

## *Celebrating and Building upon the Diverse Characteristics and Needs of Young Adolescents*



The bell rings and the students enter your classroom—a kaleidoscope of personalities, all peerless and idiosyncratic, each a packet of energy, with different focuses, experiences, dispositions, and learning capacities, and differing proficiencies in the use of the English language. What a challenge it is to understand and to teach 30 or so unique individuals all at once, and to do it for six hours a day, five days a week, 180 days a year! What a challenge it is today to be a middle grades classroom teacher. To prepare yourself for this challenge, consider the information provided in this chapter about the diverse characteristics and needs of young adolescents, for it is well known that their academic achievement is

greatly dependent upon how well their other developmental needs are understood and satisfied.

### OBJECTIVES

Upon completion of this chapter, you should be able to

1. Demonstrate your growing understanding of the meaning of *developmentally appropriate practice*.
2. Demonstrate an understanding of the developmental characteristics of young adolescents and their implications for developmentally appropriate practice.

3. Demonstrate developing skills in recognizing, celebrating, and building upon student diversity.
4. Demonstrate an understanding of the significance of the concepts of learning modalities, learning styles, and learning capacities, and their implications for appropriate educational practice.
5. Demonstrate an understanding of the three-phase learning cycle and the types of learning activities that might occur in each phase.
6. Demonstrate an awareness of appropriate curriculum options and instructional practices for specific groups of learners.
7. Describe today's concept of middle level teaching and learning, and how it differs from that of the recent past.
8. Demonstrate your developing knowledge of practical ways of attending to student individual differences while working with a cohort of students.
9. Demonstrate the concept of *multilevel instruction* and how you would use multilevel instruction in your teaching.

### YOUNG ADOLESCENT YEARS: TIME OF RAPID CHANGE AND GREAT VARIABILITY

Although generalizations are risky, from many years of experience and research experts have come to accept certain precepts about young adolescents. These are developmental characteristics of 10 to 14 year olds regardless of their individual genetic or cultural differences. They are presented here in five categories: intellectual, physical, emotional/psychological, social, and moral/ethical.<sup>1</sup> Each category is accompanied by practices that are developmentally appropriate for middle-level curriculum and instruction.<sup>2</sup>

#### *Characteristics of Young Adolescents and Their Implications for Developmentally Appropriate Practice*

It is important to emphasize that early adolescence is a period of tremendous variability among individuals of the same gender and chronological age, and that dissimilar rates of growth are common in all areas of development. It would be erroneous, for example, to draw

a conclusion that states "All seventh graders are. . ." In addition, the five areas of development are inexorably entwined.<sup>3</sup>

**Intellectual Development.** Young adolescents tend to

1. Be egocentric; argue to convince others; exhibit independent, critical thought.
2. Be intellectually at risk; that is, they face decisions that have the potential to affect major academic values with lifelong consequences.
3. Be intensely curious.
4. Consider academic goals as a secondary level of priority, whereas personal-social concerns dominate thoughts and activities.
5. Display a wide range of individual intellectual development as their minds experience change from the concrete-manipulatory stage to the capacity for abstract thought. This change makes possible
  - a. Ability to project thought into the future, to expect, and to formulate goals.
  - b. Analysis of the power of a political ideology.
  - c. Appreciation for the elegance of mathematical logic expressed in symbols.
  - d. Consideration of ideas contrary to fact.
  - e. Insight into the nuances of poetic metaphor and musical notation.
  - f. Insight into the sources of previously unquestioned attitudes, behaviors, and values.
  - g. Interpretation of larger concepts and generalizations of traditional wisdom expressed through sayings, axioms, and aphorisms.
  - h. Propositional thought.
    - i. Reasoning with hypotheses involving two or more variables.
6. Experience the phenomenon of **metacognition**—that is, the ability to think about one's thinking, and to know what one knows and does not know.
7. Exhibit strong willingness to learn what they consider to be useful, and enjoy using skills to solve real-life problems.
8. Prefer active to passive learning experiences; favor interaction with peers during learning activities.

*Implications for Developmentally Appropriate Practice (DAP).* Regarding the intellectual development of young adolescents, developmentally appropriate actions include

- The use of a wide variety of approaches and materials for instruction, that is an eclectic approach (a theme found throughout this resource guide), including physical movement with small-group discussions and learning centers.

<sup>1</sup>These characteristics are adapted from *Caught in the Middle: Educational Reform for Young Adolescents in California Public Schools* (Sacramento, CA: California State Department of Education, 1987), 144-148. See also "Characteristics of Young Adolescents," *This We Believe: Developmentally Responsive Middle Level Schools* (Columbus, OH: National Middle School Association, 1995), pp. 35-40.

<sup>2</sup>The implications are adapted from *The New American Middle School* by Wiles/Bondi 3rd ed., pp. 33-36, a 2001 Reprinted by Permission of Pearson Education, Inc. Upper Saddle River, NJ 07458.

<sup>3</sup>*This We Believe*, p. 6.

- Curricula organized around real-life concepts (e.g., conflict, competition, peer-group influence). Activities in formal and informal situations that are designed to improve reasoning powers. Studies of the community and environment are particularly relevant for young adolescents.
- Organized discussions of ideas and feelings in peer groups to facilitate self-understanding. Provision of experiences for individuals to express themselves by writing and participating in creative dramatics.
- Opportunities for enjoyable studies in the arts. Encouragement of self-expression in all subjects.

**Physical Development.** Young adolescents tend to

1. Be concerned about their physical appearance.
2. Be physically at risk; major causes of death are homicide, suicide, accident, and leukemia.
3. Experience accelerated physical development marked by increases in weight, height, heart size, lung capacity, and muscular strength.
4. Experience bone growth faster than muscle development; uneven muscle/bone development results in lack of coordination and awkwardness; bones may lack protection of covering muscles and supporting tendons.
5. Experience fluctuations in basal metabolism, which at times can cause either extreme restlessness or listlessness.
6. Face responsibility for sexual behavior before full emotional and social maturity has occurred.
7. Have ravenous appetites and peculiar tastes; may overtax digestive system with large quantities of improper foods.
8. Lack physical health; have poor levels of endurance, strength, and flexibility; as a group are more overweight and less healthy.
9. Mature at varying rates of speed. Girls are often taller than boys for the first two years of early adolescence and are ordinarily more physically developed than boys are.
10. Reflect a wide range of individual differences that begin to appear in prepubertal and pubertal stages of development. Boys tend to lag behind girls at this stage, and there are marked individual differences in physical development for both boys and girls. The greatest variation in physiological development and size occurs at about age 13.
11. Show changes in body contour, including temporarily large noses, protruding ears, and long arms; have posture problems.

*Implications for Developmentally Appropriate Practice.* Regarding the physical development of young adolescents, developmentally appropriate actions include

- A health and science curriculum that emphasizes self-understanding about body changes. Guidance coun-

seling and community resource persons to help students understand what is happening to their bodies.

- Advising parents to insist that students get proper rest; overexertion should be discouraged.
- Providing an opportunity for daily exercise and a place where students can be children by playing and being noisy for short periods.
- Encouraging activities such as special-interest classes and hands-on learning. Students should be allowed to move about physically in classes and avoid long periods of passive work.
- Providing snacks to satisfy between-meal hunger as well as nutritional guidance specific to the needs of young adolescents.

**Emotional/Psychological Development.** Young adolescents tend to

1. Be easily offended and are sensitive to criticism of personal shortcomings.
2. Be erratic and inconsistent in their behavior; anxiety and fear are contrasted with periods of bravado; feelings shift between superiority and inferiority.
3. Be moody, restless; often feel self-conscious and alienated; lack self-esteem; be introspective.
4. Be optimistic, hopeful.
5. Be psychologically at risk; at no other point in human development is an individual likely to meet so much diversity in relation to self and others.
6. Be searching for adult identity and acceptance even in the midst of intense peer-group relationships.
7. Be searching to form a conscious sense of individual uniqueness—"Who am I?"
8. Be vulnerable to naive opinions, one-sided arguments.
9. Exaggerate simple occurrences and believe that personal problems, experiences, and feelings are unique to themselves.
10. Have an emerging sense of humor based on increased intellectual ability to see abstract relationships; appreciate the *double entendre*.
11. Have chemical and hormonal imbalances, which often trigger emotions that are frightening and poorly understood; may regress to more childish behavior patterns at this point.

*Implications for Developmentally Appropriate Practice.* Regarding the psychological development of young adolescents, developmentally appropriate actions include

- Encouragement of self-assessment.
- Activities designed to allow students to play out their emotions.
- Helping students to understand their feelings of superiority and inferiority.
- Avoiding the pressuring of students by adults in the school to explain their emotions. Occasional child-like behavior is not ridiculed. Sarcasm by adults is avoided.

- Encouragement of students to assume leadership in group discussions and to experience frequent success and recognition for personal efforts and achievement.
- A general atmosphere of friendliness, relaxation, concern, and group cohesiveness.
- Numerous opportunities to release emotional stress.
- Use of sociodrama to enable students to see themselves as others see them.
- Readings that deal with problems similar to their own to help them see that many of their problems are not unique.

