Marva Vance and John Rossi are first-year teachers at Emma Lazarus Elementary School. It’s November, and Marva and John are meeting over coffee to discuss the event dreaded by many a first-year teacher: the upcoming Thanksgiving pageant.

“This is driving me crazy!” Marva starts. “Our classes are like the United Nations. How are we supposed to cast a Thanksgiving pageant? I have three Navajo children. Should I cast them as Indians, or would they be offended? My Vietnamese kids have probably never seen a turkey, and the idea of eating a big bird like that must be revolting to them. I wonder how meaningful this will be to my African Americans. I remember when I was in a Thanksgiving pageant and our teacher had us black students be stagehands because she said there weren’t any black Pilgrims! Besides, what am I going to do about a narrator? José says he wants to be narrator, but his English isn’t too good. Lakesha would be good, but she’s often out for debate tournaments and would miss some rehearsals. I’ve also been worrying about the hunters. Should they all be boys? Wouldn’t it be gender stereotyping if the boys were hunters and the girls were cooks? What about Mark? He uses a wheelchair. Should I make him a hunter?”

John sighs and looks into his coffee. “I know what you’re talking about. I just let my kids sign up for each part in the pageant. The boys signed up as hunters, the girls as cooks, the Indians as Indians. Maybe it’s too late for us to do anything about stereotyping when the kids have already bought into their roles. Where I went to school, everyone was white, and no one questioned the idea that hunters were boys and cooks were girls. How did everything get so complicated?”

Chapter Outline

What Is the Impact of Culture on Teaching and Learning?

How Does Socioeconomic Status Affect Student Achievement?
  The Role of Child-Rearing Practices
  The Link between Income and Summer Learning
  The Role of Schools as Middle-Class Institutions
  School and Community Factors

School, Family, and Community Partnerships
  Is the Low Achievement of Children from Low-Income Groups Inevitable?
  Implications for Teachers

How Do Ethnicity and Race Affect Students’ School Experiences?
  Racial and Ethnic Composition of the United States
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  Why Have Students from Under-Represented Groups Lagged in Achievement?
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How Do Language Differences and Bilingual Programs Affect Student Achievement?
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How Do Gender and Gender Bias Affect Students’ School Experiences?
  Do Males and Females Think and Learn Differently?
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How Do Students Differ in Intelligence and Learning Styles?
  Definitions of Intelligence
  Origins of Intelligence
  Theories of Learning Styles
  Aptitude–Treatment Interactions
Students differ. They differ in performance level, learning rate, and learning style. They differ in ethnicity, culture, social class, and home language. They differ in gender. Some have disabilities, and some are gifted or talented in one or more areas. These and other differences can have important implications for instruction, curriculum, and school policies and practices. Marva and John are concerned with student diversity as it relates to the Thanksgiving pageants they are planning, but diversity and its meaning for education are important issues every day, not just on Thanksgiving. This chapter discusses some of the most important ways in which students differ and some of the ways in which teachers can accept, accommodate, and celebrate student diversity in their daily teaching. However, diversity is such an important theme that almost every chapter in this book touches on this issue. Teachers are more than instructors of students. Together with their students they are builders of tomorrow’s society. A critical part of every teacher’s role is to ensure that the equal opportunity that we hold to be central to our nationhood is translated into equal opportunity in day-to-day life in the classroom. This chapter was written with this goal in mind.

**WHAT IS THE IMPACT OF CULTURE ON TEACHING AND LEARNING?**

If you have ever traveled to a foreign country, you noticed differences in behaviors, attitudes, dress, language, and food. In fact, part of the fun of traveling is in discovering these differences in culture, which refers to the shared norms, traditions, behaviors, language, and perceptions of a group (Erickson, 1997; King, 2002). Though we usually think of cultural differences as being mostly national differences, there is probably as much cultural diversity within the United States as between the United States and other industrialized nations. The life of a middle-class family in the United States or Canada is probably more like that of a middle-class family in Italy, Ireland, or Israel than it is like that of a low-income family living a mile away. Yet while we value cultural differences between nations, differences within our own society are often less valued. The tendency is to value the characteristics of mainstream, high-status groups and devalue those of other groups.

By the time children enter school, they have absorbed many aspects of the culture in which they were raised, such as language, beliefs, attitudes, ways of behaving, and food preferences. More accurately, most children are affected by several cultures, in that most are members of many overlapping groups. The cultural background of an individual child is affected by his or her ethnicity, socioeconomic status, religion, home language, gender, and other group identities and experiences (see Figure 4.1). Many of the behaviors that are associated with being brought up in a particular culture have important consequences for classroom instruction. For
example, schools expect children to speak standard English. This is easy for students from homes in which standard English is spoken but difficult for those whose families speak other languages or significantly divergent dialects of English. Schools also expect students to be highly verbal, to spend most of their time working independently, and to compete with other students for grades and recognition. However, many cultures place a higher value on cooperation and peer orientation than on independence and competitiveness (Boykin, 1994a, 1994b). Because the culture of the school reflects mainstream middle-class values (Grossman, 1995), and because most teachers are from middle-class backgrounds, the child from a different culture is often at a disadvantage. Understanding students’ backgrounds is critical for effectively teaching both academic material and the behaviors and expectations of the school.

**How Does Socioeconomic Status Affect Student Achievement?**

One important way in which students differ from one another is in social class. Even in small rural towns in which almost everyone is the same in ethnicity and religion, the children of the town’s bankers, doctors, and teachers probably have a different upbringing from that experienced by the children of most farmhands or domestic workers.

Sociologists define social class, or **socioeconomic status (SES)**, in terms of an individual’s income, occupation, education, and prestige in society. These factors tend

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**FIGURE 4.1 Cultural Diversity and Individual Identity**

to go together, so SES is most often measured as a combination of the individual’s income and years of education, because these are most easily quantified.

Levine and Levine (1996) divide the American socioeconomic class structure into five groups: upper (3 percent), upper middle (22 percent), lower middle (34 percent), upper working (28 percent), and lower working (13 percent). Within the lower working class they distinguish a very impoverished subgroup, the urban underclass, that has particularly severe difficulties in terms of unemployment, crime, and social disorganization (Danziger, Sandefur, & Weinberg, 1994; Miller & Ferroggiaro, 1995). In this book the term middle-class is used to refer to families whose wage earners are in occupations requiring significant education; working-class to those who have relatively stable occupations not requiring higher education; and lower-class to those in the urban or rural underclass who are often unemployed and might be living on government assistance.

However, social class indicates more than level of income and education. Along with social class goes a pervasive set of behaviors, expectations, and attitudes, which intersect with and are affected by other cultural factors. Students’ social-class origins are likely to have a profound effect on attitudes and behaviors in school. Students from working-class or lower-class backgrounds are less likely than middle-class students to enter school knowing how to count, to name letters, to cut with scissors, or to name colors. They are less likely to perform well in school than are children from middle-class homes (McLoyd, 1998; Natriello, 2002; Sirin, 2003). Of course, these differences are true only on the average; many working-class and lower-class parents do an outstanding job of supporting their children’s success in school, and many working-class and lower-class children achieve at a very high level. Social class cuts across categories of race and ethnicity. Although it is true that Latino and African American families are, on average, lower in social class than are white families, there is substantial overlap; the majority of all low-income families in the United States are white, and there are many middle-class nonwhite families (U.S. Census Bureau, 2001). Definitions of social class are based on such factors as income, occupation, and education, never on race or ethnicity.

Table 4.1 shows the reading performance of eighth-graders on the 2003 National Assessment of Educational Progress (NCES, 2003). Note that children of more educated parents (a key component of social class) consistently scored higher than children of less educated parents. Similarly, among fourth-graders who qualified for free or reduced-price lunches, only 15 percent scored at or above “proficient” on the reading portion of the NAEP, in comparison to 42 percent of fourth graders who did not qualify (NCES, 2003). The NAEP used qualification for free lunch as an indicator of a child’s family income.

<table>
<thead>
<tr>
<th>Parents’ Education</th>
<th>% Scoring at or above Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduated college</td>
<td>43</td>
</tr>
<tr>
<td>Some education after high school</td>
<td>33</td>
</tr>
<tr>
<td>Graduated high school</td>
<td>20</td>
</tr>
<tr>
<td>Did not finish high school</td>
<td>13</td>
</tr>
</tbody>
</table>

The Role of Child-Rearing Practices

Much research has focused on the differences in child-rearing practices between the average middle-class family and the average working-class or lower-class family. Many children from low-income families receive an upbringing that is less consistent with what they will be expected to do in school than that of middle-class children. By the time they enter school, middle-class children are likely to be good at following directions, explaining and understanding reasons, and comprehending and using complex language, while working-class or lower-class children may have less experience in all these areas (Slaughter & Epps, 1994). Children from disadvantaged homes are more likely to have poor access to health care, and to suffer from diseases such as lead poisoning. Their mothers are less likely to have received good prenatal care (McLoyd, 1998). These factors can delay cognitive development, which also affects school readiness. Of course low-income families lack resources of all kinds to help their children succeed. For example, children from disadvantaged families are far more likely to have uncorrected vision, hearing problems, or other health problems that may inhibit their success in school (Natriello, 2002).

Another important difference between middle-class and lower-class families is in the kinds of activities parents tend to do with their children. Middle-class parents are likely to express high expectations for their children and to reward them for intellectual development. They are likely to provide good models for language use, to talk and read to their children frequently, and to encourage reading and other learning activities. They are particularly apt to provide all sorts of learning materials for children at home, such as books, encyclopedias, records, puzzles, and, increasingly, computers (Yeung, Linver, & Brooks-Gunn, 2002). These parents are also likely to expose their children to learning experiences outside the home, such as museums, concerts, and zoos (Duke, 2000). They are more likely to be able to help their children succeed in school and to be involved in their education (Heymann & Earle, 2000). Middle-class parents are likely to expect and demand high achievement from their children; working-class and lower-class parents are more likely to demand good behavior and obedience (Knapp & Woolverton, 1995; Trawick-Smith, 1997). Helping poor parents engage in more enriching interactions with their children can have a substantial impact on their children’s cognitive performance. For example, the Parent–Child Home Program (PCHP) initiative provides disadvantaged mothers of toddlers with toys and demonstrations of ways to play with and talk with children to enhance their intellectual development. Studies have found strong and lasting effects of this simple intervention on children’s cognitive skills and school success, in comparison to children whose parents did not receive PCHP services (Allen & Seth, 2004; Levenston, Levenston, & Oliver, 2002).

