Questions and Activities

1. If the middle school years are especially challenging for eleven- to thirteen-year-olds and their parents, then they certainly will be for teachers as well. What characteristics of this age group should you keep uppermost in mind, and what general approaches to instruction should you seek to implement?

2. Peggy Flynn, the sixth-grade teacher mentioned in this article, said that middle school teachers expect students to be more responsible and independent than they were in the elementary grades, yet she suggests that some students may have not had much experience or instruction in these capabilities. What steps can you take, as either an elementary grade or a middle school teacher, to help students learn to be more responsible and independent?

3. To find out for yourself what middle school students are like, arrange to visit several middle school classrooms and then interview some students and teachers.

2. *Self-efficacy becomes an important influence on intellectual and social behavior.* As we mentioned in point 1 under "Social Characteristics," middle school children become capable of analyzing both their own views of an interpersonal interaction and those of the other person. This newfound analytic ability is also turned inward, resulting in evaluations of one's intellectual and social capabilities. Albert Bandura (1986), a learning theorist whom we will discuss later in the book, coined the term **self-efficacy** to refer to how capable people believe they are at dealing with one type of task or another. Thus a student may have a very strong sense of self-efficacy for math ("I know I can solve most any algebraic equation"), a moderate degree of self-efficacy for certain athletic activities ("I think I play baseball and basketball about as well as most other kids my age"), and a low sense of self-efficacy for interpersonal relationships ("I'm just not good at making friends").

> Self-efficacy beliefs for academic and social tasks become strong influences on behavior

These self-evaluative beliefs influence what activities students choose and for how long they will persist at a given task, particularly when progress becomes difficult. Students with a moderate to strong sense of self-efficacy will persist at a task long enough to obtain the success or corrective feedback that leads to expectations of future success. Students with a low sense of self-efficacy, however, tend to abandon tasks at the first sign of difficulty, thereby establishing a pattern of failure, low expectations of future success, and task avoidance. Because self-efficacy beliefs grow out of personal performance, observation of other people doing the same thing, and verbal persuasion, you can help students develop strong feelings of self-efficacy by following the suggestions we will make in later chapters about modeling and imitation, learning strategies, and effective forms of instruction.

HIGH SCHOOL (GRADES 9, 10, 11, AND 12; FOURTEEN, FIFTEEN, SIXTEEN, AND SEVENTEEN YEARS)

Physical Characteristics: High School

1. *Most students reach physical maturity, and virtually all attain puberty.* Although almost all girls reach their ultimate height, some boys may continue to grow even after graduation from high school. Tremendous variation exists in height and weight and in rate of maturation. Approximately 13 percent of students are considered to be overweight (Centers for Disease Control, 2006). As noted earlier, late-maturing boys seem to have considerable difficulty adjusting to their

what different careers are like, teachers, guidance counselors, and parents are likely to have more influence over decision making than peers. For questions about values, ethics, and future plans, the views of parents are usually sought. The influence of peer groups is strongest during early and middle childhood (Steinberg, 2005).

Not surprisingly, most conflicts between parents and their adolescent children are about such peer-influenced issues as personal appearance, friends, dating, hours, and eating habits (Hill, 1987). This general pattern may be modified, however, by type of parenting style. The adolescent children of parents who have an authoritarian style (see Diana Baumrind's work on parenting styles in the section on the cognitive characteristics of preschool and kindergarten children) have a stronger tendency than other adolescents to make decisions that are consistent with peer group advice. The adolescent children of parents who have an authoritative style, on the other hand, are more likely to make decisions that are consistent with parental advice (Steinberg & Morris, 2001). Perhaps this is why the influence of parents appears to be greatest when there are mutual affection and respect between parent and child (Baumrind, 1991b; Hill, 1987).