### Social Development. Young adolescents tend to

1. Act out unusual or drastic behavior at times; may be aggressive, daring, boisterous, and argumentative.
2. Be confused and frightened by new school settings that are large and impersonal.
3. Be fiercely loyal to peer-group values; sometimes cruel or insensitive to those outside the peer group.
4. Be impacted by the high level of mobility in society; may become anxious and disoriented when peer-group ties are broken because of family relocation.
5. Be rebellious toward parents but still strongly dependent on parental values; want to make their own choices, but the authority of the family is a critical factor in final decisions.
6. Be socially at risk. Adult values are largely shaped conceptually during adolescence; negative interactions with peers, parents, and teachers may compromise ideals and commitments.
7. Challenge authority figures; test limits of acceptable behavior.
8. Experience low-risk trust relationships with adults who show lack of sensitivity to adolescent characteristics and needs.
9. Experience often traumatic conflicts because of conflicting loyalties to peer group and family.
10. Refer to peers as sources for standards and models of behavior. Media heroes and heroines are also singularly important in shaping both behavior and fashion.
11. Sense the negative impact of adolescent behaviors on parents and teachers; realize the thin edge between tolerance and rejection. Feelings of adult rejection can drive the adolescent into the relatively secure social environment of the peer group.
12. Strive to define sex role characteristics; search to set up positive social relationships with members of the same and opposite sex.
13. Want to know and feel that significant adults, including parents and teachers, love and accept them; need frequent affirmation.

#### *Implications for Developmentally Appropriate Practice.*

Regarding the social development of young adolescents, developmentally appropriate actions include

- Scheduling debates, plays, play days, and other activities to allow students to show off in a productive way.
- Role-playing and guidance exercises that provide the opportunity to act out feelings. Providing opportunities for social interaction between the sexes—parties and games, but not dances in the early grades of middle school.
- Establishing a student government so students can develop their own guidelines for dress and behavior. Adults should be encouraged not to react with outrage when students display extreme dress or mannerisms.
- Fostering peer teaching and community service projects.
- Planning large group activities rather than boy-girl events. Intramurals can be scheduled so students can interact with friends of the same or opposite sex.

### Moral and Ethical Development. Young adolescents tend to

1. Ask broad, unanswerable questions about the meaning of life; not expecting absolute answers but being turned off by trivial adult responses.
2. Be at risk in the development of moral and ethical choices and behaviors; depend on the influences of home and church for moral and ethical development; explore the moral and ethical issues that are met in the curriculum, in the media, and in daily interactions with their families and peer groups.
3. Be idealistic; have a strong sense of fairness in human relationships.
4. Be reflective, introspective, and analytical about their thoughts and feelings.
5. Experience thoughts and feelings of awe and wonder related to their expanding intellectual and emotional awareness.
6. Face hard moral and ethical questions for which they are unprepared to cope.

#### *Implications for Developmentally Appropriate Practice.*

Regarding the moral and ethical development of young adolescents, developmentally appropriate actions include

- Encouraging mature value systems by providing opportunities for students to examine options of behavior and to study consequences of various actions.
- Providing opportunities to students to accept responsibility in setting standards for behavior.
- Helping students to develop values when solving their problems.

## DIMENSIONS OF THE CHALLENGE

Young adolescents differ in many ways: physical characteristics, interests, home life, intellectual ability, learning capacities, motor ability, social skills, aptitudes and talents, language skills, experience, ideals, attitudes,

needs, ambitions, hopes, and dreams. Having long recognized the importance of these individual differences, educators have made many attempts to develop systematic programs of individualized and personalized instruction. In the 1920s there were the "programmed" workbooks of the Winetka Plan. The 1960s brought a multitude of plans, such as IPI (Individually Prescribed Instruction), IGE (Individually Guided Education), and PLAN (Program for Learning in Accordance with Needs). The 1970s saw the development and growth in popularity of individual learning packages and the Individualized Education Program (IEP) for students with special needs. Although some of these efforts did not survive the test of time, others met with more success; some have been refined and are still being used. Today, for example, some schools, like Maryville Middle School (TN), report success using personalized learning plans for all students, not only those with special needs.<sup>4</sup> As stated in *This We Believe*, "in essence, every student needs an individualized educational plan."<sup>5</sup>

Furthermore, for a variety of reasons (e.g., learning styles and learning capacities, modality preferences, information-processing habits, motivational factors, and physiological factors) all persons learn in their own ways and at their own rates. Interests, background, innate and acquired abilities, and a myriad of other influences shape how and what a person will learn. From any particular learning experience no two persons ever learn exactly the same thing.

### *The Classroom in a Nation of Diversity and Shifting Demographics*

Central to the challenge is the concept of **multicultural education**, the recognition and acceptance of students from a variety of backgrounds. An important goal of this concept

is to educate citizens who can participate successfully in the workforce and take action in the civic community to help the nation actualize its democratic ideals . . . Schools should be model communities that mirror the kind of democratic society we envision [where] the curriculum reflects the cultures of the diverse groups within society, the languages and dialects that students speak are respected and valued, cooperation rather than competition is fostered among students and students from diverse racial, ethnic and social-class groups are given equal status.<sup>6</sup>

The variety of individual differences among middle level students requires that classroom teachers use teaching strategies and tactics that accommodate those differences. To most effectively teach students who are different from you, you need skills in (a) establishing a classroom climate in which all students feel welcome, can learn, and are supported in doing so (topic of Chapter 4), (b) techniques that emphasize cooperative and social-interactive learning and that deemphasize competitive learning (topics of Chapters 8 and 9), (c) building upon students' learning styles, capacities, and modalities, and (d) strategies and techniques that have proven successful for students of specific differences. The last two are topics of this chapter.

To help you meet the challenge, a wealth of information is available. As a licensed teacher you are expected to know, or at least to know where you can find, all necessary information, and to review it when needed. Certain information you have stored in memory will surface and become useful at the most unexpected times. While concerned about all students' safety and physical well being, you will want to remain sensitive to each student's attitudes, values, social adjustment, emotional well being, and cognitive development. You must be prepared not only to teach one or more subjects but to do it effectively with students of different cultural backgrounds, diverse linguistic abilities, and different learning styles, as well as with students who have been identified as having special needs. It is, indeed, a challenge! The statistics that follow make this even more clear.

The traditional two-parent, two-child family now constitutes only about 6 percent of U.S. households. Approximately one-half of the children in the United States will spend some years being raised by a single parent. Nationwide, an estimated one-third of all 12 year olds go home after school to places devoid of any adult supervision.<sup>7</sup> And on any given day, it is estimated that as many as a quarter million children have no place at all to call home. Even with all the nation's resources and wealth, still about one out of every ten children in the United States has a mental illness<sup>8</sup> and about one out of every five children lives in poverty, facts that are inexcusable in the wealthiest nation on Earth.<sup>9</sup>

By the year 2050, the nation's population is predicted to grow to 400 million (from 2001's approximately 283 million), a population boom that will be led by Hispanics and

<sup>4</sup>C. McCullen, "Using Data to Change Instruction," *Middle Ground* 4(3):7-9 (February 2001).

<sup>5</sup>*This We Believe*, p. 22.

<sup>6</sup>J. A. Banks, "Multicultural and Citizenship Education in the New Century," *School Administrator* 56(6):8-10 (May 1999). [Online 3/19/00 <http://www.aasa.org/SA/may9901/htm>] Now available at <http://www.aasa.org/publications/sa/1999-05/banks.htm>

<sup>7</sup>D. Pride, "Open After Hours: After-School Programs Extend the Learning of Young Adolescents," *Middle Ground* 3(1):20-23 (August 1999), p. 20.

<sup>8</sup>N. Shute, "Children in Anguish: A Call for Better Treatment of Kids' Mental Ills" [Online 1/8/01 <http://www.usnews.com/usnews/issue/010115/kids.htm>]

<sup>9</sup>H. Hodgkinson, "Educational Demographics: What Teachers Should Know," *Educational Leadership* 58(4):9 (December 2000/January 2001).

Asian Americans. Although, by then, non-white youths in the school-age population throughout the United States will average close to 40 percent, a steady increase in interracial marriages and interracial babies may challenge today's conceptions of multiculturalism and race.<sup>10</sup>

The United States truly is a multilingual, multiethnic, multicultural nation. Of children ages five to seven, approximately one out of every six speaks a language other than English at home. Many of these children have only limited proficiency in the English language (i.e., conversational speaking ability only). In many large school districts, as many as 100 languages are represented, with as many as 20 or more different primary languages found in some classrooms. An increasing ethnic, cultural, and linguistic diversity is affecting schools all across the country—not only the large urban areas but also traditionally homogeneous suburbs and small rural communities.

The overall picture that emerges is a diverse student population that challenges teaching skills. Teachers who traditionally have used direct instruction (see Chapter 6) as the dominant mode of instruction have done so with the assumption that their students were relatively homogeneous in terms of experience, background, knowledge, motivation, and facility with the English language. However, no such assumption can be made today in classrooms of such cultural, ethnic, and linguistic diversity. *As a classroom teacher today, you must be knowledgeable and skilled in using teaching strategies that recognize, celebrate, and build upon that diversity.* In a nutshell, that is your challenge.

## STYLES OF LEARNING AND IMPLICATIONS FOR TEACHING

Teachers who are most effective are those who adapt their teaching styles and methods to their students, using approaches that interest the students, that are neither too easy nor too difficult, that match the students' learning styles and learning capacities, and that are relevant to the students' lives. This adaptation process is further complicated because each student is different from every other one. All do not have the same interests, abilities, backgrounds, or learning styles and capacities. As a matter of fact, not only do students differ from one another, but each student can change to some extent from one day to the next. What appeals to a young adolescent today may not have the same appeal tomorrow. Therefore, you need to consider both the nature of young adolescents in general and each student in particular. Since you probably have already experienced a recent course in the psychology of learning, what follows is only a brief synopsis of knowledge about learning.

