

**TEST BANK**

FIFTH EDITION

# Lifespan Development



Denise Boyd • Helen Bee

# **Instructor's Classroom Kit, Volume II and CD-ROM**

*for*

Boyd and Bee

## **Lifespan Development**

Fifth Edition

*prepared by*

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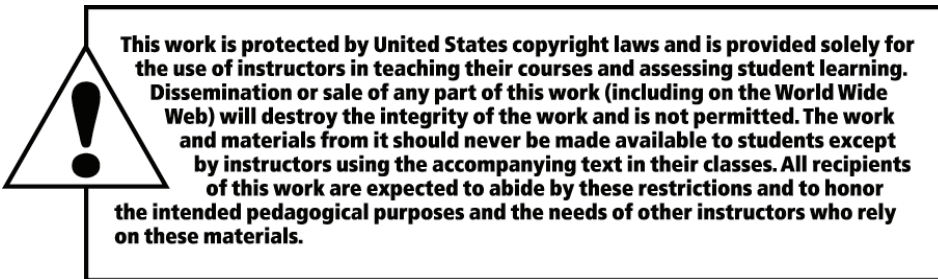
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# ***Master List of Helen Bee's Student Projects***

*(Printed in the Grade Aid Student Workbook)*

## **CHAPTER 11**

- Research Project 21: The Pendulum
- At-Home Project 22: Plotting Your Own Growth

## **CHAPTER 12**

- Research Project 23: Who Am I?

## **CHAPTER 13**

- At-Home Project 24: Estimating Your Own Longevity

## **CHAPTER 14**

- Research Project 25: Social Networks among Young Adults

## **CHAPTER 15**

- At-Home Project 26: Assessing Your Own Diet

## **CHAPTER 16**

- Research Project 27: Social Networks among Middle-Aged Adults

## **CHAPTER 17**

- Research Project 28: Facts on Aging Quiz
- Research Project 29: Definitions of Wisdom

## **CHAPTER 18**

- *No projects for this chapter.*

## **CHAPTER 19**

- Research Project 30: Visiting and Assessing a Nursing Home



# Guide to the Instructor's Classroom Kit, Volumes I & II

The goal of the *Instructor's Classroom Kit Volume 1 and 2* to accompany *Lifespan Development*, Fifth Edition, by Denise Boyd and Helen Bee, is to deliver the complete supplements package (Instructor's Manual, Test Bank, PowerPoint® Handouts) in a user-friendly, highly portable, and fully integrated format. Volume I covers Chapters 1-10 and Volume II includes the remaining Chapters 11-19.

## *Instructor's Manual*

Prepared by Karen P. Saenz, this Instructor's Manual provides support for both seasoned instructors and ones who are new to teaching by incorporating questions for class discussion or short written assignments and suggested Allyn & Bacon resources into the Integrated Chapter Teaching Notes. The resources are designed to encourage instructors to use a variety of activities in the classroom to stimulate student interest and involvement. The curriculum lends itself to a learner-centered format rather than exclusively using traditional lectures.

Each chapter begins with the Chapter Preview to provide a glimpse of the chapter as a whole. The Integrated Chapter Teaching Notes section presents information from the textbook as well as discussion launcher questions and activities. The Lecture Enhancer section provides additional information on selected topics that are appropriate for lecture or as a handout to the students. The Instructor Resources at the close of the chapter provide a summary of suggested materials to aid in preparing for class.

The following resources are included within the Integrated Chapter Teaching Notes:

- **Learning Objectives:** Specific objectives for each section are included to focus on the essential information.
- **Key Terms:** Terms that are in bold in the text are indicated at the end of each section. In the teaching notes, they are printed in **bold** and *italics*.
- **Critical Thinking Questions:** Taken straight from the textbook at the end of each section, the critical-thinking questions provide opportunities for class discussion that involve critical-thinking skills. Many are also suitable for short written assignments or group work.
- **Discussion Launchers:** The discussion questions also provide a stimulus for discussion in class to increase student participation. Many are opinion questions, and I often tell my students that any intelligent answer will get them credit—the key word being “intelligent.” Students should support their opinions with sound arguments. Many are suitable for short written assignments or group discussions.
- **Videos/DVDs:** Many videos and DVDs of various lengths are listed, and there is obviously not time in one term to include them all.
- **Helen Bee's Student Projects:** Adapted from Helen Bee's first edition of *Lifespan Development*, the projects are printed in the *Grade Aid*. The list of suggested projects for each chapter is included in the Instructor's Resource section of each chapter. They can be used as part of the written assignment for the course or even as extra credit projects.



### *Test Bank*

This portion of the Classroom Kit provides thoroughly reviewed questions, prepared by Rod Fowers, which target the key concepts from both the main content as well as the chapter features from textbook. There are approximately 2,000 questions total, ranging in type from multiple-choice, completion (fill-in-the-blank), short answer, and concise essay questions. All questions have the following metadata: correct answer, page reference from the main text, level of difficulty (scaled from 1-3, 3 being most challenging), skill type (factual, conceptual, applied), topic, and the corresponding Learning Objective number.

### ***New to this Edition! MyDevelopmentLab Connections***

**This edition of the Test Bank also offers both multiple choice/completion and essay questions to test relevant MyDevelopmentLab assets from the Study Plan that closes each chapter. Each question has the asset type and title as well as the corresponding Learning Objective!**

The Instructor's Classroom Kit Volume 2 CD-ROM has an electronic version of the test bank so you can easily build tests in Microsoft Word®. We also offer this same Test Bank in the TestGen Computerized Test Bank software, which can be downloaded from the Instructor's Resource Center at <http://www.pearsonhighered.com>.

### *PowerPoint® Presentations*

Each chapter has a lecture and art only PowerPoint Presentation prepared by Susan Carol Losh. Use the print-outs to plan your lectures, take notes, or distribute them as handouts for your students. The electronic version of the lecture outline and art only PowerPoint® Presentations are available on the CD-ROM packaged with Instructor's Classroom Kit Volume 2 as well as on our Instructor's Resource Center online at <http://www.pearsonhighered.com>. The lecture outline version contains all of the permissible figures from the text.

As you plan the Syllabus for your term, consider the materials included in this Instructor's Classroom Kit system and try something new: a debate, a new written assignment or project, or more classroom discussion. We also strongly urge you to review the *GradeAid Student Workbook with Practice Tests* as a required text for your course. This student supplement, also prepared by Karen P. Saenz, is an excellent study guide to help students get the most out of the material presented in the book.

Lifespan is a course that is rich with opportunities for these activities, and we encourage you to incorporate additional perspectives into your instruction. The resources provided in the manual will enrich the course to provide an exciting and enjoyable class for your students.

Thank you for choosing *Lifespan Development, 5<sup>th</sup> Edition!* We sincerely hope that you find these carefully integrated resources a valuable addition to your course materials.

Karen P. Saenz, Houston Community College—Southeast College  
Rod Fowers, Highline Community College  
Susan Carol Losh, Florida State University

## ***ACKNOWLEDGEMENTS***

Unending thanks go to my family—both immediate and extended—for providing me with the lifespan perspective. My husband and I recently celebrated our fortieth wedding anniversary. Our daughter finished her Bachelor’s degree, started a career, and began work on her Master’s degree. Our son and daughter-in-law changed jobs and moved farther away. Our grandson started school, and our granddaughter turned three. My mother-in-law is 93 and my aunt is almost 99. Additionally, I’m blessed to be working with some amazing high school students attending an Early College High School on our college campus. Among us, we’ve got the chapters covered! Each has patiently “rearranged the world” to allow me time to write. Thank you!

***Karen P. Saenz***

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# CHAPTER 11

## PHYSICAL AND COGNITIVE DEVELOPMENT IN ADOLESCENCE

### RESOURCES-AT-A-GLANCE

Detailed Outline	Instructor's Resources	Test Bank	MyDevelopmentLab Connection
<b>Chapter Introduction</b> 306-307		MC 1	
<b>Physical Changes</b> p. 308-312 Brain Development and Physical Growth Milestones of Puberty Timing of Puberty	<b>Student Project</b> #22 Plotting Your Own Growth <b>PowerPoint Slides</b>	MC 2-25 FI 1-3 SA 1-3 ES 1-3  MDL Study Plan MC**1-2	<b>Explore</b> The Female Reproductive Organs <b>Practice</b> Physical Changes <b>Watch</b> Secular Trend
<b>Adolescent Sexuality</b> p. 313-318 Sexual Behavior Adolescent Pregnancy Sexual Minority Youth	<b>PowerPoint Slides</b>	MC 26-41 FI 4-8 SA 4-5 ES 4-5 MDL Essay*1  MDL Study Plan MC 3	<b>Explore</b> Gender and Promiscuity <b>Watch</b> <i>Virginity—Cool?</i> Sexuality in Adolescence: Teen Pregnancy
<b>Adolescent Health</b> p. 318-323 Sensation-Seeking Drugs, Alcohol, and Tobacco Eating Disorders Depression and Suicide	<b>Lecture Enhancer</b> Body Image and Eating Disorders <b>PowerPoint Slides</b>	MC 42-58 FI 9-11 SA 6-10 ES 6  MDL Study Plan MC 4-5	<b>Practice</b> Adolescent Health <b>Watch</b> Anorexia Nervosa Substance Abuse Teen Alcoholism Teen Drinking
<b>Changes in Thinking and Memory</b> p. 324-328 Piaget's Formal Operational Stage Direct Tests of Piaget's View Advances in Information Processing	<b>Lecture Enhancer</b> Cognitive Development <b>Student Project</b> #21 The Pendulum <b>PowerPoint Slides</b>	MC 59-67 FI 12 SA 11-12 ES 7	<b>Practice</b> Changes in Thinking and Memory <b>Watch</b> Adolescent Egocentrism
<b>Schooling</b> p. 328-333 Transition to Secondary School Gender, Ethnicity, and Achievement in Science and Math Dropping Out of High School	<b>PowerPoint Slides</b>	MC 68-75 FI 13-15 SA 13-15 ES 8 MDL Essay 2	<b>Practice</b> Schooling <b>Watch</b> Students Teaching Students <i>Social Need</i>

\* MyDevelopmentLab Essay Questions correspond to *italicized* assets cited in the MyDevelopmentLab Connection

\*\*MyDevelopmentLab Study Plan Multiple Choice/Completion Questions test assets listed in the main text

## CHAPTER OVERVIEW

Development in adolescence is marked by strides, as well as challenges. Along with physical maturity comes new health risks. Advances in cognitive functioning enable teenagers to function almost as well as adults. School experiences are critical to adolescent development.

There are two major growth spurts in the brain during the teenage years. An adolescent may grow three to six inches a year for several years, then continue to add height and weight slowly until he or she reaches their adult size. Boys add more muscle than girls; girls add more fat than boys. Puberty is triggered by a complex set of hormones, beginning at about age seven or eight. Menarche, a girl's first menstrual period, typically occurs two years after the beginning of other visible changes. In boys, the peak of the growth spurt typically comes fairly late in the sequence of physical development. Each teenager has an internal model, or mental image, of the "normal" or "right" timing for puberty. Discrepancies between an adolescent's expectation and what actually happens determine the psychological effect of puberty.

Sexual activity among teens has increased in recent decades in the United States, but many do not use contraception consistently. Long-term consequences for teenaged mothers are generally negative, although some girls are able to overcome the challenges. Teens who are homosexual or who are unsure about their sexual orientation face many obstacles in the formation of an identity.

In general, teenagers show heightened levels of risky behavior, such as unprotected sex, drug use, and reckless driving. Alcohol, drugs, and tobacco are more likely to be used by teens who show other forms of deviant or problem behavior. Sensation-seeking interacts with parenting style to increase the likelihood of drug use. Eating disorders such as bulimia and anorexia are among the most significant mental health problems during adolescence. Body image may be a causal factor. A general tendency toward mental illness may also be a factor in eating disorders. The contributing factors in completed suicides include depression, aggression, and a family history of psychiatric disorders or suicide or drug or alcohol abuse.

In Piaget's fourth stage of cognitive development, the formal operational period, teenagers learn to reason logically about abstract concepts. It is characterized by the ability to apply basic operations to ideas and possibilities—systematic problem solving—in addition to actual objects. There is clear evidence of some advanced forms of thinking in at least some adolescents, but formal operational thinking is not universal, nor is it consistently used even by those who possess the ability. Adolescents process information faster, use processing resources more efficiently, understand their own memory processes better, and have more knowledge than do elementary school children.

The transition to middle school may be accompanied by changes in children's goal orientation that result in achievement and self-esteem losses. Girls seem to be at particular risk for achievement losses after the transition to high school, especially in science and math. The ethnic variations in math performance are wide, partly because not all teens receive the necessary encouragement and/or preparation for advanced high school math classes. Adolescents who succeed academically in high school are typically from authoritative families. Those who drop out are more likely to be poor, or to be doing poorly in school.

## LEARNING OBJECTIVES

After completing Chapter 11, students should be able to answer the following questions:

- 11.1 How do the brains and other body systems of adolescents differ from those of younger children?
- 11.2 What are the major milestones of puberty?
- 11.3 What are the consequences of early, “on time,” and late puberty for boys and girls?
- 11.4 What are the patterns of adolescent sexual behavior in the United States?
- 11.5 Which teenaged girls are most likely to get pregnant?
- 11.6 What are some of the causes that have been proposed to explain homosexuality?
- 11.7 How does sensation-seeking affect risky behavior in adolescents?
- 11.8 What patterns of drug, alcohol, and tobacco use have been found among adolescents in the United States?
- 11.9 What are the characteristics and causes of eating disorders?
- 11.10 Which adolescents are at greatest risk of depression and suicide?
- 11.11 What are the characteristics of thought in Piaget’s formal operational stage?
- 11.12 What are some major research findings regarding the formal operational stage?
- 11.13 What kinds of advances in information-processing capabilities occur during adolescence?
- 11.14 How do changes in students’ goals contribute to the transition to secondary school?
- 11.15 What gender and ethnic differences in science and math achievement have been found by researchers?
- 11.16 What variables predict the likelihood of dropping out of high school?

## KEY TERMS

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>ability goals (p. 328)</li> <li>adolescence (p. 307)</li> <li>anorexia nervosa (p. 321)</li> <li>bulimia nervosa (p. 321)</li> <li>formal operational stage (p. 324)</li> <li>hypothetico-deductive reasoning (p. 324)</li> <li>imaginary audience (p. 325)</li> <li>menarche (p. 310)</li> <li>personal fable (p. 325)</li> </ul> | <ul style="list-style-type: none"> <li>pituitary gland (p. 308)</li> <li>primary sex characteristics (p. 310)</li> <li>puberty (p. 308)</li> <li>secondary sex characteristics (p. 310)</li> <li>secular trend (p. 311)</li> <li>systematic problem-solving (p. 324)</li> <li>task goals (p. 328)</li> <li>transgendered (p. 317)</li> </ul> |
|---|--|

<b>INTEGRATED CHAPTER TEACHING NOTES</b>
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**PHYSICAL CHANGES (p. 308-312)**

<b>Videos/DVDs</b>	<i>Adolescence</i> <i>Adolescent Physical Development</i> <i>Body Image: Let's Get Real</i>
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*Adolescence* is a transitional period between childhood and adulthood. Physical changes occur during adolescence, but momentous changes occur in other systems as well.

