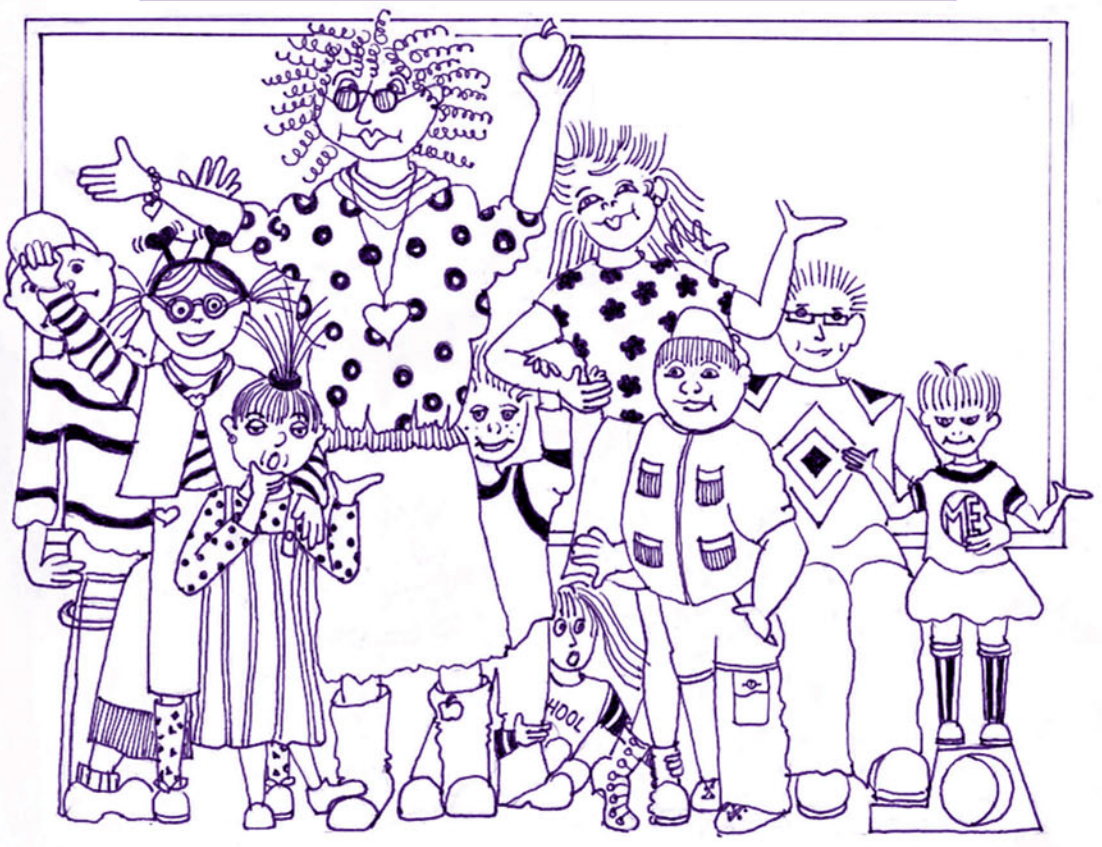
Classroom Communication and Diversity

Enhancing Instructional Practice



Robert G. Powell • Dana Caseau

CLASSROOM COMMUNICATION AND DIVERSITY

Enhancing Instructional Practice

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CLASSROOM COMMUNICATION AND DIVERSITY

Enhancing Instructional Practice

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Preface

Our purpose in writing this textbook is to provide a useful framework for helping new and experienced teachers manage the communication challenges of today's classroom. One of the most profound challenges that current teachers face is the growing diversity of the student body. This diversity comes in several forms. The most obvious involves ethnic composition of the classroom. Over the years, students whose ethnic roots can be traced to Cambodia, Laos, Thailand, Vietnam, India, Malaysia, China, Japan, Mexico, El Salvador, Nicaragua, and Western Europe have taken seats in America's classroom. Not only do these students come from different places, but they have different orientations to and beliefs about communication and the instructional process. Many teachers are unprepared for these circumstances and do little to develop competencies in culturally responsive teaching. We also believe it is important to challenge teachers to reflect on the ways their own personal culture influences their expectations about appropriate classroom communication and ways to demonstrate learning. The way in which the teacher, classroom, and student roles are negotiated impacts the learning environment in significant ways.

Diversity plays out in other ways as well. Schools have a dramatic impact on gender and classroom communication. Expectations about female and male behavior are revealed in the assignments that are given, the ways in which interaction in the classroom is managed, the ways free time is orchestrated, and the ways conflicts are mediated. Teachers need to understand the way in which instructional practice can serve to reinforce gender stereotypes or challenge them.

Finally, the numbers of students with exceptionalities who are being educated in regular education classrooms are increasing annually. Students with learning disabilities or socioemotional limitations often overwhelm regular education teachers. Behavior can be misunderstood, motivation questioned, and

abilities underestimated because teachers do not understand students' special needs. Teachers need to understand and learn strategies for managing these types of challenges.

To accomplish our goal, we have merged two theoretical areas. We have drawn from the fields of communication and education to provide theoretical models and useful strategies to improve instructional practices. Too often researchers only work within their own disciplinary boundaries. We believe that this textbook is unique because it integrates information from a variety of sources. From these bodies of knowledge we have attempted to fashion a viewpoint that focuses on special needs of the individual learner.

Finally, the authors bring a great deal of personal experience to this textbook. Much of the information shared in the text derives from our own action research experiences in schools and from our reading of the experiences of others, including many teachers, parents, and children. Our examples come from real circumstances and real students. We have taught students who come from wealth and privilege as well as students who come from extreme poverty. We have taught students whose parents are incarcerated and whose parents are heads of major corporations. We have taught those who have struggled with their sexual identity and those who have severe eating disorders. These experiences have made a significant impact on our perspective, and we wish to share this insight with those about to enter the teaching field.

PERSONAL ACKNOWLEDGMENTS

Robert Powell

There are several people whom I would like to acknowledge. First, I wish to thank my co-author and partner, Dana Caseau. On an intellectual level, she has introduced me to a community of inquiry that has enriched my understanding of instructional communication. On a personal level, she has taught me about unconditional love and support.

I would also like to thank Linda Bathgate, who had faith in this project. She was encouraging, professional, and helped bring this project to fruition. In addition, I thank George Diestel and Diane Blair, who provided helpful feedback on the early drafts of this text. The thoughtful and critical evaluation of Jeff Kerssen-Griep, at the University of Portland, the reviewer for this text, helped us sharpen our focus and clarify our purpose.

I wish to acknowledge my Father "Hap," who exposed me to the richness of diversity and the value of a warm heart and a good sense of humor. He also taught me the value of hard work and that human dignity is not related to color or socioeconomic conditions. Thanks also go to my children, Michael and Laura, who are my consummate teachers and most challenging students. Finally, I want to acknowledge Gustav Friedrich, who has been my mentor and role model.

Dana Caseau

I would first like to thank my partner and best friend, Bob Powell, for inviting me to participate in this collaborative journey of learning, writing, and discovering together. My own teaching has been greatly enriched by this experience. I wish to thank my parents, Orval and Eileen Harrison, who have helped me to understand the significance of hard work, perseverance, and caring relationships. I am grateful to my brother, David, for showing me the importance of courage in overcoming life's toughest challenges. My gal pals, Beverley Davies, Marleyne Chula, and Frankie Sylvester, all of whom are exceptional teachers of students with special needs, I thank you for your mentorship, support, and friendship over the years. Of course nothing would be possible without my students, who have taught me to appreciate the challenge of leaving one's comfort zone, celebrate all types of diversity, make learning fun, and never forget that it is all for the students that we do what we do. Finally, I wish to thank our puppy pals, Layla and Sawyer, for their diversionary antics, which always reminded us to laugh and not take ourselves too seriously.