## Learning Modalities

**Learning modality** refers to the *sensory portal* (or *input channel*) by which a student prefers to receive *sensory reception* (*modality preference*), or the actual way a student learns best (*modality adeptness*). Some young adolescent students prefer learning by seeing, a *visual modality*; others prefer learning through instruction from others (through talk), an *auditory modality*; many others prefer learning by doing and being physically involved, the *kinesthetic modality*; and by touching objects, the *tactile modality*. A student's modality preference is not always that student's modality strength.

While primary modality strength can be determined by observing students, it can also be mixed and it can change as the result of experience and intellectual maturity. As one might suspect, modality integration (i.e., engaging more of the sensory input channels, using several modalities at once or staggered) has been found to contribute to better achievement in student learning. We return to this concept in Part II of this resource guide.

Because many young adolescents have neither a preference nor a strength for auditory reception, teachers should severely limit their use of the lecture method of instruction, that is, of too much reliance on formal teacher talk. Furthermore, instruction that uses a singular approach, such as auditory (e.g., talking to the students), cheats students who learn better another way. This difference can affect student achievement. For example, a teacher who only talks to the students or uses discussions day after day is shortchanging the education of learners who learn better another way, such as kinesthetic and visual learners.

Finally, if a teacher's verbal communication conflicts with his or her nonverbal messages, students can become confused and even resentful, and this too can affect their learning. And when there is a discrepancy between what the teacher says and what that teacher does, the teacher's nonverbal signal will win every time. Actions do speak louder than words! A teacher, for example, who emphasizes the importance of students getting their assignments in on time but then takes forever to read, evaluate, and return those same papers to the students is using inappropriate modeling. Or a teacher who has just finished a lesson on the conservation of energy and does not turn off the room lights upon leaving the classroom for lunch, has, by his or her inappropriate modeling behavior, created cognitive disequilibrium and sabotaged the real purpose for the lesson. And a teacher who asks students not to interrupt others when they are on task but who repeatedly interrupts students when they are on task, is confusing the students with his or her contradictory words and behavior. A teacher's job is not to confuse students. To avoid this, think through what it is that you really expect from your students and

<sup>10</sup>See "race facts," pp. 8-9 in H. Hodgkinson, "Educational Demographics: What Teachers Should Know."

then ensure that your own verbal and nonverbal behaviors are consistent with those expectations.<sup>11</sup>

As a general rule, most young adolescents prefer and learn best by touching objects, by feeling shapes and textures, by interacting with each other, and by moving things around. In contrast, learning by sitting and listening are difficult for many of them.

Some learning style traits significantly discriminate between students who are at risk of not finishing school and students who perform well. Students who are underachieving and at risk need (a) frequent opportunities for mobility; (b) options and choices; (c) a variety of instructional resources, environments, and sociological groupings, rather than routines and patterns; (d) to learn during late morning, afternoon, or evening hours, rather than in the early morning; (e) informal seating, rather than wooden, steel, or plastic chairs; (f) low illumination, because bright light contributes to hyperactivity; and (g) tactile/visual introductory resources reinforced by kinesthetic (i.e., direct experiencing and whole-body activities)/visual resources, or introductory kinesthetic/visual resources reinforced by tactile/visual resources.<sup>12</sup>

Regardless of the subject(s) you intend to teach, you are advised to use strategies that integrate the modalities. When well designed, thematic units and project-based learning incorporate modality integration. In conclusion, then, when teaching any group of young adolescents of mixed learning abilities, modality strengths, language proficiency, and cultural backgrounds, integrating learning modalities is a must for the most successful teaching.

### Learning Styles

Related to learning modality is **learning style**, which can be defined as independent forms of knowing and processing information. While some students may be comfortable beginning their learning of a new idea in the abstract (e.g., visual or verbal symbolization), most need to begin with the concrete (e.g., learning by actually doing it). Many young adolescents prosper while working in groups, while others prefer to work alone. Some are quick in their studies, whereas others are slow, methodical, cautious, and meticulous. Some can sustain attention on a single topic for a long time, becoming more absorbed in their study as time passes. Others are slower starters and more casual in their pursuits but are capable of shifting with ease from subject to subject. Some

can study in the midst of music, noise, or movement, whereas others need quiet, solitude, and a desk or table. The point is this: students vary not only in their skills and preferences in the way knowledge is received, but also in how they mentally process that information once it has been received. This latter is a person's style of learning.

### CLASSIFICATIONS OF LEARNING STYLES

It is important to note that learning style is *not* an indicator of intelligence, but rather an indicator of how a person learns. Although there are probably as many types of learning styles as there are individuals, David Kolb describes two major differences in how people learn: how they perceive situations and how they process information.<sup>13</sup> On the basis of perceiving and processing and on earlier work by Carl Jung on psychological types,<sup>14</sup> Bernice McCarthy has described four major learning styles, presented in the following paragraphs.<sup>15</sup>

The *imaginative learner* perceives information concretely and processes it reflectively. Imaginative learners learn well by listening and sharing with others, integrating the ideas of others with their own experiences. They often have difficulty adjusting to traditional teaching, which depends less on classroom interactions and on students' sharing and connecting of their prior experiences. In a traditional classroom, the imaginative learner is likely to be an at-risk student.

The *analytic learner* perceives information abstractly and processes it reflectively. Analytic learners prefer sequential thinking, need details, and value what experts have to offer. They do well in traditional classrooms.

The *common sense learner* perceives information abstractly and processes it actively. This learner is pragmatic and enjoys hands-on learning. Common sense learners sometimes find school frustrating unless they can see an immediate use for what is being learned. In the traditional classroom, the common sense learner is likely to be a learner who is at risk of not completing school, of dropping out.

The *dynamic learner* perceives information concretely and processes it actively. Dynamic learners also prefer hands-on learning and are excited by anything new. They are risk takers and are frustrated by learning if they see it as being tedious and sequential. In a traditional classroom, the dynamic learner also is likely to be an at-risk student.

<sup>11</sup>T. L. Good and J. E. Brophy, *Looking in Classrooms*, 8th ed. (New York: Addison Wesley Longman, 2000), p. 127.

<sup>12</sup>R. Dunn, *Strategies for Educating Diverse Learners*, Fastback 384 (Bloomington, IN: Phi Delta Kappa Educational Foundation, 1995), p. 9.

<sup>13</sup>D. A. Kolb, *Experiential Learning: Experience as the Source of Learning and Development* (Upper Saddle River, NJ: Prentice Hall, 1984).

<sup>14</sup>C. G. Jung, *Psychological Types* (New York: Harcourt Brace, 1923).

<sup>15</sup>See B. McCarthy, "A Tale of Four Learners: 4MAT's Learning Styles," *Educational Leadership* 54(6):47-51 (March 1997).



### The Three-Phase Learning Cycle

To understand conceptual development and change, researchers in the 1960s developed a Piaget-based theory of learning where students are guided from concrete, hands-on learning experiences to the abstract formulations of concepts and their formal applications. This theory became known as the *three-phase learning cycle*.<sup>16</sup> Long a popular strategy for teaching science, the learning cycle can be useful in other disciplines as well.<sup>17</sup> The three phases are (1) the *exploratory hands-on phase*, where students can explore ideas and experience assimilation and disequilibrium that leads to their own questions and tentative answers, (2) the *invention or concept development phase*, where, under the guidance of the teacher, students invent concepts and principles that help them answer their questions and reorganize their ideas (that is, the students revise their thinking to allow the new information to fit), and (3) the *expansion or concept application phase*, another hands-on phase in which students try out their new ideas by applying them to situations that are relevant and meaningful to them.<sup>18</sup> During application of a concept the learner may discover new information that causes a change in the learner's understanding of the concept being applied. Thus, as discussed further in Chapter 9, the process of learning is cyclical.

Recent interpretations or modifications of the three-phase cycle include McCarthy's 4MAT.<sup>19</sup> With the 4MAT system developed by McCarthy, teachers employ a learning cycle of instructional strategies to try to reach each student's learning style. As stated by McCarthy, in the cycle learners "sense and feel, they experience, then they watch, they reflect, then they think, they develop theories, then they try out theories, they experiment. Finally, they evaluate and synthesize what they have learned in order to apply it to their next similar experience. They get smarter. They apply experi-

ence to experiences."<sup>20</sup> In this process, they are likely to be using all four learning modalities.

To evince *constructivist learning theory*, that is, that learning is a process involving the active engagement of learners who adapt the educative event to fit and expand their individual world view (as opposed to the behaviorist pedagogical assumption that learning is something done to learners)<sup>21</sup> and to accentuate the importance of student self-assessment, some variations of the learning cycle include a fourth phase, an *assessment phase*. However, because we, the authors of this book, believe that assessment of what students know or think they know should be a continual process, permeating all three phases of the learning cycle, we reject any treatment of assessment as a self-standing phase.

### Learning Capacities: The Theory of Multiple Intelligences

In contrast to learning styles, Gardner introduced what he calls *learning capacities* exhibited by individuals in differing ways.<sup>22</sup> Originally called and sometimes still referred to as **multiple intelligences**, or *ways of knowing*, capacities identified thus far are

- *Bodily/kinesthetic*: ability to use the body skillfully and to handle objects skillfully.
- *Interpersonal*: ability to understand people and relationships.
- *Intrapersonal*: ability to assess one's emotional life as a means to understand oneself and others.
- *Logical/mathematical*: ability to handle chains of reasoning and to recognize patterns and orders.
- *Musical*: sensitivity to pitch, melody, rhythm, and tone.
- *Naturalist*: ability to draw on materials and features of the natural environment to solve problems or fashion products.
- *Verbal/linguistic*: sensitivity to the meaning and order of words.
- *Visual/spatial*: ability to perceive the world accurately and to manipulate the nature of space, such as through architecture, mime, or sculpture.

