Multicultural and Gender-Fair Instruction

This chapter will help you answer the following questions about your learners:

- In what ways do learners from different ethnic and cultural groups learn and think differently?
- How do I recognize cultural bias in textbooks and in classroom conversation?
- What difficulties does the social organization of the typical classroom present for minority learners?
- How can I adapt my conversational style to encourage minority learners to participate more?
- How can I meet the needs of minority students’ unique learning styles?
- What is the difference between a learner’s learning style and his or her cognitive style?
- What instructional strategies are most appropriate for specific cognitive styles?
- What is “culturally responsive teaching” and how is it achieved?
- What prevalent sex-role stereotypes pertaining to curriculum, grouping, and classroom management should I avoid?
• How can I teach my class in ways that are free of gender bias?

In this chapter you will also learn the meanings of these terms:

cognitive style
cultural compatibility
culturally responsive teaching
education
field-dependence
field-independence
gender-fair instruction
learning style
minority group
participation structure
schooling
sex-role stereotypes
social organization
sociolinguistics
wait-time 1
wait-time 2

The United States differs from nearly all other industrialized nations in the diversity of its classroom learners. It is not uncommon, in a single classroom, for teachers to find themselves facing male and female learners not only of different intellectual abilities but also of diverse cultural, linguistic, ethnic, and racial backgrounds. In this chapter we will study what teachers need to know about these aspects of learner diversity. Let’s begin by looking in on Professor Thomas’s educational psychology class as his students discuss the topic of cultural differences and learning.
**Professor Thomas:** This week you read about “culturally responsive teaching.” What are your opinions on what some of these authors had to say?

**Howard:** I guess my views are a lot like my father’s. He’s a junior high teacher. He thinks that trying to adjust your teaching to ethnic or cultural learning styles may be more trouble than it’s worth. It’s hard enough to adjust to differences in abilities, personalities, and motivation. Now we’re expected to adapt to ethnicity, race, and gender. At what point do we say “Forget that stuff and just do the best job you can with each individual learner”?

**Professor Thomas:** So your point is that if you just treat everybody as individuals, you don’t need to worry about differences in culture and learning styles. Does everyone agree?

**Julie:** I think Howard misses the point. Every teacher would agree that we have to treat each learner as an individual. It’s a cliché. Every teacher who has ever set foot in a classroom has had “individualization” drummed into her head. Yet many minority students don’t do well in our schools. Something’s not getting across!

**Leon:** And what’s not getting across is that different groups learn differently, think differently about what they’re learning, and think differently about their classrooms and teachers. But some teachers treat learners as though everyone were alike.

**Scott:** But everybody thinks differently. There are probably as many differences within a group as there are between groups. I think ethnic and racial differences in learning style are just stereotypes.
**Professor Thomas:** Janet, as an African American woman, did the information you read on the learning styles of minority learners strike a familiar chord?

**Janet:** Well, the discussions of cooperation and competition, and language differences, rang a little true. The stuff on learning styles I don’t relate to. But maybe that’s because I grew up in a middle-class home.

**Scott:** That’s just my point. A lot of this literature makes it sound as though all members of a group think the same.

**Roselia:** The point is that schools may not be educating minority learners as well as the majority. And it may be because schools don’t respect or appreciate the differences we bring to school. They just see the differences as problems.

**Betty:** I don’t know about anyone else, but I found the readings helpful. I don’t know if I’d teach a whole lot differently in a culturally diverse classroom, but I’d think differently about the learning problems of minority students. I wouldn’t just assume it was their problem to learn, but that it was my responsibility to organize my classroom in a way that would help them.

Introduction

Prospective teachers, school administrators, and educational policy makers often want information about how to make their schools and classrooms responsive to the culturally diverse learner. Some educators assume that we already know enough to achieve success in teaching these learners. But as you will discover in this chapter, there are many divergent opinions about culture- and gender-specific learning. Let’s look in on what some prominent educators and psychologists have to say about culture and teaching.
We know that African American children who are neurologically intact and otherwise in good health show no deficits in intellectual functioning during the first years of postnatal life. Yet, many of these same children will be at risk for school failure after a year or two of formal schooling. What accounts for deflection of skill acquisition and intellectual performance in these children? The more meaningful questions for informing educational practice and policy as it pertains to poor minority students must address students’ functional abilities, adaptive skills, cognitive strategies, and social competencies, and how they “fit” with the context of the classroom. (Nelson-LeGall & Jones, 1991, p. 27)

Responsive instructional conversations and successful group and individual problem solving activities will be different for different cultures: students’ experience, values, knowledge, and taste will vary by culture and will necessarily be reflected in responsive instruction. In the absence of school/cultural compatibilities, the relationship between teacher and child becomes the ground for struggle, and the relationship issues themselves absorb all of the energy of teacher and child that should be directed toward learning academic skills. (Tharp, 1989, p. 356)

A word of caution is necessary here....Research in this area [cultural learning styles] indicates that there are as many within-group as there are between-group differences. Lumping all Hispanic students together, for instance, has its dangers....Although it is important to be able to adapt the learning environment to children with different cognitive and learning styles, it is also true that new learning styles can be suggested and encouraged. What is important is that what children bring with them to
school be understood and valued, not ignored, deplored, or despised.  
(Cushner, McClelland, & Safford, 1992, p. 114)

In discussing the educational experiences of different cultural groups in this chapter, we will refer to various minority groups. **Minority group** is the sociological term for a social group that tends to occupy a subordinate position in our society and whose members share a sense of collective identity and common perception of the world around them (Cushner et al., 1992). Educators and psychologists concerned about cultural differences and their effects on school learning typically have studied three minority groups: African Americans, Hispanic Americans, and Native Americans. In this chapter, we will primarily address the school-related problems and research pertaining to these three groups.

Many teachers in American schools teach learners from a variety of cultural backgrounds. While some of these learners have succeeded in our schools, others have not. Many African American, Hispanic, and Native American learners, for example, are believed to be not achieving at their potential. One explanation for the discrepancy between what Anglo-Americans and African, Hispanic, and Native Americans achieve focuses on the concept of cultural compatibility.

**Cultural compatibility** refers to the belief that different cultural groups have different ways of learning and thinking, as well as needs for different motivational, instructional, and classroom management strategies. Those who study topics related to cultural compatibility believe that American schools historically have not sufficiently adapted to the learning styles, preferences, and needs of various cultural groups. They argue that insufficient adaptation of classroom instruction to the learning styles and preferences of learners is a major reason for the comparatively low achievement of minority learners (Tharp, 1989).

The importance of cultural compatibility in the classroom is receiving increased attention among educators. Some have recommended that teachers adapt
their instructional, classroom management, and motivational strategies to the
needs of different cultural groups. The topic of “culturally responsive teaching”
has appeared frequently in popular teacher magazines (Educational Leadership,
vol. 49, January 1992); scholarly journals (Education and Urban Society, vol. 24,
November 1991; Exceptional Children, vol. 59, 1992) and textbooks used for
teacher training (Bennett, 1990; Cushner et al., 1992; Garcia, 1991). Nevertheless,
as the discussion in Dr. Thomas’s class illustrates, there is no consensus that
culturally responsive teaching is possible or even desirable. And there is little
agreement that the lack of cultural compatibility is an adequate explanation for
lower school achievement by some minorities.

In this chapter, we will address the issue of how best to deal with two groups
of diverse learners: those whose diversity is based on cultural differences—for
example, African Americans, Hispanic Americans, and Native Americans—and
those whose difference is based on gender.

To help you teach these two groups of learners, we will first trace the positions
that minority groups and girls and boys have historically held in our schools. We
will examine what some schools have done to perpetuate cultural and gender bias
and what effect this has had on the academic achievement of minority groups and
of girls. Then we will analyze the concepts of cognitive and learning styles, the
research supporting their existence, and the results of educational programs that
have tried to incorporate these concepts into culturally responsive teaching.
Finally, we will address what teachers need to know about how to teach diverse
learners by presenting a conceptual model that suggests the important questions to
ask when planning, delivering, evaluating, and revising instruction.
Cultural Differences and Schooling

To understand the cultural backgrounds of students of color and to teach them successfully, it is important to understand how their cultures have been and are accepted in school and society (Grant, 1991). Although most of us have heard and read that lack of understanding of cultural differences and underachievement characterize the minority experience in American schools, you may be less aware why some have expressed this viewpoint. Consequently, in this section we will review two important aspects of the school experience of minority groups: (1) how schools have valued minority culture, and (2) how well schools have taught minority students (Grant, 1991; Grant & Secada, 1990).

Minority Learners and Teachers

One symbol of how well schools respect different cultures is the number of minorities in the teaching force. As Grant asserts, “Teachers of color indicate to students of color that their cultural group is respected and academically capable” (1991, p. 243). Grant and Sleeter (1986) conducted interviews with minority learners who expressed a preference for teachers of their own minority background. From the work of Albert Bandura, which we studied in Chapter 3, we would expect teachers to be more effective as role models when they have characteristics in common with their learners.