Introduction

Classroom Communication and Diversity: Enhancing Instructional Practice is designed to help teachers face the challenges of today's diverse classroom. The first two chapters focus on defining features of communication and the role of communication in the learning process. In chapter 1, the elements of the communication process are explained. The reader is taken from message-centered to meaning-centered perspectives of communication. We argue that understanding comes from the way in which meanings are negotiated among participants in a communication exchange. The verbal and nonverbal elements that influence the creation and management of meaning are explained in chapter 1.

Chapter 2 explores the relationship between communication and learning and addresses three major areas that influence learning. First, we explore student ability. Specifically, we introduce the reader to Gardner's (1983) theory of multiple intelligence and Goleman's (1977) research on emotional intelligence. Second, we examine research on student motivation. We draw on the research on social learning theory and discuss the different orientations to learning. Finally, we explicate the communication processes related to academic achievement.

The next three chapters focus on the way in which diversity impacts learning and communication. Cultural diversity is the primary focus of chapter 3. The reader is first introduced to the dominant perspectives used to explain the role of culture in the enactment of communication behavior. We then discuss the notion of cultural identity and its impact on the perceptions of classroom performance. The next section of the chapter examines the role of culture in learning style. Another important section deals with ways to develop culturally responsive teaching. We conclude the chapter by challenging readers to explore the ways in which their personal values and beliefs about culture influence their orientation to classroom communication.

Chapter 4 examines the role of gender in classroom communication. In the first part of this chapter, we explore the ways that schools in combination with families create expectations for masculine and feminine behavior. Many teachers do not understand the numerous ways that gender socialization plays out in the classroom. The chapter also reviews contemporary research on cognitive differences between males and females. The differences that do occur may have more to do with communication processes than with biology. The next section looks at the different treatment of males and females in the classroom.

In chapter 5, we discuss the challenges that students with disabilities present for classroom teachers. Many of these students are now included in general education classrooms for most of their instructional day. Chapter 5 addresses the benefits of inclusion along with an explanation of the pertinent legislation and eligibility criteria that qualify students for special services. We define the 13 categories of disabilities funded by federal legislation and recommend strategies that promote positive communication in inclusive settings. Finally, we discuss the importance of collaboration and offer strategies for working effectively with families.

The next three chapters address the role of communication in shaping and sustaining positive teacher–student relationships, promoting socioemotional development, and utilizing appropriate strategies for managing disruptive behavior. Chapter 6 reviews literature exploring the interpersonal features of the student–teacher relationship. First, we discuss the way in which relationships unfold over time. Second, we examine relational dialectics by applying Rawlins' (2000) perspective on teaching as a mode of friendship. We conclude the chapter by reviewing the constructs that are central to positive teacher–student relationships.

Chapter 7 extends the perspective introduced in chapter 6 and considers socioemotional learning and the important role it plays in learning. In chapter 7, we define socioemotional learning and discuss the importance of relationship building through the concepts of community and belongingness. Strategies for increasing students' sense of community, such as teacher support, peer-mediated learning, and service learning, are discussed.

Classroom management is the focus of chapter 8. Educators' perceptions about the behavior children exhibit affect the way they instruct and manage students in their classrooms. Chapter 8 covers theoretical perspectives on behavior including etiology and educational application. Cultural influences that may relate to interpreting problem behavior in the classroom are also addressed. In this chapter, we explore the use of punishment and suggest proactive strategies for dealing with disruptive behavior.

The final two chapters focus on the instructional strategies and tools used to promote learning. Chapter 9 discusses teacher-centered strategies such as lecturing and student-centered strategies such as cooperative learning groups. In addition, specific communication concepts found to influence learning are re-

viewed. The purpose of chapter 9 is to provide prospective teachers with a repertoire of strategies.

Chapter 10 focuses on technology and its role in reshaping communication in the classroom. The first section of the chapter examines the ways in which technology can promote and extend learning. The next section focuses on limitations of infusing technology into the classroom. Student access and the way technology influences cognition and literacy are also addressed.

We believe that learning is best served when students and teachers engage in an ongoing conversation about concepts and ideas. *Classroom Communication and Diversity: Enhancing Instructional Practice* was written with this goal in mind. We have included reflection questions at various places in the text to promote interaction and reflection. Both authors have been strongly influenced by John Dewey and believe that educational experience must be useful.


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Communication and the Classroom

John, a first-year second-grade teacher, is about to begin his reading group. Desmond, a Native American, sits at the table with his arms crossed, looking down. When it is his turn to read, Desmond remains silent. The teacher calls him by name: "Desmond, why aren't you reading, are you tired? Did you stay up late last night?" The more the teacher implores, the more Desmond resists. The teacher threatens Desmond, "if you don't read, you will lose recess time." Finally, Desmond gets up from the table and leaves the classroom. The teacher follows yelling for Desmond to go to the vice principal.

This scenario reveals the complex relationship between communication and culture. Desmond is a Native-American child who has been taught that silence is appropriate and revealing private feelings and emotions is inappropriate. The teacher, a White male, expects the student to engage in a learning task when asked. These different orientations are underneath the surface, but they can result in conflict, misunderstanding, and alienation. Every day in America's schools, teachers and students wrestle with their interpersonal relationships, instructional goals, and objectives. The purpose of this book is to inform teachers and potential teachers about the central role of communication in today's classroom. We are particularly interested in helping teachers understand the ways in which diversity influences classroom communication and orientations to learning.

Reflection

- **What types of communication problems have you experienced?**
- **Identify and explain the key elements of human communication.**
- **Place these elements in a model of communication.**

COMMUNICATION

Human communication is ubiquitous. It exists everywhere and has profound impact on what unfolds in a communication setting. All that happens in the classroom is created and sustained through communication processes. Lesson plans, teaching methods, discipline strategies, explanations, and critiques of student work occur through the communication exchanges between teachers and learners. Communication is dynamic and complex, but it can be learned and understood if we carefully examine it in *chunks* and apply what we learn to real-world circumstances.

To begin our examination of classroom communication, we first describe how our understanding of communication has evolved. The way in which we approach and manage communication is related to our definition of it. The early theorists focused on the message. Communication was considered a one-way phenomenon. Different occasions called for different types or forms of speech. Campaign speeches required one kind of communication, funeral orations another. Thus, the early theorists contributed to our understanding of communication by suggesting that messages were connected to the setting. The effective communicator needed to master these different forms of discourse.

A message-centered approach to human communication continued for many years. Shannon and Weaver (1949) refined the message-centered approach by describing the processes that influenced the clarity of messages (see Fig. 1.1).

Communication was considered a linear process, with the initiation of a message at one point (information source) and the termination of it at another (destination). The key to effective communication was the clarity of communication exchanges. Clarity was achieved when the message sent was the message received. Noise, both external and internal, distorted a message and interfered with clarity.

Consider, for example, a lecture. The instructor (information source) presents the information in front of a class (transmits through speech). As the in-

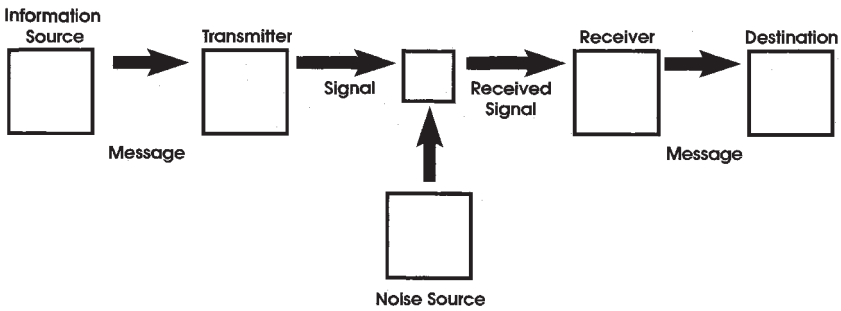

FIG. 1.1. Message-centered model of communication: the Shannon & Weaver model.

structor presents the information, a lawnmower is roaring outside the classroom (external noise). Some of the students focus on the lawnmower noise and others on a tiny white piece of tissue that is stuck on the teacher's chin (internal noise). The students receive the information in light of the processes that influence its reception.