As discussed earlier, and as implied in the presentation of McCarthy's four types of learners, many educa-

<sup>16</sup>See R. Karplus, *Science Curriculum Improvement Study, Teacher's Handbook* (Berkeley: University of California, 1974).

<sup>17</sup>See, for example, M. M. Bevevino; J. Dengel; and K. Adams, "Constructivist Theory in the Classroom: Internalizing Concepts through Inquiry Learning," *Clearing House* 72(5):275-278 (May/June 1999), using the learning cycle in a history lesson about WWI; A. C. Rule, *Using the Learning Cycle to Teach Acronyms, a Language Arts Lesson* (ED883000, 1995); and, J. E. Sowell, "Approach to Art History in the Classroom," *Art Education* 46(2):19-24 (March 1993).

<sup>18</sup>The three phases of the learning cycle are comparable to the three levels of thinking, described variously by others. For example, in Elliot Eisner's *The Educational Imagination* (New York: Macmillan, 1979), the levels are referred to as "descriptive," "interpretive," and "evaluative."

<sup>19</sup>For information about 4MAT, contact Excel, Inc. at 23385 W. Old Barrington Road, Barrington, IL 60010 (847-382-7272) or at 6822 Fenworth Ct., Agoura Hills, CA 91301, (818-879-7442).

<sup>20</sup>B. McCarthy, "Using the 4MAT System to Bring Learning Styles to Schools," *Educational Leadership* 48(2):33 (October 1990).

<sup>21</sup>R. DeLay, "Forming Knowledge: Constructivist Learning and Experiential Education," *Journal of Experiential Education* 19(2):76-81 (August/September 1996).

<sup>22</sup>For Gardner's distinction between "learning style" and "intelligences," see: H. Gardner, "Multiple Intelligences: Myths and Messages," *International Schools Journal* 15(2):8-22 (April 1996) and the many articles in the "Teaching for Multiple Intelligences" theme issue of *Educational Leadership* 55(1) (September 1997).



## CLASSROOM VIGNETTE

### Using the Theory of Learning Capacities (Multiple Intelligences) and Multilevel Instruction

In one middle school classroom, during one week of a six-week thematic unit on weather, students were concentrating on learning about the water cycle. For this study of the water cycle, with the students' help the teacher divided the class into several groups of three to five students per group. The groups worked on six projects simultaneously to learn about the water cycle. (1) One group of students designed, conducted, and repeated an experiment to discover the number of drops of water that can be held on one side of a new one-cent coin versus the number that can be held on the side of a worn one-cent coin; (2) working in part with the first group, a second group designed and prepared graphs to illustrate the results of the experiments of the first group; (3) a third group of students created and composed the words and music of a song about the water cycle; (4) a fourth group incorporated their combined interests in mathematics and art to design, collect the necessary materials, and create a colorful and interactive bulletin board about the water cycle; (5) a fifth group read about the water cycle in materials they researched from the Internet and various libraries; and (6) a sixth group created a puppet show about the water cycle. On Friday, after each group had finished, the groups shared their projects with the whole class.

tors believe that many of the students who are at risk of not completing school are those who may be dominant in a cognitive learning style that is not in sync with traditional teaching methods. Traditional methods of instruction are largely of McCarthy's analytic style: information is presented in a logical, linear, sequential fashion. Traditional methods also reflect three of the Gardner types: verbal/linguistic, logical/mathematical, and intrapersonal. Consequently, to better synchronize methods of instruction with learning styles, some teachers and middle level schools have restructured the curriculum and instruction around Gardner's learning capacities,<sup>23</sup> or around Sternberg's Triarchic Theory.<sup>24</sup>

Sternberg identifies seven metaphors for the mind and intelligence—geographic, computational, biological, epistemological, anthropological, sociological, and systems—and proposes a theory of intelligence consisting of three elements: analytical, practical, and creative.<sup>25</sup>

See the Classroom Vignette above. Internet resources on learning styles and multiple intelligences are shown in Figure 2.1.

From the preceding information about learning, these two important facts are evident:

1. *Intelligence is not a fixed or static reality, but can be learned, taught, and developed.* This concept is important for students to understand also. When students understand that intelligence is incremental, something that is developed through use over time, they tend to be more motivated to work at learning than when they believe intelligence is a fixed entity.<sup>26</sup>

2. *Not all students learn and respond to learning situations in the same way.* A student may learn differently according to the situation or according to the student's ethnicity, cultural background, or socioeconomic status.<sup>27</sup> A teacher who uses only one style of teaching for all students or who teaches to only one or a few styles of learning day after day is short-changing those students who learn better another way.

<sup>23</sup>For example, see G. Gallagher, "Multiple Intelligences," *Middle Ground* 1(2):10-12 (October 1997).

<sup>24</sup>See, for example, R. J. Sternberg, "Teaching and Assessing for Successful Intelligence," and L. English, "Uncovering Students' Analytic, Practical, and Creative Intelligences: One School's Application of Sternberg's Triarchic Theory," *School Administrator* 55(1):26-27, 30-31, and 28-29, respectively (January 1998).

<sup>25</sup>See R. J. Sternberg, "Teaching and Assessing for Successful Intelligence," *School Administrator* 55(1):26-27, 30-31 (January 1998). See also R. J. Sternberg; E. L. Grigorenko; and L. Jarvin, "Improving Reading Instruction: The Triarchic Model," *Educational Leadership* 58(6):48-52 (March 2001).

<sup>26</sup>See, for example, R. J. Marzano, "20th Century Advances in Instruction," in R. S. Brandt (Ed.), *Education in a New Era* (Alexandria, VA: ASCD Yearbook, Association for Supervision and Curriculum Development, 2000), p. 76, and A. W. Jackson and L. A. Davis, *Turning Points 2000: Educating Adolescents in the 21st Century* (New York: Teachers College Press, 2000), p. 66.

<sup>27</sup>See P. Guild, "The Culture/Learning Style Connection," *Educational Leadership* 51(8):16-21 (May 1994).

**Figure 2.1** Internet resources on learning styles and multiple intelligences.

- ERIC link to multiple intelligences resources at [http://www.indiana.edu/~eric\\_rec/ieo/blbs/multiple.html](http://www.indiana.edu/~eric_rec/ieo/blbs/multiple.html)
- Howard Gardner's Project Zero web site at <http://pzweb.harvard.edu>
- Resources on learning styles at <http://www.d.umn.edu/student/loorn/acad/strat/lnsty.html>

## MEETING THE CHALLENGE: RECOGNIZING AND PROVIDING FOR STUDENT DIFFERENCES

Assume that you are a middle school history teacher and that your teaching schedule consists of four sections of U.S. history. Three sections meet daily for 50 minutes each day. The fourth section follows a block schedule of 100 minutes two days a week and 40 minutes one day a week. Furthermore, assume that students at your school are tracked (as they are in many middle level schools). Of your three classes that follow the traditional schedule, one is a so-called accelerated class with 30 students. Another is a regular-education class with 35 students, 3 of whom have special needs because of disabilities. The third is a sheltered English class with 13 students—6 Hispanics with limited proficiency in English; 1 student from Russia and 2 from the Ukraine, all three of whom have very limited proficiency in English; and 4 Southeast Asians, 2 with no ability to use English. The class that follows the block schedule is a regular education class of 33 English-proficient students. Again, for all four sections, the course is U.S. history. Will one lesson plan using lecture and teacher-directed discussion as the primary instructional strategies work for all four sections? The answer is an emphatic no! How do you decide what to do? Before you finish this resource guide, we hope the answer to that question will become clear to you.

First consider the following general guidelines, most of which are discussed in further detail in later chapters as designated.

### *Instructional Practices That Provide for Student Differences: General Guidelines*

To provide learning experiences that are consistent with what is known about ways of learning and knowing, consider the recommendations that follow and refer to them during the preactive phase of your instruction (discussed in Chapter 3).

- As frequently as is appropriate, and especially for skills development, plan the learning activities so they follow a step-by-step sequence from concrete to

abstract (see "The Learning Experiences Ladder" in Chapter 6).

- Communicate with students in a clear, direct, and consistent manner (Chapters 2, 3, 5, and others).
- Concentrate on using student-centered instruction by using project-centered learning, discovery and inquiry strategies, simulations and role-play (Chapters 8 and 9).
- Establish multiple learning centers within the classroom (Chapter 8).
- Maintain high expectations, although not necessarily identical, for every student; establish high standards and teach toward them without wavering (see throughout).
- Plan interesting activities to bridge learning, activities that help the students connect what is being learned with their real world.
- Provide a structured learning environment with regular and understood procedures (Chapter 4).
- Provide ongoing and frequent monitoring of individual student learning, or **formative assessment** (discussed throughout).
- Provide variations in meaningful assignments, with optional due dates, that are based on individual student abilities and interests (Chapters 5 and 8).
- Use direct instruction to teach to the development of observation, generalization, and other thinking and learning skills (Chapter 9).
- Use interactive computer programs and multimedia (Chapter 10).
- Use multilevel instruction (see Figure 2.1 and Chapter 3).
- Use reciprocal peer coaching and cross-age tutoring (Chapter 8).
- Use small-group and cooperative learning strategies (Chapter 8).
- With students, collaboratively plan challenging and engaging classroom learning activities and assignments (see Chapters 5, 6, 8, and others).