Despite the recognition that minority teachers are important role models for students, and especially for minority learners, the likelihood that a minority learner will encounter a teacher of a similar background is minimal. Harris and Harris (1988) report that at the beginning of the 1980s, 91.5 percent of public school teachers were Anglo, 7.8 percent were African American, and 0.7 percent belonged to other groups. By 1986, the numbers were 89.6 percent Anglo, 7 percent African American, and 3.4 percent other. Anglo women represented
nearly 67 percent of the teaching force. All indications are that this situation will continue well into the next century (Cushner et al., 1992).

Minority Learners and Textbooks

The textbook is the most frequently used instructional tool in middle schools and high schools and is, in many cases, the only tool (Eisner, 1987). Thus, textbooks provide an excellent opportunity to communicate examples of cultural respect and equality. Although progress has been made in eliminating racial and ethnic stereotyping in texts, Ornstein (1992) reports that this was not the case through the early 1980s. Studies of textbooks completed in the 1970s reported underrepresentation of African American and Hispanic American men and women, who rarely were depicted in higher-status or decision-making roles. In comparison with the Anglo culture, the culture of minority groups has not been portrayed in an esteemed or respected manner (Butterfield, Demas, Grant, May, & Perez, 1979; Dumfee, 1974).

Sleeter and Grant (1991) recently analyzed K through 9 textbooks with publication dates between 1980 and 1987. They report that these texts depict the Anglo culture as superior to the cultures of people of color. Anglos received the most attention, were represented in a greater variety of professional and nonprofessional roles, and typically dominated the story line and lists of accomplishments. In addition, Sleeter and Grant report that minority group cultures were rarely discussed in relationship to each other. Rather, they were shown in relationship to the Anglo culture. For example, African American cowboys of the West were discussed in a context of Anglo culture rather than in the context of their interactions with Native or Hispanic Americans who also lived in that region at that time. Thus, although textbooks offer the opportunity for
teachers to present minority cultures in a favorable light, this has not always been the case (Grant, 1991).

Minority Learners and the Language of the Classroom

Bowers and Flinders (1990) cite numerous examples of how the verbal and nonverbal language of the classroom frequently communicate disrespect for the cultural heritage of certain minority groups. For example, Native American culture views forests as the natural state of the world. Yet textbooks and teachers sometimes speak of forests as wild places needing to be tamed or harnessed. Also, stories of other cultures sometimes use the expressions “primitive,” “undeveloped,” or “backward” to describe minority cultures.

Bowers and Flinders also remind us that the nonverbal aspects of communication signify different things to different cultures:

Depending on the cultural background of the student, a smile can signify rapport, embarrassment, or potential hostility; eye contact can signify respect or disrespect; close physical proximity can signify friendship or aggressiveness; and slow speech (relative to what the student perceives as normal) can signify interest and consideration or rudeness and indifference. (1990, p. 51)

Their point is that one way for schools to show respect for the culture of different groups is to make teachers aware of how their own verbal and nonverbal language patterns may differ from those of their culturally diverse learners. However, Bowers and Flinders report that these issues are seldom addressed in either teacher training programs or in-service programs for classroom teachers.
Minority Learners and Tracking

Grant (1991) believes that another way schools fail to acknowledge the culture of minority learners is through the practice of tracking and the use of tests to decide who is placed in which track. Despite some evidence that tracking lowers the achievement and self-esteem of minority learners and that standardized ability testing may disproportionately place minority learners in low-ability tracks, these practices continue in many schools throughout the United States.

Minority Learners and School Achievement

Although African, Hispanic, or Native American learners can and do achieve as well as and better than many Anglo-Americans in school, as groups, these learners tend to score lower than Anglo or Asian American students, indicating that many of these learners may not be achieving their potential in school. The school achievement of many Native American learners is substantially lower than that of Anglos (Tharp, 1989), and their dropout rate is the highest of all minority groups—nearly 42 percent (Bennett, 1990).

As a group, Hispanic Americans are the most undereducated of Americans (Bennett, 1990). Only 40 percent have completed high school, and the dropout rate of 39.9 percent is second only to that of Native Americans. Their reading, writing, and math skills also lag behind the national average (see Table 15.1).

African Americans consistently score below the national average on scholastic achievement measures (see Table 15.1). Their dropout rate approaches 25 percent (compared with 14.3 percent for Anglos). On measures of scholastic ability, such as the Scholastic Assessment Test (SAT) or group and individual IQ tests, African Americans typically score from 10 to 15 IQ score points below Anglos (Jensen, 1980).
A recent analysis of how African American learners are faring in the Milwaukee Public Schools exemplifies their achievements in many urban centers (Holt, 1992).

- Between 1978 and 1985, 94.4 percent of all students expelled from the Milwaukee Public Schools were African Americans.
- During the 1986–1987 school year, Milwaukee’s African American high school students had an average grade point average of D (1.46 GPA).
- During the 1989–1990 school year, 50 percent of the male students suspended from school were African Americans, although they represented only 27.6 percent of the students in the school district.

Although many explanations have been advanced for the underachievement of minority groups, the one that has increasingly gained support is the *cultural compatibility hypothesis* (Tharp, 1989). This hypothesis states that the social structure of many American classrooms (for example, whole-group instruction, competitive orientation, and learning from text) and cognitive abilities required to learn (verbal/analytic) may not be compatible with the social structure and cognitive learning styles of some minority learners. It is this incongruence that some believe undermines minority group achievement.

The cultural compatibility hypothesis has influenced research on instructional methods that has the potential to raise the achievement of minority learners. It has also given rise to a strategy of teaching called *culturally responsive teaching*. Increasingly, methods textbooks, scholarly journals, and popular teacher magazines recommend that teachers of minority learners adopt various versions of this type of teaching.
Cultural Compatibility and Minority Learner Achievement

The nontraditional school day begins with a period of learning readiness whose purpose is to build self-esteem and motivation, and to teach children how to resolve conflicts. Children then are engaged in two two-hour blocks of academic time: reading and language arts in the morning; and math, science, and social studies in the afternoon.

All teachers require students to do a great deal of reciting and memorization, tying in with the oral tradition of griot (African story telling). Every morning Willene Wallace’s second graders recite “The Pledge of Allegiance,” sing “The Black National Anthem,” and repeat aloud poems by black American authors. In class, teachers tell stories, and then often ask children to improvise a variation of the story, possibly with an African or African American motif if the story didn’t originally have one.

To provide a showcase for students and to create a nurturing environment, all children belong to a “school family” composed of three to four multi-grade classes. Family meetings occur every two weeks, and the programs planned by a team of teachers often feature students in performances and peer teaching. (Scherer, 1992, p. 17)

The school described here is attempting to create a classroom environment that is compatible with the home culture of African American learners. Similar culturally compatible or culturally responsive experiments in education are being carried out in other schools. For example, the Kamehameha Early Education Program (KEEP) for more than 20 years has been studying the effects of a culturally compatible language arts program on the reading and language achievement of K–3 learners of Hawaiian ancestry (Tharp et al., 1984). In Shiprock, New Mexico, a similar project is under way among elementary school-
age Navaho learners (Vogt, Jordan, & Tharp, 1987). The Milwaukee public schools are experimenting with African American Immersion Schools (Holt, 1992). These and other projects are attempts to investigate whether culturally diverse learners can achieve on a par with Anglo-American learners when placed in classrooms whose group and classroom management strategies, methods of communication, instructional practices, and motivational techniques are attuned to native cultural patterns.

In this section we will examine the cultural compatibility hypothesis. We will begin with a description of the culture of the typical American classroom and point out incompatibilities between this process of schooling and the home culture of certain minority groups. Then we will review the research supporting the cultural compatibility hypothesis. We will analyze the recommendations for how teachers should teach minority groups and propose a framework for integrating cultural knowledge about learners with instructional practice in a manner that acknowledges cultural group differences.

Education and Schooling

Educators often make a distinction between education and schooling, or informal and formal learning. They use the term education to refer to the varied and informal ways children learn the customs, attitudes, beliefs, values, social skills, and other behaviors they require to be successful members of a family, cultural group, or society (Cushner et al., 1992). Most education is informal and occurs outside the school. It occurs in contexts that are immediately meaningful, face-to-face, and influenced by group dynamics. Cooperation, not competition, predominates. A common language is the medium of learning, and the motivation to learn is often influenced by familial, peer, and similar emotionally laden relationships.
Schooling, on the other hand, often takes place apart from a real-world context. As we learned in Chapters 8 through 10, schools and classrooms have their own sets of normative beliefs, methods of social organization, rules, routines, and instructional strategies. Whereas learning outside school is largely observational and occurs through the social learning processes, learning inside school is characterized by a reliance on words, explanations, and questions. Both teaching and evaluation occur in an academic context (although, as we saw in Chapter 12, performance assessments are beginning to change this).

Roland G. Tharp, who has researched the effects of culture on schooling, uses the term psychocultural variables to refer to features of learning outside the school that differ from those inside it and that potentially cause frustration and lack of achievement for culturally different learners (Tharp, 1989). Tharp and his colleagues have focused on four classes of psychocultural variables that are most relevant for understanding the differences between learning and schooling: social organization, sociolinguistics, learning style, and cognitive style. Tharp believes that American schools may be working better for Anglo-Americans than for African Americans, Native Americans, or Hispanic Americans because the typical social organization, sociolinguistics, and instructional strategies used in schooling are more compatible with the former culture. Let’s examine the basis for that assertion.