**Brain Development and Physical Growth**

11.1 *How do the brains and other body systems of adolescents differ from those of younger children?*

**The Brain**

There are two major brain growth spurts in the teenaged years:

- The first occurs between 13 and 15. The cerebral cortex becomes thicker, and the neuronal pathways become more efficient. Additionally, more energy is produced and consumed by the brain during this spurt than in the years that precede and follow it. These growth and energy spurts take place in the parts of the brain that control spatial perception and motor functions. Consequently, by the mid-teens, adolescents' abilities in these areas far exceed those of school-aged children. Some neuropsychologists believe that a qualitatively different neural network emerges during this brain growth spurt that enables teens to think abstractly and to reflect on their cognitive processes.
- The second brain growth spurt begins around age 17 and continues into early adulthood. This time, the frontal lobes of the cerebral cortex (the area that controls logic and planning) are the focus of development. The result is that older teens differ from younger teens in terms of how they deal with problems that require these cognitive functions.

<b>Discussion Launcher</b> (Learning Objective 11.1, p. 308)
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What might be the result of a delay in the growth spurts in the brain? What could be some causes of such a delay?
---

**Other Body Systems**

An adolescent may grow three to six inches a year for several years. After the growth spurt, teenagers add height and weight slowly until they reach their adult size. Girls attain most of their adult height by age 16; boys continue to grow until they are 18 to 20 years old.

The shape and proportions of the adolescent's body also go through a series of changes. During the growth spurt, the normal cephalocaudal and proximodistal patterns are reversed, so that a teenager's hands and feet are the first body parts to grow to adult size and the trunk is usually the slowest part to grow. Although adolescents look awkward, they are better coordinated than school-aged children.

**Discussion Launcher** (Learning Objective 11.1, p. 309)

What might be some of the psychological issues involved with the awkwardness of this growth spurt? Give examples.

Besides increasing in size, the skeletal system goes through other changes. In the elementary-school years, the size and shape of the child's jaw change when the permanent teeth come in. In adolescence, both jaws grow forward and the forehead becomes more prominent.

Joint development enables adolescents to achieve levels of coordination that are close to those of adults. As at younger ages, boys continue to lag behind girls. Girls' wrists are completely developed by their mid-teens, and a similar pattern is evident in other joints enabling early-adolescent girls to outperform boys of a similar age on a variety of athletic skills that require coordination. By the late teens, however, boys finally catch up with girls in joint development and, on average, outperform them in coordinated movement.

Muscle fibers also go through a growth spurt at adolescence, becoming thicker and denser, and adolescents become quite a lot stronger in just a few years. Both boys and girls show this increase in strength, but it is much greater in boys. This substantial difference in strength reflects the underlying sex difference in muscle tissue that is accentuated at adolescence. Among adult men, about 40 percent of total body mass is muscles, compared to only about 24 percent in adult women. This sex difference in muscle mass (and accompanying strength) seems to be largely a result of hormone differences, but sex differences in exercise patterns or activities may also be involved.

Another major component of the body is fat, most of which is stored immediately under the skin. From birth, girls have slightly more fat tissue than boys do, and this discrepancy becomes gradually more marked during childhood and adolescence. During puberty, the proportion of fat rises among girls and declines among boys, while the proportion of weight that is muscle rises in boys and declines in girls.

During the teenaged years, the heart and lungs increase considerably in size, and the heart rate drops. Both of these changes are more marked in boys than in girls—another of the factors that makes boys' capacity for sustained physical effort greater than that of girls. Before puberty, boys and girls have similar endurance limits, but after puberty, boys have a clear advantage in endurance as well as size, strength, and speed.

**Milestones of Puberty***11.2 What are the major milestones of puberty?*

**Puberty** is a collective term that encompasses all of the changes needed for reproductive maturity. It begins when the **pituitary gland** triggers the release of hormones from other glands; thus, it is sometimes called the master gland. The pituitary gland secretes two other hormones, the thyroid stimulating hormone and the general growth hormone.

The most obvious changes of puberty are those associated with sexual maturity.

- Changes in **primary sex characteristics** include growth of the testes and penis in the male and the ovaries, uterus, and vagina in the female.
- Changes in **secondary sex characteristics** include breast development in girls, changing voice pitch and beard growth in boys, and the growth of body hair in both sexes.



These physical developments occur in a defined sequence that is customarily divided into five stages: stage 1 is the preadolescent stage, stage 2 includes the first signs of pubertal change, stages 3 and 4 are the intermediate steps, and stage 5 encompasses the final development of adult characteristics.

**Discussion Launcher** (Learning Objective 11.2, p. 310)

What would be the effect of an interruption in the sequence of the stages, for example, a major illness?

### Sexual Development in Girls

**Menarche**, the first menstruation, occurs two years after the beginning of other visible changes and is succeeded only by the final stages of breast and pubic hair development. Among girls in industrialized countries today, menarche occurs, on average, between 12½ and 13½; 95 percent of all girls experience this event between the ages of 11 and 15.

Menarche does not signal full sexual maturity, but it is possible to conceive shortly after menarche. Irregular menstrual periods are the norm for some time; full adult fertility thus develops over a period of years. Such irregularity no doubt contributes to the widespread—but false—assumption among younger teenaged girls that they cannot get pregnant.

### The Secular Trend

The timing of menarche changed dramatically between the mid-19<sup>th</sup> and the mid-20<sup>th</sup> centuries. In 1940, the average age of menarche in Western industrialized countries was roughly 17; the average has dropped steadily since that time at a rate of about four months per decade. Psychologists call the decrease a **secular trend**. This change was most likely caused by significant changes in lifestyle and diet, particularly by increases in protein and fat intake.

**Discussion Launcher** (Learning Objective 11.2, p. 311)

Why would the increase in protein and fat intake affect the timing of puberty?

### Sexual Development in Boys

In boys, as in girls, the peak of the growth spurt typically comes fairly late in the sequence of physical development. On average, a boy completes stages 2, 3, and 4 of genital development and stages 2 and 3 of pubic hair development before the growth peak is reached. His first ejaculation, or spermarche, occurs between 13 and 14 years of age, but the production of viable sperm is very difficult to determine, although current evidence places this event sometime between ages 12 and 14.

Although the order of physical development in adolescence seems to be highly consistent, there is quite a lot of individual variability. It is important to keep this variation in mind if you are trying to make a prediction about an individual teenager.

**Discussion Launcher** (Learning Objective 11.2, p. 311)

What are some factors that might influence the variability in the timing of physical development?

**Timing of Puberty***11.3 What are the consequences of early, “on time,” and late puberty for boys and girls?*

Although the order of physical developments in adolescence seems to be highly consistent, there is quite a lot of individual variability. Researchers think that hereditary and behavioral factors work together to control hormonal secretions in the bodies of individual teenagers, thereby controlling the timing of puberty. Discrepancies between an adolescent’s expectation and what actually happens determine the psychological effects of puberty. Those whose development occurs outside the desired or expected range are likely to think less well of themselves, to be less happy with their bodies and with the process of puberty. They may also display other signs of psychological distress.

***Classroom Activity*** (Learning Objective 11.3, p. 312)

In teams, create a list of cultural factors in the U.S. that might influence adolescents’ perception of desirable body types. Discuss the lists with the entire class.

Research in the United States generally confirms these predictions.

- Girls who are early developers (who experience major body changes before age 11 or 12) show consistently more negative body images, such as thinking of themselves as too fat. Such girls are also more likely to get into trouble in school and at home, to get involved with misbehaving peer groups, to engage in delinquent behavior, to be depressed, and to begin smoking in adolescence than are girls who are average or late developers.
- Among boys, the earlier their development, the more positive their body image, the better they do in school, the less trouble they get into, and the more friends they have.

***Discussion Launcher*** (Learning Objective 11.3, p. 312)

Why are there such differences between the perception of boys and that of girls? Give examples to support your answer.

***Discussion Launcher*** (Learning Objective 11.3, p. 312)

Do you remember whether you went through puberty very early, early, “on time,” or late? Do you think that perception had any effect on your overall experience of adolescence?

***Critical Thinking Question*** (learning Objectives 11.1-11.3, p. 308-312)

Suppose you were asked to give a talk to parents about young teenagers’ need for sex-education and for adult guidance with regard to romantic relationships. How would you integrate the information on brain development with the discussion of the stages of puberty in your presentation?

**ADOLESCENT SEXUALITY (p. 313-318)*****Videos/DVDs****Baby Love**Ignoring the Risks: Teenage Pregnancy and AIDS**Preventing Teenage Pregnancy*

**Sexual Behavior**

11.4 *What are the patterns of adolescent sexual behavior in the United States?*

**Prevalence of Sexual Behavior**

Research findings indicate that boys are more sexually active and that the proportion of sexually experienced teens increased across grades nine through twelve. Sexual experiences vary across racial and ethnic groups. Among currently sexually active students, there are also age and ethnic differences. Among students who reported recent sexual activity, only 63 percent said they had used a condom in their most recent sexual encounter.

**Discussion Launcher** (Learning Objective 11.4, p. 313)

List all the reasons you can think of to explain why teenagers often do not use contraceptives.

Although sexual activity among boys is somewhat correlated with the amount of testosterone in the blood, social factors are much better predictors than hormones of teenagers who begin sexual activity early.

- They live in poor neighborhoods in which young people are not well-monitored by adults.
- They come from poorer families or from families in which sexual activity is condoned and dating rules are lax.
- They are more likely to use alcohol.
- Many were abused and/or neglected in early childhood.
- Among girls, those who are sexually active are also more likely to have experienced early menarche, to have low interest in school, to have had their first date at a relatively early age, and to have a history of sexual abuse.
- Adolescents' moral beliefs and the activities in which they participate also predict their sexual activity.
- Teens who use alcohol are more likely to be sexually active than their peers who do not drink.

In general, these same factors predict sexual activity among whites, African Americans, and Hispanic Americans. In every group, the greater the number of these risk factors present in the life of an individual teenager, the greater the likelihood that he or she will be sexually active.

**Discussion Launcher** (Learning Objective 11.4, p. 314)

If you were a parent of an adolescent, how could you reduce the number of risk factors present in his or her life?

**Contraceptive Use**

Despite their high levels of sexual activity, teenagers know remarkably little about physiology and reproduction. Many teenagers are also woefully ignorant of sexually transmitted diseases (STDs) and their potential consequences. Even when they are knowledgeable about STDs, many teens lack the assertiveness necessary to resist sexual pressure from a romantic partner or to discuss condom use.

In addition to routine screening, many developmentalists and public health advocates say that more effective sex education programs are needed. Most suggest that programs include training in social and decision-making skills as well as information about STDs and pregnancy.

Many adults object to sex education because they believe it will cause teenagers who are not sexually active to become so. Research suggests that such fears are unfounded. There are also debates over the degree to which sex education programs should emphasize abstaining from sex or using contraceptives. Studies indicate that abstinence-based sex education is most likely to result in a delay of the first sexual intercourse when it is initiated with younger students who are not yet sexually active. Sex education advocates suggest that abstinence and contraceptive education should not be thought of in either/or terms. Finding a way to encourage teens to avoid becoming sexually active too early may be critical to influencing contraceptive use. The older teenagers are when they become sexually active, the more likely that they will be cognitively capable of weighing the various options and consequences associated with intercourse.

***Discussion Launcher*** (Learning Objective 11.4, p. 315)

Conduct a debate regarding the different types of sex-education programs, including promoting abstinence.

**Adolescent Pregnancy**

*11.5 Which teenaged girls are most likely to get pregnant?*

The rate of teenaged pregnancy is higher in the United States than in any other Western industrialized country. When the statistics are broken down by adolescent subgroup, teen pregnancy is far more frequent among older adolescents and, in fact, is most likely to happen after a girl leaves high school. The age at which an adolescent becomes pregnant is only one aspect of the teen pregnancy issue. Birth rates among teenagers have actually dropped in the entire U.S. population since the 1960s; what has increased is the rate of births to unmarried teens. Additionally, the proportion of teenaged mothers who eventually marry the baby's father has declined in recent years.

Whether a girl becomes pregnant during her teenaged years depends on many of the same factors that predict sexual activity in general.

- The younger a girl is when she becomes sexually active, the more likely she is to become pregnant.
- The rates are higher among teenaged girls from poor families, from single-parent families, or from families with relatively uneducated parents.
- Girls whose mothers became sexually active at an early age and who bore their first child early are likely to follow a similar path.
- Peer rejection increases the likelihood that a girl will become pregnant, especially among girls who are high in aggressiveness.

***Discussion Launcher*** (Learning Objective 11.5, p. 315)

List reasons why a girl's peer rejection increases the likelihood of her becoming pregnant.

In contrast, the likelihood of pregnancy is lower among teenaged girls who do well in school and have strong educational aspirations. Such girls are both less likely to be sexually active at an early age and more likely to use contraception if they are sexually active. Girls who have good communication about sex and contraception with their mothers are also less likely to get pregnant.

When teenaged girls become pregnant, in most cases they face the most momentous set of decisions they have encountered in their young lives. About one third of teen pregnancies across all ethnic groups end in abortion, and about 14 percent result in miscarriage.

The children of teenaged mothers are more likely than children born to older mothers to grow up in poverty, with all the accompanying negative consequences for the child's optimum benefit. The children of teenaged mothers whose own parents help with child care, finances, and parenting skills are less likely to suffer such negative effects. Social programs that provide teenaged mothers with child care and the support they need to remain in school positively affect both these mothers and their babies as well as the outcomes for teenaged fathers.

**Feature Box Activity** (Learning Objective 11.5, p. 316)

**The Real World: Crisis Intervention for the Pregnant Teen**

Ask students how they could use the crisis-intervention model to help teens.

**Sexual Minority Youth**

*11.6 What are some of the causes that have been proposed to explain homosexuality?*

The emergence of a physical attraction to members of the opposite sex, or heterosexuality, is one of the defining features of adolescence for the great majority of teenagers. For some, though, adolescence is the time when they discover, or confirm a long-standing suspicion, that they are attracted to people of the same sex (homosexuality) or both sexes (bisexuality). Still others become increasingly convinced that their psychological gender is inconsistent with their biological sex (transgenderism).

**Gay, Lesbian, and Bisexual Adolescents**

Several twin studies show that when one identical twin is homosexual, the probability that the other twin will also be homosexual is 50 to 60 percent. The concordance rate is only about 20 percent for fraternal twins and only about 11 percent among pairs of biologically unrelated boys adopted into the same family. Family studies also suggest that male homosexuality runs in families. Such findings strengthen the hypothesis that homosexuality has a biological basis. Prenatal hormone patterns may also be a causal factor in homosexuality.

There is some evidence that boys who demonstrate strong cross-sex behavior in early childhood are likely to show homosexual preferences when they reach adolescence. Interestingly, too, the long bones in the legs and arms of school-aged children who grow up to be homosexual do not grow as rapidly as those of children who eventually become heterosexual. These findings indicate that maturational differences between homosexuals and heterosexuals are evident before puberty and involve body systems other than the sexual organs themselves. Taken together, prenatal hormone studies, research examining early childhood activity preferences, and studies comparing the process of physical maturation in heterosexuals and homosexuals are consistent with the hypothesis that homosexuality is programmed in at birth. Such evidence does not mean that environment plays no role in homosexuality.

Whatever the cause of variations in sexual orientation, the process through which an individual comes to realize that her or she is homosexual appears to be a gradual one. As homosexual teens grapple with questions about their sexual orientation, many report feeling isolated from and unaccepted by their peers.