ON THE WEB

You can learn more about PCHP programs by visiting their website at www.parent-child.org/home.

The Link between Income and Summer Learning

Several studies have found that while low-SES and high-SES children make similar progress in academic achievement during the school year, the high-SES children continue to make progress over the summer while low-SES children fall behind (Cooper, Lindsay, Nye, & Greathouse, 1998; Entwisle, Alexander, & Olson, 2001; Heyns, 2002). These findings suggest that home environment influences not only academic readiness for school, but also the level of achievement throughout students’ careers.
in school. Middle-class children are more likely to be engaged in school-like activities during the summer and to have available more school-like materials. Working-class and lower-class children may be receiving less academically relevant stimulation at home and are more likely to be forgetting what they learned in school (Hill, 2001; Thompson, Entwisle, Alexander, & Sundius, 1992). The “summer slide” phenomenon has led many schools to offer summer school to at-risk students, and research is finding that this can be an effective strategy (Borman & Boulay, 2004).

**The Role of Schools as Middle-Class Institutions**

Students from backgrounds other than the mainstream middle class have difficulties in school in part because their upbringing emphasizes different behaviors from those valued in school. The problem is that the school overwhelmingly represents the values and expectations of the middle class. Two of these values are individuality and future time orientation (see Boykin, 1994a; Jagers & Carroll, 2003). Most U.S. classrooms operate on the assumption that children should do their own work. Helping others is often defined as cheating. Students are expected to compete for grades, for the teacher’s attention and praise, and for other rewards. Competition and individual work are values that are instilled early on in most middle-class homes. However, students from lower-class white families (Pepitone, 1985) and from many other ethnic backgrounds (Boykin, 1994a) are less willing to compete and are more interested in cooperating with their peers than are middle-class European Americans. These students have often learned from an early age to rely on their communities, friends, and family and have always also helped and been helped by others. Not surprisingly, students who are most oriented toward cooperation with others learn best in cooperation with others, whereas those who prefer to compete learn best in competition with others (Kagan, Zahn, Widaman, Schwartzwald, & Tyrrell, 1985). Because of the mismatch between the cooperative orientation of many lower-class and minority-group children and the competitive orientation of the school, many researchers (e.g., Boykin, 1994a; Greenfield & Cocking, 1994; Triandis, 1995) have argued that there is a structural bias in traditional classrooms that works against these children. They recommend that teach-
ers use cooperative learning strategies at least part of the time with these students so that they receive instruction that is consistent with their cultural orientations (see Slavin, Hurley, & Chamberlain, 2003).

**School and Community Factors**

Often, children from low-income families are placed at risk for school failure by the characteristics of the communities they live in and the schools they attend. For example, school funding in most areas of the United States is correlated with social class; middle-class children are likely to attend schools with greater resources, better-paid (and therefore better-qualified) teachers, and other advantages (Darling-Hammond, 1995). On top of these differences, schools serving low-income neighborhoods may have to spend much more on security, on services for children having difficulties, and on many other needs, leaving even less for regular education (Persell, 1997). This lack of resources can significantly affect student achievement (Land & Legters, 2002; Rothstein, 2001). In very impoverished neighborhoods, crime, a lack of positive role models, inadequate social and health services, and other factors can create an environment that undermines children’s motivation, achievement, and mental health (Behrman, 1997; Black & Krishnakumar, 1998; Vernez, 1998). In addition, teachers often hold low expectations for disadvantaged children, and this can affect their motivation and achievement (Becker & Luthar, 2002; Hauser-Cram, Sirin, & Stipek, 2003). These factors, however, do not automatically doom children to failure. Many at-risk children develop what is called resilience, the ability to succeed despite many risk factors (Borman & Overman, 2004; Glantz, Johnson, & Huffman, 2002; Waxman, Gray, & Padron, 2002). But such factors do make success in school much more difficult.

**School, Family, and Community Partnerships**

If family background is a key factor in explaining differences in student achievement, then it follows that involving families in support of children’s school success can be part of the solution. Professional educators can reach out to families and other community members in a variety of ways to improve communication and respect between home and school and to give parents strategies to help their own children succeed. Epstein and Sanders (2002) describe six types of involvement schools might emphasize in a comprehensive partnership with parents:

1. **Parenting.** Assist families with parenting and child-rearing skills, family support, understanding child and adolescent development, and setting home conditions to support learning at each age and grade level. Obtain information from families to help schools understand families’ backgrounds, cultures, and goals for children.

2. **Communicating.** Communicate with families about school programs and student progress with school-to-home and home-to-school communications. Create two-way communication channels so that families can easily communicate with teachers and administrators.

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**CERTIFICATION POINTER**

Teacher certification tests may require that you identify the factors outside of school that can affect student learning. These include culture, family circumstances, community environments, health, and economic conditions.

**INTASC**

*10 Partnerships*

“Mrs. Rogers, I think this is taking the idea of parent involvement a little too far!”
3. **Volunteering.** Improve recruitment, training, activities, and schedules to involve families as volunteers and audiences at the school or in other locations to support students and school programs.

4. **Learning at home.** Involve families with their children in academic learning activities at home, including homework, goal setting, and other curricular-linked activities and decisions.

5. **Decision making.** Include families as participants in school decisions, governance, and advocacy activities through PTA, committees, councils, and other parent organizations. Assist family representatives to obtain information from and give information to those they represent.

6. **Collaborating with the community.** Coordinate with community businesses, agencies, cultural and civic organizations, colleges or universities, and other groups. Enable students to contribute service to the community (adapted from Epstein & Sanders, 2002, p. 527).

Correlational research on parent involvement has clearly shown that parents who involve themselves in their children’s educations have higher achieving children than other parents (Flouri & Buchanan, 2004). However, there has been more debate about the impacts of school programs to increase parent involvement. Many studies have shown positive effects of parent involvement programs, especially those that emphasize parents’ roles as educators for their own children (see Epstein & Sanders, 2002; Sanders, Allen-Jones, & Abel, 2002), although there are also many studies that have failed to find such benefits (Mattingly et al., 2002). What the research suggests is that building positive relations with parents and giving parents practical means of helping their children succeed in school are important parts of any intentional educator’s plan to improve the achievement and adjustment of all children, but other elements, such as improving instruction and curriculum, are also necessary.

**Parent Involvement**

Parents and other family members have considerable influence over their children’s success in school. If you establish positive relationships with parents, you can help them see the importance of supporting the school’s educational objectives by doing such things as providing an uncluttered, quiet place for their children to do homework. The more clearly you communicate your expectations for their role in their children’s learning in your class, the more likely they will be to play that role. For example, if you expect children to practice reading every evening for homework, having a form for parents to sign each night communicates the importance of the activity. Other strategies for involving parents in their children’s learning include:

1. **Home visits.** At the beginning of the school year, it is useful to arrange for a visit to your students’ homes. Seeing where a student is coming from gives you additional understanding for the supports and constraints available to the students for their cognitive and emotional development.

2. **Frequent newsletters for families.** Informing families about what their children will be learning and what they can do at home to support that learning can increase student success. If you have English language learners in your class, having the newsletter available in their first language is important both in improving communication and in showing respect.
3. **Parent workshops.** Inviting parents to your classroom so you can explain the program of study and what your expectations are can help parents understand how they can support their children’s learning.

4. **Positive calls home.** Hearing good news about their children’s school work or behavior helps set up a productive cycle of positive reinforcement and increases the likelihood of the behavior continuing. This is especially helpful for family members whose own experiences with the school system were less than positive.

5. **Inviting family members to volunteer.** Asking parents to help out in your class by sharing their expertise, interests, or hobbies can make family members feel valued. They can demonstrate their occupation, a cultural tradition, or help out with field trips or other special projects. Beyond providing the extra assistance, this communicates to your students that you value the diversity of knowledge and expertise that their families bring to your class.

6. **Make parents your partners.** Communicating to parents and other family members that you are a team, working together to promote their children’s achievement, makes your job easier and greatly improves parents’ attitudes toward school and willingness to work with you in difficult times as well as good ones.

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**Is the Low Achievement of Children from Low-Income Groups Inevitable?**

Schools can do a great deal to enable children from low-income families to succeed in school (Barr & Parrett, 2001; Borman, 2002/03; Cole-Henderson, 2000; Gunter, Estes, & Schwab, 2003; Slavin, 2002). For example, intensive interventions have been designed to help develop children’s cognitive skills early in life and to help their parents do a better job of preparing them for school. Studies of these programs have shown long-term positive effects for children growing up in very impoverished families, especially when the programs are continued into the early elementary grades (Conyers et al., 2003; Ramey & Ramey, 1998; Reynolds et al., 2002). Reading Recovery (Lyons, Pinnell, & DeFord, 1993) and other tutoring programs for first-graders have shown substantial effects on the reading achievement of at-risk children (Denton, Anthony, Parker, & Hasbrouck, 2004; Morris, Tyner, & Perney, 2000; Wasik & Slavin, 1993). Success for All (Slavin & Madden, 2001), which combines effective instructional programs, tutoring, and family support services, has demonstrated substantial and lasting impacts on the achievement of children in high-poverty schools. Significant reductions in class size have been found to be particularly beneficial to children in high-poverty schools (Finn et al., 2003). High quality summer school programs (Borman & Boulay, 2004) and after-school programs (McCombs & Scott-Little, 2003) can provide opportunities to move at-risk students toward success. These and other programs and practices, including health and social interventions that go beyond the school (Jackson, 1999; Rothstein, 2001), demonstrate that low achievement by lower-class children is not inevitable. Achievement can be greatly improved by use of strategies that are readily available to schools.