Berlo (1960) dramatically influenced our thinking about human communication. His book, *The Process of Human Communication,* built on previous thinking, but also introduced a number of new ideas. He continued to maintain a focus on the message, but he addressed the factors influencing the production and reception of messages (see Fig. 1.2).

Berlo's (1960) model is important for a number of reasons. It introduced the complexity of the human communicator. Notice that any message is influenced by a number of individual difference variables. Let us focus on teachers for a moment. They come to the classroom with a variety of communication skills. Some are good listeners, some are organized, and some are funny. They also have different attitudes. Some like athletics, some like math. Teachers have different levels of knowledge. Some seem to know a great deal about the subjects they teach, others seem to struggle. Teachers come from different social systems and cultures, which influence perceptions of language use and rules for appropriate behavior. Taken together, these factors shape the way in which a message is structured, what is emphasized, and how it is coded.

Messages are sent through a variety of channels. The senses—seeing, hearing, touching, smelling, and tasting—can be part of a communication exchange. The reception of a message is also influenced by the receiver's communication skills, attitudes, knowledge, social system, and culture. The further apart the sender and receiver are on these variables, the more problematic the communication becomes.

Berlo (1960) went on to introduce other principles of communication not previously discussed. One principle was that communication is a process. Berlo

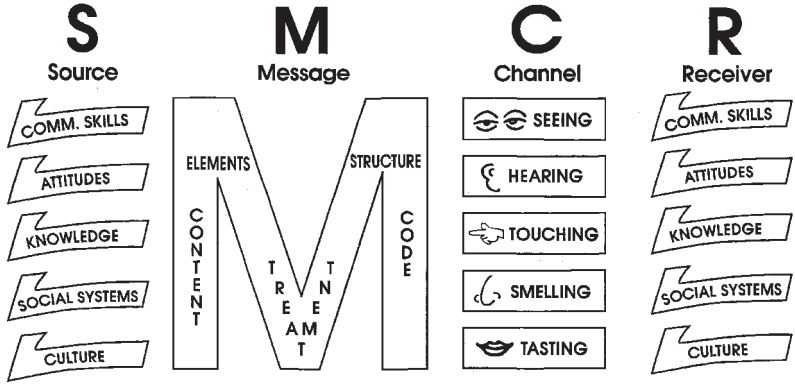

FIG. 1.2. The SMCR model of communication.

drew from Heraclitus, an ancient scholar, who posited that people could never step in the same river twice. Over time the people and the river are different. Berlo applied the concept to study of human communication:

> If we accept the concept of process, we view events and relationships as dynamic, on-going, ever changing, continuous. When we label something as a process we also mean that it does not have a beginning, an end, a fixed sequence of events. It is not static, at rest. It is moving. The ingredients within a process interact; each affects all of the others. (p. 24)

Consider an apology. When you have done something to hurt someone, saying "I'm sorry" does not erase the action that caused the hurt. In communication, we are constantly building and responding to actions that have occurred. We build and rebuild, but we never start from scratch. Every communication has a consequence, and each exchange builds on previous ones. Although we might like to start each day anew, the reality is that we build on the residue of previous events.

Another principle Berlo introduced is interdependence. He contended that any source (speaker) is dependent on a receiver to carry the communication forward. Consider the way interdependence plays out between students and teachers. A student needs a teacher to do *teacher things*, such as constructing lesson plans, assigning homework, correcting student projects, and imparting information. Teachers in turn need students to do *student things,* such as asking questions, completing homework, and listening attentively to the teacher. This interdependence helps shape an educational context with expectations about appropriate behavior.

Berlo made significant contributions to our understanding of communication behavior, and his model continued to emphasize the message. In 1968, Dean Barnland produced a transactional model of communication (see Fig. 1.3), which focused on the way that communicators act on the meanings they construct.

Barnland's (1968) model reintroduces the importance of the setting or context of communication. In the Barnland model, communicators respond to a number of internal and external cues. A communicator is simultaneously a sender and receiver. In a communication event, senders and receivers may focus on public cues such as the type of setting. A cramped classroom is different from a roomy, comfortable one. A church provides different guidelines from a mosque. Senders and receivers also act on private cues. Teachers may say to themselves as they give a lecture, "These students have no idea what I am talking about." Senders and receivers also respond to nonverbal behavioral cues. One teacher used to spit so much during a lecture that the students stopped sitting in the front row. Students may focus on the way a male teacher tugs at his mustache while answering questions or the way he uses his hands to emphasize

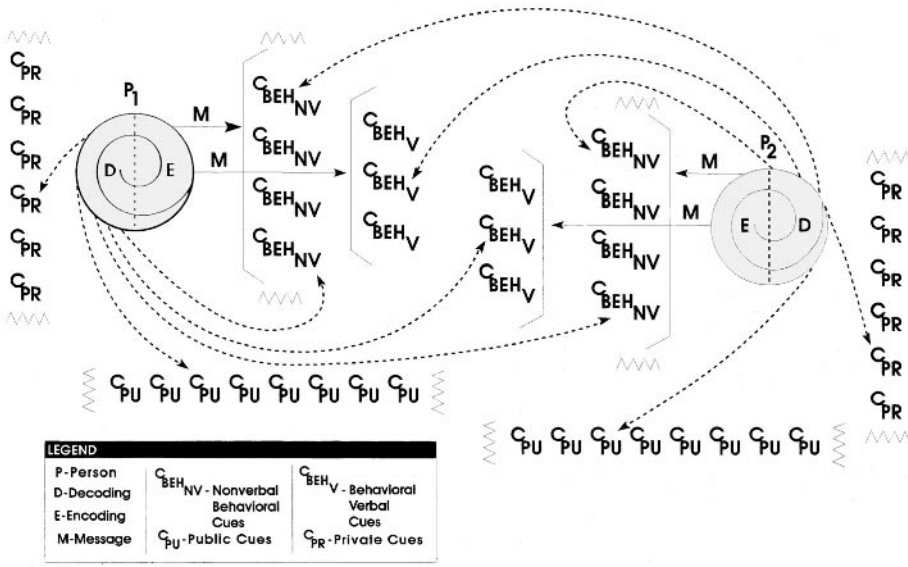

FIG. 1.3. Barnlund's meaning-centered model of communication.

important points. Finally, there are verbal cues. The words and language styles that senders and receivers use impact communication. One philosophy teacher used to spice his lectures with Latin phrases and then say, "which need no translation." Needless to say, several of his students were very confused.

Barnlund's transactional model stresses that communication is complex and individuals ultimately act on the meanings they construct. Some receivers may get their meanings from private cues and others may focus on the verbal message. All the elements of the context interact to help shape understanding. The nonverbal style of the teacher (gestures, mannerisms), the verbal style (sentence structure, vocabulary), and the physical environment (a warm and inviting room or a cold and unappealing setting) all influence the meanings constructed by students.

A meaning-centered view helps us understand the differences in the way teachers respond to classroom activities. Expert teachers—those with a great deal of experience in the classroom—see classroom events differently from novice teachers (Bransford, Brown, & Cocking, 2000). In addition to being more knowledgeable, experts are better able to contextualize learning material. That is, because they are well versed on the information, they can adapt it to the worldviews of different students.