These young people are at high risks for a variety of problems, such as depression and attempted suicide. To respond to these adolescents' needs, many mental health professionals suggest that school officials provide emotional and social support for homosexual teens.

While homosexual adolescents clearly face unique challenges, they share many of the same concerns as their heterosexual peers.

- Both homosexual and heterosexual girls are more likely to be dissatisfied with their physical appearance than boys of either sexual orientation.
- Both homosexual and heterosexual boys are more likely to drink alcohol more often and engage in more risky behavior than are female teenagers.
- The same factors predict successful identity and social development in homosexual and heterosexual teens, such as attachment to parents.

Like teenagers from ethnic minorities, homosexual teens have an additional task facing them in forming a clear identity.

### **Transgendered Teens**

*Transgendered* teens and adults are those whose psychological gender is the opposite of their biological sex. Out of fear of being stigmatized, most teens who suspect that they are transgendered keep their feelings to themselves. Once individuals accept their transgendered status, some choose to live as the opposite gender on a full-time basis, a pattern called transsexualism. Some seek sex reassignment—a process involving hormonal treatment, reconstructive surgery, and psychological counseling—in order to achieve a match between the two.

#### ***Critical Thinking Question*** (Learning Objectives 11.4-11.6, p. 313-318)

Look back at Bronfenbrenner's ecological model of development in Chapter 2. Think of sexually developing adolescents as being in the innermost circle, or the biological context, and explain how the microsystem, exosystem, and macrosystem affect sexually active teens, pregnant adolescents, and sexual minority youth.

### **ADOLESCENT HEALTH (p. 318-323)**

<b><i>Videos/DVDs</i></b>	<i>Anorexia and Bulimia</i> <i>Childhood's End</i> <i>Eating Disorders</i> <i>Fear of Fat</i> <i>Rich Kids on Drugs</i> <i>Suicide: Teenage Crisis</i> <i>Teenage Drinking: Hey, How about Another One?</i>
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### **Sensation-Seeking**

#### *11.7 How does sensation-seeking affect risky behavior in adolescents?*

Teenagers appear to have what many developmentalists describe as a heightened level of sensation-seeking, or a desire to experience increased levels of arousal, such as those that accompany fast driving or the “highs” associated with drugs. Sensation-seeking leads to recklessness, which, in turn leads to

markedly increased rates of accidents and injuries. Risky behaviors may be more common in adolescence than during other periods because they help teenagers gain peer acceptance and establish autonomy with respect to parents and other authority figures. Researchers have found that teens who show high rates of reckless behaviors are likely to have been unsuccessful at school or to have experienced early rejection by peers, neglect at home, or some combination of these problems. Adolescents who are not involved in extracurricular activities at school or to whom popularity is very important are more likely to engage in risky behavior.

**Discussion Launcher** (Learning Objective 11.7, 318)

Why do you suppose teens who experienced early rejection by peers and/or neglect at home are more likely to show risky behaviors?

The messages conveyed in the popular media about sex, violence, and drug and alcohol use may influence teens' risky behavior. In the U.S., teens spend more time watching television, listening to music, and playing video games than they do in school. Media messages interact with individual differences in sensation-seeking. Thus, teens who are highest in sensation-seeking are those who are most strongly influenced by media portrayals of risky behavior.

**Drugs, Alcohol, and Tobacco**

*11.8 What patterns of drug, alcohol, and tobacco use have been found among adolescents in the United States?*

Illicit drug use is far less common among teens in recent years than in past cohorts. Still, drug use among teenagers continues to be a significant problem because of the risks to which teens expose themselves, such as drunk driving and the possibility of life-long addiction, when they use these substances.

Marijuana is the illicit substance that teens use most often, but a surprising number of teens are using prescription drugs such as Ritalin, OxyContin, and Vicodin. Teens also use over-the-counter drugs such as cough medicines. Alcohol use is also fairly common among teens, including binge drinking (consuming five or more drinks on a single occasion).

**Discussion Launcher** (Learning Objective 11.8, p. 320)

List reasons why you believe marijuana and alcohol use are common among U.S. teens.

Teenagers who express the most interest in sensation-seeking are those who are most likely to use drugs and consume alcohol. Teens who are high sensation-seekers choose friends who are similar. Once such groups are formed, sensation-seeking becomes a central feature of their activities. Teens who spend a lot of time alone may also be vulnerable to substance abuse. Shy adolescents, particularly those who are high in neuroticism, are more likely to use alcohol and drugs than peers who are more outgoing.

Sensation-seeking also interacts with parenting style to increase the likelihood of drug use. Authoritative parenting seems to provide high sensation-seeking teenagers with protection against their reckless tendencies. Parents who have realistic perceptions of the prevalence of teenaged drinking are also less likely to have teenaged children who are drinkers.

Sensation-seeking seems to be less important in tobacco use. Some developmentalists speculate that teenagers begin smoking because they really do not understand its health consequences. Teenagers, however, seem to be well aware of these risks, including the link between smoking and lung cancer. So, why do they start smoking, if they know they should not?

Teenagers who believe they are already in poor health are more likely to smoke than those who think of themselves as healthy. Teens who begin smoking believe that their health is poor, regardless of how healthy they may actually be. To some degree, these negative self-perceptions are driven by personality traits. Thus, vulnerability to smoking is at least partly a function of factors that are within the individual. Peer influences appear to outweigh perceptions of future health risks for many teenagers, especially between the ages of 15 and 17. Parental influence is important, too—a pattern that is especially clear for mothers and daughters. When an adult stops smoking, the likelihood that her children will smoke decreases. Having a family rule against substance use—including drugs, alcohol, and tobacco—has a lot more influence on teenagers' decisions about using such substances than most parents think. Teens who view smoking as morally wrong are less likely to smoke than peers who do not think of smoking as a moral issue.

**Discussion Launcher** (Learning Objective 11.8, p. 321)

In teams, create an anti-smoking campaign for teens. Present each team's campaign to the class.

## **Eating Disorders**

11.9 *What are the characteristics and causes of eating disorders?*

Dieting is quite different from an eating disorder, which is a category of mental disorders in which eating behaviors go far beyond most people's everyday experience with trying to lose weight. Individuals with an eating disorder have a distorted body image that causes them to believe they are overweight when they are actually on the verge of starvation. These disorders, which can be fatal, tend to make their first appearance in individuals' lives during the mid to late teens. They are more common among girls than boys, but gay and lesbian youth, as well as teens who are unsure about their sexual orientation are also at higher risk than their heterosexual peers of developing eating disorders.

**Discussion Launcher** (Learning Objective 11.9, p. 321)

Why do you think teens who are heterosexual are at a lower risk for an eating disorder than teens who are gay, lesbian, or unsure of their sexual orientation?

## **Anorexia Nervosa**

**Anorexia nervosa** is characterized by extreme dieting, an intense fear of gaining weight, and obsessive exercising. In girls and women (who are by far the most common sufferers), the weight loss eventually produces a variety of physical symptoms associated with starvation. The symptoms include sleep disturbance, cessation of menstruation, insensitivity to pain, loss of hair on the head, low blood pressure, a variety of cardiovascular problems, and reduced body temperature. Between ten and fifteen percent of anorexics literally starve themselves to death; others die because of some type of cardiovascular dysfunction.



**Bulimia nervosa** involves an intense concern about weight combined with twice-weekly or more frequent cycles of binge eating followed by purging through self-induced vomiting, excessive use of laxatives, or excessive exercising. Teens with bulimia are ordinarily not exceptionally thin, but they are obsessed with their weight, feel intense shame about their abnormal behavior, and often experience significant depressions. The physical consequences of bulimia include marked tooth decay (from repeated vomiting), stomach irritation, lowered body temperature, disturbances of body chemistry, and loss of hair. The incidence of bulimia appears to have been increasing in recent decades in many Western countries; it is unheard of in countries where food is scarce.

**Discussion Launcher** (Learning Objective 11.9, p. 322)

How could you help a friend who had an eating disorder?

### **Risk Factors**

Some theorists have proposed biological causes for eating disorders, such as a brain dysfunction. Others argue for a psychoanalytic explanation, such as a fear of growing up. The most promising explanation, however, may lie in the discrepancy between the young person's internal image of a desirable body and her (or his) perception of her own body. Girls who participate in activities such as ballet and gymnastics, in which thinness is highly valued, are at a greater risk of developing eating disorders.

Some developmentalists suggest that an emphasis on thinness as a characteristic of attractive women, which is common in Western cultures, contributes to the prevalence of eating disorders. Every teenager who has a poor body image doesn't develop an eating disorder. Developmentalists think that body image interacts with other variables to produce these disorders. It can be useful to think of eating disorders as influenced by multiple risk factors, one of which is body dissatisfaction. Others include neurotic personality, a family history of eating disorders, and having a friend who suffers from either anorexia nervosa or bulimia.

A general tendency toward mental illness may also be a factor in eating disorders, as shown in a longitudinal study of young women who had been anorexic in adolescence. Obsessive-compulsive personality disorder, a condition characterized by an excessive need for control of the environment, seemed to be especially prevalent in this group. The young women's mental difficulties did not appear to be the result of having previously suffered from an eating disorder. Instead, both the adolescent eating disorder and the women's problems in adulthood seem to have been produced by a consistent tendency toward distorted perceptions.

### **Depression and Suicide**

#### *11.10 Which adolescents are at greater risk of depression and suicide?*

Epidemiological studies reveal that, at any given time, five to eight percent of adolescents are in the midst of an enduring depression. Perhaps twice that many will experience a serious depression at some time in their teenaged years. Girls are twice as likely as boys to report feelings of depression, a sex difference that persists throughout adolescence and into adulthood.

Neuroimaging studies show that adolescent depression is associated with some kind of dysfunction in the pituitary gland. Children growing up with depressed parents are much more likely to develop depression

than are those growing up with non-depressed parents. This could indicate that depression is determined to some extent by a genetic factor, or it could be explained in terms of the parenting behavior of depressed parents. Any combination of stresses—such as the parents' divorce, the death of a parent or another loved person, the father's loss of a job, a move, a change of schools, or lack of sleep—increases the likelihood of depression or other kinds of emotional distress in the adolescent.

**Discussion Launcher** (Learning Objective 11.10, p. 323)

What protective factors might be useful in preventing depression?

Depression can hinder academic achievement, because it interferes with memory. For example, depressed adolescents are more likely to remember negative information than positive information, and they seem to be less able to store and retrieve verbal information than their non-depressed peers.

**Discussion Launcher** (Learning Objective 11.10, p. 323)

Why would remembering negative information and forgetting positive information contribute to academic development?

Some teenagers' depression leads to thoughts of suicide, and some of the thoughts lead to action. Therapeutic interventions, such as antidepressant medication, may improve a depressed teenagers' academic performance along with her emotional state. Most such treatments have been shown to be as effective for adolescents as they are for depressed adults.

Although depression is more common among girls, the likelihood of a completed suicide is almost five times as high among adolescent boys as among girls. In contrast, suicide attempts are estimated to be three times more common among girls than among boys.

It is obviously very difficult to uncover the contributing factors in completed suicides. It seems clear, however, that one ingredient is some kind of emotional difficulty such as depression. Behavior problems such as aggression are also common in the histories of those who complete suicides, as is a family history of psychiatric disorder or suicide or a pattern of drug or alcohol abuse. In addition, psychologists suggest at least three other contributing factors.

- Some triggering stressful event.
- An altered mental state.
- An opportunity.

**Discussion Launcher** (Learning Objective 11.10, p. 323)

Give examples of how each of the contributing factors may affect suicide.

**Critical Thinking Question** (Learning Objectives 11.7-11.10, p. 318-323)

If you had the power to change U.S. culture in ways that you think would reduce the prevalence of the problems that were discussed in this section, what changes would you make?

**CHANGES IN THINKING AND MEMORY (p. 324-328)**

<i>Videos/DVDs</i>	<i>Formal Thought</i> <i>Piaget's Developmental Theory: Formal Thought</i>
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**Piaget's Formal Operational Stage***11.11 What are the characteristics of thought in Piaget's formal operational stage?*

Piaget's observations led him to conclude that the **formal operational stage** of thinking emerges fairly rapidly in early adolescence, between roughly age 12 and age 16. During this stage, teenagers learn to reason logically about abstract concepts. Formal operational thinking has a number of key elements.

**Systematic Problem Solving**

One important feature of formal operations is **systematic problem-solving**, the ability to search methodically for the answer to a problem. To study this process, Piaget presented adolescents with complex tasks drawn mostly from the physical sciences. In one of these tasks, the participants were given varying lengths of string and a set of objects of various weights that could be tied to the strings to make a swinging pendulum. The task was to figure out which one factor or combination of factors determined the period of the pendulum (the amount of time for one swing).

If you give the task to a concrete operational child, she will usually try out many different combinations of length, weight, force, and height in an ineffective way. In contrast, an adolescent using a formal operational approach is likely to vary just one of the four factors at a time.

**Discussion Launcher** (Learning Objective 11.11, p. 324)

Think of a few real-life examples of tasks that demand systematic problem solving.

**Logic**

Another facet of this shift is the appearance of what Piaget called **hypothetico-deductive reasoning**—the ability to derive conclusions from hypothetical premises—in the child's repertoire of skills. The development of hypothetico-deductive reasoning is part of a larger developmental trend, the emergence of the capacity for deductive reasoning. Deductive reasoning involves if-then relationships. Children as young as four or five can understand some such relationships if the premises are factually true, but only at adolescence can young people understand and use the basic logical relationships implied by if-then statements.

Psychologist David Elkind hypothesized that another common manifestation of hypothetico-deductive reasoning is a type of thought he called adolescent egocentrism, the belief that one's thoughts, beliefs, and feelings are unique.

- One component is the **personal fable**, the belief that the events of one's life are controlled by a mentally constructed autobiography.
- Adolescent egocentrism drives teens to try out various attitudes, behaviors, and even clothing choices in front of an **imaginary audience**, an internalized set of behavioral standards usually derived from a teenager's peer group.

**Discussion Launcher** (Learning Objective 11.11, p. 325)

Give examples of the personal fable and an imaginary audience.

Research examining these constructs has produced mixed results.

- While it is true that adolescents use idealized mental models to make all kinds of decisions about their own and others' behavior, school-aged children exhibit similar forms of thought.
- If school-aged children display this kind of thinking, then it is not as strongly correlated to formal operational thinking as Elkind claimed.

Despite the shortcomings, the tendency to exaggerate others' reactions to one's own behavior and to base decisions on unrealistic ideas about the future are two characteristics that distinguish adolescents from younger children. A social-cognitive approach is a model known as the new look theory. It claims that both the imaginary audience and the personal fable are rooted in social-emotional development, not in Piaget's formal operational stage. Both behaviors result from teens' attempts to establish identities that are separate from those of their parents. In the process, they use a defense mechanism called projection, the attribution of one's own thought to others.

**Direct Tests of Piaget's View***11.12 What are some major research findings regarding the formal operational stage?*

Researchers have found clear evidence of the changes in adolescent thinking during the formal operational stage in at least some adolescents. Formal operational reasoning also seems to enable adolescents to understand figurative language, such as metaphors, to a greater degree. In a more practical vein, developmentalists have shown that teenagers' new cognitive abilities alter the ways they make decisions. In one study, eighth, tenth, and twelfth graders responded to a set of dilemmas that involved a person facing a difficult decision. Nearly half of the twelfth graders, but only 11 percent of the eighth graders, mentioned future possibilities in their comments on these dilemmas.