Social Organization

In the school context, social organization refers to the relationships between adults and children during learning: their roles, functions, and common goals. We discussed these terms in Chapter 8 when we looked at group processes in the classroom. In American schools, the standard social organization is characterized by whole-group direct instruction. Learners typically are seated at individual desks...
arranged in rows or in small groups around a table. Children listen to a teacher explain and demonstrate, engage in some type of independent practice, and take tests. Although cooperative learning may be used from time to time, typically children work independently and competitively.

Tharp and others (Bennett, 1990; Cushner et al., 1992; Franklin, 1992; Garcia, 1991) believe that this type of social organization is more compatible with the culture of the Anglo culture than with that of the three principal minority groups. The result may be that Anglo children make an easier transition to school, which encourages academic success.

These educators believe that certain minority groups experience a difficult home–school transition because the social organization of their informal learning is incompatible with that of the typical American classroom. For example, Tharp (1989) states that Hawaiian and Navaho children, two groups whose reading achievement and language development are well below that of Anglo children, grow up with a social organization characterized by small-group cooperation, collaboration, and assisted performance.

Franklin (1992), Tharp (1989), and Williams (1981) report that African American children are raised in a social organization where relationships between siblings and peers are more cooperative than competitive, and the relationships between adults and children are characterized by a focus on feelings and emotions rather than on skill learning (called affective-oriented versus task-oriented). Clark (1991) concludes that African American learners experience a noncompetitive, mutually supportive learning environment at home, where egalitarianism, informality, and humor are valued. These researchers believe that schools create dissonance and stress for minority learners by exposing them to classrooms that encourage individuality, competition, task orientation, and formality, and that lessen the importance of relationships.
Sociolinguistics

Sociolinguistics is the study of how cultural groups differ in the courtesies and conventions of language. Sociolinguistics examines the rules governing social conversation: with whom to speak, how to speak, when to pause, when to ask and answer questions, how to interrupt a speaker. Sociolinguists study, for example, aspects of communication as revealed by the average length of utterances, time between utterances, speech rhythms, and rules for when, how, and about what people converse with each other. Among these aspects of communication, the most frequently studied are wait-time, rhythm, and participation structure.

Wait-Time. Sociolinguists report that cultures differ significantly in the manner in which they pause during conversation, called “wait-time.” There are two types: wait-time 1 and wait-time 2. With reference to classroom conversation, wait-time 1 refers to the amount of time a teacher gives a learner to respond to a question. Teachers who use short wait-time 1s do not give learners much time to think before answering a question. Such a teacher repeats the question or calls on another learner to answer the same question after a pause of only 2 or 3 seconds.

Wait-time 2 refers to the interval of time after a learner’s response before the teacher speaks. Teachers who use long wait-time 2s wait several seconds before asking a follow-up question, correcting the answer, or otherwise commenting on what the learner has said. Teachers who use short wait-time 2s frequently interrupt learners before they finish answering.

Rowe (1986) has found that increasing either wait-time has the following effects on learners’ responses.

- Learners give longer answers to questions.
- They volunteer more responses.
- There are fewer unanswered questions.
• Learners are more certain of their answers.
• Learners are more willing to give speculative answers.
• The frequency of learner questions increases.

Tharp (1989) reports that different cultures often have different wait-times. Navaho children, for example, are raised in a culture with longer wait-time 2s than are Anglo children. As a result, Anglo teachers more frequently interrupt Navaho children than do Navaho teachers. Some studies show that Navaho children speak in longer sentences and volunteer more answers when taught by teachers who use longer wait-time 2s. Hawaiian children, on the other hand, prefer shorter wait-time 2s. Tharp reports that in Hawaiian culture, interruptions are a sign of interest in what the speaker is saying. Conversely, long wait-time 2s suggest to Hawaiian learners that the speaker is uninterested or bored with the conversation.

Rhythm. Rhythm refers to the tempo, inflections, and speed of a conversation. Young (1970) and Piestrup (1973) have observed that African American children and their mothers converse with one another using rapid rhythms and a “contest” style of interaction. Mothers encourage their children to be assertive. Directions for household chores and the children’s responses to these directions take on an almost debate-like tone, with the mother directing or calling and the children responding. Franklin (1992) suggests that this style of interaction creates a high-energy, fast-paced home environment, which contrasts with the low-energy, slow-paced environment of the typical classroom, and speculates that this contrast between the pace of conversation at home and in school may be one reason why some African American children are referred for behavior problems in the classroom.
Similarly, Anderson (1992) states that many Anglo teachers overreact to the conversational style of African American adolescents, which may explain the disproportionate referral of these children to programs for learners with behavior disorders. Anderson recommends that teachers allow African American learners to use in the classroom the conversational style they bring from home. This would include speaking more rhythmically, using greater variation of tone, and engaging in more fast-paced verbal interplay.

Participation Structure. The typical classroom conversation occurs in a one-to-one, question-and-answer format. A teacher looks directly at a child, asks him a question, and waits for an answer before making a follow-up response.

Tharp (1989) observes that such a participation structure results in very little participation by Hawaiian or Navaho children. At home and in their communities, the typical participation structure when adults are present involves a relatively small group of children together with an encouraging, participating, but nondirective adult in an informal setting. When the classroom participation structures are based on those in the culture, both Hawaiian and Navaho children, who otherwise rarely participate in classroom discussions or question-and-answer formats, become surprisingly verbal (Au & Mason, 1981; Watson-Gegeo & Boggs, 1977).

Sociolinguists point out that children are more comfortable in classrooms where the sociolinguistic patterns (including wait-times, rhythms, participation structures) are compatible with those of their home and community. Baratz and Baratz (1970) and Lein (1975) point out that schools often view African American or Hispanic migrant children as nonverbal. Yet when observed in familiar home or neighborhood environments, these same children use vibrant, expressive, and creative language. Because the sociolinguistic patterns of the
typical American classroom make certain minority group learners uncomfortable, these learners participate less in class, speak in ways that Anglo-American teachers view as deficient or inappropriate, and consequently achieve less.

Learning Styles

Take a minute and reflect on the circumstances under which you learn best and how you tend to think about and solve problems:

1. Do you prefer studying in a group or by yourself?
2. When learning about a short story, poem, song, picture, or dance, do you first try to grasp the overall theme, message, or point of view, or do you tend to first analyze the characters, plots, relationships, or movements?
3. Do you learn better when teachers provide visual aids, or do you prefer verbal explanations and examples?
4. Do you tend to relate on a personal level to what you read and listen to, or do you approach information and tasks in an impersonal, disinterested manner?
5. Do you prefer large blocks of time in which to master something, or would you rather distribute your efforts over smaller time periods?
6. When you look at pictures such as those shown in Figure 15.1, can you easily see the simple geometric figures embedded in the complex pattern, or do you have difficulty separating the simple figure from the background?
7. Do you learn better in noisy or quiet environments?
8. Are you quick to jump to conclusions, or do you reflect for long periods of time before making a decision?
9. Do you prefer teachers who use an overhead projector or the blackboard?

10. Do you have to see the purpose or larger reason for learning something in order to grasp and understand it, or can you learn things even if they have little relevance for you at the moment?

In the above list, the odd-numbered questions pertain to learning style preferences, while the even-numbered questions pertain to how you process or think about what you learn. The former measure your learning style and the latter your cognitive style. In this section, we will address learning styles; in the next, cognitive styles.

Technically speaking, learning style refers to the classroom or environmental conditions under which an individual prefers to learn. Learning style preferences fall into the following categories:

*Physical environment:* seating arrangements, lighting, temperature, noise level, and so on.

*Social environment:* working alone versus in pairs or small groups; cooperative versus competitive instructional formats; working with or without the presence of adults.

*Emotional environment:* friendly, helpful versus aloof, solitary; preference for a nurturing, people-oriented versus a self-reliant, materials- or text-oriented learning environment.

*Instructional environment:* lecture versus discussion; preference for certain types of tests; direct, indirect, self-directed instructional formats; preference for activities involving visual, tactile, or kinesthetic sense modalities.

*Managerial environment:* many versus few rules; written-down versus unstated rules; clear versus implied consequences; number of classroom
routines; preferences for particular leadership styles (referent, expert, and so on as discussed in Chapter 8).

Do different cultures have learning style preferences? There is surprisingly little research comparing the learning style preferences of different cultural groups (Cushner et al., 1992). This is due in part to the lack of tests that measure learning style preferences that are equally valid when used by people of different cultures. Furthermore, current instruments do not exhibit strong validity or reliability (Snider, 1990). Most of the discussion supporting cultural learning style preferences is based on the assumption that the way we are raised at home shapes our preferences for the way we learn at school. Building on this assumption, psychologists such as Asa Hilliard and Roland Tharp have studied the ways in which members of certain cultural groups are raised or socialized and have used that information to draw conclusions about the learning style preferences of these groups.