2. *Girls seem to experience greater anxiety about friendships than boys do.* Factors that cause girls to become concerned about the reactions of others were summarized in the preceding chapter. Adolescent girls tend to seek intimacy in friendships. Boys, in contrast, often stress skills and interests when they form friendships, and their tendencies to be competitive and self-reliant may work against the formation of close relationships with male companions. Because adolescent girls often wish to form an intimate relationship with another girl, they are more likely than boys to experience anxiety, jealousy, and conflicts regarding friendships with same-sex peers. You should not be surprised, therefore, if secondary school girls are much more preoccupied with positive and negative aspects of friendships than boys are (Hardy, Bukowski, & Sippola, 2002; Pleydon & Schner, 2001; Steinberg, 2005).

> Girls more likely than boys to experience anxiety about friendships

3. *Many high school students are employed after school.* During the school months of 1999–2000, 68.2 percent of sixteen-year-olds worked part-time at some point during the school year. For seventeen- and eighteen-year-olds the percentages increased to 78.9 and 84.8, respectively. Some students may have worked for only a week or two, but the average number of weeks worked was 23.4 for sixteen-year-olds, 33.8 for seventeen-year-olds, and 34.2 for eighteen-year-olds (Bureau of Labor Statistics, 2003).

The pros and cons of after-school employment have been vigorously debated. On the positive side, it is thought to enhance self-discipline, a sense of responsibility, self-confidence, and attitudes toward work. On the negative side, part-time employment leaves less time for homework, participation in extracurricular activities, and development of friendships; it may also lead to increased stress, lower grades, and lower career aspirations. Most experts agree that students who work more than 20 hours per week are likely to have lower grades than students who work less or not at all (Steinberg, 2005).

Emotional Characteristics: High School

1. *Many psychiatric disorders either appear or become prominent during adolescence. Included among these are eating disorders, substance abuse, schizophrenia, depression, and suicide.* Eating disorders are much more common in females than in males. *Anorexia nervosa* is an eating disorder characterized by a preoccupation with body weight and food, behavior directed toward losing weight, peculiar patterns of handling food, weight loss, intense fear of gaining weight, and a distorted perception of one's body. This disorder occurs predominantly in females (more than 90 percent of the cases) and usually appears between the ages of fourteen and seventeen (American Psychiatric Association, 2000).

Bulimia nervosa is a disorder in which binge eating (uncontrolled rapid eating of large quantities of food over a short period of time), followed by self-induced vomiting, is the predominant behavior. Binges are typically followed by feelings of guilt, depression, self-disgust, and fasting. As with anorexia, over 90 percent of individuals with bulimia are female (American Psychiatric Association, 2000).

Adolescents who engage in *substance abuse* (tobacco, alcohol, and illegal drugs) not only jeopardize their physical and emotional health but also increase their risk of doing poorly in school or of dropping out of school. A 1999 survey of high school students found that:

- More than one-third reported smoking on one or more of the previous thirty days, and about 17 percent reported smoking on twenty or more of the previous thirty days.
- About one-half reported drinking in the previous thirty days. Twenty-eight percent of female students and 35 percent of male students engaged in binge drinking.
- Forty-seven percent had used marijuana at least once during their lifetimes, and 27 percent had used marijuana one or more times in the preceding thirty days.
- Ten percent reported using some form of cocaine at least once during their lifetimes, and 4 percent reported using cocaine in the preceding thirty days (MacKay et al., 2000).

Schizophrenia, a thinking disorder characterized by illogical and unrealistic thinking, delusions, and hallucinations, is relatively rare among adolescents, affecting less than 0.25 percent of all thirteen- to nineteen-year-olds. Yet it is the most frequently occurring psychotic disorder, and the number of cases diagnosed between the ages of twelve and eighteen is steadily increasing. Early symptoms include odd, unpredictable behavior; difficulty communicating with others; social withdrawal; and rejection by peers (Beiser, Erickson, Fleming, & Iacono, 1993; Conger & Galambos, 1997; Gilberg, 2001).