**Implications for Teachers**

Children enter school with varying degrees of preparation for the school behaviors that lead to success. Their behaviors, attitudes, and values also vary. However, the mere fact that some children initially do not know what is expected of them and
have fewer entry-level skills than others, does not mean that they are destined for academic failure. Although there is a modest positive correlation between social class and achievement, it should not be assumed that this relationship holds for all children from lower-SES families. There are many exceptions. Many working-class and lower-class families can and do provide home environments that are supportive of their children’s success in school. Autobiographies of people who have overcome poverty (e.g., Comer, 1990) often refer to the influence of strong parents and role models with high standards who expected nothing less than the best from their children and did what they could to help them achieve. While educators need to be aware of the problems encountered by many lower-class pupils, they also need to avoid converting this knowledge into stereotypes. In fact, there is evidence that middle-class teachers often have low expectations for working-class and lower-class students (Persell, 1997) and that these low expectations can become a self-fulfilling prophecy, causing students to perform less well than they could have (Good & Brophy, 1997; Weinstein, Madison, & Kuklinski, 1995).

**How Do Ethnicity and Race Affect Students’ School Experiences?**

A major determinant of the culture in which students will grow up is their ethnic origin. An **ethnic group** is one in which individuals have a shared sense of identity, usually because of a common place of origin (such as Swedish, Polish, or Greek Americans), religion (such as Jewish or Catholic Americans), or race (such as African or Asian Americans). Note that **ethnicity** is not the same as race; **race** refers only to physical characteristics, such as skin color. Ethnic groups usually share a common culture, which may not be true of all people of a given race. African Americans who are recent immigrants from Nigeria or Jamaica, for example, are from ethnic backgrounds that are quite different from that of African Americans whose families have been in the United States for many generations, even if they are of the same race (King, 2002; Mickelson, 2002).

Most European Americans identify with one or more European ethnic groups, such as Polish, Italian, Irish, Greek, Latvian, or German. Identification with these groups might affect a family’s traditions, holidays, food preferences, and, to some extent, outlook on the world. However, white ethnic groups have been largely absorbed into mainstream U.S. society, so the differences among them have few implications for education (Alba, 1990).

The situation is quite different for other ethnic groups. In particular, African Americans (Loury, 2002), Latinos (Secada et al., 1998), and Native Americans (Deyhle & Swisher, 1995; Lomawaima & McCarty, 2002) have yet to be fully accepted into mainstream U.S. society and have not yet attained the economic success or security that the white and many Asian ethnic groups have achieved (Carter & Goodwin, 1994). Students from these ethnic groups face special problems in school and have been the focus of two of the most emotional issues in U.S. education since the mid-1960s: desegregation and bilingual education. The following sections discuss the situation of students of various ethnic backgrounds in schools today.

**Racial and Ethnic Composition of the United States**

The people who make up the United States have always come from many ethnic backgrounds, but every year the proportion of nonwhites and Latinos is increasing. Table 4.2 shows U.S. Census Bureau projections of the percentages of the U.S. population

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**ethnic group**
A group within a larger society that sees itself as having a common history, social and cultural heritage, and traditions, often based on race, religion, language, or national identity.

**ethnicity**
A history, culture, and sense of identity shared by a group of people.

**race**
Visible genetic characteristics of individuals that cause them to be seen as members of the same broad group (e.g., African, Asian, Caucasian).

**minority group**
An ethnic or racial group that is a minority within a broader population.
How Do Ethnicity and Race Affect Students’ School Experiences?

According to ethnicity. Note that the proportion of non-Latino whites is expected to continue to decline; as recently as 1970, 83.3 percent of all Americans were in this category. In contrast, the proportion of Latinos and Asians has grown dramatically since 1990 and is expected to continue to grow at an even more rapid rate from 2000–2010. In 2001, the U.S. Census Bureau announced that Latinos had overtaken African Americans as the largest minority group. These trends, which are due to immigration patterns and differences in birth rates, have profound implications for U.S. education. Our nation is becoming far more ethnically diverse (Hodgkinson, 2001).

Academic Achievement of Students from Under-Represented Groups

If students from under-represented groups achieved at the same level as European and Asian Americans, there would probably be little concern about ethnic-group differences in U.S. schools. Unfortunately, they don’t. On virtually every test of academic achievement, African American, Latino, and Native American students score significantly lower than their European and Asian American classmates.

Table 4.3 shows reading scores on the 2003 National Assessment of Educational Progress (NAEP) according to students’ race or ethnicity. African American, Latino, and American Indian children scored significantly lower than non-Latino white or Asian American children at all grade levels. These differences correspond closely with differences among the groups in average socioeconomic status, which themselves translate into achievement differences (recall Table 4.1).

The achievement gap between African American, Latino, and white children may be narrowing, but not nearly rapidly enough. During the 1970s there was a substantial reduction, but since the early 1980s the gap has stayed more or less constant in both reading and math on the National Assessment of Educational Progress (NCES, 2003).

Why Have Students from Under-Represented Groups Lagged in Achievement?

Why do many students from under-represented groups score so far below European and many Asian Americans on achievement tests? The reasons involve economics,
society, families, and culture, as well as inadequate responses by schools (Gallimore & Goldenberg, 2001; Okagaki, 2001). The most important reason is that in our society, African Americans, Latinos (particularly Mexican Americans and Puerto Ricans), and Native Americans tend to occupy the lower rungs of the socioeconomic ladder. Consequently, many families in these groups are unable to provide their children with the stimulation and academic preparation that are typical of a middle-class upbringing (Halle, Kurtz-Coster, & Mahoney, 1997). Again, there are many exceptions; nevertheless, these broad patterns largely explain the average differences. Chronic unemployment, underemployment, and employment in very low-wage jobs, which are endemic in many communities of people from underrepresented groups, have a negative effect on family life, including contributing to high numbers of single-parent families in these communities (U.S. Census Bureau, 2001).

Another important disadvantage that many students from under-represented groups face is academically inferior, overcrowded urban schools (Barton, 2003). Middle-class and many working-class families of all ethnicities throughout the United States buy their way out of center-city schools by moving to the suburbs or sending their children to private or parochial schools, leaving the public schools to serve people who lack the resources to afford alternatives. The remaining children, who are disproportionately members of ethnic minorities, are likely to attend the lowest-quality, worst-funded schools in the country (Biddle & Berliner, 2002; Ferguson & Mehta, 2004; Lee, 2004), where they often have the least qualified and least experienced teachers (Connor, Son, Hindman, & Morrison, 2004; Haycock, 2001; Viadero, 2000).

Often, minority-group students perform poorly because the instruction they receive is inconsistent with their cultural background (Boykin, 1994b; Henry & Pepper, 1990; Jagers & Carroll, 2002; Latham, 1997a; Ogbu, 1999; Vasquez, 1993). Academic excellence itself may be seen as inconsistent with acceptance in a student’s own community; for example, Ogbu (1999), Spencer et al. (2001), Cross (1995), and others have noted the tendency of many African American students to accuse their peers of “acting white” if they strive to achieve. In contrast, many Asian American parents strongly stress academic excellence as an expectation, and as a result many (though not all) Asian subgroups do very well in school (Okagaki & Frensch, 1998; Portes, 1999). African Americans (Boykin, 1994a; Jagers & Carroll, 2002; Lee, 2000), Native Americans (Henry & Pepper, 1990; Lomawaima & McCarty, 2002), and Mexican Americans (Losey, 1995; Padrón, Waxman, & Rivera, 2002) generally prefer to work in collaboration with others and perform better in cooperative settings than in traditional competitive ones. Lack of respect for students’ home languages and dialects can also lead to a diminishing of commitment to school (Delpit, 1995). Low expectations for minority-group students can contribute to their low achievement (Delpit, 1995; Nieto, 1997; Ogbu, 1999; Van Laar, 2001). This is especially true if, as often happens, low expectations lead well-meaning teachers or administrators to disproportionately place students from under-represented groups in low-ability groups or tracks (see Braddock, Dawkins, & Wilson, 1995) or in special education (Heward & Cavanaugh, 1997). Interestingly, though African American students often suffer from the low expectations of teachers and others, their expectations for themselves and their academic self-concepts tend to be at least as high as those of their white classmates (Eccles, Wigfield, & Byrnes, 2003; Van Laar, 2000).

The low achievement of African American, Latino, and Native American children may well be a temporary problem. Within a few decades, as under-represented groups increasingly achieve economic security and enter the middle class, their children’s achievement will probably come to resemble that of other groups. In the 1920s it was widely believed that immigrants from southern and eastern Europe (such as Italians,
How Do Ethnicity and Race Affect Students’ School Experiences?

Greeks, Poles, and Jews) were hopelessly backward and perhaps retarded (Oakes & Lipton, 1994), yet the children and grandchildren of these immigrants now achieve as well as the descendants of the Pilgrims. However, we cannot afford to wait a few decades. The school is one institution that can break the cycle of poverty, by giving children from impoverished backgrounds the opportunity to succeed. Most immediately, schools serving many African American, Latino, and Native American children can accelerate the achievement of these children by using comprehensive reform

Fluent in both Spanish and English, Elizabeth Montgomery had changed careers in her mid-thirties to become a bilingual elementary teacher. After earning a Master of Education degree with honors and successfully completing her student-teaching, Elizabeth was hired to teach a fourth-grade Spanish bilingual class at a large elementary school in a working- and lower-class urban community. Of the thirty students in her class, twenty-six are Latino, two are African American, and two are European American.

LaShonda Brown is one of the African American students in Ms. Montgomery’s class. After school she is startlingly sweet and often confides pleasant facts about her home life, but she is amazingly recalcitrant during class time. She often comes to school late and usually responds with “I ain’t doin’ that” to even the smallest request. In class she sits limply during assignments, makes rude noises during reading (which delights her classmates to no end), and refuses to participate in her math group. She seems both angry and dependent. By the fifth week of class, Ms. Montgomery has decided to call LaShonda’s mother but plans to describe LaShonda’s behavior as depression rather than anger.

Ms. Montgomery: Mrs. Brown, I’m concerned about LaShonda. She doesn’t participate in class and seems especially dependent. Could she be depressed about something?

Mrs. Brown: Ms. Montgomery, that girl certainly isn’t depressed because even though I’m raising her alone, I work very hard to buy her everything she wants and to make her happy. I’ll admit that she’s way too dependent, you might even say spoiled, but she isn’t depressed.

Ms. Montgomery: Well, perhaps when you come to our class open house next week, we can talk some more about how to help LaShonda participate more in class.

During the open house Ms. Montgomery shows Mrs. Brown and the other parents around the classroom and discusses the bilingual approach she is using. The meeting is pleasant, but there is no opportunity to talk with Mrs. Brown alone about LaShonda, whose behavior is now prompting Ms. Montgomery to send her out of the classroom for small periods so her acting out does not get reinforced by her classmates.