Because social awareness is such an important and integral part of a young adolescent student's experience, exemplary school programs and much of their practices are geared toward some type of social interaction. Indeed, learning is a social enterprise among learners and their teachers. Although many of today's successful instructional practices rely heavily on social learning activities and interpersonal relationships, each teacher must be aware of and sensitive to individual student differences. For working with specific learners, consider the guidelines that follow and refer back to these guidelines often during your preactive phase of instruction.

### *Recognizing and Working with Students with Disabilities*

Students with disabilities (referred to also as **exceptional students** and special-needs students) include

those with disabling conditions or impairments in any one or more of the following categories: mental retardation, hearing, speech or language, visual, emotional, orthopedic, autism, traumatic brain injury, other health impairment, or specific learning disabilities. To the extent possible, students with special needs must be educated with their peers in the regular classroom. Public Law 94-142, the Education for All Handicapped Children Act (EAHCA) of 1975, mandates that all children have the right to a free and appropriate education, as well as to nondiscriminatory assessment. (Public Law 94-142 was amended in 1986 by P.L. 99-457, in 1990 by P.L. 101-476 at which time its name was changed to Individuals with Disabilities Education Act-IDEA, and in 1997 by P.L. 105-17.) Emphasizing normalizing the educational environment for students with disabilities, this legislation requires provision of the least-restrictive environment (LRE) for these students. An LRE is an environment that is as normal as possible.

Teachers today know that students with disabilities fall along a continuum of learner differences rather than in a separate category of student.<sup>28</sup> Because of their wide differences, students identified as having special needs may be placed in the regular classroom for the entire school day. This is called *full inclusion*.<sup>29</sup> Those students may also be in a regular classroom the greater part of the school day, called *partial inclusion*, or only for designated periods. Although there is no single, universally accepted definition of the term, *inclusion* is the concept that students with disabilities should be integrated into general education classrooms regardless of whether they can meet traditional academic standards.<sup>30</sup> (The term *inclusion* has largely replaced use of an earlier and similar term, *mainstreaming*.) As a classroom teacher you will need information and skills specific to teaching learners with special needs who are included in your classes.

Generally speaking, teaching students who have special needs requires more care, better diagnosis, greater skill, more attention to individual needs, and an even greater understanding of the students. The challenges of teaching students with special needs in the regular classroom are great enough that to do it well you need specialized training beyond the general guidelines presented here. At some point in your teacher preparation, you should take one or more courses in working with special-needs learners in the regular classroom.

When a student with special needs is placed in your classroom, your task is to deal directly with the differences between this student and other students in your classroom. To do this, you should develop an understanding of the general characteristics of different types of special-needs learners, identify the student's unique needs relative to your classroom, and design lessons that teach to different needs at the same time. This is called *multilevel teaching*, or *multitasking*. Remember that just because a student has been identified as having one or more special needs does not preclude that person from being gifted or talented.

Congress stipulated in P.L. 94-142 that an Individualized Educational Program (IEP) be devised annually for each special-needs child. According to that law, an IEP is developed for each student each year by a team that includes special education teachers, the child's parents or guardians, and the classroom teachers. The IEP contains a statement of the student's present educational levels, the educational goals for the year, specifications for the services to be provided and the extent to which the student should be expected to take part in the regular education program, and the evaluative criteria for the services to be provided. Consultation by special and skilled support personnel is essential in all IEP models. A consultant works directly with teachers or with students and parents. As a classroom teacher, you may play an active role in preparing the specifications for the special-needs students assigned to your classroom and assume a major responsibility for implementing the program.

### GUIDELINES FOR WORKING WITH SPECIAL-NEEDS STUDENTS IN THE REGULAR CLASSROOM

Although the guidelines represented by the paragraphs that follow are important for teaching all students, they are especially important for working with special-needs students.

Familiarize yourself with exactly what the special needs of each learner are. Privately ask the special-needs student whether there is anything he or she would like for you to know about the learner or anything that you specifically can do to facilitate his or her learning.

Adapt and modify materials and procedures to the special needs of each student. For example, a student who has extreme difficulty sitting still for more than a few minutes will need planned changes in learning activities. When establishing student seating arrangements in the classroom, give preference to students according to their special needs. Try to incorporate activities into lessons that engage all learning modalities—visual, auditory, tactile, and kinesthetic. Be flexible in your classroom procedures. For example, allow the use of tape recorders for note taking and test taking when students have trouble with the written language.

<sup>28</sup> A. Meyer and D. H. Rose, "Universal Design for Individual Differences," *Educational Leadership* 58(3):39-43 (November 2000), p. 40.

<sup>29</sup> See, for example, M. L. Yell, "The Legal Basis of Inclusion," *Educational Leadership* 56(2):70-73 (October 1998).

<sup>30</sup> F. Fleggerman-Farber and C. Radziewicz, *Collaborative Decision Making: The Pathway to Inclusion* (Upper Saddle River, NJ: Merrill/Prentice Hall, 1998), pp. 12-13.

Provide high structure and clear expectations by defining the learning objectives in behavioral terms (discussed in Chapter 5). Teach students the correct procedures for everything (Chapter 4). Break complex learning into simpler components, moving from the most concrete to the abstract, rather than the other way around. Check frequently for student understanding of instructions and procedures, and for comprehension of content. Use computers and other self-correcting materials for drill and practice and to providing immediate, constructive, and private feedback to the student.

Develop your **wititness** (discussed in Chapters 3 and 4), which is your awareness of everything that is going on in the classroom at all times, monitoring students for signs of restlessness, frustration, anxiety, and off-task behaviors. Be ready to reassign individual learners to different activities as the situation warrants. Established classroom learning centers (discussed in Chapter 8) can be a big help.

Have all students maintain assignments for the week or some other period of time in assignment books or in folders that are kept in their notebooks. This is a requirement in many middle schools. Post assignments in a special place in the classroom (and perhaps on the school's website) and frequently remind students of assignments and deadlines.

Maintain consistency in your expectations and in your responses. Special-needs learners, particularly, can become frustrated when they do not understand a teacher's expectations and when they cannot depend on a teacher's reactions.

Plan interesting activities to bridge learning. Activities that help the students connect what is being learned with their real world helps to motivate students and to keep them on task.

Plan questions and questioning sequences and write them into your lesson plans (discussed in Chapters 6 and 7). Plan questions to ask special-needs learners so that they are likely to answer them with confidence. Use signals to let students know that you are likely to call on them in class (e.g., prolonged eye contact or mentioning your intention to the student before class begins). After asking a question, give the student adequate time to think and respond. Then, after the student responds, build upon the student's response to indicate that the student's contribution was accepted as being important.

Provide for and teach toward student success. Offer students activities and experiences that ensure each individual student's success and mastery at some level. Use of student portfolios (discussed in Chapter 11) can give evidence of progress and help build student confidence and self-esteem.

Provide guided or coached practice and time in class for students to work on assignments and projects. During this time, you can monitor the work of each student while looking for misconceptions; thus ensuring that students get started on the right track (discussed in Chapter 6).

Provide help in the organization of students' learning. For example, give instruction in the organization of notes and notebooks. Have a three-hole punch available in the classroom so students can put papers into their notebooks immediately, thus avoiding disorganization and their loss of papers. During class presentations use an overhead projector with transparencies so students who need more time can copy material from them. Ask students to read their notes aloud to each other in small groups, thereby aiding their recall and understanding, and encouraging them to take notes for meaning rather than for rote learning. Encourage and provide for peer support, peer tutoring or coaching, and cross-age teaching (Chapter 8). Ensure that the special-needs learner is included in all class activities to the fullest extent possible.

### ***Recognizing and Working with Students of Diversity and Differences***

Quickly determine the language and ethnic groups represented by the students in your classroom. A major problem for newcomers, as well as some ethnic groups, is learning a second (or third or fourth) language. While in many schools it is not uncommon for more than half the students to come from homes where the spoken language is not English, standard English is a necessity in most communities of this country if a person is to become vocationally successful and enjoy a full life. Learning to communicate reasonably well in English can take an immigrant student at least a year and probably longer; some authorities say three to seven years. By default, then, an increasing percentage of teachers are teachers of English language learning. Helpful to the success of teaching students who are English Language Learners (ELL's), that is, who have limited proficiency in English language usage, is the demonstration of respect for students' cultural backgrounds, long-term teacher-student cohorts (such as, for example, in looping), and the use of active and cooperative learning.<sup>31</sup>

There are numerous programs specially designed for English language learners. Most use the acronym LEP (limited English proficiency) with five number levels from LEP 1 that designates non-English-speaking, although the student may understand single sentences and speak simple words or phrases in English, to LEP 5, sometimes designated FEP (fluent English proficient), for the student who is fully fluent in English. However, the student's overall academic achievement may still be less than desired because of language or cultural differences.

<sup>31</sup>See P. Berman, et al., *School Reform and Student Diversity, Volume II: Case Studies of Exemplary Practices for LEP Students* (Berkeley, CA: National Center for Research on Cultural Diversity and Second Language Learning, 1995).