2. *The most common type of emotional disorder during adolescence is depression.* The most common forms of **depression**, from least to most serious, are *depressed mood, depressive syndrome,* and *clinical depression.* Depressed mood is primarily characterized by feelings of sadness or unhappiness, although emotions such as anxiety, fear, guilt, anger, and contempt are frequently present, as well (Peterson et al., 1993). In 2005, 36.7 percent of high school females and 20.4 percent of high school males reported feeling so sad and hopeless almost every day for two or more weeks in a row that they stopped engaging in some usual activities. The percentages of White, Black, and Latino students who gave this response were 25.8, 28.4, and 36.2, respectively (Centers for Disease Control, 2006). As you can see from these data, more girls than boys report having emotional responses indicative of depression, as do minority students, particularly those of Latino origin.

Common symptoms of depression include feelings of worthlessness, crying spells, and suicidal thoughts, threats, and attempts. Additional symptoms include moodiness, social isolation, fatigue, hypochondria, and difficulty in concentrating (Cicchetti & Toth, 1998; Peterson et al., 1993). Depression in adolescents precedes substance abuse (MacKay et al., 2000). High school students who experience such symptoms typically try to ward off their depression through restless activity or flight to or from others. They may also engage in problem behavior or delinquent acts carried out in ways that make it clear they are appealing for help. (A depressed fifteen-year-old boy may carry out an act of vandalism, for instance, at a time when a school authority or police officer is sure to observe the incident.)

Aaron Beck (1972) suggests that depression consists of a *cognitive set* made of negative views of oneself, the world, and the future. Martin Seligman (1975) proposes that depression is caused by *learned helplessness,* which leads to feelings of having no control over one's life. Irving Weiner (1975) emphasizes that depression

Depression most common among females, minorities

Depression may be caused by negative cognitive set, learned helplessness, sense of loss

typically involves a *sense of loss* that may have many causes. Depression may stem from the abrupt end of a personal relationship through death, separation, or broken friendship. An individual may undergo a sharp drop in self-esteem as a result of failure or guilt. Or a person may experience a loss of bodily integrity following illness, incapacitation, or disfigurement. For female adolescents, increases in sex hormones, specifically testosterone and estradiol, have also been linked to depression (Angold, Worthman, & Costello, 2003).

Although many techniques exist for changing a negative self-concept to a positive view of self, one effective approach to minimizing depression is to help as many of your students as possible to experience success as they learn. Techniques to accomplish that goal will be discussed in subsequent chapters of this book.

3. *If depression becomes severe, suicide may be contemplated.* In 2005, 16.9 percent of high school students had seriously considered attempting suicide during the previous twelve months, 13 percent had made a suicide plan, and 8.4 percent had made one or more attempts. Many more females than males considered attempting suicide (21.8 percent versus 12 percent, respectively) and made one or more attempts (10.8 percent versus 6 percent).

Latino teens are more likely than White or Black teens to consider a suicide attempt (17.9 percent, 16.9 percent, and 12.2 percent, respectively) and to make a suicide attempt (11.3 percent, 7.3 percent, and 7.6 percent, respectively) (Centers for Disease Control, 2006). As of 2003, the death rate from suicide in the fifteen- to twenty-four-year age group was highest for American Indian/Alaskan Native males (27.2 per 100,000 residents) and females (8.3 per 100,000 residents) and lowest for Asian or Pacific Islander males (9.0 per 100,000 residents) and Black females (2.0 per 100,000 residents) (National Center for Health Statistics, 2005).

The single most important signal of a youth at risk for suicide is depression. Along with the common symptoms noted earlier under point 2, other signs of depression and potential suicide include poor appetite, weight loss, changes in sleeping patterns, difficulty in concentrating, academic problems, poor self-concept, withdrawing from friends and/or social activities, giving away prized possessions, lack of interest in personal appearance, and feelings of loneliness. These symptoms take on added significance when accompanied by a family history of suicide or parents who commit abuse or use drugs and alcohol excessively.