Later that week, Ms. Montgomery receives a letter from Mrs. Brown that says, “It’s too bad you can’t be bothered to really teach my girl. It seems you prefer the Mexican American children in your class over the black children.”

Stunned, Ms. Montgomery shows the letter to the vice principal, an African American woman with whom LaShonda has rapport. Vice Principal Johnson suggests inviting Mrs. Brown to a meeting with her and Ms. Montgomery in her office.

Vice Principal Johnson: Mrs. Brown, I’m so glad you could come in to talk with us about your concerns about LaShonda’s class.

Mrs. Brown: Well, I don’t mean any disrespect, but I think a white woman from the ritzy suburbs, who calls me up telling me my LaShonda is “depressed” may not be the best teacher for my daughter.

Ms. Montgomery: What would you do, Mrs. Brown, if LaShonda came into the room in the morning and refused to participate or do her work, and then refused to join the group for extra math help?

Mrs. Brown: She does that?

Ms. Montgomery: Every day.

Mrs. Brown: You’ve never told me this. I can’t deal with her if you don’t tell me what’s going on. I wish you would have told me earlier.

Questions for Reflection

1. Discuss how social class, child-rearing practices, and the middle-class values of school may each be a factor in LaShonda’s behavior in class.

2. If you were Ms. Montgomery, what would you have done differently with LaShonda and her mother?

3. Role-play the continuing discussion among Vice Principal Johnson, Ms. Montgomery, and Mrs. Brown. What would you say, as one of these three participants, to bring a more positive and cooperative conclusion to the meeting?

Source: Adapted from “What Would You Do, Mrs. Brown?” by June Isaacs Elia, from Allyn & Bacon’s Custom Cases In Education, edited by Greta Morine-Dershimer, Paul Eggen, and Donald Kauchak. Copyright © 2000 by Pearson Education. Adapted by permission of the publisher.
Effects of School Desegregation

Before 1954, African American, white, and often Latino and Native American students were legally required to attend separate schools in 20 states and the District of Columbia, and segregated schools were common in the remaining states. Students from under-represented groups were often bused miles away from their nearest public school to separate schools. The doctrine of separate but equal education was upheld in several U.S. Supreme Court decisions. In 1954, however, the Supreme Court struck down this practice in the landmark Brown v. Board of Education of Topeka case on the grounds that separate education was inherently unequal (Cose, 2004; Smith, 2002). Brown v. Board of Education did away with legal segregation, but it was many years before large numbers of racially different students were attending school together. In the 1970s a series of Supreme Court decisions found that the continued segregation of many schools throughout the United States was due to past discriminatory practices, such as deliberately drawing neighborhood boundary lines to separate schools along racial lines. These decisions forced local school districts to desegregate their schools by any means necessary (Kantor & Lowe, 1995).

Many districts were given specific standards for the proportions of students from under-represented groups who could be assigned to any particular school. For example, a district in which 45 percent of the students were African American might be required to have an enrollment of 35 to 55 percent African Americans in each of its schools. To achieve desegregation, some school districts simply changed school attendance areas; others created special magnet schools (such as schools for the performing arts, for talented and gifted students, or for special vocational preparation) to induce students to attend schools outside their own neighborhoods. However, in many large, urban districts, segregation of neighborhoods is so extensive that districts must bus students to other neighborhoods to achieve racially balanced schools. School desegregation was supposed to increase the academic achievement of low-income students from under-represented groups by giving them opportunities to interact with more middle-class, achievement-oriented peers (Lomotey & Teddlie, 1997). All too often, however, the schools to which students are bused are no better than the segregated schools they left behind, and the outflow of middle-class families from urban areas (which was well under way before busing began) often means that lower-class African American or Latino students are integrated with similarly lower-class whites (Kahlenberg, 2000; Trent, 1997). Also, it is important to note that because of residential segregation and opposition to busing, most students from under-represented groups still attend schools in which there are few, if any, whites, and in many areas segregation is once again on the increase (Orfield, Frankenberg, & Lee, 2002/03; Smith, 2002). Support for busing to achieve integration has greatly diminished among African American and Latino parents (Morris, 1999; Wells & Crain, 1997), and in fact there is a small movement toward the deliberate creation of Afrocentric academies in some urban areas.

The overall effect of desegregation on the academic achievement of students from under-represented groups has been small, though positive. However, when desegregation begins in elementary school, particularly when it involves busing children from under-represented groups to high-quality schools with substantially middle-class student bodies, desegregation can have a significant positive effect on the achievement of the students from under-represented groups (Schofield, 1995b; Trent, 1997; Wells, 1995). This effect is thought to result not from sitting next to whites but rather from attending a better school. One important outcome of desegregation is that African

models and other proven practices (Borman et al., 2003; Herman, 1999; Lee, 2000; Slavin & Madden, 2001).
American and Latino students who attend desegregated schools are more likely to attend desegregated colleges, to work in integrated settings, and to attain higher incomes than their peers who attend segregated schools (Schofield, 1995b; Wells & Crain, 1994).

Long ago I carried out a pilot project in a science class that a friend was teaching in an integrated high school in Portland, Oregon. On the first day, I came to the class and explained to the students that they would be working in groups. I then asked them to select themselves into groups of four.

The students were delighted and immediately chose their groups: one composed entirely of African American boys, one of African American girls, and one of white boys, one of white girls. I was glad to see that there was one integrated group, but it turned out to be composed of students who rarely came to class!

Another time in the same school I went to visit the classroom of a friend who was teaching English. When I came into his class, the students all came rushing up. “Do you know Mr. ___?” they asked. I said I did. “Is he black or white?” It turned out that my friend, who has a dark complexion, recognized that in this school it might be good not to tell the kids his race to avoid being stereotyped as being on one side or the other.

I’ve now had three of my own children go through integrated high schools in Baltimore. In most ways their experiences with integration have been wonderful, and they all have friends of all races and backgrounds. Yet more than 50 years after Brown v. Board of Education, race is still the critical dividing line in our nation, not only in the obvious boundaries that still exist in economics, housing, and society at large, but most disturbingly in the hearts and minds of young people.

Reflect on This. What was the racial or ethnic mix of your K–12 experience? What did your school do to ensure full integration among students? Did this reflect the community efforts as a whole? What discussions about diversity have you had in your education classes? How have those discussions influenced your perspectives on classrooms and learning?

Teaching in a Culturally Diverse School

Following are some recommendations for promoting social harmony and equal opportunity among students in racially and ethnically diverse classrooms and schools (see also Banks, 1997b; Gay, 2004; Henze, 2001; Nieto, 2002/03).

- Use fairness and balance in dealing with students. Students should never have any justification for believing that “people like me [whites, African Americans, Latinos, Vietnamese] don’t get a fair chance” (McIntyre, 1992).
- Choose texts and instructional materials that show all ethnic groups in equally positive and nonstereotypical roles (Garcia, 1993). Make sure under-represented groups are not misrepresented. Themes should be nonbiased, and individuals from under-represented groups should appear in nonstereotypical high-status roles (Banks, 1995c, 1997b; Bigler, 1999).
Supplement textbooks with authentic material from different cultures taken from newspapers, magazines, and other media of the culture. Reach out to children’s parents and families with information and activities appropriate to their language and culture (Lindeman, 2001). Avoid communicating bias, but discuss racial or ethnic relations with empathy (Stephan & Finlay, 1999) and openly, rather than trying to pretend there are no differences (Polite & Saenger, 2003).

Avoid stereotyping and emphasize the diversity of individuals, not groups (Aboud & Fenwick, 1999; Levy, 1999). Let students know that racial or ethnic bias, including slurs, taunts, and jokes, will not be tolerated in the classroom or in the school. Institute consequences to enforce this standard (Wessler, 2001).

Help all students to value their own and others’ cultural heritages and contributions to history and civilization. At the same time, avoid trivializing or stereotyping cultures merely in terms of ethnic foods and holidays. Because the United States is becoming a mosaic rather than a melting pot, students need more than ever to value diversity and to acquire a more substantive knowledge and appreciation of other ways of life.

Decorate classrooms, hallways, and the library/media center with murals, bulletin boards, posters, artifacts, and other materials that are representative of the students in the class or school or of the other cultures being studied. Avoid resegregation. Tracking, or between-class ability grouping, tends to segregate high and low achievers, and because of historical and economic factors, students from under-represented groups tend to be over-represented in the ranks of low achievers. For this and other reasons, tracking should be avoided (Ferguson & Mehta, 2004; Khmelkov & Hallinan, 1999; Slavin, 1995b).

Be sure that assignments are not offensive or frustrating to students of diverse cultural groups. For example, asking students to write about their Christmas experiences is inappropriate for non-Christian students.

Provide structure for intergroup interaction. Proximity alone does not lead to social harmony among racially and ethnically different groups (Schefield, 1997). Students need opportunities to know one another as individuals and to work together toward common goals (Cooper & Slavin, 2004; Kagan, 2001). For example, students who participate in integrated sports and extracurricular activities are more likely than other students to have friends who are ethnically or racially different from themselves (Braddock, Dawkins, & Wilson, 1995; Slavin, 1995b).

Use cooperative learning, which has been shown to improve relations across racial and ethnic lines (Cooper & Slavin, 2004; National Research Council, 2000). The positive effects of cooperative learning experiences often outlast the teams or groups themselves and may extend to relationships outside of school. Cooperative learning contributes to both achievement and social harmony (Johnson & Johnson, 1998; Slavin, Hurley, & Chamberlain, 2003) and can increase the participation of children from under-represented groups (Cohen, 2004).

**How do language differences and bilingual programs affect student achievement?**

As recently as 1979, only 9 percent of Americans ages 5 to 24 were from families in which the primary language spoken was not English. In 1999, this proportion had
increased to 17 percent (NCES, 2004), and projections forecast that by 2026, 25 percent of all students will come from homes in which the primary language is not English. Sixty-five percent of these students’ families speak Spanish (NCES, 2004). However, many students speak any of dozens of Asian, African, or European languages. The term language minority is used for all such students, and limited English proficient (LEP) and English language learners (ELL) are terms used for the much smaller number who have not yet attained an adequate level of English to succeed in an English-only program. These students are learning English as a second language (ESL) and may attend classes for English language learners in their schools.