The Barnlund model also notes that meanings are negotiated between communication participants. The interpersonal relationship between teachers and students has a dramatic impact on what transpires in the classroom. Teachers and students work through course content and teacher–student relationships

through the process of communication. Frymeir and Houser (2000) examined the communication skills associated with this process. The authors extended Burleson and Sampter's (1990) research on the skills necessary for friendship to the classroom setting. Eight communication skills were assessed: conversational skills (the ability to initiate, maintain, and terminate conversations), referential skill (the ability to convey information), ego-supportive skill (the ability to make others feel good about themselves), comforting skills (ability to make others feel better when depressed), conflict management (the ability to reach mutually satisfying solutions to conflicts), persuasive skill (the ability to get people to modify their thoughts and behaviors), narrative skill (the ability to entertain through jokes and stories), and regulation (the ability to help someone who has violated a norm to fix the mistake effectively; Burleson & Sampter, 1990). Although each of the skills was considered important, referential skill, ego support, and conflict management were particularly significant. In addition, the authors found that communication skills positively correlated with student learning and motivation.

So where are we today? Contemporary theorists do not believe that communication rests in the production and presentation of a single message. Rather, any communication event involves a context in which a number of factors play roles in the way the communication unfolds. Among the issues that are important are the physical setting, the relationship between the participants, and the participants' goals. In summary, our concept of communication has evolved from a linear notion that focused exclusively on the message to a transactional one in which participants share in the construction and management of meanings.

Several factors are related to the way in which these meanings are managed. Each individual enters a communication exchange with a set of experiences, values, and beliefs. In addition, each person has a wide range of competencies that also influence the production and reception of messages. At the center of these processes is the individual's symbol system.

Verbal Symbols

Verbal messages, the symbols we use to communicate, play a dramatic role in the classroom. Symbol making and symbol using are fundamental to human communicative behavior. A symbol is something that stands for something else. Words, icons, and some gestures are symbols. Symbols are contextually flexible. Meanings for symbols vary from situation to situation. In Milwaukee, a drinking fountain is called a *bubbler*. The machine used to harvest wheat is called a *combine* in Nebraska and a *harvester* in the San Joaquin Valley. We drink a *soda* in California and *pop* in Cleveland.

Symbols are also arbitrary. We make up words to represent something. Think about the nicknames people have. How did they get them? What do they

signify? Educators are notorious for creating new labels for students. Labels such as *jock*, *shy*, *gifted*, *bilingual*, *ADD*, *prep*, *skater*, and *nerd* have specific meanings and imply expectations about academic performance and classroom communication. Although labels might be efficient, they can also be problematic. We can lock people into an expectation based on the words we use to describe them. Words and situations change, but if individuals do not have an understanding of the context in which the symbol is being used, then misunderstanding and sometimes embarrassment can result.

Reflection

- **What are some of the labels used to describe students?**
- **What do these labels imply or suggest about these students?**

Finally, symbols are abstract. Some words are quite concrete and easily understood. Words such as *basketball*, *notebook*, and *desk* have a limited range of interpretation, but words such as *love*, *democracy*, and *racism* are more difficult to understand.

We cannot underestimate the role that language plays in the instructional setting. Our model of communication presupposes that individuals act on the meanings they construct. These constructions are inextricably tied to the symbol system individuals possess. Teachers are constrained by the symbols they use to impart information, and students are constrained by the symbols they use to understand the teacher. A young Latina tried to explain a *quincenera* to her Anglo teacher. The young woman struggled to find ways to explain this cultural tradition in a way that her teacher would understand. She grew frustrated and closed off the exchange by saying—"Oh, never mind." How many times have teachers grown so frustrated over trying to explain a concept that they have given up and moved onto a new or different idea?

Human symbolic behavior influences not only the content of messages, but also the way we organize and structure interaction. For example, students must understand the difference between a question and a directive. A teacher may say to students, who are talking during a lesson, "Are you finished with your work?" The teacher is really saying "get to work and stop talking," but for that utterance to be effective the student must also understand that this utterance is a directive. The student who says "Yes" and continues to talk, seeing the comment as a question, may be chastised for being disrespectful.

LANGUAGE AND KNOWLEDGE

Theorists also argue that there is a relationship between language and knowledge. Dance (1982) contended that human capacity to use speech—to talk and listen—leads to the development of human conceptualization, which is neces-

sary for the development of intellect, understanding, and knowledge. Language does more than package or represent something; it embodies an individual's understanding of the world (Langer, 1942; Stewart, 1986). Knowledge, then, is socially constructed rather than individually received. Sprague (1992) argued that individuals interested in instructional communication have focused too much on the role of teacher talk in the classroom. She contended that student talk facilitates learning of all subjects and should therefore be understood by teachers and researchers as well.

Vygotsky (1981), a prominent Russian scholar, contended that mental processes and communication are inextricably intertwined. That is, the ability to learn and think is connected to communication processes. One of Vygotsky's (1978) major contributions was the *zone of proximal development*. The zone of proximal development is the distance between independent problem-solving ability and the potential development that can be accomplished through adult guidance or in collaboration with more skilled peers. Communication, therefore, is the mechanism through which these developmental processes occur.

According to Forman and Cazden (1998), communication with more competent peers, teachers, and tutors requires individuals to reconcile different perspectives on an issue or problem and, as a consequence, experience cognitive growth. Negotiation is one of the communication activities that influences cognition (Azmitia, 1998; Miller, 1987). As individuals move from childhood to adulthood, they must learn to manage situations involving alternative viewpoints. Negotiation requires individuals to engage in arguments that reveal strengths and weaknesses of a perspective. Think about the way in which students deliberate on classroom projects. The tension fueled from these exchanges must be resolved. Learning a new perspective or developing a new insight is one way the tension is resolved (Piaget, 1965). Knowledge, then, is not passively received, but emerges through interaction with peers and teachers.

The relationship between learning and language is at the core of constructivist approaches to education. Constructivism is predicated on the belief that learners construct their own meaning from interaction with texts, problems, materials, students, teachers, and other features of the learning environment (Arends, Winitzky, & Tannenbaum, 2001). Students are not empty vessels to be filled with some type of intellectual fluid. Each student comes to the educational environment steeped in experiences, competencies, and beliefs. Communication processes play a significant role in the way instructional processes are managed.

We would be remiss if we did not address the way in which bilingualism influences the management of educational meaning. Bilingual education is one of the more controversial topics in education today. Gollnick and Chinn (1994) observed that rather than valuing children who speak more than one language, we expect them to give up their home language as soon as possible. There is a prevailing belief that the bilingual child, especially one who comes from a lower so-

cioeconomic background, is educationally disadvantaged. The data supporting these educational attitudes are not unequivocal. Yeung, Marsh, and Suliman (2000) conducted an extensive investigation of the effects of home language on academic performance. The results indicate that proficiency in a language other than English had a positive effect on objective tests of English proficiency.

The child who is competent in a home language and regularly uses a language other than English may over time reap some important educational advantages. The child who does not have proficiency in a home language, however, is in a precarious position. Some students speak linguistic blends such as *Spanglish*. Yeung, Marsh, and Suliman (2000) acknowledged that if the learner's first language is not established, there will not be positive effects of home language on second-language acquisition. Many students who sit in linguistic limbo may be the students at most risk.

NONVERBAL

In addition to verbal language, nonverbal cues affect meaning (see the Barnland model). Literally hundreds of studies have been conducted on this area of communication (e.g., Burgoon, 1985; Knapp, Cody, & Reardon, 1987; Knapp, Wiemann, & Daly; 1978; Smith, 1984).

Lustig and Koester (1999) suggested that nonverbal communication serves to accent, complement, contradict, regulate, and substitute for verbal messages. We can use a nonverbal message to emphasize a point—Donny got it right! Nonverbal messages can be contradictory. Think about the teacher who looks at his watch while saying, "Come in and see me; I always have time for my students." Nonverbal communication can be used to substitute for verbal messages. For example, a teacher might put an index finger over the mouth to ask for silence.

These general functions of nonverbal communication become problematic when we introduce culture. Students from different cultural backgrounds have different interpretations for nonverbal communication. White students often "grin and nod" when they agree with a teacher, whereas Asian students may "grin and nod" when they do not understand the teacher.