Findings from several cohorts of adolescents suggest that Piaget's predictions about adolescents' thinking abilities were overly optimistic—in contrast to his overly pessimistic estimates of young children's abilities. In adulthood, rates of formal operational thinking increase with education. Generally, the better educated the adult participants in a study of formal operational thinking, the greater the percentage who displayed this kind of reasoning. The current consensus among developmentalists is that all non-retarded teenagers and adults have the capacity for formal operational thinking, but they actually acquire it in response to specific demands, such as those imposed by higher levels of education. Thus, people whose life situations or cultures do not require formal operational thinking do not develop it.

**Discussion Launcher** (Learning Objective 11.12, p. 326)

In what way might formal operational thinking influence decision-making about risky behavior in adolescence?

**Feature Box Activity** (Learning Objective 11.12, p. 326)**Research Report: Formal Operational Thinking and Everyday Problem Solving**

Ask students to give examples of formal operational thinking in everyday problem solving.

**Advances in Information-Processing***11.13 What kinds of advances in information-processing capabilities occur during adolescence?*

Adolescents process information faster, use processing resources more efficiently, understand their own memory processes better, and have more knowledge than do elementary school children. As a result, their working memories function more efficiently, and they outperform school-aged children even on such simple memory tasks as recognizing faces. Moreover, they are much better at using strategies to help themselves remember things and can more easily understand and remember complex information, such as that presented in a textbook.

**Metacognition, Metamemory, and Strategy Use**

By age 14 or 15, the metacognitive and metamemory skills of adolescents far exceed those of younger children. In addition, the capacity to apply memory strategies selectively, based on the characteristics of a memory task, appears early in the teenaged years and continues to improve throughout adolescence. Training studies, in which children and adolescents are taught to use a particular memory strategy, also suggest that metacognitive abilities enable teenagers to benefit more from training than young children do. Experimenters found that only the high school students made an effort to use the strategy they had just learned to accomplish the new memory task. High school students' success seemed to be due to their superior ability to recognize the similarity between the two tasks—an aspect of metamemory.

***Discussion Launcher*** (Learning Objective 11.13, p. 327)

Give examples of improvements in metacognition, metamemory, and strategy use from early adolescence to late adolescence.

**Text Learning**

Differences between younger children's and adolescents' processing of a memory for a text are even more dramatic. In a classic study of text processing, experimenters asked 10-, 13-, 15- and 18-year-olds to read and summarize a 500-word passage. The researchers hypothesized that participants would use four rules in writing summaries:

- First, they would delete trivial information.
- Second, their summaries would show categorical organization.
- Third, the summaries would use topic sentences from the text.
- Fourth, the participants would invent topic sentences for paragraphs that did not have them.

The results of the study suggested that participants of all ages used the first rule, but the 10- and 13-year-olds used the other rules far less frequently than the older students. Additionally, the 15-year-olds used categories about as frequently as 18-year-olds, but the oldest group used topic sentences far more effectively. This pattern suggests that the ability to summarize a text improves gradually during the second half of adolescence. Studies of text outlining reveal a similar pattern.

***Critical Thinking Question*** (Learning Objectives 11.11-11.13, p. 324-328)

How could some of the cognitive advances that emerge during adolescence be used in an essay countering negative stereotypes of teenagers in the media?

**SCHOOLING (p. 299-307)****Transition to Secondary School***11.14 How do changes in students' goals contribute to the transition to secondary schools?*

In many schools, children attend a lower school for eight years before moving on to a high school for four years, an arrangement known as an 8-4 system. Because students typically show achievement declines after entering high school, educators have developed two models that include a transitional school between elementary and high school.

- The junior high system typically includes six years of elementary school, three years of junior high, and three years of high school, a 6-3-3 system.
- The middle school model includes five years of elementary school, three years of middle school, and four years of high school, a 5-3-4 system.

Neither approach seems to have solved the problem, however. Students show losses in achievement and in self-esteem across both transition points in the 6-3-3 and 5-3-4 systems. Further, students in both of these systems show greater losses during the transition to high school than those in 8-4 systems. Consequently, educators and developmentalists are currently searching for explanations and practical remedies.

**Discussion Launcher** (Learning Objective 11.14, p. 328)

Conduct a class debate of the pros and cons of each of the school systems.

**Middle School**

One potential explanation for transition-related achievement declines is that students' academic goals change once they leave elementary school. Researchers classify such goals into two very broad categories: task goals and ability goals.

- **Task goals** are goals based on personal standards and a desire to become more competent at something.
- An **ability goal** is one that defines success in competitive terms, being better than another person at something.

Most fifth graders have task goals, but by the time they have been in sixth grade a few months, most children have shifted to ability goals.

A student's goals influence his behavior in important ways.

- Task goals are associated with a greater sense of personal control and more positive attitudes about school. The student tends to set increasingly higher standards for his performance and attributes success and failure to his own efforts.
- Students with ability goals adopt relative standards—that is, they view performance on a given academic task as good as long as it is better than someone else's. The students are more strongly influenced by the group with which they identify than by internal standards that define good and bad academic performance. They are more likely to attribute success and failure to forces outside themselves and are likely to have a negative view of school.

Because middle schools emphasize ability grouping more than elementary schools, it is likely that many middle-school students change their beliefs about their own abilities during these years. Once an ability-goal-oriented student adopts the belief that her academic ability is less than adequate, she tends to stop putting effort into school work. She is also likely to use ineffective cognitive strategies when attempting to learn academic material. Consequently, achievement suffers along with self-esteem.

**Discussion Launcher** (Learning Objective 11.13, p. 327)

Give examples of how task and ability goals influence behavior.

Another factor that influences young adolescents' adjustment to secondary school is their perception of the school's climate. Many middle-schoolers perceive their schools to be impersonal and unsupportive.

- Some schools provide students with an adult mentor, either a teacher or a volunteer from the community, to whom they are assigned for a transitional period or throughout the middle school years. In some schools, students in the sixth grade report to a homeroom teacher who is supposed to monitor the child's progress and communicate with each child's parents. The parents are then responsible for follow-up. Research suggests that these programs are highly successful in improving middle school students' grades.
- Organizing students and teachers into teams for each grade level may make a middle school truly transitional. Teachers in each grade-level team work together to balance the demands of different subject-area classes, assess problems of individual students, and devise parent involvement strategies. Preliminary research suggests that the team approach helps to minimize the negative effects of the middle school transition.

**High School**

Regardless of the type of school they attended previously, the early days of high school set a general pattern of success or failure for teenagers that continue into their adult years. For example, teenagers who fail one or more courses in the first year of high school are far less likely than their peers to graduate.

Some psychologists emphasize the positive aspects of transition to high school, claiming that participation in activities that are usually offered only in high school allows students opportunities to develop psychological attributes that can't be acquired elsewhere. Educators may be able to ease the transition to high school for many students by offering a wide variety of elective and extracurricular activities and encouraging students to participate.

**Discussion Launcher** (Learning Objective 11.14, p. 330)

What was your first year of high school like? Did your grades and self-esteem decline? What do you think teachers and administrators could do differently to make the transition easier for students?

**Gender, Ethnicity, and Achievement in Science and Math**

*11.15 What gender and ethnic differences in science and math achievement have been found by researchers?*

Girls seem to be at a particular risk for achievement losses after the transition to high school. For example, eighth-grade boys outscore girls in science achievement, and the gap widens substantially by the time adolescents reach tenth grade. The gender gap is widest among the most intellectually talented students, and girls' achievement suffers in science learning situations that do not offer hands-on activities. Additionally, intellectually talented girls are often discouraged from taking courses and pursuing careers in sciences such as chemistry and physics. Instead, teachers and counselors urge girls who express an interest in science to focus on life sciences such as zoology and botany. Cultural attitudes clearly influence girls' science achievement. For example, girls' and their parents' perceptions of science as a suitable career for females strongly predict girls' success in science courses.

**Discussion Launcher** (Learning Objective 11.15, p. 330)

Give examples of how girls' and their parents' perception of sciences as a suitable career affects girls' success in science courses.

The gender gap in mathematics achievement widens in high school as well, although sex differences are smaller today than they were in the 1960s. Variations in boys' and girls' approaches to problem-solving may be responsible for sex differences in high school. Like their scientifically talented peers, mathematically gifted high school girls have considerably less confidence in their abilities than their male counterparts do, even though the girls typically get better grades. It is the girls' beliefs about their abilities and about the acceptability of success in math for females that shapes their interest in taking higher-level high school and college math courses.

As striking as the gender differences in math are, they pale in comparison to ethnic variations. One reason for the ethnic differences is that Asian-American and white students are more likely to enter ninth grade with the skills they need to take their first algebra class. Many researchers conclude that educators may be encouraging African-American and Hispanic-American students to attend college without providing them with the necessary skills to attain this goal. More rigorous transitional classes in eighth and ninth grade might enable greater numbers of African-American and Hispanic-American students to complete college preparatory math classes in high school.

**Discussion Launcher** (Learning Objective 11.15, p. 331)

In teams, devise a plan to encourage greater numbers of African-American and Hispanic-American students to complete college preparatory math classes in high school. Share each team's plans with the entire class.

**Dropping Out of High School***11.16 What variables predict the likelihood of dropping out of high school?*

The cumulative effect of success over many years of schooling fosters a greater sense of academic confidence among academically successful high school students. Those who achieve, especially those who achieve despite backgrounds that include poverty or other daunting obstacles, are likely to have parents who have high aspirations for them or an authoritative parenting style.

Dropping out of high school, like academic success, results from a complex interaction of academic and social variables, such as ethnicity and social class. Children growing up in low-income families—especially those families with a single parent—are considerably more likely to drop out of high school than are those from more economically advantaged or intact families. Because minority teenagers in the U.S. are so much more likely to come from poor families or from families that do not provide psychological support for academic achievement, they are also more likely to drop out of school.

Longitudinal studies show that students who have a history of academic failure, a pattern of aggressive behavior, and poor decisions about risky behavior are more likely to drop out. With respect to risky behavior, decisions about sexual intercourse seem to be especially critical. Adolescent drug use is also a strong predictor of dropping out. In fact, alcohol and drug use better predict a high school students' grades than do the students' grades in elementary or middle school. Consequently, decisions about such risky behaviors seem to be one factor that can cause a teen to deviate from a previously positive



developmental pathway. Peer influence may also be a factor in dropping out. Teens who quit school are likely to have friends who dropped out or who are contemplating leaving school.

**Discussion Launcher** (Learning Objective 11.16, p. 332)

List reasons why the peer group has such a strong influence on dropping out of school.

Whatever its cause, dropping out of high school is associated with a number of long-term consequences, such as unemployment, lower wages, and depression. Staying in school, however, may be an important protective factor for boys who have poor self-regulation skills. When boys who are poor self-regulators stay in school, they are less likely to become involved in criminal activity in early adulthood.

**Feature Box Activity** (Learning Objective 11.16, p. 332)

**No Easy Answers: Reaching the High School Drop-Out**

List suggestions for reaching high school drop-outs.

## LECTURE ENHANCERS

### Body Image and Eating Disorders

Given the complex relationship between body image, identity, and self-esteem, it would make sense that body image might be related to eating disorders in some way. Adolescents are developing strong internal working models about self, and these models influence their view of the world and the manner in which they process information.

The text mentions that bulimia is virtually unheard of in countries where food is scarce. Information such as this reinforces the belief that bulimia is psychologically driven and not biological in origin. Anorexia (characterized by extreme dieting, intense fear of gaining weight, and obsessive exercising) seems to be clearly linked to body image. It has been suggested that the body image of the anorexia sufferer is so distorted that she or he sees an image of themselves in the mirror that is "too fat" regardless of how rail-thin she or he might actually be.

The cycle that might lead to anorexia is probably similar to the relationship between the adolescent's internal image of pubertal onset and the actual timing of onset as described earlier. In the same fashion, the adolescent develops an internal working model of what her or his body should look like. This internal working model (or body image) is probably developed as a combination of societal images of what the perfect, ideal, or preferred body would be. It seems that the better job we do of educating adolescents of the changes that will occur in their bodies, what a healthy body image should be, and how to incorporate a reasonable body image into their developing self-concepts, the healthier the adolescent's internal image will be. This, in turn, should lead to more positive self-related feelings.

## Cognitive Development

As if all of the physical changes that are taking place during adolescence are not enough, there are significant cognitive changes that are taking place as well. One significant cognitive change involves the complex changes in body image. Children from very young ages are developing a sense of body image. Young boys aged three years (or even younger) tighten their arms and say, "Feel my muscles. I am strong." Adolescents are in the formal operational stage of cognitive development in Piaget's theory. During this stage of cognitive development, the adolescent utilizes logic that is much more abstract than at any time before.

The child is now able to move beyond thinking about only those experiences that she has actually had. The adolescent is becoming significantly more adept at manipulating abstract concepts and can tolerate ambiguity more profoundly than before. During this stage, the adolescent is also developing the skill to approach problems logically and to utilize systematic efforts to solve those problems. At younger ages, children may adopt a trial-and-error approach to solving problems.

With this type of tactic, the child tries whatever he can think of to solve the problem. Often, when the first few efforts are not successful, he will simply give up. Teenagers who are developing successful skills for systematic problem-solving are less likely to give up because their strategies are more likely to be successful in the long run. All in all, the cognitive development of adolescence mirrors the physical changes the individual is going through. Likewise, the teenager's physical changes can have a profound impact on the cognitive changes.

<b>INSTRUCTOR RESOURCES</b>
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### *Media*

- *Adolescence*. (30 minutes, Insight Media). Provides a very basic introduction to the key developmental issues and concepts of adolescence. Experts discuss the physical, psychological, and social changes that force the individual to make the transition from childhood to adulthood.
- *Adolescent Physical Development*. (30 minutes, Insight Media). Describes the physical changes that accompany puberty and discusses their psychological impact. Explores the psychological effects of early and late maturation, menarche, and feelings about physical appearance.
- *Anorexia and Bulimia*. (19 minutes, Films for the Humanities and Sciences). Shows the extremes to which people with these disorders commonly go. Discusses the possible effects of eating disorders on the cardiovascular and central nervous systems.
- *Baby Love*. (57 minutes, Films for the Humanities and Sciences). A diverse group of teenaged mothers speak out on a variety of issues; portrays the personal perspective on adolescent sexuality and parenting.
- *Body Image: Let's Get Real*. (48 minutes, films for the Humanities and Sciences). Examines how media images have influences both boys' and girls' ideal body.
- *Childhood's End*. (25 minutes, Filmmakers Library, Inc., 1991). Shows interviews with adolescents who have attempted suicide and identifies preventive approaches.
- *Eating Disorders*. (19 minutes, Films for the Humanities and Sciences, 1994). Describes the personality profiles of anorexics, and shows how anorexia develops and can be cured.
- *Fear of Fat*. (26 minutes, Churchill Films, 1986). Features five young women who have eating disorders and shows how they have overcome them. The societal pressures that cause eating disorders are described and the importance of accepting your body is stressed.