Students with limited English proficiency present a dilemma to the educational system (August & Hakuta, 1997). Clearly, those who have limited proficiency in English need to learn English to function effectively in U.S. society. However, until they are proficient in English, should they be taught math or social studies in their first language or in English? Should they be taught to read in their first language? These questions are not just pedagogical— they have political and cultural significance that has provoked emotional debate. One such issue is that many Latino parents want their children to be instructed in the Spanish language and culture to maintain their group identity and pride (Cline, 1998; Macedo, 2000). Other parents whose language is neither English nor Spanish often feel the same way.

**Bilingual Education**

The term bilingual education refers to programs for students who are acquiring English that teach the students in their first language part of the time while English is being learned. English language learners are typically taught in one of four types of programs. They are as follows.

1. **English immersion.** The most common instructional placement for English language learners is some form of English immersion, in which ELL students are taught primarily or entirely in English. Typically, children with the lowest levels of English proficiency are placed in ESL programs to build their oral English to help them succeed in their English-only curriculum. English immersion programs may use carefully designed strategies to build students’ vocabularies, simplify instructions, and help ELL students succeed in the content (see, for example, Echevarria, Vogt, & Short, 2004). Such models are often referred to as structured English immersion. Alternatively, ELL students may simply be included in regular English instruction and expected to do the best they can. This “sink or swim” approach is most common when the number of ELL students is small and when ELL students speak languages other than Spanish.

2. **Transitional bilingual education.** A common but declining alternative for ELL students is transitional bilingual education, programs in which children are taught reading or other subjects in their native language (most often, Spanish) for a few years and then transitioned to English, usually in second, third, or fourth grade.

3. **Paired bilingual education.** In paired bilingual models, children are taught reading or other subjects in both their native language and in English, usually at different times of the day.

4. **Two-way bilingual education.** Two-way, or dual language, models teach all students both in English and in another language, usually Spanish. That is, English proficient students are expected to learn Spanish as Spanish proficient students learn English (Calderón & Minaya-Rowe, 2003; Lessow-Hurley, 2005). From the perspective of English language learners, a two-way bilingual program is essentially a paired bilingual program, in that they are taught both in their native language and in English at different times.

“Children, this is not what we mean by dual language!”

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- **Language minority**
  In the United States, native speakers of any language other than English.

- **Limited English proficient (LEP)**
  Possessing limited mastery of English.

- **English as a second language (ESL)**
  Subject taught in English classes and programs for students who are not native speakers of English.

- **Bilingual education**
  Instructional program for students who speak little or no English in which some instruction is provided in the native language.
Research on bilingual strategies for teaching reading generally supports bilingual approaches, especially paired bilingual methods (Greene, 1997; Slavin & Cheung, 2004). The evidence supporting paired bilingual strategies suggests that English language learners need not spend many years building their oral English, but can learn English reading with a limited level of English speaking skills, and can then build their reading and speaking capabilities together (Slavin & Cheung, 2004). However, language of instruction is only one factor in effective education for ELL students, and the quality of instruction (whether in English only or in English and another language) is at least as important (August & Hakuta, 1997).

ON THE WEB

The National Association for Bilingual Education provides support for the education of English language learners at www.nabe.org.

Teaching English Language Learners

Teachers in all parts of the United States and Canada are increasingly likely to have ELLs in their classes. The following are some general principles for helping these students succeed in the English curriculum (see Diaz-Rico, 2004; Echevarria, Vogt, & Short, 2004; Fitzgerald, 1995; Klingner & Vaughn, 2004; Slavin & Calderón, 2001).

1. Don’t just say it—show it. All students benefit from pictures, videos, concrete objects, gestures, and actions to illustrate difficult concepts, but ELLs particularly benefit from teaching that includes visual as well as auditory cues (Calderón, 2001).

2. Encourage safe opportunities to use academic English. Many ELLs are shy in class, not wanting to use their English for fear of being laughed at. Yet the best way to learn a language is to use it. Structure opportunities for students to use English in academic contexts. For example, when asking questions, first give students an opportunity to discuss answers with a partner, and then call on partner pairs. This and other forms of cooperative learning can be particularly beneficial for ELLs (Calderón et al., 2004; Calderón, Hertz-Lazarowitz, & Slavin, 1998).

3. Develop vocabulary. All children, but especially ELLs, benefit from explicit teaching of new vocabulary. Give students many opportunities to hear new words in context and to use them themselves in sentences they make up themselves. Learning dictionary definitions is not as useful as having opportunities to ask and answer questions, write new sentences, and discuss new words with partners (Carlo et al., 2004; Fitzgerald, 1995).

4. Keep instructions clear. English language learners (and other students) often know the answers but get confused about what they are supposed to do. Take extra care to see that students understand assignments and instructions, for example, by asking students to restate instructions.

5. Point out cognates. If you speak the language of your ELLs, point out cases in which a word they know is similar to an English word. For example, in a class with many ELLs, you might help students learn the word amor by noting the similarity to the Spanish and Portuguese word amor, the French word amour, or the Italian word amore, depending on the students’ languages (Carlo et al., 2004).
6. Never publicly embarrass children by correcting their English. Instead, praise their correct answer and restate it correctly. For example, Russian students often omit a and the. If a student says, “Mark Twain was famous author,” you might respond, “Right! Mark Twain was a very famous author,” without calling attention to your addition of the word a. To encourage students to use their English, establish a classwide norm of never teasing or laughing at English errors.

Increasingly, research on bilingual education is focusing on the identification of effective forms of instruction for language-minority students rather than on the question of which is the best language of instruction (Christian & Genessee, 2001; Secada et al., 1998; Slavin & Calderón, 2001; U.S. Department of Education, 2000). Cooperative learning programs have been particularly effective both in improving the outcomes of Spanish reading instruction and in helping bilingual students make a successful transition to English-only instruction in the upper elementary grades (Calderón, 1994; Calderón, Hertz-Lazarowitz, & Slavin, 1998; Durán, 1994). A program called Success for All, which combines cooperative learning with one-to-one tutoring for primary-grade students, family support services, and other elements, has had positive effects on the Spanish and English reading of children in bilingual programs (Dianda & Flaherty, 1995; Slavin & Madden, 1999). Case studies of exceptionally successful schools serving Latino students (e.g., Reyes, Scribner, & Paredes, 1999) also provide practical visions for effective practice.

Bilingualism itself has not been found to interfere with performance in either language (Yeung, Marsh, & Suliman, 2000). In fact, Canadian studies have found bilingualism to increase achievement in areas other than the language studied (Cummins, 1998; Slavin & Cheung, 2003). This evidence has been cited as a reason to promote bilingual education for all students. The United States is one of the few countries in the world in which most students graduate from high school knowing only one language (Hakuta & McLaughlin, 1996).

According to research, students in a bilingual program will ultimately achieve in English as well as or better than their peers who are taught only in English. Why do you think this is true?
Bilingual education has many problems, however. One is the lack of teachers who are themselves completely bilingual. This is a particular problem for bilingual education in the languages of the most recent immigrants, such as those from Southeast Asia. A second problem is the difficulty of the transition from the bilingual program to the English-only mainstream program. Third, the goals of bilingual education sometimes conflict with those of desegregation by removing language-minority students from classes containing European American or African American students. Despite all these problems, the alternative to bilingual education—leaving students in the regular class with no support or with part-time instruction in English as a second language (sometimes known as the sink-or-swim approach)—has not been found to be beneficial for students’ English language development and risks allowing the language-minority child to fail in school. For example, language-minority children are sometimes assigned to special education because of academic difficulties that are in fact due to lack of proficiency in English (Council of Chief State School Officers, 1990).

Recently, there has been a movement to abandon bilingual education in favor of English-only instruction. In California, which has the largest number of language-minority students in the United States, a referendum called Proposition 227 was passed in 1998 (Merickel et al., 2003). It mandates a maximum of one year for students with limited English proficiency to receive intensive assistance in learning English. After that, children are expected to be in mainstream English-only classes. This legislation has reduced but not eliminated bilingual education in California, as parents may still apply for waivers to have their children taught in their first language. Massachusetts, Arizona, and other states have also passed legislation limiting bilingual education (Hakuta, Butler, & Witt, 2000).

**WHAT IS MULTICULTURAL EDUCATION?**

In recent years, multicultural education has become a much-discussed topic in U.S. education. Definitions of *multicultural education* vary broadly. The simplest definitions emphasize including non-European perspectives in the curriculum, for example, the works of African, Latino, Asian, and Native American authors in English curricula, teaching about Columbus from the point of view of Native Americans, and teaching more about the cultures and contributions of non-Western societies (Davidman & Davidman, 2001; Diaz, 2001; Manning & Baruth, 2004). Banks (1993) defines multicultural education as encompassing all policies and practices schools might use to improve educational outcomes not only for students of different ethnic, social class, and religious backgrounds, but also for students of different genders and exceptionalities (e.g., children who have mental retardation, hearing loss, or vision loss or who are gifted). Banks (1993) summarizes this definition as follows:

Multicultural education is an idea stating that all students, regardless of the groups to which they belong, such as those related to gender, ethnicity, race, culture, social class, religion, or exceptionality, should experience educational equality in the schools. (p. 25)
Dimensions of Multicultural Education

Banks (1999) discusses five key dimensions of multicultural education (see Figure 4.2).

**Content integration** is teachers’ use of examples, data, and information from a variety of cultures. This is what most people think of as multicultural education: teaching about different cultures and about contributions made by individuals from diverse cultures, inclusion in the curriculum of works by members of under-represented groups, including women, and the like (Bettmann & Friedman, 2004; Hicks-Bartlett, 2004).

**Knowledge construction** refers to teachers helping children “understand how knowledge is created and how it is influenced by the racial, ethnic, and social-class positions of individuals and groups” (Banks, 1995b, p. 4). For example, students might be asked to write a history of the early colonization of America from the perspectives of Native Americans or African Americans to learn how the knowledge we take as given is in fact influenced by our own origins and points of view (see Cortés, 1995; Koppelman & Goodheart, 2005).

**Prejudice reduction** is a critical goal of multicultural education. Prejudice reduction involves both development of positive relationships among students of different ethnic backgrounds (Cooper & Slavin, 2004; Stephan & Vogt, 2004) and development of more democratic and tolerant attitudes toward others (Banks, 1995c).