We have already learned about some of these preferences. Native Americans and Native Hawaiians prefer small-group cooperative learning because this better matches the social organization and participation structures of their homes and communities. African American learners prefer a fast-paced, high-energy style of instruction because this better matches the conversational patterns of their homes. Based on his studies of how African American children are raised, Hilliard (1976) suggests the following learning style preferences for these learners: energetic involvement in activities, lessons that focus on people and relationships, cooperative learning, and high degree of novelty.

In one of the few cross-cultural studies of learning style preferences, Jalali (1989) used the Learning Style Inventory (Renzulli & Smith, 1978) with 300 culturally different fourth-, fifth-, and sixth-graders and found the following learning style preferences: African Americans preferred quiet, warmth, bright
light, mobility, routine and patterns, frequent feedback from authority figures, action-oriented instructional experiences, and afternoon or evening learning sessions rather than morning. *Hispanic Americans* preferred low light, structure, mobility, learning alone (some researchers, like Kagan [1983] and Ramirez & Castaneda [1974], suggest the importance of group learning), tactile and visual instruction, and feedback from an authority figure.

Cognitive Styles

In Chapter 5 we studied a model of cognitive learning (Figure 5.1). From it you learned that the *learning process* is what goes on inside the learner’s head as a result of receiving instructional stimuli. The learning process refers to how learners attend to, assimilate, accommodate, and use learning strategies to acquire knowledge.

*Cognitive style* refers to individuals’ preferred ways of engaging in the learning process. Some learners are quick to respond when presented with a problem to solve or question to answer. Others are more reflective, even though they may be as informed and expert. The even-numbered questions in the list on pages 512–514 reflect examples of cognitive style. Although there are a number of cognitive styles (convergent versus divergent thinking, reflectivity versus impulsivity), the one most studied in cross-cultural research has been that of field-dependence versus field-independence.

Field-Dependence Versus Field-Independence. Much has been written about how African American, Native American, and Hispanic American children are more “global” than “analytic” in the way they approach learning (Franklin, 1992). Some use the terms “holistic/visual” to describe “global” learners and “verbal/analytic” to describe the opposite style or orientation (Tharp, 1989). Still others (Hilliard, 1976) prefer the term “field sensitive” to describe the
holistic/visual cognitive style and “field insensitive” to refer to the verbal/analytic cognitive style.

All of these researchers are referring to a traditional distinction between cognitive styles usually referred to as **field-dependence** and **field-independence**. These terms refer to two different ways of viewing the world. People who are field-dependent see the world in terms of large, connected patterns. Looking at a volcano, for example, a field-dependent person would notice its overall shape and the larger colors and topographical features that make it up. A field-independent person, on the other hand, would tend to notice the discrete, individual parts of a scene. Thus, she might notice the individual trees, the different rocks, the size of the caldera, where the caldera sits in relation to the rest of the structure, topographical features showing the extent of lava flow, and so forth.

To better understand what field-dependence and field-independence mean and what these terms suggest about how culturally different children learn, let’s look at how researchers have studied these concepts. Witkin and Goodenough (1977) were among the first psychologists to explore how individuals perceive situations and respond to problems. They used two types of tests to determine whether a person tended to be field-dependent or field-independent: the rod-and-frame test and the embedded figures test. Figure 15.2 depicts the rod-and-frame test. In a darkened room, subjects were shown a tilted rod inside a tilted frame with no other visual information (Position A, Figure 15.2). Subjects were then asked to adjust the rod so that it was perpendicular to the ground. Some subjects, even though they had no visual cues such as floor or walls, adjusted the rod correctly (Position B) despite the tilt of the frame. These subjects were called field-independent because they used internal information from their senses to gauge space and movement and ignored contradictory information from the visually tilted frame.
Other subjects, however, adjusted the rod so that it was perpendicular to the frame (Position C). Witkin called these individuals field-dependent. They depended more on the external information provided by the frame than on the internal information coming from their senses. They were more dependent on external sources of information to solve the problem than were members of the field-independent group.

Refer back to Figure 15.1, a hidden figures test. Field-dependent people find it difficult to focus their gaze and attention away from the global pattern to locate the simple figures embedded within the pattern. In other words, they focus on the whole figure rather than its parts. Field-independent people, on the other hand, have no difficulty separating the simple figures from the background. As in the rod-and-frame test, they are able to use internal sources of information to solve the problem. They engage in an internal dialogue with themselves and analytically break the whole into its constituent parts. Thus, the term verbal/analytic is used to describe the field-independent problem-solving style. On the other hand, visual/holistic and global are terms used to describe the cognitive style used by field-dependent people.

Educational Implications. Witkin and his colleagues believe that field-dependence and field-independence are stable traits of individuals that affect different aspects of their lives—especially their approaches to classroom learning. Table 15.2 summarizes the characteristics associated with both types of learners.

Witkin, Moore, Goodenough, and Cox (1977) and Garger and Guild (1984) believe that the different personality characteristics or traits of field-dependent and field-independent learners suggest that at least some learners employ different cognitive processes during classroom learning activities. These researchers also suggest that each group would profit from different instructional strategies. The
accompanying box, *Matching Teaching Strategies with Learners’ Cognitive Styles*, suggests some instructional strategies for each of these two groups of learners.

As you study the table and box, keep in mind two points:

1. The two contrasting cognitive styles have not been directly observed. These descriptions are assumptions or inferences about how the groups approach and think about instructional situations and stimuli, based on their performances on the various tests used by Witkin and his colleagues. In other words, these descriptions come from a logical rather than an empirical analysis.

2. Little research supports the notion that one group requires a different instructional strategy than another to achieve in school (Cronbach & Snow, 1977; Kampwerth & Bates, 1980; Mayer, 1987). Rather, the teaching style preferences identified in the box only suggest the most efficient way to teach learners who tend to approach learning in a field-dependent or field-independent manner.

Cognitive Style and Culture. Educators and psychologists have been interested in the relationship between cognitive style and culture. The work of several researchers has suggested that Native Americans, Hispanic Americans, and African Americans tend to be more field-dependent than either Anglo-Americans or Asian Americans (Bennett, 1990; Cushner et al., 1992; Garcia, 1991; Hilliard, 1992; Tharp, 1989). They therefore advocate that teachers who work with these groups of learners use more field-dependent teaching styles.

What evidence have these studies found to suggest that minority groups have different patterns of cognitive functioning than Anglo-Americans? While the evidence is scattered and sometimes inconsistent, in general there is some support that minority learners are more holistic/global/visual or field-sensitive in their
approaches to learning than are Anglo-Americans. For example, Native Americans consistently score higher on tests that require spatial ability and manipulation skills (arranging puzzles, solving mazes, drawing figures) than on tests that require primarily verbal abilities (detecting similarities and differences in concepts, analyzing proverbs for their underlying meaning) (Cohen, 1985; Gallimore, Tharp, Sloat, Klein, & Troy, 1982; Tharp, 1987).

Lesser, Fifer, and Clark (1965) found that Hispanic American and African American first-grade learners had different patterns of mental abilities than did Chinese American or Jewish American first-graders. The former groups performed better in those abilities that suggest a field-sensitive cognitive style, while the latter showed strengths in tasks requiring verbal/analytic abilities.

Shade (1982), Cohen (1969), and Hilliard (1976) present evidence suggesting that African American learners have a cognitive style emphasizing field-sensitive abilities as well as a preference for person-oriented classroom activities: cooperative learning and activities that focus on people and what they do rather than on things or objects.

Some researchers (Knight & Kagan, 1977; Ramirez & Castaneda, 1974) conclude that Mexican Americans are more field-sensitive as a group than Anglo-Americans. They explain the superior relative performance of this group on measures of field-sensitivity by pointing out that their child-rearing practices stress strong family ties and a respect and obedience to elders—experiences that may lead to a more field-sensitive cognitive style.

Summary and Conclusions

We have presented the evidence that minority groups differ from Anglo-Americans in certain aspects of learning and cognitive style. Some educators and psychologists suggest that these differences are a significant factor in the failure of
minority groups to achieve their potential (Tharp, 1989). These educators and psychologists believe that many American classrooms use teaching styles that are incompatible with the more field-sensitive, person-oriented, cooperative learning preference of the majority of Native Americans, Hispanic Americans, or African Americans.

Is there sufficient justification to advocate field-sensitive teaching styles in classrooms with significant numbers of minority learners? Should teachers make greater use of instructional practices that emphasize cooperative learning, action-oriented activities, and visual/holistic learning when they teach significant numbers of African, Hispanic, or Native American learners? Before embracing culturally responsive teaching, consider the following cautions.

Beware of Perpetuating Stereotypes. Grant cautions that cultural information such as that described here may be used to “perpetuate ideas from the cultural deficit hypothesis and encourage teachers to believe that these students have deficits and negative differences and, therefore, are not as capable of learning as white students” (1991, p. 245). Others (Weisner, Gallimore, & Jordan, 1988) claim that cultural explanations of differential achievements of minority groups often result in global and stereotypical descriptions of how minority cultures behave that go beyond available evidence. Kendall (1983) argues that it is one thing to be aware of the potential effect of culture-specific learning and cognitive styles on classroom achievement, but another to expect a child of a particular group to behave and learn in a particular way.