Some schools use a "pullout" approach, where part of the student's school time is spent in special bilingual classes and the rest of the time the student is placed in regular classrooms. In some schools, LEP students are placed in academic classrooms that use a simplified or "sheltered" English approach. Regardless of the program, specific techniques recommended for teaching ELL students include

- Allowing more time for learning activities than one normally would.
- Allowing time for translation by a classroom aide or by a classmate and allowing time for discussion to clarify meaning, encouraging the students to transfer into English what they already know in their native language.
- Avoiding jargon or idioms that might be misunderstood. See the scenario that follows.

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## CLASSROOM SCENARIO

### A Humorous Scenario Related to Idioms: A Teachable Moment

While Elina was reciting she had a little difficulty with her throat (due to a cold) and stumbled over some words. The teacher jokingly commented, "That's okay Elina, you must have a horse in your throat." Quickly, Mariya, a recent immigrant from the Ukraine, asked, "How could she have a horse in her throat?" The teacher ignored Mariya's question. Missing this teachable moment, he continued with his planned lesson.

- 
- Dividing complex or extended language discourse into smaller, more manageable units.
  - Giving directions in a variety of ways.
  - Giving special attention to key words that convey meaning, and writing them on the board.
  - Maintaining high expectations of each learner.
  - Reading written directions aloud and then writing the directions on the board.
  - Speaking clearly and naturally but at a slower than normal pace.
  - Using a variety of examples and observable models.
  - Using simplified vocabulary but without talking down to students.<sup>52</sup>

### ADDITIONAL GUIDELINES FOR WORKING WITH LANGUAGE-MINORITY STUDENTS

While they are becoming literate in English language usage, LEP students can learn the same curriculum in the various disciplines as native English-speaking students.

Although the guidelines presented in the following paragraphs are important for teaching all students, they are especially important when working with language-minority students.

Present instruction that is concrete, that includes the most direct learning experiences possible. Use the most concrete (least abstract) forms of instruction.

Build upon (or connect with) what the students already have experienced and know. Building upon what students already know, or think they know, helps them to connect their knowledge and construct their understandings.

Encourage student writing. One way is by using student journals (see Chapters 8 and 11). Two kinds of journals that are appropriate when working with LEP students are dialogue journals and response journals. *Dialogue journals* are used for students to write anything that is on their minds, usually on the right page. Teachers, parents, and classmates then respond on the left page, thereby "talking with" the journal writers. *Response journals* are used for students to write (record) their responses to what they are reading or studying.

Help students learn the vocabulary. Assist the ELL students in learning two vocabulary sets: the regular English vocabulary needed for learning and the new vocabulary introduced by the subject content. For example, while learning science a student is dealing with both the regular English language vocabulary and the special vocabulary of science.

Involve parents, guardians, or older siblings. Students whose primary language is not English may have other differences about which you will also need to become knowledgeable. These differences are related to culture, customs, family life, and expectations. To be most successful in working with language minority students, you should learn as much as possible about each student. To this end it can be valuable to solicit the help of the student's parent, guardian, or even an older sibling. Parents (or guardians) of new immigrant children are usually truly concerned about the education of their children and may be very interested in cooperating with you in any way possible. In a study of schools recognized for their exemplary practices with language-minority students, the schools were recognized for being "parent friendly," that is, for welcoming parents in a variety of innovative ways.<sup>53</sup>

Plan for and use all learning modalities. As with teaching young adolescents in general, in working with language-minority students in particular you need to use multisensory approaches—learning activities that involve students in auditory, visual, tactile, and kinesthetic learning activities.

<sup>52</sup>D. R. Walling, *English as a Second Language: 25 Questions and Answers*, Fastback 347 (Bloomington, IN: Phi Delta Kappa Educational Foundation, 1993), p. 26.

<sup>53</sup>C. Minicucci, et al., "School Reform and Student Diversity," *Phi Delta Kappan* 77(1):77-80 (September 1995), p. 78.

Use small group cooperative learning. Cooperative learning strategies are particularly effective with language-minority students because they provide opportunities for students to produce language in a setting that is less threatening than speaking before the entire class.

Use the benefits afforded by modern technology. For example, computer networking allows the language minority students to write and communicate with peers from around the world as well as to participate in "publishing" their classroom work.

#### ADDITIONAL GUIDELINES FOR WORKING WITH STUDENTS OF DIVERSE BACKGROUNDS

To be compatible with, and to be able to teach, students who come from backgrounds different from yours, you need to believe that, given adequate support, all students *can* learn—regardless of gender, social class, physical characteristics, language, and ethnic or cultural backgrounds. You also need to develop special skills that include those in the following guidelines, each of which is discussed in detail in other chapters. To work successfully and most effectively with students of diverse backgrounds, you should do the following:

- Build the learning around students' individual learning styles. Personalize learning for each student, much like what is done by using the IEP with special-needs learners. Involve students in understanding and in making important decisions about their own learning, so that they feel ownership (i.e., a sense of empowerment and connectedness) of that learning. As was said at the start of this chapter, some schools report success using personalized learning plans for all students, not only those with special needs.
- Communicate positively with every student and with the student's parents or guardians, learning as much as you can about the student and the student's culture, and encouraging family members to participate in the student's learning. Involve parents, guardians, and other members of the community in the educational program so that all have a sense of ownership and responsibility, and feel positive about the school program.
- Establish and maintain high expectations, although not necessarily the same expectations, for each student. Both you and your students must understand that intelligence is not a fixed entity, but a set of characteristics that, through a feeling of "I can" and with proper coaching, can be developed. (See, for example, *Characteristics of Intelligent Behavior*, in Chapter 9.)
- Teach to individuals by using a variety of strategies to achieve an objective or by using a number of different objectives at the same time (multilevel teaching).
- Use techniques that emphasize collaborative and cooperative learning—that de-emphasize competitive learning.

#### Recognizing and Working with Students Who Are Gifted

Historically, educators have used the term *gifted* when referring to a person with identified exceptional ability in one or more academic subjects, and *talented* when referring to a person with exceptional ability in one or more of the visual or performing arts.<sup>34</sup> Today, however, the terms more often are used interchangeably as if they are synonymous, which is how they are used for this resource guide.

Sometimes, unfortunately, in the regular classroom gifted students are neglected.<sup>35</sup> At least part of the time, it is likely to be because there is no singularly accepted method for identification of these students. In other words, students who are gifted in some way or another may go unidentified as such. For placement in special classes or programs for the gifted and talented, school districts traditionally have used grade point averages and standard intelligence quotient (IQ) scores. However, because IQ testing measures linguistic and logical/mathematical aspects of giftedness (refer to earlier discussion in this chapter—Learning Capacities: The Theory of Multiple Intelligences), it does not account for others and thus gifted students sometimes are unrecognized. They can also be among the students most at risk of dropping out of school.<sup>36</sup> It is estimated that between 10 and 20 percent of school dropouts are students who are in the range of being intellectually gifted.<sup>37</sup>

To work most effectively with gifted learners, their talents first must be identified. This can be done not only with tests, rating scales, and auditions but also by observations in and out of the classroom, and from knowledge about the student's personal life. With those information sources in mind, here is a list of indicators of superior intelligence:<sup>38</sup>

- Ability to assume adult roles and responsibilities at home or at work.
- Ability to cope with school while living in poverty.
- Ability to cope with school while living with dysfunctional families.

<sup>34</sup>See the discussion in G. Clark and E. Zimmerman, "Nurturing the Arts in Programs for Gifted and Talented Students," *Phi Delta Kappan* 79(10):747-751 (June 1998).

<sup>35</sup>See, for example, J. F. Feldhusen, "Programs for the Gifted Few or Talent Development for the Many?" *Phi Delta Kappan* 79(10):735-738 (June 1998).

<sup>36</sup>C. Dixon, L. Mains, and M. J. Reeves, *Gifted and At Risk*, Fastback 398 (Bloomington, IN: Phi Delta Kappa Educational Foundation, 1996), p. 7.

<sup>37</sup>S. B. Rimm, "Underachievement Syndrome: A National Epidemic," in N. Colangelo and G. A. Davis (Eds.), *Handbook of Gifted Education*, 2nd ed. (Needham Heights, MA: Allyn & Bacon, 1997), p. 416.

<sup>38</sup>S. Schwartz, *Strategies for Identifying the Talents of Diverse Students*, ERIC/CUE Digest, Number 122 (New York: ED410323, ERIC Clearinghouse on Urban Education, May 1997).

- Ability to extrapolate knowledge to different circumstances.
- Ability to lead others.
- Ability to manipulate a symbol system.
- Ability to reason by analogy.
- Ability to retrieve and use stored knowledge to solve problems.
- Ability to think and act independently.
- Ability to think logically.
- Creativity and artistic ability.
- Strong sense of self, pride, and worth.
- Understanding of one's cultural heritage.

To assist you in understanding gifted children who may or may not yet have been identified as being gifted, following are some types of students and the kinds of problems to which they may be prone, that is, personal behaviors that may identify them as being gifted but academically disabled, bored, and alienated.