The term **equity pedagogy** refers to the use of teaching techniques that facilitate the academic success of students from different ethnic and social class groups. For example, there is evidence that members of some ethnic and racial groups, especially Mexican Americans and African Americans, learn best with active and cooperative methods (Boykin, 1994a, 1994b; Losey, 1995; Triandis, 1995).

An **empowering school culture** is one in which school organization and practices are conducive to the academic and emotional growth of all students. A school with such a culture might, for example, eliminate tracking or ability grouping, increase

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**FIGURE 4.2**

Five Key Dimensions of Multicultural Education

inclusion (and reduce labeling) of students with special needs, try to keep all students on a path leading to higher education, and consistently show high expectations. An excellent example of an empowering school culture is the AVID project (Swanson, Mehan, & Hubbard, 1995; Watt, Powell, & Mendiola, 2004), which places at-risk students from under-represented groups in college preparatory classes and provides them with tutors and other assistance to help them succeed in a demanding curriculum.

The first step in multicultural education is for teachers, administrators, and other school staff to learn about the cultures from which their children come and to carefully examine all the policies, practices, and curricula used in the school to identify any areas of possible bias (e.g., teaching only about European and European American culture or history). Books by Banks (2001), Davidman and Davidman (2001), Diaz (2001), Koppelman & Goodheart (2005), and Manning and Baruth (2004) are good places to start. These and other books identify some of the characteristics of various cultures and teaching strategies and materials that are appropriate to each.

HOW DO GENDER AND GENDER BIAS AFFECT STUDENTS’ SCHOOL EXPERIENCES?

A child’s sex is a visible, permanent attribute. Cross-cultural research indicates that gender roles are among the first that individuals learn and that all societies treat males differently from females. Therefore, gender-role or sex-role behavior is learned behavior. However, the range of roles occupied by males and females across cultures is broad. What is considered natural behavior for each gender is based more on cultural belief than on biological necessity. Nevertheless, the extent to which biological differences and gender socialization affect behavioral patterns and achievement is still a much-debated topic. The consensus of a large body of research is that no matter what the inherent biological differences, many of the observed differences between males and females can be clearly linked to differences in early socialization experiences (Feingold, 1992; Grossman & Grossman, 1994).

Do Males and Females Think and Learn Differently?

The question of gender differences in intelligence or academic achievement has been debated for centuries, and the issue has taken on particular importance since the early 1970s. The most important thing to keep in mind about this debate is that no responsible researcher has ever claimed that any male–female differences on any measure of intellectual ability are large in comparison to the amount of variability within each sex. In other words, even in areas in which true gender differences are suspected, these differences are so small and so variable that they have few practical consequences (Fennema, Carpenter, Jacobs, Franke, & Levi, 1998; Sadker, Sadker, & Long, 1997). Far more important are differences caused by cultural expectations and norms. For example, twelfth-grade girls score significantly lower than boys on the quantitative section of the Scholastic Assessment Test (SAT) (Gallagher & De Lisi, 1994) and on Advanced Placement tests in mathematics (Stumpf & Stanley, 1996). A summary of 20 major studies by Kim (2001) found that males scored better than females in math, whereas the opposite was true on English tests. Surprisingly, males scored better on multiple choice tests, but not on other formats. There may be a biological basis for such differences, but none has been proven (see Friedman, 1995; Halpern & LaMay, 2000). The most important cause is that females in our society have traditionally been
discouraged from studying mathematics and therefore take many fewer math courses than males do. In fact, as females have begun to take more math courses over the past two decades, the gender gap on the SAT and on other measures has been steadily diminishing (National Center for Education Statistics, 1997).

Bearing these cautions in mind, note that studies generally find that males score higher than females on tests of general knowledge, mechanical reasoning, and mental rotations; females score higher on language measures, including reading and writing assessments (ETS, 2001), and on attention and planning tasks (Warrick & Naglieri, 1993). There are no male–female differences in general verbal ability, arithmetic skills, abstract reasoning, spatial visualization, or memory span (Fennema et al., 1998; Friedman, 1995; Halpern & LaMay, 2000). There is an interesting argument about variability of performance in certain areas. For example, Feingold (1992) has argued that males are more variable than females in quantitative reasoning—that is, that there are more very high-achieving males and more very low-achieving males than there are females in either category. Studies of students who are extremely gifted in mathematics consistently find a substantially higher number of males than females in this category (e.g., Mills, Ablard, & Stumpf, 1993). However, there is still a lively debate about the idea that males are more variable than females in intellectual abilities (Bielinski & Davison, 1998).

In school grades, females start out with an advantage over males and maintain this advantage into high school. Even in math and science, in which females score somewhat lower on tests, females still get better grades in class (Maher & Ward, 2002). Despite this, high school males tend to overestimate their skills in language and math (as measured by standardized tests), while females underestimate their skills (Pomerantz, Altermatt, & Saxon, 2002). In elementary school, males are much more likely than females to have reading problems (Taylor & Lorimer, 2002/03) and are much more likely to have learning disabilities or emotional disorders (Smith, 2001).

**Sex-Role Stereotyping and Gender Bias**

If there are so few genetically based differences between males and females, why do so many behavioral differences exist? These behavioral differences originate from different experiences, including reinforcement by adults for different types of behavior.

Male and female babies have traditionally been treated differently from the time they are born. The wrapping of the infant in either a pink or a blue blanket symbolizes the variations in experience that typically greet the child from birth onward. In early studies, adults described boy or girl babies wrapped in blue blankets as being more active than the same babies wrapped in pink. Other masculine traits were also ascribed to those wrapped in blue (Baxter, 1994). Although gender bias awareness has begun to have some impact on child-rearing practices, children do begin to make gender distinctions and have gender preferences by around the age of 3 or 4. Thus, children enter school having been socialized into appropriate gender-role behavior for their age in relation to community expectations (Delamont, 2001). Differences in approved gender roles between boys and girls tend to be much stronger in low-SES families than in high-SES families (Flanagan, 1993).

Socialization into this kind of approved sex-role behavior continues throughout life, and schools contribute to it. Though interactions between socialization experiences and achievement are complex and it is difficult to make generalizations, schools differentiate between the sexes in a number of ways. In general, males receive more attention from their teachers than females do (Koch, 2003). Males receive more disapproval and blame from their teachers than females do, but they also engage in more interactions with their teachers in such areas as approval, instruction giving, and being listened to (Koch, 2003; Maher & Ward, 2002; Sadker & Sadker, 1994). Teachers

*sex-role behavior*

Socially approved behavior associated with one gender as opposed to the other.
tend to punish females more promptly and explicitly for aggressive behavior than they do males. Torrance (1986) found that the creative behavior of males was rewarded by teachers three times as often as that of females. Other differentiations are subtle, as when girls are directed to play in the house corner while boys are provided with blocks or when boys are given the drums to play in music class and girls are given the triangles.

Avoiding Gender Bias in Teaching

“In my science class the teacher never calls on me, and I feel like I don’t exist. The other night I had a dream that I vanished” (Sadker & Sadker, 1994). Unfortunately, the girl who complained of being ignored by her teacher is not alone. According to a national study undertaken by the American Association of University Women (1992), schools shortchange female students in a variety of ways, from ignoring instances of sexual harassment to interacting less frequently with females than with males and less frequently with African American females than with white females. Teachers tend to choose boys, boost the self-esteem of their male students, and select literature with male protagonists. The contributions and experiences of girls and women are still often ignored in textbooks, curricula, and standardized tests (Zittleman & Sadker, 2002/03).

Teachers, usually without being aware of it, exhibit gender bias in classroom teaching in three principal ways: reinforcing gender stereotypes, maintaining sex separation, and treating males and females differently as students (see Grossman & Grossman, 1994; Horgan, 1995; Koch, 2003; Maher & Ward, 2002; Sadker,
Sadker, Fox, & Salata, 1994). These inequities can have negative consequences for boys as well as girls (Canada, 2000; Weaver-Hightower, 2003).

Avoiding stereotypes. Teachers should avoid promoting sexual stereotypes. For example, they can assign jobs in the classroom without regard to gender, avoiding automatically appointing males as group leader and females as secretary, and can ask both males and females to help in physical activities. Teachers should also refrain from stating stereotypes, such as “Boys don’t cry” and “Girls don’t fight,” and should avoid labeling students with such terms as tomboy. Teachers should encourage students who show an interest in activities and careers that do not correspond to cultural stereotypes, such as a female who likes math and science (Sadker, Sadker, & Long, 1997).

Promoting integration. One factor that leads to gender stereotyping is the tendency for boys and girls (particularly in elementary school) to have few friends of the opposite sex and to engage mostly in activities with members of their own sex. Teachers sometimes encourage this by having boys and girls line up separately, assigning them to sex-segregated tables, and organizing separate sports activities for males and females. As a result, interaction between boys and girls in schools is less frequent than between students of the same sex. However, in classes in which cross-sex collaboration is encouraged, children have less stereotyped views of the abilities of males and females (Klein, 1994).

Treating females and males equally. Too often, teachers do not treat males and females equally. Observational studies of classroom interactions have found that teachers interact more with boys than with girls and ask boys more questions, especially more abstract questions (Sadker et al., 1997). In one study, researchers showed teachers videotapes of classroom scenes and asked them whether boys or girls participated more. Most teachers responded that the girls talked more, even though in fact the boys participated more than the girls by a ratio of 3 to 1 (Sadker et al., 1997). The researchers interpreted this finding as indicating that teachers expect females to participate less and thus see low rates of participation as normal. Teachers must be careful to allow all students equal opportunities to participate in class, to take leadership roles, and to engage in all kinds of activities (Bernard-Powers, 2001; Stein, 2000).

How Do Students Differ in Intelligence and Learning Styles?

Intelligence is one of those words that everyone believes they understand until you ask them to define it. At one level, intelligence can be defined as a general aptitude for learning or an ability to acquire and use knowledge or skills. However, even experts on this topic do not agree in their definitions; in a survey of 24 experts by Sternberg and Detterman (1986), definitions varied widely. A consensus definition expressed by Snyderman and Rothman (1987) is that intelligence is the ability to deal with abstractions, to solve problems, and to learn.