Knapp and Hall (1992) provided a useful typology for examining nonverbal communication in the classroom. Their classification consists of (a) environmental factors, (b) physical appearance, (c) proximics, (d) kinesics, and (e) paralanguage.

Environmental Factors

The physical setting is an environmental factor that influences communication in a number of ways. We cannot identify a direct relationship between a physical setting and learning, but we can conclude that the physical setting establishes a set of expectations and constraints that influence attitudes and commu-

nication. We may have an aesthetically pleasing classroom with tasteful artwork, well-organized work stations, and moveable desks designed to facilitate learning tasks and communication, but we cannot be sure that learning will occur in that setting. Similarly, we cannot conclude that learning will not occur in classrooms with tiles falling from the ceiling, faded paint on the walls, and outdated equipment. Ultimately, educational outcomes are most directly related to the activities occurring in the context of instruction.

Physical Appearance

Knapp and Hall (1992) noted that the physical characteristics of students and teachers influence communication in a number of ways. We live in a culture obsessed with physical looks so it is not surprising that attraction plays a substantial role in the classroom. Research indicates that attraction positively correlates with grades and teachers interact more with students considered attractive (Gibson, 1982; Richmond, McCroskey, & Payne, 1987). Attractiveness is also related to popularity (Boyatzis, Baloff, & Durieux, 1998).

One feature of physical appearance discussed by Knapp is artifacts. Artifacts are clothing and other materials worn or displayed by individuals. These symbols are significant because they play a central role in identity management. Skaters, preps, and jocks each dress a particular way to mark who they are. Many young African-American men wear *do-rags* over their hair, and more and more students are getting tattoos and piercings to express their individuality. In some school systems students are not allowed to wear clothing that can be construed as gang related.

A growing body of research has examined the effects of attire on judgments of teachers. Morris, Gorham, Cohen, and Huffman (1996) examined the effects of the attire of teaching assistants on their credibility. Three conditions of attire—formal professional, casual professional, and casual—were tested. The study found that perceptions of competence were directly affected by dress. The more casual the dress, the less competent the teaching assistant was perceived to be. The results also indicate that a casual dress style was related to sociability.

Roach (1997) examined the effects of graduate teaching assistant attire on student learning, misbehaviors, and rating of instruction. The research found correlations between teaching assistant attire and student learning (affective and cognitive). Learning increased with professional attire. Interestingly, teaching assistants who dressed more professionally also encountered less student misbehavior. Professional dress helped the instructor establish and maintain appropriate distance and boundaries. In addition, teachers who dressed professionally received higher teacher evaluations. Students seem to expect professionalism from an instructor, and dress style helps teachers fulfill this expectation. This research is consistent with a wide range of studies that have

examined the effects of attire (Davis et al., 1992; Gorham, Cohen, & Morris, 1997; Hensley, 1981; Kleinke, 1977; Lang, 1986; Lukavsky, Butler, & Harden, 1995; Molloy, 1975; Newhouse, 1984; Schneider, 1974). Individuals in professional contexts such as teaching positively influence their credibility by dressing in a professional fashion. Simmons (1996), a long-time supervisory teacher, summed up the issue of dress in the following way: "Without a question, dress sends a strong message about who teachers are as individuals and as professionals. The message is clear—those who want respect for themselves and their profession must dress accordingly" (p. 293).

Proximics

This area of nonverbal communication is concerned with the management of space. Research has been rather consistent in this area. The proximity of the teacher influences the participation of the student (Smith, 1984). In traditional classrooms, there is a zone of classroom participation (see Fig. 1.4). The shaded area shows where most of the interaction occurs. Students sitting on the sides and in back do not receive as much attention and do not engage in as much interaction.

Teachers must remember that no single seating arrangement is ideal for all classes, learning situations, or individuals (Williams, Alley, & Hensen, 1999). The classroom in Fig. 1.5 reflects the instruction goals of one fourth-grade class.

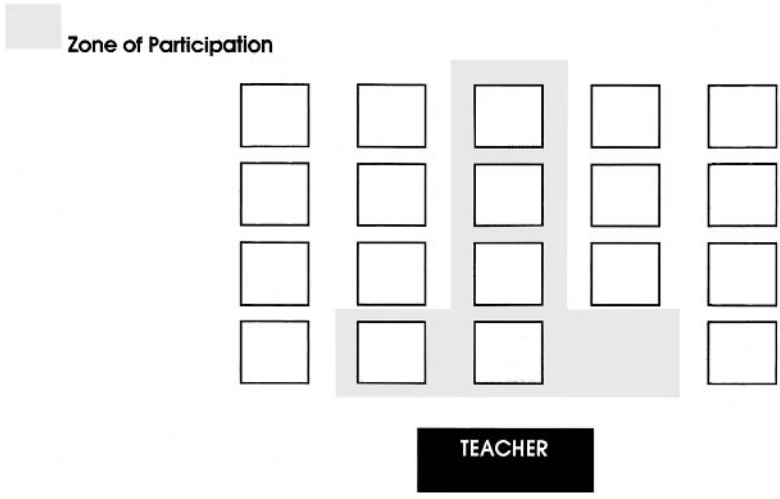

FIG. 1.4. Zone of participation.

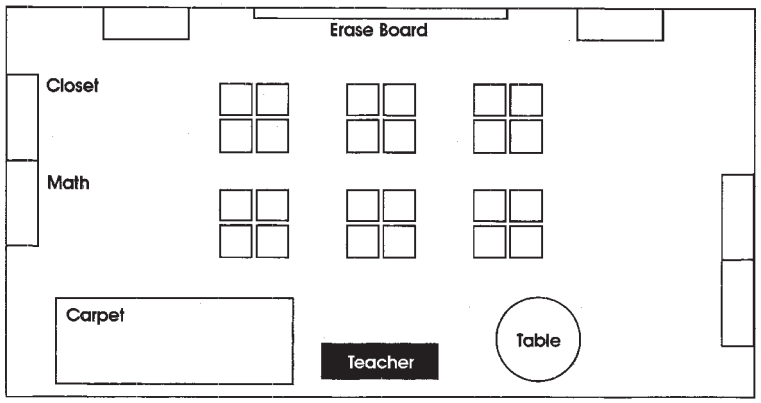

FIG. 1.5. Classroom arrangement.

Reflection

- **What are the advantages and disadvantages of placing the student desks in the center of the room?**
- **What is the purpose of placing the computer station in the front of the room?**
- **How would you arrange this classroom?**

In this class, the instructor has created several different *classrooms*, each designed to accomplish a different goal. At the center are cooperative teams. Four students are placed in the center where group activity and direct instruction occurs. The carpet is a place were students can go for free reading, working on puzzles, or doing other tasks. There is a table where reading groups can work without distracting other groups. In this classroom, students can work on several instructional activities simultaneously. Notice that the teacher's desk is not at the center of the room.

Given the choice, students will seek out areas in the classroom that accommodate their orientation to communication. Those who do not like to participate generally seek out areas where there is a lower probability of being called on by the teacher. Teachers, therefore, must think about ways to organize their classrooms to accomplish their goals. Teachers might experiment with different arrangements throughout the school year.

Kinesics

According to Knapp and Hall (1992), *kinesics* refers to gestures, posture, touching behavior, facial expressions, and eye behavior. Ekman and Friesen (1969), two nonverbal scholars, studied body movement and contended that there are

five primary categories of movement: emblems, illustrators, affect displays, regulators, and adaptors. Emblems have a direct verbal translation. Americans wave to say hello, whereas Eastern Indians clasp their hands together in front of their face. Illustrators are used to highlight or explain a verbal message. We can pretend that we are holding a fork and move it to our mouth to show or illustrate something about eating. Affect displays are those gestures that reveal emotion. These are primarily seen in the face. A smile is one way to show we are happy. Regulators are used to manage the give and take of conversation. People raise their voice when they do not want to give up the floor; they shift their posture when they wish to give the floor to someone else. Postural shifts occur as individuals participate in conversations. Finally, individuals use adaptors to manage stress or arousal. Some students tap their feet when they are anxious. Other people play with pens, tug at their hair, or snap gum to manage tension.