JOURNAL ENTRY
Helping Students Overcome Depression

Depression and unstable family situation place adolescents at risk for suicide

Many high school students, girls in particular, experience periods of depression, loneliness, and anxiety. Because severe depression often precedes a suicide attempt, teachers should refer students they believe to be depressed to the school counselor.
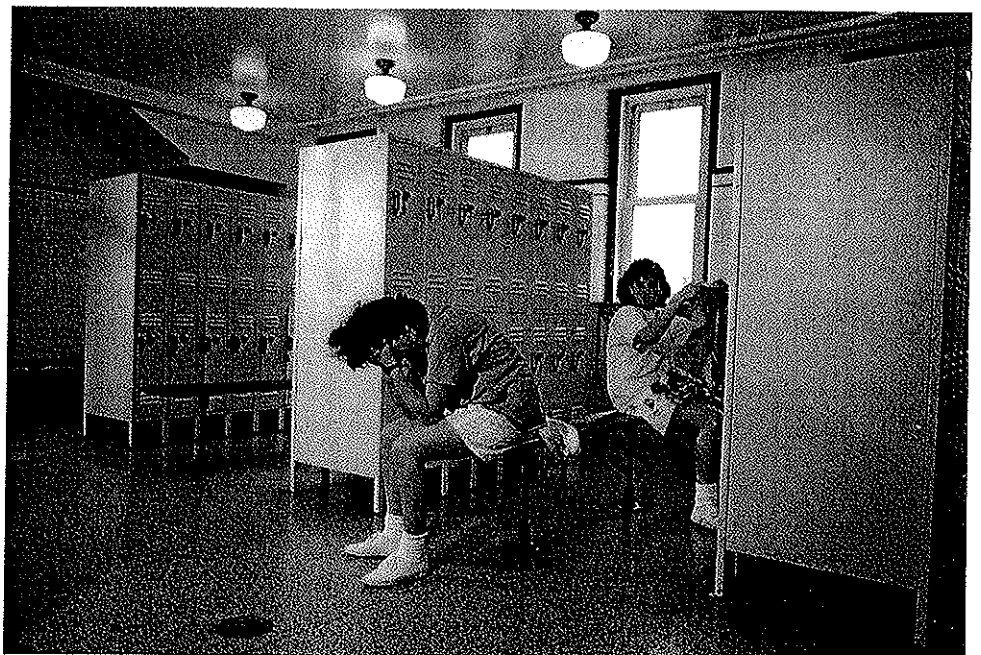
The factors that usually trigger a suicide include a shameful or humiliating experience, such as perceived failure at school or rejection by a romantic partner or parent (Fisher, 2006; Perkins & Hartless, 2002; Sofronoff, Dalgliesh, & Kosky, 2005).

VIDEO CASE ◄◄ ▶ ►►

Social and Emotional Development: Understanding Adolescents

Watch the video clip, study the artifacts in the case, and reflect upon the following questions:

1. The preceding material describes signs of adolescent students who might be "at risk." Based on your observations of the students in this Video Case, would you consider any of the students in this video to be at risk? Are there observable factors/characteristics that you can detect?

2. How does this Video Case illustrate the powerful influence of peer groups in adolescents' lives?

If you notice that a student in one of your classes seems extremely depressed, take the trouble to ask if there is anything you can do to provide support and seek the advice of the school counselor. To encourage students to discuss their concerns with you, suggest that they read books written for adolescents that address suicide in a direct and forthright manner (Fisher, 2006). Your interest and sympathy may prevent a suicide attempt. Also, be aware that recent prevention efforts include school-based programs. These programs, which are run by a mental health professional or an educator (or both), are typically directed to high school students, their parents, and their teachers. They usually include a review of suicide statistics, a list of warning signs, a list of community mental health resources and how to contact them, and a discussion of how to refer a student or peer to counseling.