The biggest problem comes when we ask whether there is such a thing as general aptitude (Sternberg, 2003). Many people are terrific at calculus but couldn’t write a good essay or paint a good picture if their lives depended on it. Some people can walk
into a room full of strangers and immediately figure out the relationships and feelings among them; others may never learn this skill. Clearly, individuals vary in their aptitude for learning any specific type of knowledge or skill taught in a specific way. A hundred students attending a lecture on a topic they knew nothing about beforehand will all walk away with different amounts and kinds of learning, and aptitude for that particular content and that particular teaching method is one important factor in explaining these differences. The student who learned the most from the lecture would be likely also to learn very well from other lectures on similar topics. But would this student also learn the most if the lecture were on a different topic or if the same material were presented through hands-on experiences or in small groups?

The concept of intelligence has been discussed since before the time of the ancient Greeks, but the scientific study of this topic really began with the work of Alfred Binet, who devised the first measure of intelligence in 1904. The French government asked Binet to find a way to identify children who were likely to need special help in their schooling. His measure assessed a broad range of skills and performances but produced a single score, called intelligence quotient (IQ), which was set up so that the average French child would have an IQ of 100 (Hurn, 2002).

**Definitions of Intelligence**

Binet’s work greatly advanced the science of intelligence assessment, but it also began to establish the idea that intelligence was a single thing—that there were “smart” people who could be expected to do well in a broad range of learning situations. Ever since Binet, debate has raged about this issue. In 1927 Charles Spearman claimed that while there were, of course, variations in a person’s abilities from task to task, there was a general intelligence factor, or “g,” that existed across all learning situations. Is there really one intelligence, as Spearman suggested, or are there many distinct intelligences?

The evidence in favor of “g” is that abilities are correlated with each other. Individuals who are good at learning one thing are likely, on the average, to be good at learning other things. The correlations are consistent enough for us to say that there...
are not a thousand completely separate intelligences, but they are not nearly consistent enough to allow us to say that there is only one general intelligence (Gustafsson, 1994; Sternberg, 2003). In recent years, much of the debate about intelligence has focused on deciding how many distinct types of intelligence there are and describing each. For example, Sternberg (2002, 2003) describes 3 types of intellectual abilities: analytical, practical, and creative. Guilford (1988) proposes 180 types of intelligence: 6 types of mental operations (e.g., thinking, memory, and creativity) times 5 types of content (e.g., visual, auditory, and verbal content) times 6 types of products (e.g., relations and implications). Gardner and Hatch (1989) describe 8 multiple intelligences (see Gardner, 2003). These are listed and defined in Table 4.4.

### Table 4.4

<table>
<thead>
<tr>
<th>Intelligence</th>
<th>End States</th>
<th>Core Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logical/mathematical</td>
<td>Scientist, mathematician</td>
<td>Sensitivity to, and capacity to discern, logical or numerical patterns; ability to handle long chains of reasoning.</td>
</tr>
<tr>
<td>Linguistic</td>
<td>Poet, journalist</td>
<td>Sensitivity to the sounds, rhythms, and meanings of words; sensitivity to the different functions of language.</td>
</tr>
<tr>
<td>Musical</td>
<td>Composer, violinist</td>
<td>Abilities to produce and appreciate rhythm, pitch, and timbre; appreciation of the forms of musical expressiveness.</td>
</tr>
<tr>
<td>Naturalist</td>
<td>Naturalist, botanist, hunter</td>
<td>Sensitivity to natural objects, like plants and animals; making fine sensory discriminations.</td>
</tr>
<tr>
<td>Spatial</td>
<td>Navigator, sculptor</td>
<td>Capacities to perceive the visual–spatial world accurately and to perform transformations on one's initial perceptions.</td>
</tr>
<tr>
<td>Bodily/kinesthetic</td>
<td>Dancer, athlete</td>
<td>Ability to control one's body movements and to handle objects skillfully.</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Therapist, salesperson</td>
<td>Capacities to discern and respond appropriately to the moods, temperaments, motivations, and desires of other people.</td>
</tr>
<tr>
<td>Intrapersonal</td>
<td>Person with detailed, accurate self-knowledge</td>
<td>Access to one's own feelings and the ability to discriminate among them and draw on them to guide behavior; knowledge of one's own strengths, weaknesses, desires, and intelligences.</td>
</tr>
</tbody>
</table>


The precise number of intelligences is not important for educators. What is important is the idea that good or poor performance in one area in no way guarantees similar performance in another. Teachers must avoid thinking about children as smart or not smart, since there are many ways to be smart. Unfortunately, schools have traditionally recognized only a narrow set of performances, creating a neat hierarchy of students primarily in terms of what Gardner calls linguistic and logical/mathematical intelligence quotient (IQ)

An intelligence test score that for people of average intelligence should be near 100.

multiple intelligences

In Gardner’s theory of intelligence, a person’s eight separate abilities: logical/mathematical, linguistic, musical, naturalist, spatial, bodily/kinesthetic, interpersonal, and intrapersonal.
skills (only two of his eight intelligences). If schools want all children to be smart, they must use a broader range of activities and reward a broader range of performances than they have in the past.

**Theory into Practice**

**Multiple Intelligences**

Gardner’s theory of multiple intelligences implies that concepts should be taught in a variety of ways that call on many types of intelligence (Kornhaber, Fierros, & Veenema, 2004; Krechevsky, Hoer, & Gardner, 1995). To illustrate this, Armstrong (1994) gives the following examples of different ways to teach Boyle’s Law to secondary students.

- Students are provided with a verbal definition of Boyle’s Law: “For a fixed mass and temperature of gas, the pressure is inversely proportional to the volume.” They discuss the definition. [Linguistic]
- Students are given a formula that describes Boyle’s Law: $P \times V = K$. They solve specific problems connected to it. [Logical/mathematical]
- Students are given a metaphor or visual image for Boyle’s Law: “Imagine that you have a boil on your hand that you start to squeeze. As you squeeze it, the pressure builds. The more you squeeze, the higher the pressure, until the boil finally bursts and pus spurts out all over your hand!” [Spatial]
- Students do the following experiment: They breathe air into their mouths so that their cheeks puff up slightly. Then they put all the air into one side of their mouth (less volume) and indicate whether pressure goes up or down (it goes up); then they’re asked to release the air in both sides of their mouth (more volume) and asked to indicate whether pressure has gone up or down (it goes down). [Bodily/kinesthetic]
- Students become “molecules” of air in a “container” (a clearly defined corner of the classroom). They move at a constant rate (temperature) and cannot leave the container (constant mass). Gradually, the size of the container is reduced as two volunteers holding a piece of yarn representing one side of the container start moving it in on the “molecules.” The smaller the space, the more pressure (i.e., bumping into each other) is observed; the greater the space, the less pressure is observed. [Interpersonal, bodily/kinesthetic]
- Students do lab experiments that measure air pressure in sealed containers and chart pressure against volume. [Logical/mathematical, bodily/kinesthetic]
- Students are asked about times in their lives when they were “under pressure”: “Did you feel like you had a lot of space?” (Typical answer: lots of pressure/not much space.) Then students are asked about times when they felt little pressure (little pressure/lots of space). Students’ experiences are related to Boyle’s Law. [Intrapersonal]

Few lessons will contain parts that correspond to all types of intelligence, but a key recommendation of multiple-intelligence theory for the classroom is that teachers seek to include a variety of presentation modes in each lesson to expand the number of students who are likely to succeed (Campbell, Campbell, & Dickinson, 1996; Gardner, 1995; Kline, 2001).
How Do Students Differ in Intelligence and Learning Styles?

Origins of Intelligence

The origins of intelligence have been debated for decades. Some psychologists (such as Herrnstein & Murray, 1994; Jensen, 1980) hold that intelligence is overwhelmingly a product of heredity—that children’s intelligence is largely determined by that of their parents and is set the day they are conceived. Others (such as Gordon & Bhattacharyya, 1994; Plomin, 1989; Rifkin, 1998) just as vehemently hold that intelligence is shaped mostly by factors in a person’s social environment, such as the amount a child is read to and talked to. Most investigators agree that both heredity and environment play an important part in intelligence (Petrill & Wilkerson, 2000). It is clear that children of high-achieving parents are, on the average, more likely to be high achievers themselves, but this is due as much to the home environment created by high-achieving parents as to genetics (Turkheimer, 1994). French studies of children of low-SES parents adopted into high-SES families find strong positive effects on the children’s IQs compared to nonadopted children raised in low-SES families (Capron & Duyme, 1991; Schiff & Lewontin, 1986). One important piece of evidence in favor of the environmental view is that schooling itself clearly affects IQ scores. A review by Ceci (1991) found that the experience of being in school has a strong and systematic impact on IQ. For example, classic studies of Dutch children who entered school late because of World War II showed significant declines in IQ as a result, although their IQs increased when they finally entered school. A study of the children of mothers with mental retardation in inner-city Milwaukee (Garber, 1988) found that a program of infant stimulation and high-quality preschool could raise children’s IQs substantially, and these gains were maintained at least through the end of elementary school. Studies of the Abecedarian program, which combined infant stimulation, child enrichment, and parent assistance, also found lasting effects of early instruction on IQ (Ramey & Ramey, 1998). This and other evidence supports the idea that IQ is not a fixed, unchangeable attribute of individuals but can change as individuals respond to changes in their environment (Cardellichio & Field, 1997). Further, some evidence indicates that IQ can be directly changed by programs designed for this purpose (Ellis, 2001; Feuerstein & Kozulin, 1995).

Intelligence, whether general or specific, is only one of many factors that influence the amount children are likely to learn in a given lesson or course. It is probably much less important than prior knowledge (the amount the student knew about the course beforehand), motivation, and the quality and nature of instruction. Intelligence does become important at the extremes, as it is a critical issue in identifying students who have mental retardation or those who are gifted, but in the middle range, where most students fall, other factors are more important. IQ testing has very frequently been misused in education, especially when it has been used to assign students inappropriately to special education or to tracks or ability groups (Hilliard, 1994). Actual performance is far more important than IQ and is more directly susceptible to being influenced by teachers and schools (Sternberg, 2003). Boykin (2000) has argued that schools would do better to focus on developing talents, rather than seeing them as fixed attributes of students.