Focus on Within-Group Differences. Almost all studies of the learning style preferences and cognitive styles of different minority groups have shown that differences within the cultural groups studied were as great as those between cultural groups (Cushner et al., 1992; Henderson, 1980; Tharp, 1989). In other
words, Native Americans, Hispanic Americans, African Americans, and Anglo-Americans vary considerably on tests of field-dependence and field-independence. Some Anglo-Americans are field-dependent in their patterns of scores and some Native Americans are similarly field-independent. On average, the groups may differ. But around these averages are ranges of considerable magnitude. Thus, using a field-dependent teaching style—even in a monocultural classroom—may fail to match the preferred learning and cognitive styles of at least some learners.

Focus on “Expert Practice.” Some educators, such as Englemann (1982) and Lindsley (1992a), argue that before assuming that differences in achievement result from characteristics within the learner (for example, learning and cognitive styles), the teacher should rule out factors external to the learner, such as ineffective teaching practices. Also, minority learners, like all other learners, require high-quality instruction. All learners should be given equal resources; motivation; high expectations; and expert instruction before their teachers embrace techniques specifically adapted to minorities. Although there is some evidence that African American and Native American children improve in reading and math with culturally responsive teaching techniques (Franklin, 1992; Tharp, 1989), studies fail to indicate that expert instruction using traditional instructional methods could not have achieved the same or similar results.

Culturally Responsive Teaching

If the research supporting the practice of culturally responsive teaching has yet to provide explicit prescriptions for teaching culturally different learners, what does it tell us about better understanding students in multicultural classrooms? For the answer to this question, let’s examine the research of Professor Deborah Dillon of Purdue University. We will integrate what she has learned with a
perspective on multicultural schooling that places subject matter at the center of what teachers need to know about teaching culturally diverse learners.

Professor Dillon spent a year observing one teacher, Mr. Appleby, teach a class of low-track African American learners in a high school serving primarily children of low socioeconomic status (Dillon, 1989). She wanted to determine what makes a teacher of culturally different learners effective. Let’s listen to what Mr. Appleby says in one of the interviews:

Kids need to know where you are and how you stand on things and you have to be predictable and dependable....I’m not as strict with them (students), you know...I let them run their mouths more; I challenge them more, maybe I talk to them more, ask them for feedback, get personal and use nicknames....I let them work together more than most of their other teachers would do, I imagine. A lot of their teachers would look at this as cheating...I pretty much give them responsibility for their own behavior...with some of these kids they’re not going to remember who wrote “The Pearl” or “Of Mice and Men”—but...they got involved in a book, and they got involved in something—they used their imagination—they had a good experience...they opened up and shared some of their thoughts and feelings...we can create an atmosphere in the classroom where kids can feel free to express themselves. (Dillon, 1989, p. 244)

Dillon concluded that Appleby’s effectiveness as a classroom teacher was based on his ability to assume the role of “translator and intercultural broker” between the middle-class culture of the school and the lower-class African American culture of his students. As a cultural broker and translator, Appleby was thoroughly
knowledgeable about the backgrounds of his learners, and as a result he was able to bridge the differences between school and community/home cultures.

With this cultural knowledge, Appleby created a classroom with three significant attributes:

• He created a social organization where teacher and learners knew one another, trusted one another, and felt free to express their opinions and feelings. In other words, Appleby created a climate characterized by the type of cohesiveness discussed in Chapter 8.

• He taught lessons that were built around the prior knowledge and experiences of his learners. His knowledge of his learners’ backgrounds allowed him to represent the subject matter in ways that encouraged his students to link it with what they already knew and felt.

• He used instructional methods that allowed learners to actively participate in lessons and to use the language and social interaction patterns with which both he and his learners were familiar.

Here is how Appleby’s students describe this style of teaching:

I act differently in his class—I guess because of the type of teacher he is. He cuts up and stuff...he is hisself—he acts natural—not tryin’ to be what somebody wants him to be...he makes sure that nobody makes fun of anybody if they mess up when they read out loud. (Melinda, in Dillon, 1989, p. 241)

Appleby’s fun, he helps you when you feel bad, he’ll talk to you. Appleby’s got his own style, he makes his own self...he’s not a brag...Appleby always has this funny grin. Everybody call him Magnum—like Tom Selleck—he don’t know that yet...he’s funny, he tells jokes, laughs with the class. He makes me want to work, he makes me want
to give and do something...he show me that I can do it. (LaVonne, in Dillon, 1989, p. 242)

Dillon concludes that in order to teach successfully in multicultural classrooms, teachers need to know more about the values, socialization practices, interests, and concerns of their learners than about presumed learning style preferences and cognitive styles and the dos and don’ts of teaching learners with these traits. Rather, Dillon believes that the cultural knowledge that teachers like Appleby have about their learners allows them to represent subject matter content in ways that are meaningful to them, to develop lessons that gain their active participation, and to create social organizations in the classroom within which learners feel free to be themselves.

Culture and Teaching:
What Teachers Need to Know and Understand

Dillon’s in-depth study suggests that, in order to be successful, teachers of culturally different learners must understand the importance of three relationships: (1) learner-subject matter relationships, (2) teacher-subject matter relationships, and (3) teacher-learner relationships (McDiarmid, 1991). Successful teachers of culturally different learners must understand all three relationships, including how these relationships have been formed and how they can be improved.

In Figure 15.3, we conceptualize the teaching act as a triadic relationship between teacher, learner, and subject matter (McDiarmid, 1991). What distinguishes the teacher-learner relationship from other adult-child relationships is that in the former case both parties have a mutual involvement in and concern for subject matter.
McDiarmid asserts that successful teachers of culturally different learners should recognize that their primary obligation is to teach their subject matter. However, teachers must also recognize that their way of thinking and portraying the knowledge they teach may not match the way their learners think about it (teacher-subject matter relationship); that their learners have prior knowledge, attitudes, and experiences with the subject matter that may facilitate or frustrate learning (learner-subject matter relationship); and finally, that teacher-student (as well as student-student) relationships, as expressed in the social organization of the classroom, can facilitate or frustrate subject matter learning.

McDiarmid suggests that successful teachers like Mr. Appleby must be knowledgeable about the cultures from which their learners come, sensitive to the differences between the school culture and that of the community, and appreciative of the importance of good teacher-student and student-student relationships. In addition to these characteristics, they must also have a thorough understanding of the subjects they teach in order to make them meaningful to diverse learners. Cultural knowledge alone will not make one an effective teacher of content. Likewise, subject matter expertise, in and of itself, will not make a teacher effective if he or she does not understand the importance of how learners relate to the subject and to all classroom participants. In other words, knowledge of subject matter, of learners, and of the relationships between the two are essential for teaching in multicultural classrooms. The accompanying box, *Integrating Cultural Knowledge with Subject Matter Expertise*, presents some important guidelines for forging these relationships.

Gender Differences and Schooling

So far we have discussed cultural diversity and how it is experienced in schools. Gender differences are yet another aspect of learner diversity that concerns
educators. In this section we will discuss what teachers need to know about gender differences and gender-fair teaching. But, before doing so, consider two factors that limit our understanding of the gender differences in schools.

d  Much of what we know about how girls and boys learn and about sex roles at home and in school comes from research on middle-class Anglo children (Cushner et al., 1992). We know relatively little about how children of other cultures are affected by the sex-role socialization practices at home and at school.

d  Most research has focused on the effects of sex-role stereotypes on girls rather than on boys. For example, there is much discussion in both the popular media and scholarly journals of how socialization practices limit the social, educational, and occupational choices of girls. Very little is known or has been studied about how such practices inhibit the choices made by boys (Cushner et al., 1992).

Despite these limitations, research on the different ways boys and girls experience gender at home and in school has sensitized educators and psychologists to some inequities. We will address these inequities in this section. First, let’s explore some sex-role stereotypes and the ways in which schools may unintentionally perpetuate them. We will then return to McDiarmid’s triadic perspective on cultural diversity to illustrate how it applies to helping teachers deal with issues of gender.

Think back to some of your experiences as a student or reflect on a classroom with which you are familiar as a visitor or observer. Which of the following practices did you observe?

- Textbooks (or other curriculum materials) that portray females as housewives and males as outside-the-home wage earners.
• Teachers who use the female gender with the roles of teacher, nurse, or social worker but the male gender when referring to engineers, doctors, and lawyers.

• Girls and boys grouped for certain types of activities during recess that reflect sex-role biases.

• Teachers calling on boys more for answers during math or science but girls more during language arts.

• Different career advice given to girls and boys.

• Teachers who address boys from across the classroom but girls from an arm’s length distance or less.

• Teachers who reprimand boys more sharply and in front of students more often than girls for the same behavior.

• Teachers who praise girls when they choose activities associated with traditional gender roles.

• Female teachers who express misgivings about math more often than do male teachers.

• Boys are more often corrected for academic mistakes and more often told to get it right than girls who make similar mistakes.

• Teachers who call on boys more often than on girls.