- *Formal Thought*. (32 minutes, Davidson Films). Demonstrates logical and systematic procedures as adolescents grapple with various tests of formal operational thought.
- *Ignoring the Risks: Teenage Pregnancy and AIDS*. (28 minutes, Films for the Humanities and Sciences). Adapted from a Phil Donahue program, teens explain why they continue to ignore the warning that unprotected sex often is the pathway to unwanted pregnancy, AIDS, and death.
- *Piaget's Developmental Theory: Formal Thought*. (32 minutes, Pennsylvania State University, 1971). Depicts junior high and high school students working with Piagetian tasks and demonstrates the properties of formal operational thought.
- *Preventing Teen Pregnancy*. (28 minutes, Films for the Humanities and Sciences). Adapted from a Phil Donahue program, the film begins by describing the disproportionate number of problems faced by teenage mothers and their children.
- *Rich Kids on Drugs*. (28 minutes, Films for Humanities and Sciences, 1994). Describes how a teenager got hooked on drugs. Adapted from a Phil Donahue Program.
- *Suicide: Teenage Crisis*. (25 minutes, CRM/McGraw-Hill Films, 1981). Discusses the reasons for teenage suicide and identifies preventive approaches.
- *Teenage Drinking: Hey, How about Another One?* (15 minutes, CRM/McGraw-Hill Films, 1975). Discusses motivations for drinking in adolescence and consequences for teenage drinking.

***Helen Bee's Student Projects***

- Research Project 21           The Pendulum
- At-Home Project 22        Plotting Your Own Growth

## **Test Bank**

### **Chapter 11 Physical and Cognitive Development in Adolescence**

#### **Multiple Choice Questions**

1) Which of the following best defines *adolescence*?

- A) The period between the ages of 10 and 17
- B) The transition to puberty
- C) The transitional period between childhood and adulthood
- D) The transitional period from childhood to teenage-hood

Answer: C

*Diff: 1 Page Ref: 307*

*Topic: Chapter Introduction*

*Skill: Factual*

*Objective: N/A*

2) Which group of hormones is responsible for the development of the sex organs?

- A) Testosterone in females and estradiol in males
- B) General growth hormones
- C) Estrogen in females and testosterone in males
- D) Thyroid gland hormones

Answer: C

*Diff: 1 Page Ref: 308*

*Topic: Brain Development and Physical Growth*

*Skill: Factual*

*Objective: 11.1*

3) Which hormone is responsible for normal brain development and overall rate of growth?

- A) Adrenal androgen
- B) Thyroxine
- C) Testosterone
- D) Estrogen

Answer: B

*Diff: 1 Page Ref: 308*

*Topic: Brain Development and Physical Growth*

*Skill: Factual*

*Objective: 11.1*

4) Which hormone is responsible for changes at puberty, particularly the development of the secondary sex characteristics in girls?

- A) Adrenal androgen
- B) Thyroxine
- C) Testosterone
- D) Estrogen

Answer: A

*Diff: 2 Page Ref: 308*

*Topic: Brain Development and Physical Growth*

*Skill: Factual*

*Objective: 11.1*

CHAPTER 11

5) At what ages do the two major brain growth spurts occur?

- A) 12 - 14 and 17 - 18
- B) 13 - 15 and 18 - 20
- C) 11 - 12 and 13 - 15
- D) 13 - 15 and 17 - 18

Answer: D

*Diff: 3 Page Ref: 308*

*Topic: Brain Development and Physical Growth*

*Skill: Factual*

*Objective: 11.1*

6) During a growth spurt, which is (are) likely to grow first?

- A) The torso
- B) Arms and legs
- C) Hands and feet
- D) The brain

Answer: C

*Diff: 2 Page Ref: 308*

*Topic: Brain Development and Physical Growth*

*Skill: Conceptual*

*Objective: 11.1*

7) Which gland prompts the release of hormones from the other endocrine glands?

- A) Pituitary
- B) Thyroid
- C) Adrenal
- D) Hypothalamus

Answer: A

*Diff: 1 Page Ref: 309*

*Topic: Milestones of Puberty*

*Skill: Factual*

*Objective: 11.2*

8) During puberty the pituitary gland signals the adrenal glands to increase production of androgens. What is the term for this process?

- A) Pituitarism
- B) Adrenarche
- C) Puberty
- D) Estradiol

Answer: B

*Diff: 1 Page Ref: 309*

*Topic: Milestones of Puberty*

*Skill: Factual*

*Objective: 11.2*

9) During adolescence, boys are more advanced than girls in which of the following aspects of physical development?

- A) Attainment of adult height
- B) Joints of the skeletal system
- C) Acquisition of fat tissue
- D) Size of heart and lungs

Answer: D

*Diff: 2 Page Ref: 309 - 310*

*Topic: Milestones of Puberty*

*Skill: Conceptual*

*Objective: 11.2*

- 10) Which of the following best defines menarche?  
A) The beginning of puberty marked by the development of breast buds  
B) Growth of the uterus during puberty  
C) The onset of menstruation at puberty  
D) Increase in body fat at puberty

Answer: C

*Diff: 1 Page Ref: 310*

*Topic: Milestones of Puberty*

*Skill: Factual*

*Objective: 11.2*

- 11) Which of the following is NOT a change in primary sex characteristics which takes place during puberty?  
A) Growth of breasts  
B) Growth of the ovaries  
C) Growth of the penis  
D) Formation of a uterus

Answer: A

*Diff: 2 Page Ref: 310*

*Topic: Milestones of Puberty*

*Skill: Conceptual*

*Objective: 11.2*

- 12) Which of the following is an example of changes in secondary sex characteristics during puberty?  
A) Growth of the testes  
B) Growth of the breasts  
C) Growth of the penis  
D) Growth of the ovaries

Answer: B

*Diff: 2 Page Ref: 310*

*Topic: Milestones of Puberty*

*Skill: Conceptual*

*Objective: 11.2*

- 13) What is the term for the onset of the menstrual cycle?  
A) Menstruation  
B) Ovarianation  
C) Secularization  
D) Menarche

Answer: D

*Diff: 1 Page Ref: 310*

*Topic: Milestones of Puberty*

*Skill: Factual*

*Objective: 11.2*

- 14) Which of the following is the earliest sign of puberty for a female?  
A) Menstruation  
B) Changes in breasts and pubic hair  
C) Growth spurt  
D) Development of a mesomorphic body type

Answer: B

*Diff: 2 Page Ref: 310*

*Topic: Milestones of Puberty*

*Skill: Factual*

*Objective: 11.2*

CHAPTER 11

15) The changes in the patterns of physical growth and development that are known as the *secular trend* are most likely caused by which of the following?

- A) An increasingly sexualized society
- B) Increased levels of demand and stress placed upon children and adolescents
- C) Improvements in nutrition and health care
- D) Cultural values that favor a thin, angular body image

Answer: C

Diff: 2 Page Ref: 310 - 311

Topic: Milestones of Puberty

Skill: Conceptual

Objective: 11.2

16) According to current research, which of the following accounts for the secular trend in development worldwide?

- A) Better sex education
- B) Declines in teen sexual behavior
- C) Improvements in nutrition and health care
- D) Lack of proper prenatal care

Answer: C

Diff: 3 Page Ref: 311

Topic: Milestones of Puberty

Skill: Conceptual

Objective: 11.2

17) In which of the following groups has the average age of menarche NOT changed over the past six decades?

- A) African American girls
- B) White girls in Great Britain
- C) Hispanic American girls
- D) White girls in the U.S.

Answer: D

Diff: 2 Page Ref: 311

Topic: Milestones of Puberty

Skill: Factual

Objective: 11.2

18) Which of the following is a true statement regarding obesity and puberty?

- A) Obesity is likely to be positively correlated with early puberty in girls.
- B) Obesity is likely to be positively correlated with early puberty in boys.
- C) Obesity is likely to cause late onset puberty in boys and girls.
- D) Obesity is negatively correlated with early puberty in girls.

Answer: A

Diff: 3 Page Ref: 311

Topic: Milestones of Puberty

Skill: Conceptual

Objective: 11.2

- 19) Dawn has just turned thirteen years old, and she recently experienced menarche. If Dawn becomes sexually active, will she be at risk for pregnancy?
- A) Possibly. Although irregular menstrual cycles are the norm for some time, pregnancy is still possible.
  - B) Not likely, as irregular menstrual cycles signal the absence of ovulation.
  - C) No. The irregularity of menstrual cycles after menarche means that it would be impossible to have intercourse during an ovulatory cycle.
  - D) Probably not. She would be too young to get pregnant.

Answer: A

*Diff: 3 Page Ref: 311*

*Topic: Milestones of Puberty*

*Skill: Applied*

*Objective: 11.2*

- 20) Which of the following statements about menarche is FALSE?
- A) Among girls in industrialized countries, menarche occurs, on average, between the ages of 12 and 13.
  - B) Menarche typically occurs two years after the beginning of indicators such as changes in the breast and pubic hair.
  - C) Ninety-nine percent of girls experience menarche between the ages of 11 and 15.
  - D) In industrialized countries, the average age of menarche has remained fairly stable for more than 100 years.

Answer: D

*Diff: 2 Page Ref: 311*

*Topic: Milestones of Puberty*

*Skill: Conceptual*

*Objective: 11.2*

- 21) Of the following events in boys' puberty, which typically occurs earliest?
- A) Growth of the genitals
  - B) Peak of the growth spurt
  - C) Growth of a beard
  - D) Lowering of the voice

Answer: A

*Diff: 2 Page Ref: 311*

*Topic: Milestones of Puberty*

*Skill: Factual*

*Objective: 11.2*

- 22) Which of the following is true of spermarche?
- A) It's onset varies considerably between different ethnic groups.
  - B) It typically occurs between 13 & 14 years of age, but the production of viable sperm does not happen until a few months later.
  - C) It typically occurs between 15 & 16 years of age.
  - D) Viable sperm production usually occurs a few months prior to the first ejaculation.

Answer: B

*Diff: 3 Page Ref: 311*

*Topic: Milestones of Puberty*

*Skill: Conceptual*

*Objective: 11.2*



CHAPTER 11

23) Which of the following groups is more likely to have a negative body image, get into trouble at school and with peers, and engage in delinquent behavior?

- A) Late-maturing boys
- B) Early-maturing boys
- C) Late-maturing girls
- D) Early-maturing girls

Answer: D

*Diff: 2 Page Ref: 312*

*Topic: Timing of Puberty*

*Skill: Conceptual*

*Objective: 11.3*

24) Which of the following groups is more likely to occupy leadership roles, but also be at increased risk for alcohol or drug use?

- A) Late maturing girls
- B) Early maturing boys
- C) Late maturing boys
- D) Early maturing girls

Answer: B

*Diff: 2 Page Ref: 312*

*Topic: Timing of Puberty*

*Skill: Conceptual*

*Objective: 11.3*

25) Which of the following is NOT likely to be characteristic of a girl who experienced the major physical changes of puberty by age ten?

- A) A positive body image
- B) Involvement with misbehaving peers
- C) Trouble at home and at school
- D) Depression

Answer: A

*Diff: 3 Page Ref: 312*

*Topic: Timing of Puberty*

*Skill: Conceptual*

*Objective: 11.3*

26) Which of the following factors is most likely to influence whether or not teens become sexually active across cultures?

- A) Social factors
- B) Hormones
- C) Nutritional levels
- D) Levels of sex education

Answer: A

*Diff: 2 Page Ref: 313*

*Topic: Sexual Behavior*

*Skill: Factual*

*Objective: 11.4*

- 27) Which of the following statements about adolescent sexual activity is NOT true?
- A) Two thirds of sexually active children report using condoms in their most recent sexual activity.
  - B) Of the students using contraception, more use the birth control pill than use condoms.
  - C) Teens who are involved in sports or after-school activities have lower rates of sexual activity than teens who do not participate in such activities.
  - D) Among girls, those who are sexually active are more likely to have had early menarche.

Answer: B

*Diff: 2 Page Ref: 314*

*Topic: Sexual Behavior*

*Skill: Conceptual*

*Objective: 11.4*

- 28) In the United States, earlier initiation to adolescent sexual activity is associated with which of the following?
- A) Involvement in school activities
  - B) Plans for college or education beyond high school
  - C) School-based sexuality education programs
  - D) Earlier dating

Answer: D

*Diff: 2 Page Ref: 314*

*Topic: Sexual Behavior*

*Skill: Conceptual*

*Objective: 11.4*

- 29) In the United States, which of the following sexually active groups is most likely to use condoms?
- A) African Americans
  - B) White Americans
  - C) Hispanic Americans
  - D) Asian Americans

Answer: A

*Diff: 1 Page Ref: 314*

*Topic: Sexual Behavior*

*Skill: Factual*

*Objective: 11.4*

- 30) What proportion of teenagers can actually explain the reality of when a female is most likely to get pregnant?
- A) One third
  - B) About half
  - C) Two thirds
  - D) Only 10%

Answer: B

*Diff: 2 Page Ref: 314*

*Topic: Sexual Behavior*

*Skill: Factual*

*Objective: 11.4*

- 31) Which of the following statements is true regarding adolescent pregnancy in the U.S.?
- A) The number of teen pregnancies continues to rise.
  - B) Teen pregnancy statistics only account for those under the age of 16.
  - C) The number of unwed teen mothers who eventually wed the babies' fathers has increased over the past four decades.
  - D) The number of births to unmarried teens has increased over the past four decades.

Answer: D

*Diff: 3 Page Ref: 315*

*Topic: Adolescent Pregnancy*

*Skill: Conceptual*

*Objective: 11.5*

CHAPTER 11

32) What is the overall annual teenaged pregnancy rate in the United States?

- A) 10 per 1,000 teens
- B) 20 per 1,000 teens
- C) 40 per 1,000 teens
- D) 100 per 1,000 teens

Answer: C

*Diff: 2 Page Ref: 315*

*Topic: Adolescent Pregnancy*

*Skill: Factual*

*Objective: 11.5*

33) Which of the following statements about teen pregnancy is true?

- A) The highest rate of teenaged pregnancy is among girls under the age of 15.
- B) The teenaged pregnancy rate has steadily increased since the 1960s.
- C) The rate of births to married teenagers has increased in the last four decades.
- D) Pregnancy is most likely to happen after a girl leaves high school.

Answer: D

*Diff: 2 Page Ref: 315*

*Topic: Adolescent Pregnancy*

*Skill: Conceptual*

*Objective: 11.5*

34) How many teen pregnancies end in abortion?

- A) 10%
- B) Almost half
- C) About one fourth
- D) About one third

Answer: D

*Diff: 2 Page Ref: 316*

*Topic: Adolescent Pregnancy*

*Skill: Factual*

*Objective: 11.5*

35) Which of the following is NOT one of the stages of crisis of teen pregnancy?

- A) The escalation phase
- B) The denial phase
- C) The initial phase
- D) The redefinition phase

Answer: B

*Diff: 2 Page Ref: 316*

*Topic: The Real World*

*Skill: Conceptual*

*Objective: 11.5*

36) Which of the following statements best summarizes the research as to the causes of homosexuality?

- A) The majority of teens who identify as homosexual report having been sexually abused as children.
- B) More and more research indicates that genetics plays a strong role in the development of sexual orientation.
- C) The research does not clearly point to either genetics or environment, but rather indicates that sexual orientation is a result of both genetic and environmental factors.
- D) The research clearly indicates that homosexual behaviors are a matter of choice.

Answer: C

*Diff: 3 Page Ref: 317*

*Topic: Sexual Minority Youth*

*Skill: Conceptual*

*Objective: 11.6*

37) What is the concordance rate of homosexuality in fraternal twins?

- A) 20%
- B) 30%
- C) 50%
- D) 60%

Answer: A

*Diff: 2 Page Ref: 317*

*Topic: Sexual Minority Youth*

*Skill: Factual*

*Objective: 11.6*

38) Most people probably begin to have some awareness of their sexual orientation at what point in their lives?