Theories of Learning Styles

Just as students have different personalities, they also have different ways of learning. For example, think about how you learn the names of people you meet. Do you learn a name better if you see it written down? If so, you may be a visual learner, one who learns best by seeing or reading. If you learn a name better by hearing it, you may be an auditory learner. Of course, we all learn in many ways, but some of us learn better in some ways than in others (McCarthy, 1997; Swisher & Schoorman, 2001).
There are several other differences in learning styles that educational psychologists have studied. One has to do with field dependence versus field independence (Kogan, 1994). Field-dependent individuals tend to see patterns as a whole and have difficulty separating out specific aspects of a situation or pattern; field-independent people are more able to see the parts that make up a large pattern. Field-dependent people tend to be more oriented toward people and social relationships than are field-independent people; for example, they tend to be better at recalling such social information as conversations and relationships, to work best in groups, and to prefer such subjects as history and literature. Field-independent people are more likely to do well with numbers, science, and problem-solving tasks (Wapner & Demick, 1991).

Students may also vary in preferences for different learning environments or conditions. For example, Dunn and Dunn (1993) found that students differ in preferences about such things as the amount of lighting, hard or soft seating, quiet or noisy surroundings, and working alone or with peers. These differences can predict to some extent which learning environments will be most effective for each child.

**Aptitude–Treatment Interactions**

Given the well-documented differences in learning styles and preferences, it would seem logical that different styles of teaching would have different impacts on different learners; yet this commonsense proposition has been difficult to demonstrate conclusively. Studies that have attempted to match teaching styles to learning styles have only inconsistently found any benefits for learning (Knight, Halpin, & Halpin, 1992; In his article "Celebrating Diverse Minds," author, physician, and educator Mel Levine of the University of North Carolina explores the importance of celebrating "all kinds of minds" as a way of making sure no child is left behind. He asks, "What becomes of students . . . who give up on themselves because they lack the kinds of minds needed to satisfy existing criteria for school success?"

Levine points out that learning differences can constitute daunting barriers, especially when they are not recognized and managed. Most important, these breakdowns can mislead us into undervaluing, unfairly accusing, and even undereducating students, thereby stifling their chances for success in school and life.

Many faltering students have specialized minds—brains exquisitely wired to perform certain kinds of tasks masterfully, but decidedly miswired when it comes to meeting other expectations. A student may be brilliant at visualizing, but embarrassingly inept at verbalizing. A classmate may reveal a remarkable understanding of people, but exhibit no insight about sentence structure.

. . . Within every student contending with learning differences, an area invariably exists in which her or his mind has been amply equipped to thrive. (Levine, 2003, p. 12)

Levine proposes addressing this problem in three ways:

- **Broaden student assessment.** Our understanding of learning differences often focuses on fixing deficits, rather than identifying latent or blatant talents in struggling learners.
- **Reexamine the curriculum.** Explore new instructional practices and curricular choices in order to provide educational opportunities for diverse learners and to prepare them for a successful life.
- **Provide professional development for educators.** Provide teachers with training on the insights from brain research that will help them understand and support their students' diverse minds.

**Reflect on This.** Did you or someone you know ever experience frustration over learning a concept or skill more slowly than peers? How would you define your learning style? What steps can you take as a teacher to become aware of your students' different learning styles and adapt your lessons accordingly?
However, the search for such aptitude–treatment interaction goes on, and a few studies have found positive effects for programs that adapt instruction to an individual’s learning style (Dunn, Beaudrey, & Klavas, 1989). The commonsense conclusion from research in this area is that teachers should be alert to detecting and responding to the differences in the ways that children learn (see Ebeling, 2000).

Chapter Summary

What Is the Impact of Culture on Teaching and Learning?

Culture profoundly affects teaching and learning. Many aspects of culture contribute to the learner’s identity and self-concept and affect the learner’s beliefs and values, attitudes and expectations, social relations, language use, and other behaviors.

How Does Socioeconomic Status Affect Student Achievement?

Socioeconomic status—based on income, occupation, education, and social prestige—can profoundly influence the learner’s attitudes toward school, background knowledge, school readiness, and academic achievement. Working-class and low-income families experience stress that contributes to child-rearing practices, communication patterns, and lowered expectations that may handicap children when they enter school. Low-SES students often learn a normative culture that is different from the middle-class culture of the school, which demands independence, competitiveness, and goal-setting. However, low achievement is not the inevitable result of low socioeconomic status. Teachers can invite parents to participate in their children’s education, and this can improve students’ achievement.

How Do Ethnicity and Race Affect Students’ School Experiences?

Populations of under-represented groups are growing dramatically as diversity in the United States increases. Students who are members of certain under-represented groups—self-defined by race, religion, ethnicity, origins, history, language, and culture, such as African Americans, Native Americans, and Latinos—tend to have lower scores than those of European and Asian Americans on standardized tests of academic achievement. The lower scores correlate with lower socioeconomic status and reflect in part a legacy of discrimination against under-represented groups and consequent poverty. School desegregation, long intended as a solution to educational inequities due to race and social class, has had mixed benefits. Continuing issues include delivering fairness and equal opportunity, fostering racial harmony, and preventing segregation.

How Do Language Differences and Bilingual Programs Affect Student Achievement?

English language learners are typically taught in one of four types of programs: English immersion, transitional bilingual, paired bilingual, and two-way bilingual. Bilingual programs teach students in their native language as well as English. Research suggests that bilingual education, especially paired bilingual education, can have benefits for students. Recent legislation in states throughout the country has had a chilling effect on bilingual education.
What Is Multicultural Education?

Multicultural education is calling for the celebration of cultural diversity and the promotion of educational equity and social harmony in the schools. Multicultural education includes content integration, knowledge construction, prejudice reduction, equity pedagogy, and an empowering school culture.

How Do Gender and Gender Bias Affect Students’ School Experiences?

Many observed differences between males and females are clearly linked to differences in early socialization, when children learn sex-role behaviors regarded as appropriate. Ongoing research shows very few genetically based gender differences in thinking and abilities. However, gender bias in the classroom, including subtle teacher behav-
iors toward male and female students and curriculum materials that contain sex-role stereotypes, has clearly affected student choices and achievement. One outcome is a gender gap in mathematics and science, though this gap has decreased steadily.

**How Do Students Differ in Intelligence and Learning Styles?**

Students differ in their ability to deal with abstractions, to solve problems, and to learn. They also differ in any number of specific intelligences, so accurate estimations of intelligence should probably rely on broader performances than traditional IQ tests allow. Therefore teachers should not base their expectations of students on IQ test scores. Binet, Spearman, Sternberg, Guilford, and Gardner have contributed to theories and measures of intelligence. Both heredity and environment determine

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**Chapter Summary**

1. How do students differ in intelligence and learning styles?
2. What instructional materials, technology, assistance, and other resources are available to help accomplish my objectives?
3. How will I plan to assess students’ progress toward my objectives?
4. How will I respond if individual children or the class as a whole is not on track toward success? What is my back-up plan?
intelligence. Research shows that home environments, schooling, and life experiences can profoundly influence IQ.

Students differ in their prior learning and in their cognitive learning styles. Field-dependent people tend to see patterns as a whole and do better with people and social relationships. Field-independent people are more likely to see parts that make up a large pattern and do better with subjects such as science. Individual preferences in learning environments and conditions also affect student achievement.

**Key Terms**

Review the following key terms from the chapter. Then, to explore research on these topics and how they relate to education today, connect to Research Navigator™ through this book’s Companion Website or directly at www.researchnavigator.com.

- aptitude–treatment interaction 126
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**Self-Assessment: Practicing for Licensure**

**Directions:** The chapter-opening vignette addresses indicators that are often assessed in state licensure exams. Re-read the chapter-opening vignette, and then respond to the following questions.

1. Marva Vance and John Rossi discuss their students’ diverse norms, traditions, behaviors, languages, and perceptions. Which of the following terms best describes the essence of their conversation?
   a. race
   b. socioeconomic status
   c. intelligence
   d. culture

2. In regard to the students of Marva Vance and John Rossi, which of the following statements on socioeconomic status is most likely true?
   a. Students from working-class or lower-class backgrounds perform academically as well as or better than students from middle-class homes.
   b. Students from disadvantaged homes are more likely to have inadequate access to health care.
   c. Students from middle-class and lower-class homes are equally likely to make academic progress over the summer.
   d. Schools overwhelmingly represent the values and expectations of the working class.
3. Marva Vance and John Rossi discuss their students’ tendencies to accept the stereotypical roles assigned to them by society. According to research, what should the teachers do about this stereotyping?
   a. Allow students to select their own roles, even if they make stereotypical decisions.
   b. Tell the story of Thanksgiving as realistically as possible: Indian students play Indians, girls play cooks, and boys play hunters.
   c. Themes should be nonbiased, and individuals from under-represented groups should appear in non-stereotypical high-status roles.
   d. Write a Thanksgiving play that includes the contributions of all under-represented groups.

4. José, a student in Marva Vance’s class, wants to be the narrator of the Thanksgiving pageant, even though he is not proficient in English. According to research on the effectiveness of bilingual programs, which strategy might Ms. Vance use to improve all her students’ English speaking and writing skills?
   a. Ms. Vance should avoid bilingual programs because they have been found to be harmful to students in their English development.
   b. Ms. Vance should learn the languages of the students in her class.
   c. Ms. Vance should support bilingual education since studies have found that students in bilingual programs ultimately achieve in English as well as or better than students taught only in English.
   d. Ms. Vance should speak out about the detrimental effects of bilingual education on a student’s self-esteem.

5. Marva Vance and John Rossi discuss stereotypical gender roles in the Thanksgiving pageant. From the research reported in this section, how should the teachers assign male and female students to the roles in the pageant?
   a. The teachers should encourage students to select roles in which they are interested, not roles that society expects them to play.
   b. The teachers should reduce the interactions of males and females in the pageant.
   c. The teachers should assign males and females to authentic roles: males are hunters, females are cooks.
   d. The teachers should assign all students to nontypical racial and gender roles.

6. What is multicultural education? What steps can teachers, administrators, and other school personnel take to reach their students from under-represented groups?

7. Students differ in their prior learning and in their cognitive learning styles. What strategies can teachers use to reach all of their students?

8. List six strategies that a teacher could implement to involve parents or caregivers in helping students meet their potential.