This list describes some of the ways schools can perpetuate sex-role stereotypes. We use sex-role stereotypes when we overextend sex roles or apply them too rigidly to people without taking their individual qualities into account. When we say that men are unemotional or can’t nurture children as well as women, we are applying a stereotype. If we say that women are intuitive and less analytic than men, we are applying another stereotype. Boys are often described
(and expected to be) more aggressive, dominant, competitive, and risk-taking, while girls are cast as dependent, nurturing, helping, generous, sociable, compliant, and emotional.

In addition to these personality stereotypes about males and females, there are occupational stereotypes. Girls are expected to be housewives, nurses, social workers, elementary school teachers, law paraprofessionals, dental assistants, secretaries, clerks, and bank tellers, while boys are expected to be auto mechanics, electricians, construction workers, high school math teachers, lawyers, doctors, or executives.

Boys and girls are also stereotyped according to mental abilities, creating intellectual stereotypes. For most of the twentieth century girls were assumed to be born with less mathematical ability than boys. Thanks to the work of Eccles and her colleagues (Eccles, Adler, & Kaczala, 1982; Eccles et al., 1983; Eccles & Jacobs, 1986), we know that the parents’ stereotypes about female math ability, the mothers’ beliefs about the difficulty of math, and the perceived value of math to the student—not inherited abilities—account for much of the difference in male-female scores on math ability tests. Girls also are mistakenly believed to have less spatial ability than boys. However, research has shown that science, spatial, mathematical, and even verbal abilities have very little to do with gender (Jacklin, 1989).

How Schools Perpetuate Sex-Role Stereotypes

Despite our awareness of such stereotypes, they continue to persist, because of both the power of norms and social sanctions or punishments. Norms, as we learned in Chapter 8, are expectations shared by members of a group regarding how they should think, feel, and behave. We learned that norms are powerful regulators of group behavior. Sex-role stereotypes—attitudes, beliefs, values, and
behavior associated with gender—are coded by one’s social group into norms. Because these norms are part of our everyday thinking, we view them as natural, normal, and appropriate. In other words, we take them for granted and rarely challenge their validity.

We also learned from Chapter 8 that when group norms are present, so too are group sanctions against violating those norms. Thus, both males and females are reluctant to challenge and deviate from their respective group norms because of the punishments (both real and imagined) that can occur when one behaves in an “unmanly” or “unwomanly” manner.

But adherence to male or female group norms or stereotypes may incur costs. Stereotypes have significantly constrained women’s occupational, educational, and social opportunities. Expectations for how women should look have led females to be more at risk for developing serious eating disorders such as bulimia or anorexia (Attie, Brooks-Gunn, & Petersen, 1990). For boys, different expectations for behavior, and different reactions by adults to inappropriate behavior, have been considered factors in their being at higher risk than girls for developing conduct disorders, elimination disorders such as night-time bed wetting (enuresis), and ADHD (Barkley, 1990; Liebert & Fischel, 1990; Martin & Hoffman, 1990).

Despite the fact that stereotypes and their harmful effects are recognized and appreciated by educators and psychologists, schools may persist in a number of practices that perpetuate them. In the following sections, we consider curriculum bias, academic differentiation, classroom management practices, and school staffing patterns (Sadker & Sadker, 1988; Sadker, Sadker, & Steindam, 1989).

Curriculum Bias. Just as curriculum bias historically has affected the achievement of certain minority groups, it also has contributed to the stereotyping of females. Although progress has been made in recent years in eliminating sex-role
stereotyping from textbooks and other educational materials and in exposing learners to examples of boys and girls who engage in a wider variety of activities (girls playing marbles, boys babysitting), some stereotypes still prevail (Cushner et al., 1992). Sadker and Sadker (1990) have identified six types of curriculum bias that can be used as a guide for judging the presence of sex-role stereotypes in teaching materials. Some examples of these six types of bias appear in the accompanying box, *Detecting Gender-Specific Curriculum Bias*.

Academic Differentiation. Despite the fact that boys and girls are born with similar spatial, mathematical, and verbal abilities, and despite the fact that girls typically earn better grades than boys, boys are awarded 64 percent of all National Merit Scholarships and outperform girls on all sections of the American College Testing Program Examination (ACT), the Scholastic Aptitude Test (SAT), the Graduate Record Exams (GRE), the Medical College Admission Test (MCAT), and the Graduate Management Admissions Test (GMAT) (Cushner et al., 1992). While parental attitudes and peer group norms play a certain role, we also know that teachers inadvertently contribute to the differential treatment of male and female learners.

For example, Sadker and Sadker report that

...girls are more likely to be invisible members of classrooms. They receive fewer contacts, less praise, fewer complex and abstract questions, and less instruction on how to do things for themselves. (1990, p. 115)

Boys are also more likely to be corrected for academic mistakes and urged to practice skills until they achieve mastery. Girls, on the other hand, particularly high-achieving girls, are ignored persons in the classroom. They are asked fewer questions and receive less feedback than boys (Sadker & Sadker, 1985, 1986).

Sadker, Sadker, and Klein (1991) estimate that from preschool through college
graduation, girls receive nearly 1800 fewer hours of instruction and attention than boys.

The result of this differential is that by the time they graduate from high school, some girls show declines in career commitment (Eccles, 1986). This decline has been attributed to feelings of social helplessness and a notion that boys don’t want to associate with “smart” girls (Cushner et al., 1992). Moreover, Farmer and Sidney (1985) report that guidance counselors and classroom teachers tend to give more praise and encouragement to girls when they choose careers more in line with traditional sex-role stereotypes than when they choose nontraditional ones such as engineering.

Classroom Management Practices. In both elementary and secondary school classrooms, teachers manage boys and girls differently (Grossman, 1990). Boys receive more criticism than girls (Dunkin & Biddle, 1974). Teachers react more to the misbehavior of boys than to that of girls (Serbin, O’Leary, Kent, & Tonick, 1973). When teachers correct learners for misbehaving, they typically talk to girls in private but call out to boys from across the room and in a harsher fashion (Katz, 1986; Meyer & Thompson, 1956; Serbin et al., 1973). The effect of these practices is to give boys a more prominent role in the classroom and to reinforce the notion that boys and girls are different.

School Staffing Patterns. There are two principal concerns regarding how schools are staffed. The first has to do with the so-called feminization of schooling. As we have mentioned, the overwhelming majority of teachers are Anglo females. The percentage of female teachers is greatest at the elementary school level. Some educators and psychologists attribute the fact that boys experience more disciplinary and conduct problems in schools than girls to the predominance of women teachers (Cushner et al., 1992).
Holt (1992) believes that African American males, in particular, are put at a disadvantage by being taught by female teachers. He advocates the establishment of African American immersion schools in which African American males will be taught a multicultural curriculum exclusively by African American male teachers. Although these ideas are controversial (Ravitch, 1992), there is some acceptance for this point of view.

A second feature of school staffing patterns is the predominance of men as leaders, supervisors, and bosses but of women as workers (i.e., teachers, secretaries, paraprofessionals). Many educators believe that the underrepresentation of women as administrators (although this is rapidly changing) reinforces sex-role stereotypes that relegate women to lesser roles not only in schools but in the larger society as well (Cushner et al., 1992).

Promoting Gender-Fair Schooling

We conclude this section by revisiting McDiarmid’s triadic perspective on cultural diversity to see how it applies to gender diversity. Just as the academic achievement of minority learners should be the overriding goal of teachers who teach in multicultural settings, likewise it should be the primary goal of gender-fair instruction. Just as the successful teaching of culturally different learners demands teachers’ expert knowledge of subject matter, of learners, and of the relationships between these two factors, so also is this true of gender-fair schooling.

The accompanying box, Promoting Gender-Fair Instruction, lists some guidelines based on the triad shown in Figure 15.3.
Summing Up

This chapter introduced you to what teachers need to know about culture and gender diversity. Its main points were these:

• A minority group is a social group that tends to occupy a subordinate position in our society and whose members share a sense of collective identity and a common perception of the world around them.

• Cultural compatibility refers to the belief that minority learners have ways of learning and thinking and needs for motivational, instructional, and classroom management strategies that differ from those of majority learners.

• The results of tests of scholastic achievement indicate that Native Americans, Hispanic Americans, and African Americans consistently perform below Anglo-Americans, and frequently have higher dropout rates, indicating that many minority learners may not be achieving their potential.

• Psychocultural variables, which potentially cause frustration and lack of achievement for minority learners, include the social organization of the classroom, sociolinguistics, learning style, and cognitive style.

• Sociolinguists point out that children are more comfortable in classrooms where sociolinguistic patterns (for example, wait-times, rhythms, and participation structures) are compatible with those of their home and community.

• Learning style refers to the physical, social, emotional, instructional, and managerial environment in which an individual prefers to learn. Different cultures are purported to have different learning styles, although little research evidence is available.

• Cognitive style refers to individual preferences for assimilating, accommodating, and using learning strategies to acquire knowledge. The cognitive style of field-dependence refers to “holistic/visual,” or “global”
learners who tend to see the world in terms of large, connected patterns. The cognitive style of field-independence refers to “verbal/analytic” learners who tend to see the world in terms of discrete parts.