The way in which teachers carry themselves has a great impact on students' attitudes. A great deal of research has been conducted on teacher immediacy—a concept developed by Mehrabian (1981). According to Mehrabian, immediacy behaviors signal approach. The behaviors considered immediate are smiling, eye contact, body lean, proximity, and relaxed posture. A number of studies have shown that immediate teachers are perceived positively regardless of student cultural identity (Collier & Powell, 1990; Powell & Harville, 1990 ; Sanders & Wiseman, 1990). Teachers using immediacy behavior indicate that they are open and they like their students.

One of the most controversial kinesetic behaviors is touching. Touch, considered an essential component of human development, can be problematic in the classroom. Touch can be used to comfort, discipline, and focus attention. When used appropriately, touch can send powerful messages of affirmation and care. Inappropriate touch, however, can be devastating. Behaviors that appear nurturing in one situation can be litigious in another. Hugging a third grader who falls from the swing may be appropriate, whereas hugging a student in an empty classroom for being a *good student* may have a different implication. Mongeau and Blalock (1994) found that, of all the teacher immediacy behaviors they studied, touch was the only one perceived to be inappropriate.

Paralanguage

The final area discussed by Knapp and Hall (1992) is concerned with the nonlinguistic features of speech, such as voice volume, tempo, pitch, intensity, as well as intruding sounds. Accent is certainly a paralinguistic feature that influences communication in the classroom. Research reveals that accent influences speaker credibility. Powell and Avila (1986) compared Anglo, Latino, Asian, and African-American students on the Communication Competency Assessment Instrument (CCAI) and found that students from Latin and Asian cultural backgrounds were considered less competent than individuals from the other

groups. One of the variables accounting for this difference was pronunciation, which is influenced by accent.

Gill (1994) investigated the effects of accent on comprehension. The results indicate that listeners had more favorable responses to teachers with standard North American accents than to those with British or Malaysian accents. Further, the students were able to comprehend more information from North American teachers than from foreign teachers.

Student attitudes may influence how they perceive a teacher who has an accent. Students who do not do well in a course may use the teacher's accent as a reason for their poor performance. The teacher's accent may be less significant to the students who do well in the course. Students who accept cultural differences may be more tolerant of a nonmainstream accent, whereas less accepting students may be much more critical of a nonmainstream accent. Similarly, teachers may develop expectations about students based on stylized features. Students with a nondominant style of speech may not be perceived as bright, motivated, or interesting as a student with a dominant style of speech. Some teachers feel that it is the obligation of education to create a homogenized community that uses the same code. Students with accents, regardless of their intellect, may be inappropriately pushed to the margins. Teachers need to be aware of the attributions they make about students who have accents.

LISTENING

The final aspect of the communication process that we wish to discuss is listening. Meanings are intimately tied to listening ability. Students who are distracted may not focus on main ideas, silently counterargue with a speaker's ideas, or may have difficulty following instructional messages. Wolvin and Coakley (1993) provided a useful typology of listening consisting of five major functions.

According to Wolvin and Coakley, *discriminative listening* is distinguishing among auditory and visual stimuli. This type of listening undergirds all other forms of listening. In the classroom, teachers and students must sort through a wide range of auditory stimuli. Students talking, shuffling papers, snapping gum, and the squeak of chalk are among the sounds processed in the classroom context.

Discriminative ability is fundamental to musicians, auto mechanics, parents, and teachers. Each must determine the significance of certain sounds and how to respond to them. The musician learns how to coordinate certain tones and blend them into melodies. The mechanic listens to the ping in an engine to determine why it is not running smoothly. Parents learn to differentiate cries of distress from cries of fatigue. Students and teachers must sort out a multitude of stimuli as they negotiate the meanings of instructional material.

Listening for *comprehension* builds on discrimination of stimuli to an understanding of the message. Much of the educational process engages this listening function. Students listen to lectures, student reports, classroom discussions, announcements, and teachers' admonitions. Successful comprehension requires listeners to avoid an evaluative attitude about the topic being discussed or the speaker. A student who does not like history may have difficulty attending to a lecture on the Revolutionary War. Listening is made particularly difficult when the listener does not like the speaker. It is easier to attend to messages from people we like and tune out messages from people we dislike.

Listening is facilitated when the listener can identify the speaker's main ideas. As we have observed, in any instructional context, a multitude of messages are shared. Listeners must learn to discard extraneous information and focus on that which is most relevant to the instructional task. Comprehension is difficult in diverse classrooms where there may be vast differences in vocabulary. Students may hear many words but not know what they mean. Finally, comprehensive listening requires listeners to store information in short-term memory, rehearse it, and move it into long-term memory so that it can be retrieved later.

According to Wolvin and Coakley (1993), *therapeutic* listening requires the listener to help the speaker solve problems. To fulfill this function, the listener serves as a sounding board so that the speaker can identify ways to define and solve a problem. Teachers often play this role when they listen to the difficulties students have at home or the struggles they have with friends at school. In these contexts, the teacher attempts to empathize with the speaker and show understanding. However, when students are experiencing more serious emotional difficulties, they should be advised to consult with professionals who are trained in counseling.

Critical thinking requires the listener to render a judgment about the information received. This skill is invoked in several ways. When a speaker's purpose is to persuade, a listener must make a judgment about the validity and strength of evidence. Effectiveness in this situation requires listeners to understand the way in which persuasive arguments are structured and supported. Teachers put on their critical listening hats when they listen to student accounts for late work or a problematic pattern of behavior. They also model good listening when they help students process good arguments from more problematic ones. Students must learn that criticizing an argument does not mean criticizing the person.

The final function that Wolvin and Coakley (1993) discussed is *appreciative* listening. Listening to music, the sounds of a mountain stream, or a favorite TV program is appreciative listening. This type of listening is subject to individual tastes and standards. Conduct a survey of your class and identify the different music forms that students like.

There are numerous circumstances that make effective listening difficult. One is that listening is always part of an interpersonal relationship. I have frequently heard teachers ask students, "Are you listening?" What they are really saying is that the students are not doing what the teachers wants them to do. It is easier for participants to listen to individuals they respect and like and tune out and counterargue with individuals they do not like. In addition to these relational features, there are other blocks to effective listening worth mentioning:

Preoccupation: Listeners feign attention while they think about other things. Students may grin and nod, exhibiting attentive behaviors, while thinking about what they want for lunch.

Noise: As we noted earlier in this chapter, internal and external noise can distort instructional messages and interfere with the creation of meaning.

Information overload: Listeners process information better in manageable chunks. When students receive too much information too quickly, they may tune out the teacher.

Boredom: Listeners easily tune out a speaker who is monotone, slow paced, and uses no vocal variety.

Selection: Listeners will tune into information they perceive is relevant and tune out information they believe is irrelevant. These choices are based on personal tastes and attitudes.

Counterargument: Listeners listen to features they can refute. As a consequence, they may miss other important features of communication.

Language competency: Listening is difficult when listeners do not understand the language being spoken. This is especially true when speakers are continually translating the messages they hear.

Listening is often treated as an independent category of the communication process. We believe that listening is part of a host of behaviors used to make sense of instructional material. Cooper and Simmons (1999) contended that effective listeners are actively involved in the communication process. One effective strategy is to paraphrase another person's message. The goal of paraphrasing is to capture the content and feelings of the other's response. A student who feels that an assignment is too difficult may blurt out, "I don't get it, this isn't clear." A teacher might paraphrase this statement by saying, "You seem anxious about this assignment."