- *Antisocial* students, alienated by their differences from peers, may become bored and impatient troublemakers.
- *Creative, high achieving* students often feel isolated, weird, and depressed.
- *Divergent thinking* students can develop self-esteem problems when they provide answers that are logical to them but seem unusual and off-the-wall to their peers. They may have only a few peer friends.
- *Perfectionists* may exhibit compulsive behaviors because they feel as though their value comes from their accomplishments. When their accomplishments do not live up to expectations—their own, their parents', or their teachers—*anxiety and feelings of inadequacy* arise. When other students do not live up to the gifted student's high standards, alienation from those students is probable.
- *Sensitive* students who also are gifted may become easily depressed because they are so aware of their surroundings and of their differences.
- *Students with special needs* may be gifted. Attention deficit disorder, dyslexia, hyperactivity, and other learning disorders sometimes mask giftedness.
- *Underachieving* students can also be gifted students but fail in their studies because they learn in ways that are seldom or never challenged by classroom teachers. Although often expected to excel in everything they do, most gifted students can be underachievers in some areas. Having high expectations of themselves, underachievers tend to be highly critical of themselves and develop a low self-esteem, and can become indifferent and even hostile.<sup>39</sup>

### **Curriculum Tracking: Not a Viable Option**

All students, not only those who have been identified as gifted, need a challenging academic environment. Although grouping and tracking students into classes based on interest and demonstrated ability is still widely practiced (such as reading groups, grade level retention, accelerated groups, and special education placement), an overwhelming abundance of sources in the literature adamantly opposes the homogeneous grouping of students according to ability, or *curriculum tracking*, as it has long been known. Grouping and tracking do not seem to increase overall achievement of learning, but they do promote inequity.<sup>40</sup>

Although many, perhaps most, research studies lead one to conclude that tracking, as it has been traditionally practiced, should be discontinued because of its discriminatory and damaging effects on students, many schools continue using it. Direct examples are counseling students into classes according to evidence of ability and the degree of academic rigor of the program. Tracking also results indirectly by designating certain classes and programs as "academic" or "accelerated" and others as "non-academic" or "standard" and allowing students some degree of latitude to choose, either partly or wholly, from one or the other.

### **Meaningful Curriculum Options: Multiple Pathways to Success**

Because of what is now known about learning and intelligence, the trend today is to assume that each student, to some degree and in some area of learning and doing, has the potential for giftedness, and to provide sufficient curriculum options, or multiple pathways, so each student can reach those potentials. For example, that is why, in schools' mission statements (see Figure 1.1 of Chapter 1) today there is usually reference to the school's belief that all students can succeed. Clearly, achievement in school increases, students learn more, and they enjoy learning and remember more of what they have learned when individual learning capacities, styles, and modalities are identified and accommodated.<sup>41</sup>

To provide relevant curriculum options, a trend in exemplary schools is to eliminate from the school curriculum what have traditionally been the lower and general curriculum tracks and instead provide curriculum options to try to assure success for every student. While attempting to diminish the discriminatory and damaging effects on

<sup>40</sup> See J. Oakes, et al., "Equity Lessons from Detracking Schools," Chapter 3 of A. Hargreaves (Ed.), *Rethinking Educational Change With Heart and Mind* (Alexandria, VA: ASCD 1997 Yearbook, Association for Supervision and Curriculum Development, 1997) (pp. 13-22); W. Schwartz (Ed.), *New Trends in Language Education for Hispanic Students* (New York: ED442913, ERIC Clearinghouse on Urban Education, 2000); and *Turning Points 2000*, pp. 65-68 and 100.

<sup>41</sup> Dixon, Mains, and Reeves, p. 21.



students that are believed to be caused by tracking and homogeneous ability grouping, educators have devised and are refining numerous other seemingly more productive ways of attending to student differences, of providing a more challenging but supportive learning environment, and of stimulating the talents and motivation of each student. Because the advantage gained from using a combination of responsive practices concurrently is generally greater than is the gain from using any singular practice by itself, in many instances in a given school the practices overlap and are used simultaneously. These practices are shown in Figure 2.2, and most are discussed in various places throughout this resource guide. Check the index for topic locations.

### ADDITIONAL GUIDELINES FOR WORKING WITH GIFTED STUDENTS

When working in the regular classroom with a student who has special gifts and talents, you are advised to

- Collaborate with students in some planning of their own objectives and activities for learning.

**Figure 2.2** Multiple pathways to success; productive ways of attending to student differences, of providing a more challenging learning environment, and of stimulating the talents and motivation of each student.

- Advisory programs and adult advocacy relationships for each student
- Students being allowed to attend a high school class while still in middle grades
- Students being allowed to skip a traditional grade level, thereby accelerating the time it takes for a student to pass through the grades
- Bilingual programs that are intellectually stimulating and designed for integration with mainstream education
- Community service learning that is connected to some portion of the academic program
- Cooperative learning in the classroom
- Curriculum compacting
- Extra effort to provide academic help
- Flexible block scheduling
- High expectation for every student
- Individualized educational plans and instruction
- Integrating new technologies into the curriculum
- Interdisciplinary teaming and thematic instruction
- Looping
- Peer and cross-age teaching
- Personal problems assistance provision at school
- Second opportunity recovery strategies
- Specialized and/or smaller schools or schools-within-a-school
- Ungraded or multi-age grouping
- Within-class and across discipline student-centered projects

- Emphasize skills in critical thinking, problem solving, and inquiry.
- Identify and showcase the student's special gift or talent.
- Involve the student in selecting and planning activities, encouraging the development of the student's leadership skills.
- Plan assignments and activities that challenge the students to their fullest abilities. This does *not* mean overloading them with homework or giving identical assignments to all students (see "tiered assignments" in Chapter 7). Rather, carefully plan so that the students' time spent on assignments and activities is quality time on meaningful learning.
- Provide in-class seminars for students to discuss topics and problems that they are pursuing individually or as members of a learning team.
- Provide independent and dyad learning opportunities. Gifted and talented students often prefer to work alone or with another gifted student.
- Use *curriculum compacting*, a process that allows a student who already knows the material to pursue enriched or accelerated study. Plan and provide optional and voluntary enrichment activities. Learning centers, special projects, and computer and multimedia activities are excellent tools for providing enriched learning activities.
- Use preassessments (diagnostic evaluation) for reading level and subject content achievement so that you are better able to prescribe objectives and activities for each student.

### ***Recognizing and Working with Students Who Take More Time but Are Willing to Try***

Students who are slower to learn typically fall into one of two categories: (1) those who try to learn but simply need more time to do it, and (2) those who do not try, referred to variously as underachievers, recalcitrant, or reluctant learners. Practices that work well with students in one category are often not those that work well with students in the other—making life difficult for a teacher of 30 students, half of whom try and half who don't. It is worse still for a teacher of a group of 30 students in which some try but need time, one or two are academically talented, one or two have special needs, a few are LEP students, and several not only seem unwilling to try but are also disruptive in the classroom.

Remember that just because a student is slow to learn does not mean that the student is less intelligent; some students just plain take longer, for any number of reasons. The following guidelines may be helpful when working with a student who is slow but willing to try:

- Adjust the instruction to the student's preferred learning style, which may be different from yours and from other students in the group.

- Be less concerned with the amount of content coverage than with the student's successful understanding of content that is covered.
- Discover something the student does exceptionally well, or a special interest, and try to build on that.
- Emphasize basic communication skills, such as speaking, listening, reading, and writing, to ensure that the student's skills in these areas are sufficient for learning the intended content.
- Help the student learn content in small sequential steps with frequent checks for comprehension.
- If necessary, help the student to improve his or her reading skills, such as pronunciation and word meanings.
- If using a single textbook, be certain that the reading level is adequate for the student; if it is not, use other more appropriate reading materials for that student.
- Maximize the use of in-class, on-task work and cooperative learning, with close monitoring of the student's progress. Avoid relying much on successful completion of traditional out-of-class assignments unless you can supply coached guidance to the student in the classroom.
- Vary the instructional strategies, using a variety of activities to engage the visual, verbal, tactile, and kinesthetic modalities.
- When appropriate, use frequent positive reinforcement with the intention of increasing the student's self-esteem.
- As the school year begins, learn as much about each student as you can. Be cautious in how you do it, though, because many of these students will be suspicious of any interest you show in them. Be businesslike, trusting, genuinely interested, and patient. A second caution: although you should learn as much as possible about each student, what has happened in the past is history. Use that information not as ammunition, something to be held against the student, but as insight to help you work more productively with the student.
- Avoid lecturing to these students; it won't work.
- Early in the school term, preferably with the help of adult volunteers (e.g., professional community members acting as mentors have worked well to help change a student's attitude from one of rebellion to one of hope, challenge, and success), work out a personalized education program with each student.
- Engage the students in learning by using interactive media, such as the Internet.
- Engage the students in active learning with real-world problem solving and perhaps community service projects.
- Forget about trying to "cover the subject matter," concentrating instead on the student's learning some things well. A good procedure is to use thematic teaching and to divide the theme into short segments. Because school attendance for these students is sometimes sporadic, try to individualize their assignments so that they can pick up where they left off and move through the course in an orderly fashion, even when they have been absent excessively. Try to assure some degree of success for each student.

### ***Recognizing and Working with Recalcitrant Learners***

When working with recalcitrant learners you can use many of the guidelines from the preceding list. You should understand, however, that the reasons for these students' behaviors may be quite different from those for the other category of slow learners. Slower-learning students who are willing to try may be slow because of their learning style, genetic factors, or a combination of those and any number of other reasons. They are simply slower at learning. But they can and will learn. Recalcitrant learners, on the other hand, may be generally quick and bright thinkers but reluctant even to try because of a history of failure, a history of boredom with school, a poor self-concept, severe personal problems that distract from school, or any variety and combination of reasons, many of which are psychological in nature.