• There is some evidence that minority learners are more holistic/global/visual or field-dependent than verbal/analytic or field-independent.

• In order to teach in multicultural classrooms, teachers need to know more about the values, socialization practices, interests, and concerns of their learners. Specifically, they need to be knowledgeable about learner-subject matter, teacher-subject matter, and teacher-learner relationships.

• Sex-role stereotyping occurs when we overextend sex roles or apply them too rigidly to people without taking into account individual qualities. At least three male-female stereotypes persist: personality stereotypes, occupational stereotypes, and intellectual stereotypes.

• Six types of curriculum bias that can foster sex-role stereotypes are linguistic bias (for example, use of masculine terms) stereotyping (limiting male/female occupations), invisibility (ignoring female/male roles or influences), imbalance (not giving the proper weight to women’s/men’s contributions), unreality (ignoring or glossing over some facts), and fragmentation (omitting or poorly integrating some accomplishments of one gender).

For Discussion and Practice

*1. What individual characteristics come to mind when you hear the phrase “minority group member”? What three characteristics do sociologists agree minority groups tend to possess?

*2. In your own words, explain the cultural compatibility hypothesis.
*3. Provide some indications that schools may have undervalued minority culture and may not have taught minority learners as well as Anglo-American learners. Which of these do you believe has been most detrimental to the performance of minority learners?

*4. How do Native Americans, Hispanic Americans, and African Americans fare with respect to school achievement in comparison to Anglo-American learners? What is the approximate dropout rate for each group, respectively, compared with Anglo-American learners?

*5. What is the difference between education and schooling? Why is this difference important to the understanding of minority learners?

*6. Identify and give an example of each of the psychocultural variables relevant to educating the minority learner.

*7. How would you explain the difference between a field-dependent and a field-independent learner? Identify which you believe you are closest to, and give an example of how your preferred cognitive style came to your attention.

*8. What cognitive style does research suggest some minority groups tend to have? What are some cautions in implementing these findings in the classroom?

*9. What three types of relationships are important for successfully teaching culturally different learners? From your own experience, give an example of the importance of each.

*10. What two factors limit our understanding of gender differences in schools? How would either or both of these factors affect your thinking about male-female stereotypes?
11. From your own experience, provide an example of a personality sex-role stereotype, an occupational sex-role stereotype, and an intellectual sex-role stereotype. Which is likely to be found with the school-age learner you are most likely to teach?

*12. What are some examples of linguistic sex-role stereotypes? What are some of the steps you would take to avoid this type of bias in your classroom?

*13. In your own words, describe the research you would cite in convincing a colleague that boys aren’t born smarter than girls in mathematical and spatial ability. What are some of the reasons this stereotype has prevailed?

*14. In your subject matter and grade level, what are some examples of classroom practices that might treat boys and girls differently?

15. Using McDiarmid’s triadic perspective on cultural diversity, suggest one thing you might do in your classroom to promote each of his three types of relationships.

Suggested Readings

Bennett, C. I. Comprehensive multicultural education: Theory and practice. (1990). Needham, MA: Allyn & Bacon. Presents numerous real-world vignettes designed to pique the reader’s interest in the topic of how best to teach learners of different cultures. Integrates knowledge from the social sciences, the humanities, and instructional theory.

comprehensive treatment of the various forms of human diversity found in schools: cultural, gender, class, language, and handicapping conditions.

Kennedy, M. M. (Ed.). (1991). *Teaching academic subjects to diverse learners.* New York: Teachers College Press. Presents the view that expert teaching is the antidote to the problems of minority group underachievement. This book has two chapters on the issue of what teachers should know about teaching culturally different learners.

**Minority group.** A social group that occupies a subordinate position with respect to the society as a whole and that shares a sense of collective identity.

**Cultural compatibility.** The goal of designing instruction to incorporate relevant features of the learners’ culture.

In what ways do learners from different ethnic and cultural groups learn and think differently?

A classroom made up of a diverse group of learners requires that the teacher accommodate her instruction to a variety of learning and cognitive styles.

How do I recognize cultural bias in textbooks and in classroom conversation?
Table 15.1
National Assessment of Educational Progress,
by Subject and by Ethnic Group*

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<td>9-year-olds</td>
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<td>17-year-olds</td>
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<td>fourth-graders</td>
<td>eighth-graders</td>
<td>eleventh-graders</td>
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<tr>
<td>National average</td>
<td>173.3</td>
<td>208.2</td>
<td>220.7</td>
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</tr>
<tr>
<td>White</td>
<td>180.0</td>
<td>213.1</td>
<td>225.3</td>
<td></td>
</tr>
<tr>
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<td>150.7</td>
<td>190.1</td>
<td>206.9</td>
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<tr>
<td>Hispanic</td>
<td>162.2</td>
<td>197.2</td>
<td>202.0</td>
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<td>9-year-olds</td>
<td>13-year-olds</td>
<td>17-year-olds</td>
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<tr>
<td>National average</td>
<td>222.0</td>
<td>269.0</td>
<td>302.0</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>227.0</td>
<td>274.0</td>
<td>309.0</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>202.0</td>
<td>249.0</td>
<td>279.0</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>205.0</td>
<td>254.0</td>
<td>283.0</td>
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</table>

*Range: From 0 to 500.

Focus on

Carl A. Grant, University of Wisconsin–Madison

I began my career working as a teacher and administrator and realized that students of color were continually being marginalized and oppressed and were not the recipients of social justice because of school policy and practices. The culture of peoples of color was treated as subordinate to the culture of Anglos, and instructional materials were often racist and sexist and ignored students with disabilities.

My research into multicultural issues grew out of the civil rights struggles of the 1960s. Social change was being demanded in colleges and K–12 schools. The policies and practices of many educational institutions at that time often worked against people of color and women. Multicultural education research began to investigate the interactions of race, ethnicity, class, gender, and disability as they were being played out in schools and the classroom.

Most recently, research has studied the practice of tracking and the use of tests to decide who gets tracked. Its results suggest that tracking serves to lower the achievement and self-esteem of minority learners, and standardized tests may disproportionately place minority learners in low-ability tracks. Another finding from the research is that what teachers know about their students’ cultural backgrounds can influence student learning. Their training needs to include a history of schooling from the perspective of people of color, a discussion of the need for teachers to understand their own biographies and enculturation, and an examination of what the literature says (or does not say) about the influence of culture on the teaching and learning of students of color.
For teachers to use effectively any information they do receive about the culture of their students, they must understand their own biographies and enculturation and how these give direction to their thoughts and actions. Finally, research indicates that the educational problems experienced by students of color are not the main cause for students’ lack of educational success. The overall structures of school and society play a major role in the lack of academic success of students of color.

I hope that teachers use the results from this research to better understand how to make their teaching more appropriate and engaging for their students, especially when they have males and females of color, low-income students, students with disabilities, and white students who have limited knowledge about race, class, and gender issues. To understand the cultural background of students of color and to teach them successfully it is necessary to understand how their culture has been and is accepted in school and society. Also, the results of this research should help teachers understand the importance of providing students with curriculum and instruction that empower them and that teaches them to understand the importance of making wise life choices.

One of the most important perspectives I believe teachers should take away from multicultural education is that it is a way of thinking, a way of seeing the world that is consistent with the words and statements in many of our national documents dealing with equity, equality, liberty, and justice. It is an education that starts when each of us examines our own attitudes, beliefs, privileges, and behavior. Multicultural education is not static. It requires that each of us continually examine ourselves, our homes, and our communities for a lifelong, deep concern for humankind.
Historically, schools have not succeeded with minority learners as well as they have with majority learners. Some research suggests that this may result in part from the failure of schools to understand and appreciate minority group culture fully.

**Education.** The varied and informal ways in which children learn the customs, attitudes, beliefs, values, social skills, and other behaviors that they require to be successful members of a family, cultural group, and society. Most such education takes place outside the school.

**Schooling.** Learning that takes place within the special academic context and culture of formal educational structures, primarily through words, processes, and questions.

**Social organization.** The relationships—roles, functions, and common goals—between adults and children during learning.

What difficulties does the social organization of the typical classroom present for minority learners?

**Sociolinguistics.** The study of how cultural groups differ in the courtesies and conventions of language rather than in the grammatical structure of what is said; the social conversation of speech.

**Wait-time 1.** The amount of time a teacher gives a learner to respond to a question.
Teachers need to be aware that members of different groups have different conversational styles.

**Wait-time 2.** The interval of time after a learner’s response before the teacher speaks.

How can I adapt my conversational style to encourage minority learners to participate more?

**Participation structure.** The social structure that governs classroom conversation. The most common form of participation structure is a one-to-one question-and-answer format.

**Figure 15.1**

**Learning style.** The classroom or environmental conditions under which an individual prefers to learn.

How can I meet the needs of minority students' unique learning styles?

What is the difference between a learner's learning style and his or her cognitive style?
**Cognitive style.** The means by which individuals process and think about what they learn.

**Field-dependence.** A cognitive style that influences learners to perceive complex stimuli in terms of larger patterns and relationships.