Another strategy that Cooper and Simmons (1999) discussed is *perception checking.* The purpose of this technique is to assess another's thoughts, feelings, or perceptions. According to Cooper and Simmons, perception checking involves three ideas: (a) referencing the sensory data leading to a conclusion, (b) the conclusion that has been drawn, and (c) a question asking the other if your conclusion is accurate. For example, a teacher may have a student athlete who has been late with

homework and inattentive in class. The teacher may be concerned that the student is spending too much time on the athletic field and not enough time studying. In probing this situation, a teacher may ask this student if she understood the assignment that was due. The student may look down and say, "I understood it but I had so much to do that I couldn't get it done." This perception can be assessed in the following way: "Julie, I know that the playoffs are coming up this week and you do not seem as focused on your studies. Are you spending so much time practicing that you are not attending to your schoolwork?"

There are other ways to facilitate effective listening. However, we emphasize that listening is part of an ongoing interpersonal relationship that is established and maintained. Effective listening involves more than implementing a few techniques. Good listeners and good communicators are sensitive to a host of behaviors involved in the communication process. As your knowledge of this process increases, so will your communication ability.

SUMMARY

Over the years, researchers have come to appreciate the complexity of human communication. Early theoretical approaches were linear and simplistic. Contemporary orientations are complex and circular. Communication processes are negotiated among participants as they act on the meanings they construct and share. Verbal and nonverbal behaviors are the mechanisms through which instructional sense making is achieved. Contemporary theorists also emphasize the powerful relationship between learning and communication. How we come to understand instructional material is a function of communication. After reading this chapter, our hope is that you recognize that understanding communication is an exciting and difficult challenge.

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TWO

Factors Influencing Learning and Communication

Enrique and Danielle are in the teachers' lounge savoring the last drops of their coffee before scurrying off to their first-period class. Rosa Parks Middle School, where Enrique and Danielle teach, is located in a low-income, ethnically diverse community. For many students, English is not their first language, and the verbal skills of many other students are below grade level. The test scores at Rosa Parks have been low, and the principal has made it clear that she expects substantial improvement. Teachers like Enrique and Danielle face a daunting task: They must meet state standards, raise test scores, and excite students about learning. It is in this context that teachers can easily forget their fundamental charge—to help students learn.

Learning is a complex process entailing a number of interrelated factors. Enrique and Danielle will be more effective in the classroom when they have a deep understanding of these factors; then they can develop teaching strategies to meet their instructional goals and address the needs of students. In this chapter, we define the learning context and examine three areas related to the teaching–learning process: student abilities, student motivation, and classroom communication.

Reflection

- **What role does communication play in the learning process?**

THE LEARNING CONTEXT

Our definition of *communication* states that people act on the meanings they construct. Our view of learning follows from our definition of communication. It is not fruitful to believe that students are empty vessels to be filled with intel-

lectual fluid. Rather, students are active agents in the creation and management of educational material. Constructivism, a perspective studied in communication and education, resonates with our view. Kelly's (1955) personal construct theory, Piaget's (1955) developmental theory, and Mead's (1934) theory of symbolic interactionism provide the conceptual basis for this perspective. Brooks and Brooks (1993) summarized constructivist processes when they stated:

> Each of us makes sense of our world by synthesizing new experiences into what we have previously come to understand. Often we encounter an object, an idea, a relationship, or a phenomenon that doesn't quite make sense to us. When confronted with such initially discrepant data or perceptions, we either interpret what we see to conform to our present set of rules for explaining or ordering the world, or we generate a new set of rules that better accounts for what we perceive to occurring. Either way our perceptions and rules are constantly engaged in a grand dance that shapes our understandings. (p. 4)

Thus, learning occurs through the continuous building, integration, organization, and rebuilding of material. At the core of this perspective is the recognition that language, culture, home, and community play important roles in the knowledge structures students possess. Consider, for example, the way that a class discussion on music would be impacted by culture. One family may listen to Latin music such as *rancheras*, *corridos*, *cumbias*, and *mariachi*. Another may listen to country and western, bluegrass, and gospel. The discussion of music is intimately tied to the students' experiences.

Culture also influences the constructs that students have for managing social situations. An Iranian student new to America went shopping for clothes at a department store. After selecting the shirt he wished to purchase, he haggled with the clerk over the price. The Iranian student equated buying a shirt in a department store with buying a shirt in the open marketplace in Tehran, where negotiating the price is the common practice.

Constructivist approaches recognize that students come to the instructional context with different levels of competencies, interests, and experiences. Unfortunately, much of our educational curriculum is based on a *one-size-fits-all* metaphor. As students move through the system, little effort is spent on tailoring instructional cloth to better fit each student. Unfortunately, learning does not follow this pattern. Students come to class in many different shapes and sizes.

Indeed, students draw on a range of interpersonal and educational constructs to learn instructional material and manage classroom relationships. Garcia (1999) stated that meaningful instruction accounts for the sociocultural, linguistic, and experiential background of students. An instructor may have jurisdiction over curriculum, whereas ultimately the student has jurisdiction over what it means (Wenger, 1998).

Because learning entails the negotiation of instructional material, it is difficult to isolate the specific ways that teaching influences learning. Some theorists

go as far to contend that teaching plays a rather minor role in learning (e.g., Coleman et al., 1966; Heath & Nielson, 1974; Mosteller & Moynihan, 1972). The findings of this early research indicated that family socioeconomic status, ethnicity, and family background are more important predictors of achievement than teaching. Think about arguments teachers like Enrique and Danielle make when they try to explain their students' low scores on state achievement tests. These teachers recognize that there are significant factors outside of the school that influence learning. At the same time, we do not want to argue that teachers do little to influence the learning process. Friedrich (1982) argued that three sets of interrelated variables account for classroom learning.

Friedrich (1982) contended that student ability, student motivation, and the quality of classroom communication are the primary factors influencing achievement. These three areas provide a useful starting point for our discussion of the relationship between teaching and learning.

Student Ability

We argued earlier that students enter the classroom with a wide range of abilities and competencies. Friedrich (1982) contended that these abilities account for a substantial amount of variance on a range of cognitive outcome assessments (i.e., achievement tests, aptitude tests, general intelligence measures, unit measures). The scores that students receive on standardized assessments, such as multiple-choice tests, may have more to do with the intellectual predilections of the student than with the classroom instruction.

Recent developments in cognitive psychology give insight into the intellectual capacities that students possess and bring to the instructional scene. Gardner (1983, 1999) developed a provocative framework that has dramatically influenced educational practices. In his original work, *Frames of Mind*, Gardner outlined seven intelligences, and in the *Disciplined Mind* he added an eighth intelligence. Following is a brief discussion of these intelligences.

Linguistic Intelligence entails the ability to use words effectively in both oral and written modes for a variety of purposes such as debate, poetry, prose writing, storytelling, and persuasion. Individuals with highly developed linguistic intelligence enjoy verbal jousting, puns, and other forms of word play. These individuals achieve best when they can speak, listen, read, or write.

Logical-Mathematical Intelligence involves the capacity to reason—to think atomistically and linearly. People who employ logical-mathematical intelligence are effective at finding patterns, establishing causal relationships, and working through formulas. Among the processes that emerge with this intelligence are categorization, classification, hypothesis testing, and generalization.

Spatial Intelligence addresses the ability to perceive, create, and re-create visual images and pictures. Individuals who are strong in spatial intelligence perceive small details and are sensitive to color, tone, composition, shape, and form. This intelligence entails the capacity to visualize and represent ideas graphically or spatially.

Bodily-Kinesthetic intelligence involves the ability to use one's body to express ideas and feelings. Among the defining features of this intelligence is heightened tactile competence (e.g., a sculptor), coordination, balance, dexterity, and flexibility.

Musical Intelligence is the ability to understand, create, interpret, and discriminate among musical forms. Musically intelligent people sing in key, keep tempo, and are sensitive to rhythm, pitch, and melody.

Interpersonal Intelligence requires individuals to be socially and personally perceptive. These individuals are able to perceive the moods and feelings of others and adapt messages to the demands of social situations. Interpersonally intelligent people enjoy social settings and work well with other people.