- A) Adolescence
- B) Early Childhood
- C) Middle Childhood
- D) Young Adulthood

Answer: C

*Diff: 2 Page Ref: 317*

*Topic: Sexual Minority Youth*

*Skill: Conceptual*

*Objective: 11.6*

39) Which of the following statements is true regarding identity and social development in homosexual and heterosexual teens?

- A) Homosexual teens have a much more difficult time establishing identity than do heterosexual teens.
- B) The factors that are important in identity development are mostly similar between homosexual and heterosexual teens.
- C) Homosexual boys struggle with identity more than homosexual girls.
- D) Homosexuals are not likely to establish a clear identity until early adulthood.

Answer: B

*Diff: 2 Page Ref: 317*

*Topic: Sexual Minority Youth*

*Skill: Conceptual*

*Objective: 11.6*

40) Which of the following terms applies to a person whose psychological gender does not match their physical sex?

- A) Homosexual
- B) Transgendered
- C) Transfixed
- D) Cross-typed

Answer: B

*Diff: 1 Page Ref: 317*

*Topic: Sexual Minority Youth*

*Skill: Factual*

*Objective: 11.6*

CHAPTER 11

41) Thomas has been transgendered for as long as he can remember. He has begun living full time as Trina and has started taking hormone supplements. Trina plans to have gender reassignment surgery next year. Which of the following terms best describes Trina?

- A) Transgendered
- B) Homosexual
- C) Queer
- D) Transsexual

Answer: D

*Diff: 3 Page Ref: 318*

*Topic: Sexual Minority Youth*

*Skill: Applied*

*Objective: 11.6*

42) What is the correlation between risk-seeking behavior and the media?

- A) Teens who watch more than 40 hours of television per week are more likely to engage in sensation-seeking.
- B) The correlation between media influences and risk taking is negative.
- C) Teens who are most strongly influenced by media portrayals of risky behavior are more likely to engage in sensation-seeking.
- D) There is no evidence to correlate media portrayals of risky behavior and sensation-seeking.

Answer: C

*Diff: 2 Page Ref: 319*

*Topic: Sensation-Seeking*

*Skill: Conceptual*

*Objective: 11.7*

43) Among teenagers, sensation-seeking appears to be LEAST associated with which of the following?

- A) Automobile accidents and injuries
- B) Tobacco use
- C) Drug use
- D) Alcohol use

Answer: B

*Diff: 2 Page Ref: 320*

*Topic: Drugs, Alcohol, and Tobacco*

*Skill: Conceptual*

*Objective: 11.8*

44) Among teenagers, what is the most commonly used illicit drug?

- A) Alcohol
- B) Cocaine
- C) Marijuana
- D) Diet pills

Answer: A

*Diff: 1 Page Ref: 320*

*Topic: Drugs, Alcohol, and Tobacco*

*Skill: Factual*

*Objective: 11.8*

45) Of the following, which would be the LEAST effective strategy for parents who want to prevent children from smoking?

- A) Provide a parental model for non-smoking
- B) Discuss beliefs about the morality of smoking
- C) Punish teens who are found to be smoking
- D) Establish family rules against substance use

Answer: C

*Diff: 2 Page Ref: 321*

*Topic: Drugs, Alcohol, and Tobacco*

*Skill: Conceptual*

*Objective: 11.8*

46) Which of the following is NOT a characteristic of anorexia nervosa?

- A) Intense fear of gaining weight
- B) Fear of conflict
- C) Cessation of menstruation
- D) Obsessive exercising

Answer: B

*Diff: 2 Page Ref: 321*

*Topic: Eating Disorders*

*Skill: Conceptual*

*Objective: 11.9*

47) Anorexia nervosa is characterized by

- A) bingeing and purging.
- B) obsessive fear of food.
- C) the use of laxatives or self-induced vomiting.
- D) intense fear of weight gain, extreme dieting, and obsessive exercising.

Answer: D

*Diff: 2 Page Ref: 321*

*Topic: Eating Disorders*

*Skill: Conceptual*

*Objective: 11.9*

48) The eating disorder bulimia nervosa is characterized by

- A) obsessive dieting that results in death by starvation.
- B) significant weight loss.
- C) episodes of binge eating that are followed by purging activities.
- D) metabolic dysfunction that triggers compulsive and excessive eating.

Answer: C

*Diff: 1 Page Ref: 321*

*Topic: Eating Disorders*

*Skill: Factual*

*Objective: 11.9*

49) Which of the following is NOT associated with bulimia?

- A) Excessive weight loss
- B) Tooth decay
- C) Hair loss
- D) Depression

Answer: A

*Diff: 2 Page Ref: 321*

*Topic: Eating Disorders*

*Skill: Factual*

*Objective: 11.9*

CHAPTER 11

50) Use of laxatives, exercise and vomiting are most closely associated with which of the following?

- A) Treatment of anorexia nervosa
- B) Binge behaviors
- C) Purging
- D) Treatment of bulimia

Answer: C

*Diff: 1 Page Ref: 321*

*Topic: Eating Disorders*

*Skill: Conceptual*

*Objective: 11.9*

51) Tooth decay among bulimic teens is caused by which of the following?

- A) Poor nutrition
- B) Repeated vomiting
- C) Bulimia's correlation with poor hygiene
- D) Excessive intake of sugary foods

Answer: B

*Diff: 2 Page Ref: 322*

*Topic: Eating Disorders*

*Skill: Conceptual*

*Objective: 11.9*

52) All of the following have been proposed by theorists as a possible explanation for the development of eating disorders in our society EXCEPT

- A) obsessive-compulsive personality disorder.
- B) a discrepancy between an individual's internal image of a desirable body and her perception of her own body.
- C) mothers' beliefs about the desirability of thinness and their daughters' attractiveness.
- D) cultural values that emphasize health and strength as characteristics of attractiveness.

Answer: D

*Diff: 3 Page Ref: 322*

*Topic: Eating Disorders*

*Skill: Conceptual*

*Objective: 11.9*

53) Which of the following terms describes an excessive need for control of the environment?

- A) Obsessive-compulsive personality disorder
- B) Manic personality disorder
- C) Controlling personality disorder
- D) Borderline personality disorder

Answer: A

*Diff: 2 Page Ref: 322*

*Topic: Eating Disorders*

*Skill: Factual*

*Objective: 11.9*

54) Which of the following may create a developmental pathway for adolescent depression?

- A) Growing up with a depressed parent
- B) Growing up in a religion that emphasizes traditional gender roles
- C) Growing up in a low socioeconomic status family
- D) Having many siblings

Answer: A

*Diff: 2 Page Ref: 323*

*Topic: Depression and Suicide*

*Skill: Conceptual*

*Objective: 11.10*

55) Which of the following factors is NOT likely to contribute to the development of depression among adolescents?

- A) Genetic factors
- B) Family stressors
- C) Low self-esteem
- D) Family responsibilities and chores

Answer: D

*Diff: 3 Page Ref: 323*

*Topic: Depression and Suicide*

*Skill: Conceptual*

*Objective: 11.10*

56) Why are girls less likely to complete suicide?

- A) They are more prone to suicidal "faking."
- B) They lack access to lethal means.
- C) They tend to use means that are less successful, such as poisoning.
- D) Fewer girls attempt suicide, so fewer complete.

Answer: C

*Diff: 2 Page Ref: 323*

*Topic: Depression and Suicide*

*Skill: Conceptual*

*Objective: 11.10*

57) What percentage of high school students in the U.S. have seriously considered suicide?

- A) 17%
- B) 2 - 8 %
- C) 14%
- D) 25%

Answer: A

*Diff: 3 Page Ref: 323*

*Topic: Depression and Suicide*

*Skill: Factual*

*Objective: 11.10*

58) All of the following are recognized as common factors among suicide completers EXCEPT

- A) history of parental divorce.
- B) altered mental state through alcohol, drugs or emotional upset.
- C) access to means/opportunity.
- D) a triggering stressful event.

Answer: A

*Diff: 2 Page Ref: 323*

*Topic: Depression and Suicide*

*Skill: Conceptual*

*Objective: 11.10*

59) What is Piaget's fourth stage of cognitive development?

- A) Concrete operations
- B) Preoperational
- C) Post-operational
- D) Formal operations

Answer: D

*Diff: 1 Page Ref: 324*

*Topic: Piaget's Formal Operational Stage*

*Skill: Factual*

*Objective: 11.11*



CHAPTER 11

60) Piaget, through his fourth stage, believed that adolescence is the time when children's main task is to learn which of the following?

- A) To think abstractly
- B) To use concrete operations in new ways
- C) Choose an adult career
- D) Develop peer relationships

Answer: A

*Diff: 2 Page Ref: 324*

*Topic: Piaget's Formal Operational Stage*

*Skill: Conceptual*

*Objective: 11.11*

61) Fourteen-year-old Muhammed won a contest sponsored by the local newspaper to celebrate a championship basketball game. The object of the contest was to determine how many words could be made from the word "score." Which newly developed ability of formal operational thought would have been most helpful to Muhammed?

- A) The ability to reason about objects or situations not previously seen or experienced
- B) The ability to search systematically and methodologically for the solutions to a problem
- C) The ability to use ethical principles for decision-making
- D) The ability to start with a theory and a prediction and arrive at a conclusion

Answer: B

*Diff: 3 Page Ref: 324*

*Topic: Piaget's Formal Operational Stage*

*Skill: Applied*

*Objective: 11.11*

62) Charlene has achieved formal operational thought and is about to attempt Piaget's pendulum task. What can she do that she was UNABLE to do when she was still in the concrete operations stage?

- A) Formulate an approach to the task
- B) Try out varying combinations of height, weight, force, and length
- C) Measure the length of the string, the height of the pendulum, and the weight of the object
- D) Evaluate the effects of multiple factors in systematic, methodical fashion

Answer: D

*Diff: 3 Page Ref: 324*

*Topic: Piaget's Formal Operational Stage*

*Skill: Applied*

*Objective: 11.11*

63) Which of the following is an accurate statement about adolescents' development of formal operational thinking?

- A) Formal operational reasoning enables adolescents to understand figurative language, such as metaphors.
- B) An adolescent's decision-making can include here-and-now factors but not future possibilities.
- C) Nearly all adolescents are engaged in formal operational thinking by the twelfth grade.
- D) Higher education is of little use in the development of formal operational thinking.

Answer: A

*Diff: 3 Page Ref: 324 - 325*

*Topic: Piaget's Formal Operational Stage*

*Skill: Conceptual*

*Objective: 11.11*

64) Which of the following is a component of adolescent egocentrism according to Elkind?

- A) Hypothetical-inductive reasoning
- B) Self-biography
- C) Concrete thinking
- D) The personal fable

Answer: D

*Diff: 2 Page Ref: 325*

*Topic: Piaget's Formal Operational Stage*

*Skill: Conceptual*

*Objective: 11.11*

65) Whenever Jean walks by a mirror or any reflective surface he stops to make sure that his hair looks good and that his clothes look acceptable to his peers. Which principle is at work here?

- A) Piaget's theory of centration
- B) Elkind's theory of the imaginary audience
- C) Elkind's theory of formal operations.
- D) Piaget's theory of deductive logic

Answer: B

*Diff: 3 Page Ref: 325*

*Topic: Piaget's Formal Operational Stage*

*Skill: Applied*

*Objective: 11.11*

66) According to your text, high school students perform better than elementary school students in memory task experiments because they

- A) can apply previously learned memory strategies to the new task.
- B) pay closer attention to the task.
- C) are more motivated.
- D) are more mature and therefore more goal-oriented.

Answer: A

*Diff: 2 Page Ref: 327*

*Topic: Advances in Information-Processing Skills*

*Skill: Conceptual*

*Objective: 11.12*

67) Which of the following best summarizes the research of Brown and Day regarding text learning in adolescence?

- A) The ability to summarize a text at the age of 18 is not much different than at the age of 13.
- B) Overall, students in U.S. high schools are unable to summarize and comprehend their reading assignments.
- C) The ability to summarize a text improves gradually during the second half of adolescence.
- D) Sixteen-year-olds are likely to use only the first and third rules when writing summaries.

Answer: C

*Diff: 3 Page Ref: 327 - 328*

*Topic: Advances in Information-Processing Skills*

*Skill: Conceptual*

*Objective: 11.12*

68) Which statement best describes the transition from elementary school to high school?

- A) Students experience losses in academic achievement and self-esteem.
- B) Students generally have a smooth transition and easy adaptation to different demands of a new educational environment.
- C) Students establish higher personal standards and goals for success.
- D) Students have increased competence and self-efficacy.

Answer: A

*Diff: 2 Page Ref: 328*

*Topic: Transition to Secondary School*

*Skill: Conceptual*

*Objective: 11.14*

CHAPTER 11

69) If Marla wants to be the best clarinet player in the band, she is motivated by which type of goal?

- A) Ability
- B) Extrinsic
- C) Inductive
- D) Task

Answer: A

*Diff: 2 Page Ref: 328*

*Topic: Transition to Secondary School*

*Skill: Applied*

*Objective: 11.14*

70) DeShaun wants to learn calculus so he can become an engineer. He is motivated by which type of goal?

- A) Ability
- B) Metacognitive
- C) Hypothetical
- D) Task

Answer: D

*Diff: 2 Page Ref: 328*

*Topic: Transition to Secondary School*

*Skill: Applied*

*Objective: 11.14*

71) Which of the following is the best example of a child who has *ability goals* for academic achievement?

- A) Julia loves to cook and wants to open her own restaurant.
- B) Darren wants to do another biology project on fruit flies because he learned so much on his first project.
- C) Cindy hopes to score higher on her college entrance exam than any of her brothers and sisters.
- D) Eduardo hopes his computer teacher will let him learn Java computer programming language for his final project.

Answer: C

*Diff: 3 Page Ref: 328 - 329*

*Topic: Transition to Secondary School*

*Skill: Applied*

*Objective: 11.14*

72) According to your text, which of the following is NOT one of the factors that influence adolescent adjustment to secondary school?

- A) Middle schools' emphasis on ability grouping
- B) The emphasis of middle schools on self-efficacy
- C) The goal orientation of the individual adolescent
- D) The perception that the teachers and the school are impersonal and unsupportive

Answer: B

*Diff: 3 Page Ref: 329*

*Topic: Transition to Secondary School*

*Skill: Conceptual*

*Objective: 11.14*

73) Which of the following best explains what shapes girls' desire to take advanced math and science classes?

- A) Their own abilities and belief in the acceptability of these subjects for girls
- B) The encouragement they receive from their parents to pursue these fields
- C) The encouragement they receive from their teachers to take these courses
- D) The acceptance they receive from their peers if they choose these types of courses

Answer: A

*Diff: 2 Page Ref: 331*

*Topic: Gender, Ethnicity, and Achievement in Science and Math*

*Skill: Conceptual*

*Objective: 11.15*

74) What percentage of U.S. high school students receive a diploma?

- A) 50%
- B) 65%
- C) 90%
- D) 95%

Answer: C

*Diff: 1 Page Ref: 332*

*Topic: Dropping Out of High School*

*Skill: Factual*

*Objective: 11.16*

75) Which of the following does NOT correlate with dropping out of high school?