**Field-independence.** A cognitive style that influences learners to perceive complex stimuli in terms of the discrete, individual elements that constitute it.

**Figure 15.2**
Field-dependence in perception and personality.

What instructional strategies are most appropriate for specific cognitive styles?
Table 15.2

Characteristics of Field-Dependent and Field-Independent Learners

<table>
<thead>
<tr>
<th>Field-Dependent (Field-Sensitive) Learner</th>
<th>Field-Independent Learner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceives global aspects of concepts and materials.</td>
<td>Focuses on details of curriculum materials.</td>
</tr>
<tr>
<td>Personalizes curriculum—relates concepts to personal experience.</td>
<td>Focuses on facts and principles.</td>
</tr>
<tr>
<td>Seeks guidance and demonstrations from teacher.</td>
<td>Rarely seeks physical contact with teacher.</td>
</tr>
<tr>
<td>Seeks rewards that strengthen relationship with teacher.</td>
<td>Formal interactions with teacher are restricted to tasks at hand—seeks nonsocial rewards.</td>
</tr>
<tr>
<td>Prefers to work with others and is sensitive to their feelings and opinions.</td>
<td>Prefers to work alone.</td>
</tr>
<tr>
<td>Likes to cooperate.</td>
<td>Likes to compete.</td>
</tr>
<tr>
<td>Prefers organization provided by teacher.</td>
<td>Can organize information by himself or herself.</td>
</tr>
</tbody>
</table>

Applying Your Knowledge:

Matching Teaching Strategies with Learners' Cognitive Styles

Strategies for Field-Dependent Learners
- Display physical and verbal experiences of approval or warmth; show referent power.
- Motivate by use of social and tangible rewards.
- Use cooperative learning strategies.
- Minimize corrective feedback.
- Allow interaction during learning.
• Structure lessons, projects, homework, and so forth.
• Assume role of lecturer, demonstrator, checker, reinforcer, grader, materials designer.

Strategies for Field-Independent Learners
• Be formal in interactions with learners; show expert power.
• Motivate by use of nonsocial rewards, such as grades.
• Use mastery learning and errorless teaching strategies.
• Use corrective feedback.
• Emphasize independent projects.
• Allow learners to develop their own structure.
• Assume role of consultant, listener, negotiator, facilitator.

**Culturally responsive teaching.** Instructional methods designed to be compatible with the learning and cognitive styles of a particular ethnic or cultural group.

Some teachers are successful with minority group learners because they act as cultural brokers, helping their students adapt to the classroom and vice versa.

What is “culturally responsive teaching” and how is it achieved?

**Figure 15.3**
Triadic relationship among teacher, learner, and subject matter.
Applying Your Knowledge:

Integrating Cultural Knowledge with Subject Matter Expertise

Guidelines for Learner-Subject Matter Relationships
1. Know how your learners perceive the knowledge you teach. Their friends, family, and community have influenced these perceptions. For example, among poor, working-class, and minority students, the exclusive use of formal texts and a competitive classroom environment may be looked on with some degree of skepticism.

2. Know what kinds of knowledge, skills, attitudes, and values are respected in your students’ cultures. This knowledge will allow you to present subject matter in ways that bridge the cultural gap between school and community.

3. Be aware of your learners’ prior knowledge and experience with the subject matter of your lessons. Their misconceptions and the degree to which you anticipate them will have a lot to do with how well your students learn.

4. Learn what your students think, understand, and value about the subject matter. This will help you create a positive classroom climate and establish a context for learning in which learners feel free to talk about themselves and how they feel about school and school subjects.

Guidelines for Teacher-Subject Matter Relationships
1. Your knowledge and understanding of your subject will affect the activities you use, the type of practice you provide, and the sense modalities you use to represent your subject.
2. Represent ideas, concepts, and procedures in a variety of ways in order to adapt to the experiences and understandings of culturally different learners. Given knowledge of your learners’ cultures, you should be able to judge the appropriateness of the examples you use to teach concepts, the language you use to describe these concepts, and the media selected to express them.

3. Be aware of how your subject matter relates to the world around your learners and how to help your learners understand these connections. All learners, and in particular culturally diverse ones, should be taught the connection between what they learn in school and what they experience outside it.

Guidelines for Teacher-Learner Relationships

1. You are a role model for your learners. How you think about a subject will affect your learners’ attitudes toward it. If you represent science as difficult, mathematics as boring, or history as a collection of facts, that is how your learners will view them.

2. You can limit your learners’ access to important subject matter by the social organization you create in the classroom. Ability grouping, tracking, and competitive learning arrangements can limit learners’ access to important knowledge and generalizations.

3. The style of leadership you assume in the classroom (authoritarian, laissez-faire, democratic) or the type of power you exercise (expert, referent, legitimate, coercive, reward) can affect the willingness of culturally different learners to engage in subject matter learning tasks. If you want your learners to explore problems and ideas with others, consider how your own behavior and the relationships you establish with learners inhibit or promote such cooperation.
What prevalent sex-role stereotypes pertaining to curriculum, grouping, and classroom management should I avoid?

**Sex-role stereotypes.** The overextension of sex roles as well as the rigid application of sex roles to individuals without taking personal qualities into account.

Research shows that boys receive more attention from teachers than do girls. Teachers tend to correct the misbehavior of boys in ways that give them a more prominent role in the classroom.

Schools can make significant contributions in breaking down the sex-role stereotypes that sometimes appear in textbooks. Teachers must be prepared to present their subject matter in ways that confront the stereotypic perceptions of their learners.

Applying Your Knowledge:

**Detecting Gender-Specific Curriculum Bias**

**Linguistic Bias.** Examples of linguistic bias are history texts that use masculine terms such as “cavemen,” “forefathers,” “mankind,” or “servicemen” to refer to groups composed of both men and women. Likewise, occupational titles like fireman, policeman, mailman, businessman, or deliveryman ignore the fact that women also assume these roles. Similarly, be careful about associating human service professions (teacher, social worker, nurse) with the female pronoun and business or science professions with the masculine.
Referring to boats, countries, or hurricanes as “she” is another form of linguistic bias. Also, watch out for expressions like “John Williams and his wife,” which imply that the wife is John’s possession. “John Williams and Susan Williams” is a more appropriate expression.

Stereotyping. Stereotyping occurs when textbooks or other curriculum materials identify males or females with particular personality traits or particular occupational roles. Thus, females are typically depicted as nurses, housewives, and teachers, while males are doctors, soldiers, and farmers. Girls are depicted in situations where they are dependent, passive, cooperative, docile, or fearful, while boys are brave, active, courageous, risk-taking, and adventuresome.

Invisibility. Invisibility occurs when history books ignore the important roles women have played throughout world history. It is also evident when the achievements of women in the arts, sciences, and mathematics are omitted from textbooks.

Imbalance. Women played a prominent role in the suffrage movement in America in the 1920s. Yet, in the past, history books devoted more space to discussing their style of dress during that period than to their political movement. An imbalance results when the role women played in the history of a country, the development of a particular scientific process, or the creation of an important invention is given less importance than that of men.

Unreality. Unreality refers to portraits of historical periods of contemporary life or culture that gloss over controversial topics or issues like prejudice, discrimination, divorce, or alternative family living arrangements. Books that ignore the fact that more than one-third of American children live in single-parent, female-headed households present an unrealistic picture of the American family to school learners.
**Fragmentation.** Textbooks in history or science often feature boxes with the particular achievements of a woman but do not integrate this material into the text. The impression left with the reader is that the accomplishment is out of the ordinary and that women haven’t made contributions to the mainstream of development of the country or a scientific discipline.

**Gender-fair instruction.** The use of educational strategies, curriculum materials, and instructor-learner interactions that counteract sex-role stereotypes.

How can I teach my class in ways that are free of gender bias?

Applying Your Knowledge:

Promoting Gender-Fair Instruction

Guidelines for Learner-Subject Matter Relationships

- Recognize that some females have certain attitudes, beliefs, and values about school subjects such as math and science that have been acquired from their parents, peer group, and society at large. Many parents have gender-stereotyped beliefs about some subjects, like math, that are acquired by their daughters.
- Be aware of these beliefs and be prepared to represent subjects such as math and science in ways that bridge or confront the perceptions of your learners.
- Remember that learners’ prior experiences with math or science may have convinced them that they lack an ability in these subjects. Teach the subjects in ways that overcome these attributions.

Guidelines for Teacher-Subject Matter Relationships

- Recognize your own gender-stereotyped beliefs about certain subjects—whether math, science, or home economics.
• Teach your subject in ways that overcome the negative attributions regarding ability that female learners often make when the subject is math or science.

• Use various examples and ways of representing your subject that do not reinforce gender stereotypes. For example, curriculum materials and teaching activities in math and science should depict competent female models.

Guidelines for Teacher-Learner Relationships

• Remember that you are a role model for your learners. Do not communicate gender stereotypes about occupations and subjects during informal conversations with learners.

• Group learners in ways that promote gender-free attitudes and beliefs about subject matter, occupations, and recreational activities.

Questions marked with an asterisk are answered in the appendix.