Whatever the case, you need to know that a student identified as being a slow or recalcitrant learner might, in fact, be quite gifted or talented in some way, but because of personal problems, may have a history of increasingly poor school attendance, poor attention to schoolwork, and poor self-confidence, and may have an attitude problem. Consider the following guidelines when working with recalcitrant learners:

- Help students develop their studying and learning skills, such as concentrating, remembering, and comprehension. Mnemonics, for example, is a device these students respond to positively, and they are often quick to create their own (for examples, see Chapter 8).
- If using a single textbook, see if the reading level is appropriate (discussed in Chapter 5); if it is not, discard the book and select other more appropriate reading materials for that student.
- Make sure your classroom procedures and rules are understood at the beginning of the school term and be consistent about following them (see Chapter 4).
- Maximize the use of in-class, on-task work and cooperative learning, with close monitoring of the student's progress. Do not rely on successful completion of traditional out-of-class assignments unless the student gets coached guidance from you before leaving your classroom.
- Use simple language in the classroom. Be concerned less about the words the students use and the way they use them and more about the ideas they are expressing. Let the students use their own idioms without carping too much on grammar and syntax. Always take care, though, to use proper and professional English yourself.

- When appropriate, use frequent positive reinforcement, with the intention of increasing the student's sense of personal worth. When using praise for reinforcement, however, try to direct your praise to the deed rather than the student.

## TEACHING TOWARD POSITIVE CHARACTER DEVELOPMENT

In what appears to be a cycle, arising in the 1930s, in the late 1960s, in the 1990s, and continuing today, interest is high in the development of students' values, especially those of honesty, kindness, respect, and responsibility. Today this interest is in what some refer to as **character education**. Whether defined as ethics, citizenship, moral values, or personal development, character education has long been part of public education in this country.<sup>42</sup> Stimulated by a perceived need to act to reduce students' antisocial behaviors and to produce more respectful and responsible citizens, many schools and districts recently have developed or are developing curricula in character education with the ultimate goal of "developing mature adults capable of responsible citizenship and moral action."<sup>43</sup>

As a teacher at the middle level, you can teach toward positive character development in two general ways (both of which are discussed further in Chapters 3, 4, and 5): by providing a conducive classroom atmosphere where students actively and positively share in the decision making; and by being a model that students can proudly emulate. Acquiring knowledge and developing understanding can enhance the learning of attitudes. Nevertheless, changing an attitude is often a long and tedious process, requiring the commitment of the teacher and the school, assistance from the community, and the provision of numerous experiences that will guide students to new convictions. Here are some specific practices, most of which are, as indicated, discussed further in later chapters:

- Build a sense of community in the school and in the classroom with shared goals, optimism, cooperative efforts, and clearly identified and practiced procedures for reaching those goals (see Chapter 4).
- Collaboratively plan, with students, action- and community-oriented projects that relate to curriculum themes; solicit students' family members and community members to assist in projects (see Chapters 1, 5, 8, and others).
- Teach students to negotiate; practice and develop skills in conflict resolution such as empathy, problem

<sup>42</sup>See K. Burrett and T. Rusnak, *Integrated Character Education*, Fastback 351 (Bloomington, IN: Phi Delta Kappa Educational Foundation, 1998).

<sup>43</sup>Burrett and Rusnak, p. 15.

solving, impulse control, and anger management (see Chapter 4).<sup>44</sup>

- Share and highlight examples of class and individual cooperation in serving the classroom, school, and community (see throughout).
- Make student service projects visible in the school and community (Chapters 5 and 8).
- Promote higher-order thinking about value issues through the development of students' skills in questioning (Chapters 7 and 9).
- Sensitize students to issues and teach skills of conflict resolution through debate, role play, simulations, and creative drama (Chapters 8 and 9).

See Figure 2.3 for resources on character education. When compared with traditional instruction, one characteristic of exemplary middle level instruction today is the teacher's encouragement of dialogue among students in the classroom to debate, discuss, and explore their own ideas. Modeling the very behaviors we expect of teachers and students in the classroom is, as promised in the Preface, a constant theme throughout this resource guide. One purpose of Exercise 2.1 is, in a similar fashion, to start that dialogue. Complete that exercise now.

<sup>44</sup>See D. W. Johnson and R. T. Johnson, *Reducing School Violence Through Conflict Resolution* (Alexandria, VA: Association for Supervision and Curriculum Development, 1995).

**Figure 2.3** Selected resources on character education.

- Character Education Institute, 8918 Tesoro Drive, San Antonio, TX 78217 (800-284-0499).
- Character Education Partnership, 918 16th Street NW, Suite 501, Washington, DC 20006 (800-988-8081). Web site <http://www.character.org>.
- Character Education Resources, P.O. Box 651, Contoocook, NH 03229.
- Developmental Studies Center, 111 Deerwood Place, San Ramon, CA 94583 (415-838-7633).
- Ethics Resource Center, 1120 G Street NW, Washington, DC 20005 (202-434-8465).
- Jefferson Center for Character Education, 202 S. Lake Avenue, Pasadena, CA 91101 (818-792-8130).
- Josephine Institute of Ethics, 310 Washington Boulevard, Marina Del Rey, CA 90292 (310-306-1868).
- C. Martin and J. Lehr, *The Start Curriculum: An Interactive and Experiential Curriculum for Building Strong Character and Healthy Relationships in Middle and High Schools* (Minneapolis, MN: Educational Media Corporation, 1999). For information via e-mail: [emedial@usinternet.com](mailto:emedial@usinternet.com).
- Texas Education Agency, *Building Good Citizens for Texas: Character Education Resource Guide. Middle School* (Austin, TX: Author, 2000). Available online at <http://www.tea.state.tx.us>.

**EXERCISE 2.1: REFLECTING UPON MY OWN SCHOOL EXPERIENCES**

**INSTRUCTIONS:** The purpose of this exercise is to share with others in your class your reflections on your own experiences during your middle grade years.

1. What school(s) did you attend at this age (10–14)? Where and when? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. What do you remember most about how this school level differed from your elementary and high school experiences? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. What do you remember most about your teachers? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. What do you remember most about other students? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. What do you remember most about school life? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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**EXERCISE 2.1 (continued)**

6. What grade (or class) do you specifically recall with fondness? Why? \_\_\_\_\_

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7. What grade (or class) would you particularly like to forget? Why? \_\_\_\_\_

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8. What do you recall about peer and parental pressures? \_\_\_\_\_

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9. What do you recall about your own feelings during these years? \_\_\_\_\_

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10. Is there any other aspect of your attendance at a middle or junior high school you wish to share with others? \_\_\_\_\_

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## SUMMARY

Teachers and other adults in a school can collaborate in the promotion of harmony among young adolescents and within the school community by encouraging and providing experiences that recognize and celebrate student differences and cultural identities and establish close friendships with and positive opinions of others, and by promoting a sense of empathy, trust, integrity, and fairness.

As a classroom teacher, you must acknowledge that students in your classroom have different ways of receiving information and processing that information—different ways of knowing and of constructing their knowledge. These differences are unique and important and, as you will learn in Part II of this resource guide, they are central considerations in curriculum development and instructional practice.

You must try to learn as much as you can about how each student learns and processes information. But because you can never know everything about each student, the more you dialogue with your colleagues, vary your teaching strategies, and assist students in integrating their learning, the more likely you are to reach more of the students more of the time. In short, to be an effective middle level classroom teacher you should (a) learn as much about your students and their preferred styles of learning as you can, (b) develop an eclectic style of teaching that is flexible and adaptable, and (c) integrate the disciplines, thereby helping students make bridges or connections between their lives and all that is being learned.

## ADDITIONAL EXERCISE

See the companion Website <http://www.prenhall.com/kellough> for the following exercise related to the content of this chapter:

- Interviewing a Young Adolescent

## QUESTIONS FOR CLASS DISCUSSION

1. Explain why knowledge of learning styles, learning capacities, and teaching styles is or should be important to you.
2. Kelly, a social studies teacher, has a class of 33 eighth-graders who, during her lecture, teacher-led discussion, and recitation lessons are restless and inattentive, creating a problem for her in classroom management. At Kelly's invitation, the school psychologist tests the students for learning modality and finds that of the 33 students, 29 are predominately kinesthetic learners. Of what value is this information to Kelly? Describe what, if anything, Kelly should try as a result of this information.
3. What concerns you most about teaching the diverse students you are likely to have in a classroom? Share those concerns with others in your class. Categorize your

group's concerns. By accessing an Internet teacher bulletin board see what kinds of problems classroom teachers are currently concerned about. Are block scheduling, thematic instruction, grading, group learning, and classroom management high in frequency of concern? Are the concerns of teachers as expressed on the Internet similar to yours? As a class, devise a plan and time line for attempting to ameliorate your concerns.

4. Give an example of how and when you would use multi-level instruction. Of what benefit is its use to students? To teachers? What particular skills must a teacher have in order to effectively implement multilevel instruction?
5. Select one of the "Reflective Thoughts" from the introduction to Part I (page 2) that is specifically related to the content of this chapter, research it, and write a one-page essay explaining why you agree or disagree with the thought. Share your essay with members of your class for their thoughts.
6. Explain why many educators and researchers discourage the use of curriculum tracking or homogeneous grouping. What strategies are recommended in the place of traditional tracking?
7. Prepare an argument either for or against the following statement and present your argument to your classmates: Since teaching about citizenship, ethics, and moral values are unavoidable, a school should plan and do it well.
8. Describe any prior concepts you held that changed as a result of your experiences with this chapter. Describe the changes.
9. From your current observations and fieldwork, as related to this teacher preparation program, clearly identify one specific example of educational practice that seems contradictory to exemplary practice or theory as presented in this chapter. Present your explanation for the discrepancy.
10. Do you have other questions generated by the content of this chapter? If you do, list them along with ways answers might be found.

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