- A) Social class
- B) Risk-taking behavior
- C) A history of academic failure
- D) Gender

Answer: D

*Diff: 2 Page Ref: 332*

*Topic: Dropping Out of High School*

*Skill: Applied*

*Objective: 11.16*

### **Fill-in-the-Blank Questions**

1) The first major brain growth spurt in adolescence occurs between the ages of \_\_\_\_\_.

Answer: 13 and 15

*Diff: 2 Page Ref: 308*

*Topic: Brain Development and Physical Growth*

*Skill: Factual*

*Objective: 11.1*

2) Changes in sexual maturity which occur during puberty are referred to as \_\_\_\_\_ sex characteristics.

Answer: secondary

*Diff: 1 Page Ref: 310*

*Topic: Milestones of Puberty*

*Skill: Conceptual*

*Objective: 11.2*

3) The first ejaculation in boys is called \_\_\_\_\_.

Answer: spermarche

*Diff: 1 Page Ref: 311*

*Topic: Milestones of Puberty*

*Skill: Factual*

*Objective: 11.2*

4) When surveyed \_\_\_\_\_% of U.S. 11th grade females reported recent sexual activity.

Answer: 41

*Diff: 2 Page Ref: 313*

*Topic: Sexual Behavior*

*Skill: Factual*

*Objective: 11.4*

5) Girls who are sexually active are also more likely to have experienced early \_\_\_\_\_.

Answer: menarche

*Diff: 2 Page Ref: 314*

*Topic: Sexual Behavior*

*Skill: Conceptual*

*Objective: 11.4*

CHAPTER 11

6) Approximately \_\_\_\_\_ of teen pregnancies in the U.S. end in abortion.

Answer: one-third

Diff: 2 Page Ref: 316

Topic: Adolescent Pregnancy

Skill: Factual

Objective: 11.5

7) Many researchers feel that recognition of one's feelings of same-sex attraction begin as early as \_\_\_\_\_.

Answer: middle childhood.

Diff: 3 Page Ref: 317

Topic: Sexual Minority Youth

Skill: Conceptual

Objective: 11.6

8) Mary is a biological female who identifies psychologically and emotionally as male. Mary is \_\_\_\_\_.

Answer: transgendered

Diff: 1 Page Ref: 317

Topic: Sexual Minority Youth

Skill: Applied

Objective: 11.6

9) The incidence of illicit drug use among teens was \_\_\_\_\_ in the 1990s than in the 1970s.

Answer: lower

Diff: 2 Page Ref: 319

Topic: Drugs, Alcohol, and Tobacco

Skill: Factual

Objective: 11.8

10) Sylvia, although extremely thin, looks in the mirror and sees excessive body fat. She exercises obsessively and eats very little. Sylvia might be diagnosed as having \_\_\_\_\_.

Answer: anorexia nervosa

Diff: 2 Page Ref: 321

Topic: Eating Disorders

Skill: Applied

Objective: 11.9

11) Research conducted by Dyl et al. indicates that eating disorders may be more attributable to \_\_\_\_\_ factors than \_\_\_\_\_ factors.

Answer: psychological; cultural

Diff: 3 Page Ref: 322

Topic: Eating Disorders

Skill: Conceptual

Objective: 11.9

12) Piaget's concept of \_\_\_\_\_ enables teens to understand metaphors and symbols.

Answer: formal operational thinking

Diff: 3 Page Ref: 326

Topic: Direct Tests of Piaget's View

Skill: Conceptual

Objective: 11.12

13) Goals which are based on a desire for self-improvement are referred to as \_\_\_\_\_ goals.

Answer: task

Diff: 1 Page Ref: 328

Topic: Transition to Secondary School

Skill: Conceptual

Objective: 11.14

14) Jason works out regularly at the gym. He is one of the best players on his soccer team. Jason's goal to be the best on his team is an example of a (n) \_\_\_\_\_ goal.

Answer: ability

*Diff: 2 Page Ref: 328*

*Topic: Transition to Secondary School*

*Skill: Applied*

*Objective: 11.14*

15) One of the strongest predictors of girls' science achievement is their \_\_\_\_\_ perception of science as a suitable career for females.

Answer: parents'

*Diff: 2 Page Ref: 330*

*Topic: Gender, Ethnicity, and Achievement in Science and Math*

*Skill: Conceptual*

*Objective: 11.15*

### Short Answer Questions

1) What are the major changes that take place in the development of the heart and lungs during adolescence?

Answer: heart and lungs increase considerably in size; heart rate slows

*Diff: 2 Page Ref: 309*

*Topic: Brain Development and Physical Growth*

*Skill: Conceptual*

*Objective: 11.1*

2) List three glands that contribute to physical growth and development. Identify the hormone which each gland secretes.

Answer: thyroid secretes thyroxine; adrenal secretes adrenal androgen; testes secrete testosterone; ovaries secrete estradiol; pituitary secretes growth hormone

*Diff: 3 Page Ref: 309*

*Topic: Milestones of Puberty*

*Skill: Factual*

*Objective: 11.2*

3) Using Tanner's stages of pubertal development identify a change that takes place in stage 4 for girls and one that takes place for boys in stage 3.

Answer: for girls in stage 4: areola and nipple form secondary mounds; for boys in stage 3 the penis enlarges slightly in length; testes and scrotum continue to enlarge and first ejaculation takes place

*Diff: 3 Page Ref: 310*

*Topic: Milestones of Puberty*

*Skill: Conceptual*

*Objective: 11.2*

4) List, in order, from highest to lowest, the three ethnic groups most likely to have had sexual intercourse during their high school years.

Answer: African American, Hispanic American, White American

*Diff: 3 Page Ref: 313*

*Topic: Sexual Behavior*

*Skill: Factual*

*Objective: 11.4*

5) Identify three factors that increase the likelihood that a teen girl will become pregnant.

Answer: early sexual activity; single-parent families; relatively uneducated parents; lower economic class

*Diff: 2 Page Ref: 315*

*Topic: Adolescent Pregnancy*

*Skill: Conceptual*

*Objective: 11.5*

## CHAPTER 11

6) Why does your text say that risky behaviors are more common in adolescence than other developmental periods?

Answer: to gain peer acceptance; establish autonomy

*Diff: 2 Page Ref: 318*

*Topic: Sensation-Seeking*

*Skill: Conceptual*

*Objective: 11.7*

7) Which two illicit substances are the most frequently used by teenagers according to your text?

Answer: alcohol and marijuana

*Diff: 1 Page Ref: 320*

*Topic: Drugs, Alcohol, and Tobacco*

*Skill: Factual*

*Objective: 11.8*

8) Name three reasons why the incidence of cigarette smoking has decreased among U.S. teens since the 1970s.

Answer: public education campaigns; school curricular; possibility of decreased attractiveness to potential romantic partners

*Diff: 3 Page Ref: 321*

*Topic: Drugs, Alcohol, and Tobacco*

*Skill: Conceptual*

*Objective: 10.8*

9) Describe the diagnostic criteria for bulimia nervosa.

Answer: binge eating, purging through vomiting, laxatives or excessive exercise, normal or high body weight

*Diff: 2 Page Ref: 321*

*Topic: Eating Disorders*

*Skill: Conceptual*

*Objective: 11.9*

10) List three factors that contribute to completed suicide.

Answer: a triggering stressful event; an altered mental state; an opportunity

*Diff: 3 Page Ref: 323*

*Topic: Depression and Suicide*

*Skill: Conceptual*

*Objective: 11.10*

11) Eight-year-old Emily and thirteen-year-old Ben are sitting with their parents at the dinner table. The family is having a discussion about relationships and their mom says "Birds of a feather flock together." Explain the differences in how Emily and Ben will interpret this statement.

Answer: Emily is likely to think of real birds in flocks; Ben is likely to understand that it's a metaphor referring to people.

*Diff: 3 Page Ref: 326*

*Topic: Direct Tests of Piaget's View*

*Skill: Applied*

*Objective: 11.12*

12) By what age do the metacognitive and metamemory skills of adolescents become fully developed?

Answer: 14 - 15 years

*Diff: 1 Page Ref: 327*

*Topic: Advances in Information-Processing Skills*

*Skill: Factual*

*Objective: 11.13*

13) When a high-achieving 5th grader starts to lose confidence in his abilities after transitioning to middle school, what are some possible reasons for this?

Answer: middle schools' emphasis on ability grouping; peer grouping in general

*Diff: 2 Page Ref: 329*

*Topic: Transition to Secondary School*

*Skill: Conceptual*

*Objective: 11.14*

14) How do girls compare with boys in math skills and achievement?

Answer: girls typically get better grades than boys

*Diff: 1 Page Ref: 331*

*Topic: Gender, Ethnicity, and Achievement in Science and Math*

*Skill: Conceptual*

*Objective: 11.15*

15) Identify three factors that contribute to dropping out of high school.

Answer: history of academic failure; pattern of aggressive behavior; poor decision making abilities

*Diff: 3 Page Ref: 332*

*Topic: Dropping Out of High School*

*Skill: Conceptual*

*Objective: 11.16*

### **Essay Questions**

1) Summarize the physical changes that correlate with motor skill development in adolescence. Explain some of the differences between boys and girls.

Answer: The cephalocaudal pattern is reversed; the trunk is the slowest growing part; joint development enables higher levels of coordination; boys lag behind girls at first but catch up by the end of adolescence--this affects fine motor skills as well; muscle fibers become thicker and denser and strength increases--this occurs faster in boys than in girls

*Diff: 3 Page Ref: 308*

*Topic: Brain Development and Physical Growth*

*Skill: Factual*

*Objective: 11.1*

2) Explain the concept of *secular trend* and apply it to adolescent sexual development.

Answer: Secular trend describes changes in developing nations that contribute to changes in physical development. An example which pertains to sexual development is the decreasing age of menarche in Western European and North American countries. Obesity as a result of abundance of food also leads to early onset of menstruation.

*Diff: 2 Page Ref: 311*

*Topic: Milestones of Puberty*

*Skill: Conceptual*

*Objective: 11.2*

3) How does parenting interact with the timing of puberty to influence sexual behavior?

Answer: Early-developing teens with outgoing personalities are most likely to engage in early sexual behavior if they have permissive parents.

*Diff: 2 Page Ref: 312*

*Topic: Timing of Puberty*

*Skill: Conceptual*

*Objective: 11.3*



## CHAPTER 11

4) Summarize the frequency of contraceptive use among U.S. teens. Explain the factors that contribute to these statistics.

Answer: Contraceptive use among teens continues to be very low compared to other industrialized nations. Levels of sexual activity are comparable to other countries, but the lack of early and good sex education, media exposure, and parental non-involvement contribute to risky sexual behavior.

*Diff: 3 Page Ref: 314*

*Topic: Sexual Behavior*

*Skill: Conceptual*

*Objective: 11.4*

5) List and summarize the characteristics of the three phases of pregnancy crisis.

Answer: Phase 1, the initial phase is characterized by anxiety and confusion; phase 2, the escalation phase is characterized by the teen trying to confront the crisis; phase 3, the redefinition phase, is characterized by a adult intervention to help the teen deal with the crisis by setting small goals and short-term intervention and problem solving skills, eventually leading to long-term solutions

*Diff: 3 Page Ref: 316*

*Topic: The Real World*

*Skill: Factual*

*Objective: 11.5*

6) In terms of adolescent behavior, what is meant by *sensation-seeking*? How is sensation-seeking a risk factor in adolescent development? What types of behaviors are linked to sensation-seeking by adolescents?

Answer: Sensation seeking is a desire to experience increased levels of arousal and "highs" associated with risky behavior. This behavior has the potential to lead to accidental injury or death. Most common behaviors include drug/alcohol abuse, reckless driving, unprotected sex, etc.

*Diff: 3 Page Ref: 318*

*Topic: Sensation-Seeking*

*Skill: Factual*

*Objective: 11.7*

7) Explain the differences in formal operational thought between younger and older teens. How does Piaget account for these differences?

Answer: Younger teens are likely to only focus on the short-term consequences of a behavior or decision. This is explained by some as failure to use formal operational thinking at all and the persistence of concrete thinking. Piaget says that it's simply due to lack of sufficient experience to fully develop formal operations.

*Diff: 3 Page Ref: 325*

*Topic: Research Report*

*Skill: Conceptual*

*Objective: 11.11*

8) Explain the strategies that seem to be successful in reaching, and successfully educating, high school drop-outs.

Answer: Building self-esteem is important. The program in Boston teaches marketable job skills along with completion of the GED. The students spend half their time in academics and the other half working on the job. The students also receive counseling, help with goal setting, and financial assistance.

*Diff: 2 Page Ref: 332*

*Topic: No Easy Answers*

*Skill: Conceptual*

*Objective: 11.16*

**MyDevelopmentLab Essay Questions**

1) Based on your own experience, how is virginity viewed among adolescents now?

Answer: This question can be used to explore a broad variety of cultural and individual beliefs about virginity. Frequently, young college-aged students won't discuss virginity or abstinence openly in a classroom because they're afraid that they'll be viewed negatively. There does seem to be a trend among some high schools and colleges to encourage talking about virginity as an alternative to the usual peer pressure making some teens feel as if they have to have sex.

*Diff: 3 Page Ref: MDL*

*Topic: Watch: Virginity--cool?*

*Skill: Applied*

*Objective: 11.4*

2) Summarize the techniques used by the high school teacher in the video to increase students' awareness of social responsibility and also retention of academic material.

Answer: He believes that it's important to know enough about individual students to be able to talk to them about their lives. This gives them a sense of importance and may encourage them, as it did him, to have a sense of social responsibility. As for retention of material he encourages daily conversations with parents about the school day and what they learned. This is clearly a type of rehearsal and will increase retention of material. One-on-one conversations are important with both parents and teachers.

*Diff: 3 Page Ref: MDL*

*Topic: Watch: Social Need*

*Skill: Conceptual*

*Objective: 11.14*

**MyDevelopmentLab Study Plan Questions**

1) Approximately \_\_\_\_\_% of African American girls and \_\_\_\_\_% of white girls start to show signs of pubertal development by the age of 8 or 9 years.

Answer: 50; 15

*Diff: 1 Page Ref: MDL*

*Topic: Watch: Secular Trend*

*Skill: Factual*

*Objective: 11.2*

2) Besides environmental pollutants, according to David Seifer, which of the following may be an environmental factor which contributes to the earlier onset of puberty in girls in the present day?

- A) Better nutrition
- B) Stronger genetic influences
- C) More drug use
- D) Media influence

Answer: A

*Diff: 2 Page Ref: MDL*

*Topic: Watch: Secular Trend*

*Skill: Conceptual*

*Objective: 11.2*

3) Which of the following was NOT one of the concerns expressed by the pregnant teen girl in the video?

- A) Concern about her son's health
- B) Concern about her own well-being
- C) Concern about finances
- D) Concern that no one will want to marry her

Answer: C

*Diff: 2 Page Ref: MDL*

*Topic: Watch: Sexuality in Adolescence: Teen Pregnancy*

*Skill: Factual*

*Objective: 11.5*

## CHAPTER 11

- 4) According to researcher Aaron White, which of the following is a common drinking pattern among teens?
- A) They tend to have just a couple of drinks and then stop.
  - B) They drink as much as they can as fast as they can.
  - C) They tend to drink only on the weekends.
  - D) They drink about the same amount as their parents do.

Answer: B

*Diff: 2 Page Ref: MDL*

*Topic: Watch: Teen Drinking*

*Skill: Conceptual*

*Objective: 11.8*

- 5) Jose is in his early twenties. As a teen he frequently went out with friends on the weekends and drank a six-pack of beer by himself. According to the research performed by Oesterle, which of the following health problems might Jose be experiencing, even though is still young?