Cognitive Characteristics: High School

1. *High school students become increasingly capable of engaging in formal thought, but they may not use this capability.* These students are more likely than younger students to grasp relationships, mentally plan a course of action before proceeding, and test hypotheses systematically. Without supervision and guidance, however, they may not use such capabilities consistently. Accordingly, you might take advantage of opportunities to show students at these grade levels how they can function as formal thinkers. Call attention to relationships and to ways that previously acquired knowledge can be applied to new situations. Provide specific instruction in techniques of problem solving. (Ways you might do this will be discussed in Chapter 10, "Constructivist Learning Theory, Problem Solving, and Transfer.") Although some students may ignore your advice, others will probably take it more seriously. Despite the constant attempts of adolescents to appear totally self-sufficient and independent, they still view parents and teachers as knowledgeable authority figures when it comes to school achievement (Amiram, Bar-Tal, Alona, & Peleg, 1990).

Political thinking becomes more abstract, less authoritarian, more knowledgeable

2. *Between the ages of twelve and sixteen, political thinking becomes more abstract, liberal, and knowledgeable.* Joseph Adelson (1972, 1986) used an interview approach to obtain information about the development of political thought during the adolescent years. At the start of the interviews, the participants were requested to imagine that one thousand people had ventured to an island in the Pacific for the purpose of establishing a new society. The respondents were then

asked to explain how these people might establish a political order; devise a legal system; establish a balance among rights, responsibilities, personal liberty, and the common good; and deal with other problems of public policy.

The analysis of the interview responses showed no significant gender differences in the understanding of political concepts and no significant differences attributable to intelligence and social class, although brighter students were better able to deal with abstract ideas and upper-class students were less likely to be authoritarian. The most striking and consistent finding was the degree to which the political thinking of the adolescent changed in the years between ages twelve and sixteen. Adelson concluded that the most significant changes were (1) an increase in the ability to deal with such abstractions as freedom of speech, equal justice under law, and the concept of community; (2) a decline in authoritarian views; (3) an increase in the ability to imagine the consequences of current actions; and (4) an increase in political knowledge.

Increased ability to deal with abstractions is a function of the shift from concrete to formal operational thought. When thirteen-year-olds were asked, "What is the purpose of laws?" a typical answer was, "So people don't steal or kill" (Adelson, 1972, p. 108). A fifteen- or sixteen-year-old, by contrast, was more likely to say, "To ensure safety and enforce the government" (p. 108).

When considering punishment for crimes, younger children (Piaget's moral realists) hold the conviction that laws are immutable and that punishment should be stern. But by age fourteen and fifteen, the adolescents whom Adelson interviewed were more likely to consider circumstances and individual rights and to recommend rehabilitation rather than punishment.

If you will be teaching courses in social studies, you may find this information useful in lesson planning. It may also help you understand why students may respond to discussions of political or other abstract matters in different ways.

SELECTING TECHNOLOGIES FOR DIFFERENT AGE LEVELS

As this chapter and the preceding one indicate, your teaching approaches will be influenced by the developmental level of your students. Your incorporation of educational technology will be no different. For kindergarten and primary grade teachers, tools to enhance student literacy are likely to be a priority. Elementary, middle school, and high school teachers will be more interested in tools that promote thinking, problem solving, and communication.

Using Technology to Reduce Egocentrism

As we pointed out in the preceding chapter, primary to elementary grade children are limited by egocentrism in their ability to think logically. Egocentrism, as you may recall, is the inability to understand the world from any perspective but your own. According to Jean Piaget, who first proposed the concept, the main factor that contributes to the decline of egocentrism is exposure to different points of view through social interaction. Because these interactions do not have to be face-to-face, it is quite possible that sharing experiences and points of view by computer may produce the same result.

One way to accomplish these exchanges is through Kidlink (www.kidlink.org), a nonprofit organization that helps teachers and students arrange electronic exchanges with students from around the world. The goal of Kidlink is to help children understand themselves, identify and define life goals, and collaborate with peers. Joyce Burtch, a middle school teacher, has described how she created a program through