- A) Hepatitis and high blood pressure
- B) High blood pressure and obesity
- C) Diabetes and kidney failure
- D) Kidney failure and obesity

Answer: B

*Diff: 2 Page Ref: MDL*

*Topic: Watch: Teen Drinking*

*Skill: Applied*

*Objective: 11.8*

# 11

## Physical and Cognitive Development in Adolescence

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## Adolescence

- A time between childhood and adulthood
- Period of tremendous physical and cognitive growth
- Able to devise new, complex plans
- A time of risk and opportunity
- Some risks have long-lasting consequences

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## Physical Changes: Puberty

- Changes needed for reproductive maturity
- Endocrine glands
  - Secrete hormones governing pubertal growth and physical changes
  - Pituitary gland
    - Master gland – triggers hormone release from other glands
    - Gonadotrophic hormones – responsible for development of sex organs

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Physical Changes: Reproductive Systems

- Endocrine glands
  - Testes and ovaries develop
    - Sex hormones released
    - Testosterone for males
    - Estradiol for girls

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Other Body Systems: Brain Growth

- First Brain Growth Spurt
- Between 13 and 15
  - Cerebral cortex thickens
  - Neuronal pathways more efficient
  - More energy consumed during growth spurt
  - Takes place in spatial perception and motor areas
  - Enables abstract thought and reflection on cognitive processes

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Other Body Systems: Brain Growth

- Second Brain Growth Spurt
- Begins approximately age 17
  - Frontal lobes of brain
  - Associated with logic and planning



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**The Skeletal System**

- Growth may be 3 – 6 inches a year
- Girls attain most of their height by 16
- Boys continue to grow until 18 – 20
- Hands and feet are the first to grow
- The trunk is the slowest-growing
- Joint development improves coordination

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**The Muscular System**

- Muscle fibers become thicker and denser
- By age 17, boys can be as much as 3 times stronger than girls
- Men – 40% of total body mass is muscle
- Women – 24% of total mass is muscle
- Largely a result of hormonal differences
- Girls have a rise in body fat while boys have a drop

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**The Heart and Lungs**

- Increase in size
- Heart rate drops
- Greater change in boys than in girls
- Improved capacity for sustained physical effort
- Boys gain a clear advantage in endurance, as well as in size, strength, and speed

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**The Endocrine and Reproductive Systems**

- **The Thyroid Gland**
  - Thyroxin
  - General growth hormone and brain development
- **Adrenal Androgen**
  - Important for girls
    - Triggers growth spurt
    - Affects development of secondary sex characteristics
  - Less significant for boys
    - Due to large amounts of testosterone

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**The Endocrine and Reproductive Systems**

- **Primary sex characteristics**
  - Growth of testes and penis
  - Growth of ovaries, uterus, and vagina
- **Secondary sex characteristics**
  - Breast development
  - Changing voice pitch
  - Beard growth
  - Body hair

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**Sexual Development in Girls**

**Menarche – First Menstruation**

- Occurs 2 years after beginning of other visible signs
  - Average age – between 12 and 13
  - Irregular menstrual cycles first few years.
  - Ovum may not be produced during every cycle
- **Secular trend**
  - Lowering of the age of menarche by 4 months per decade
  - Due mainly to changes in diet and lifestyle
- **Pregnancy can occur after menarche**

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**Sexual Development in Boys**

- Sperm production begins between 12 and 14
- First ejaculation about age 13 or 14
- Genital development and pubic hair development precedes the end of the growth spurt.
- Development of beard and voice changes occur near the end of the sequence

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**Timing of Puberty**

- Heredity and behavioral factors influence hormonal secretions
  - Body fat linked to beginning of puberty for girls
- Early developing girls
  - Major body changes before age 11 or 12
  - Consistently more negative body image
  - More likely to show problem behaviors
- Early or late developing boys associated with depression
- Early developing boys may be associated with leadership
- Social context of change
  - Activities that inhibit development of body fat may delay puberty, such as sustained strenuous exercise

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**Sexual Behavior**

- Boys more sexually active than girls
- Sexual activity increases with age
- Reports of sexual intercourse
  - 67% of African Americans
  - 51% of Hispanics
  - 44% of Caucasians

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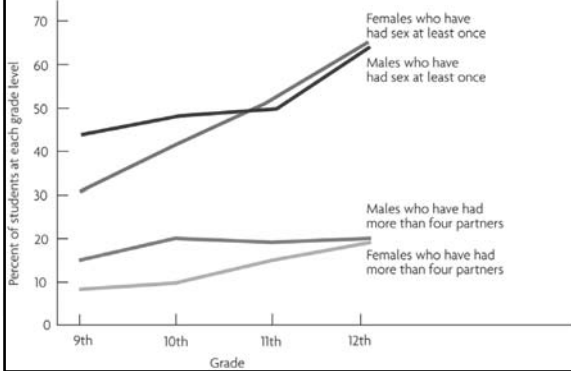
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Figure 11.1 Sexual Activity in High School Students




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### Sexual Behavior

- Age of sexually active students
  - 20% of female 9<sup>th</sup> graders
  - 41% of female 11<sup>th</sup> graders
- Early sexuality influenced mainly by social factors
  - Poverty
  - Unsupervised by adults
  - More likely to use alcohol
  - More likely to be abused/neglected

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### Sexual Behavior

- Girls who are sexually active
  - Experienced early menarche
  - Low interest in school
  - Dated early
  - History of sexual abuse
  - A higher number of risk factors increases likelihood of sexual activity

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**Sexual Behavior**

- Activities and moral beliefs and influence lower sexual activity
  - Teens who believe premarital sex is wrong
  - Teens who attend religious services
  - Teens who participate in school activities
  - Teens who do not use alcohol

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**Sexual Behavior**

- Despite school units, teens show ignorance of STDs
- Fail to discuss condom use
  - 63% reported use of a condom
  - 21% of sexually active females use the pill
- Abstinence and contraceptive education still controversial in many schools

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**Adolescent Pregnancy**

- Higher in the U.S. than many other industrialized countries, such as Israel or Japan
  - 25% of African American births
  - 11% of Caucasian births
  - 17% of Hispanic births
- Far more frequent among older adolescents
- Teen birth rates have dropped since 1960's
- Relative frequency of teens who are unmarried has increased

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## Adolescent Pregnancy

- Ethnic differences in teens who marry
  - 5% of African American teen mothers marry the baby's father
  - 26% of Hispanic American teen mothers marry the baby's father
  - 41% of Caucasian American teen mothers marry the baby's father
- Overall, only 17% of teen mothers maintain romantic relationships with their babies' fathers

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## Adolescent Pregnancy

### Factors in teenage pregnancy

- Age of onset of sexual activity
- Poor families
- Less teen pregnancy among girls who do well in school
  - More likely to use contraceptives if sexually active
  - More likely to have good communication about sex and contraception with their mothers

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## Adolescent Pregnancy

- 1/3 of teen pregnancies end in abortion
- 14% result in miscarriage
- 7% of Whites and 1% of African American teens carry the baby to term and place it up for adoption
- Children of teen mothers
  - Grow up in poverty
  - Negative effects can be mitigated by support from girl's own parents
  - Staying in school and social programs positively help both child and mother

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**Sexual Orientation**

- 92% of teens say they are exclusively heterosexual, 7% aren't sure, 1% say they are exclusively homosexual
- Twin studies show when one identical twin is homosexual, the probability that the other will be is 50 – 60%
- Male homosexuality runs in families
- Such findings strengthen a biological basis hypothesis for homosexuality

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**Homosexuality**

- Prenatal hormone patterns may be a causal factor in homosexuality
- Realization that one may be homosexual begins in middle school
- Few accept their homosexuality during adolescence
- Often feel isolated from their peers

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**Transgendered Teens**

- Their psychological gender differs from their biological sex
- Cause is unclear
- Transgendered teens, as do gay and lesbian teens, have higher rates of depression
- Some undergo sexual reassignment, typically as adults, sometimes as teens

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### Adolescent Health Sensation Seeking

- Desire to experience increased levels of arousal
- Risky behavior may gain peer acceptance and gain autonomy from parents
- Teens not involved in extracurricular activities and who value popularity are at risk
- Popular media's messages of sex, violence, drugs, and alcohol may influence risky behavior
  - Often portray teens smoking and drinking (less so for illicit drugs)

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### Drugs, Alcohol, and Tobacco

- Teen use of illicit drugs down from earlier generations
- Still a problem
- Alcohol use is prevalent
- Sensation seeking is related to increased use of alcohol and drugs

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### Drugs, Alcohol, and Tobacco Tobacco Use

- Fewer teens are regular smokers than a generation ago
  - Educational efforts
  - Teens familiar with health reasons for not smoking
  - Also want to be attractive romantic partners
- Teens who are more likely to smoke are
  - Influenced by peers who smoke
    - Especially vulnerable to peers during 15 – 17 years

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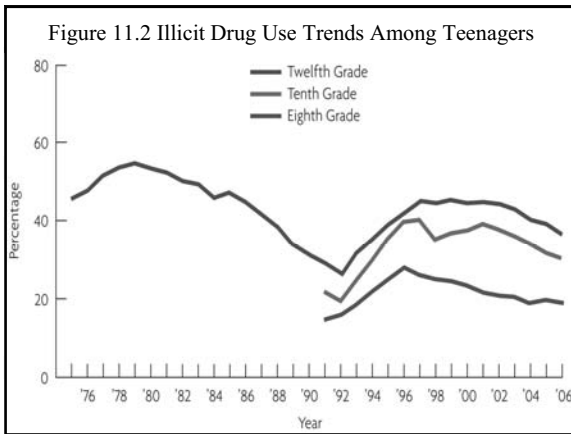
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**Body Image and Eating Disorders**

- Although most teens are weight-conscious, eating disorders are more extreme
- Sufferers have a distorted body image
- Eating disorders can be fatal
- More common among girls, and also gay and lesbian teens

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**Body Image and Eating Disorders**  
**Anorexia Nervosa**

- Extreme dieting
- Intense fear of gaining weight
- Weight loss approaching starvation
- Symptoms may include cessation of menstruation, insensitivity to pain, loss of hair, low blood pressure, and death

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## Body Image and Eating Disorders

### Bulimia

- Frequent cycles of binge eating
- Purging through self-induced vomiting, laxatives, or excessive exercise
- Intense concern about weight
  - Not abnormally thin
  - Feel intense shame about their behavior
  - May experience significant depression
- Symptoms include tooth decay, stomach irritation, lowered body temperature, and loss of hair

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## Body Image and Eating Disorders

### Causes

- Negative body images
- Girls who participate in activities such as ballet and gymnastics
- Emphasis on thinness as a characteristic of attractive women
- General tendency towards mental illness
- Girls who internalize the “thin ideal” in middle childhood more dissatisfied with body image.

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## Depression and Suicide

- 5-8% are depressed
- Girls are twice as likely as boys
- Associated with disorder of the pituitary gland
- Causes
  - Genetic basis
  - Growing up with a depressed parent
  - Low self-esteem
- Can hinder academic performance
- Therapeutic interventions include medication.

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## Suicide

- Girls think about suicide more but boys are 5 times as likely to commit suicide.
- Depression is one ingredient.
- Aggression is common.
- Family history of suicide or drug use is often present.
- Contributing factors
  - Some triggering stressful event
  - An altered mental state
  - An opportunity

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## Questions to Ponder

- Who has advantages or disadvantages – early maturing boys or early maturing girls? What happens to late maturing boys or girls?
- Your friend suffers from anorexia or depression. How do you help her?

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## Changes in Thinking And Memory

### Piaget's Formal Operational Thought

- Adolescents learn to reason logically about abstract concepts.
  - Systematic problem solving
    - The ability to search methodically for an answer
  - Logic
    - Hypothetico-deductive reasoning

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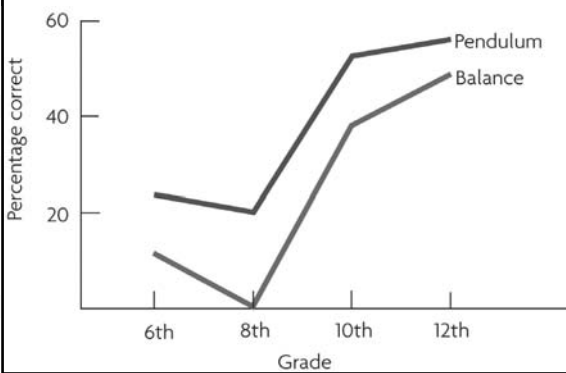
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Figure 11.3 Within Stage Development in Formal Operations



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### Direct Tests of Piaget's Views

- Older children generally do better on complex reasoning tasks.
- Formal Operational reasoning enables teens to understand metaphors.
- Influenced how teens make decisions.
  - Nearly 3/5 of 12<sup>th</sup> graders did not show future orientation thinking.
  - Formal operational thinking is not used on every problem.
- Education levels influence the use of formal operational thought.

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### Advances in Information-Processing

- Metacognition, metamemory, and strategy use increase with age
- Text learning
  - The ability to summarize a text improves gradually during the second half of adolescence
  - Outlining improves with age, as well

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**Schooling**  
Transition to Secondary School

- Middle School
  - Task goals – based on personal standards and a desire to become more competent
    - Associated with greater sense of personal control and positive attitudes about school
  - Ability goals – define success in competitive terms
    - Students may adopt relative standards – good means beating someone else.
  - Most 5<sup>th</sup> graders have task goals, but by 6<sup>th</sup> grade most have switched to ability goals.

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**Schooling**  
Middle School

- Emphasis on ability grouping
- Students change their beliefs about abilities.
  - High achievers maintain level of achievement into 6<sup>th</sup> grade
  - Low achievers may adopt ability orientation, ultimately putting less effort into school work.
    - More likely to use ineffective cognitive strategies
    - More likely to have low self-esteem

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**Schooling**  
Middle School

- Perception of school climate
  - Many students find schools to be impersonal and unsupportive.
    - Providing a student with an adult mentor helps.
      - Homeroom teacher
    - Successful interventions improve grades.
  - Organizing teachers and students into teams
    - Teachers at each grade level devise strategies for student and parental involvement.

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## Schooling High School

- Early days of high school set a pattern.
- Participating in activities during high school helps develop psychological attributes that can't be acquired elsewhere.

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## Gender, Ethnicity, and Science and Math Achievement

- Girls at risk for achievement losses in transition to high school
- Gender gap widest among most intellectually talented students
- Girls suffer in sciences not offering hands-on activities
- Girls often discouraged from taking courses in science

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## Gender, Ethnicity, and Science and Math Achievement

- Gender gap widens in math, as well.
  - Academically talented girls are often less confident than male counterparts.
- Ethnic variations
  - Only 1/3 of African American and Hispanic students have 2 years of algebra.
    - May not be prepared in 9<sup>th</sup> grade for higher math classes
    - May not have been encouraged to go to college and lacked the necessary preparation

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## Dropping Out of High School

- Social class is a better predictor of school completion than ethnicity.
- When a teen's peer group puts a low value on completion, teens are more likely to drop out.
- Students with a history of academic failure are at risk.
- Quiet, disengaged, low-achieving, and poorly adjusted students are high risks for dropping out.
- Negative consequences include unemployment, lower wages, depression, and increased criminal activity.

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