Intrapersonal Intelligence entails the ability to be in touch with one's emotional state and predispositions. Individuals who are aware of their inner moods, intentions, motivations, temperaments, and desires, and have the capacity for self-discipline, are intrapersonally intelligent. This intelligence helps individuals create a realistic view of their strengths and weaknesses.

Naturalist Intelligence is the capacity to be attuned to the natural world of plants and animals. Individuals who possess this intelligence enjoy the outdoors, are aware of patterns in nature, and have a deep appreciation for the environment.

Gardner cautioned against viewing these intelligences as fixed and discrete. Individuals possess each of the intelligences to a degree, but one or two may be particularly dominant.

Reflection

- **What are your strongest intelligences?**
- **How are these intelligences manifested?**
- **How can teachers build on student intelligences?**

A number of recent educational textbooks discuss ways to integrate multiple intelligences (MI) into educational practice (Armstrong, 1994; Carrozza, 1996; Silver, Strong, & Perini, 1997). Silver, Strong, and Perini (2000), for example, outlined strategies for realigning the curriculum to account for learning style and multiple intelligences. The authors also provided guidelines for developing authentic assessments. Armstrong (1994) discussed ways to develop an MI port-

folio. He identified what should be included in such a portfolio and ways to evaluate it. The instructional approaches using multiple intelligences are concerned with measuring student growth and development, not with indexing student deficit. Building and extending student strength is one way to create more engaged and enthused learners.

Emotional Intelligence

Goleman (1997) extended Gardner's work into the area of emotional ability. Individuals who are emotionally intelligent are tuned into their affective states. There is growing interest in the area of emotion and learning. Goleman (1997) identified five dimensions of emotional intelligence:

- Knowing one's emotions: Recognizing a feeling as it happens. The ability to monitor feelings is crucial to psychological insight and self-understanding.
- Managing emotions: Appropriately handling feelings. The ability to work through anxiety or gloom is central to success.
- Motivating oneself: Marshalling emotions in service of a goal is essential to paying attention for self-motivation and mastery.
- Recognizing emotions in others: Empathy is a fundamental social skill. People who are empathetic are attuned to subtle social signals indicating how people feel.
- Handling relationships: Skill in managing relationships, popularity, leadership, and interpersonal effectiveness.

Emotional intelligence plays an important role in the classroom. The way in which students manage their emotions influences their approach to academic tasks and their ability to work with other students. Healy (1998) argued that socioemotional factors are important predictors of academic and lifetime success. She described a study that investigated preschoolers' ability to delay immediate gratification. The preschoolers were given one marshmallow and told that if they could wait 15 to 20 minutes they would get two marshmallows. These students were evaluated 14 years later. The results indicate that the students who could delay gratification scored higher on the SAT, were better liked by teachers and peers, and were more emotionally stable.

The research on emotional intelligence is compelling. Encouraging students to work before play, to be diligent in the face of adversity, and to be respectful and caring helps foster an attitude of self-efficacy, which in turn positively impacts academic achievement.

Perspectives on Motivation

Student interests, attitudes, and self-views relate to how motivated and engaged they are in the learning material. Friedrich (1982) summarized Bloom (1976), who identified four areas related to motivation:

- Subject-related affect: The interest the student has in a particular subject area.
- School-related affect: Attitudes toward the school and learning.
- Academic self-concept: How the student views him or herself in relationship to school and learning.
- Unit interest: Success is one type of learning task that relates to interest in starting a new learning task.

It should not be surprising that motivation influences willingness to engage in learning tasks. For example, adolescents spend tremendous amounts of time e-mailing friends and talking on the telephone. Trying to get these same youngsters to read a novel or practice Spanish may be much more problematic. In the next section, we examine some of the contemporary perspectives on motivation in education.

Social Cognitive Theories

Bandura (1981, 1986, 1991, 1997) argued that individuals develop judgments about their personal effectiveness, which he labeled *self-efficacy*. Individuals who believe they can successfully complete a task will expend the necessary effort to accomplish it. When individuals have low expectations, they are less likely to expend the time and effort on the task.

Bandura (1997) discussed four factors that influence a person's judgments of self-efficacy. The first factor is *enactive* influences. These judgments result from the way in which a person performs certain tasks. According to Bandura (1997), enactive experiences are the most powerful because they provide the most authentic evidence of whether the individual can access what it takes to succeed. Success leads to a strong belief in one's personal efficacy. However, efficacy does not always follow from success. Individuals who only succeed at easy tasks may come to lose patience and persist when the tasks become more troublesome.

A second factor influencing self-efficacy is *vicarious* experience. Individuals continually compare their own competencies with others. Hence, modeling serves as another way to achieve personal efficacy. The most powerful effect is

based on peer comparisons. An individual's self-efficacy is not affected by comparisons to younger, older, or more talented others.

Miller (2000) examined the effects of self-comparison and referential comparison. Self-comparisons occur when students infer their ability in one area by comparing their performance in that area with performance in another area. External comparison occurs when students compare their performance in an academic area with that of their peers. The results indicate that students gave more weight to external comparisons than self-evaluations. This tendency, although understandable, is also problematic. Individuals do not always have information to make accurate comparisons. Skill levels, the amount of time on task, and interest can vary from student to student and are frequently ignored when comparisons are made. Miller (2000) suggested that educators should help students develop more balanced constructs of their abilities.

The third way that individuals develop self-efficacy is through *persuasion*. Bandura (1997) argued that persuasion has its greatest impact on those who have some reason to believe that they can achieve their goals. Persuasive information focusing on the target's ability and effort seem to positively influence efficacy. Persuasive messages focusing only on effort, however, can lead the individual to believe that he or she is deficient in skill, which can be counterproductive to the development of efficacy. If an individual does not have the necessary skills, no amount of effort can impact self-efficacy.

Two additional features play an important role in the effects of persuasion. One involves the credibility of the source, and the second entails the discrepancy between what individuals are told and their view of themselves. Research in persuasion clearly indicates that source credibility is one of the most powerful features of persuasive communication (Bostrom, 1983). Information from a low credible source, even when it is accurate, may be distorted or discounted. The persuasive effects on self-efficacy are directly related to the credibility of the sender.

Self-efficacy is also related to the degree of disparity between the information received and the individual's view of self. Bandura (1977) noted that information might differ minimally, moderately, or markedly from a person's view of self. For example, one high school baseball player had a successful season his senior year in high school and received an offer to play baseball at a major university. The youngster's coach encouraged him to consider taking this opportunity, but the young man did not believe that he had enough talent regardless of the statistics and the arguments from his coach. Rather than going to the large school, he decided to attend a local community college, where he believed there was a better fit for his talent.

The final factor influencing self-efficacy involves physiological and affective states. Arousal states can vary from falling asleep in class to suffering panic attacks. Some tasks create great anxiety for students, which influences their ability

to complete the task. For example, many students have tremendous fear of public speaking (communication apprehension), and the anxiety attached to this activity negatively affects performance. Highly apprehensive students break out in hives, their voice quivers, and their stomach aches in anticipation of a 5-minute presentation. Other students enjoy public speaking and channel their energy and excitement into dramatic delivery.

Self-efficacy is impacted by the way individuals work through these affective states. Bandura (1997) stated that an understanding of emotional states is developed through a process of social labeling that is coordinated with lived events. Children may experience an internal state (anger) and behave in a way that is connected to the emotion. Parents, teachers, and peers help identify the emotional state (e.g., "You're mad because you didn't get your way"; "Are you too embarrassed to read?"). The effects on self-efficacy relate to the way in which individuals learn to label and manage these emotional states. The manifestation of these emotions and the way they are processed, explained, negotiated, and managed has a great deal to do with the development of efficacy. Students with higher levels of emotional intelligence are better able to stay focused on tasks and persist through difficult situations.

Attribution Theory

Attribution theory builds on many of the assumptions of self-efficacy theory and also provides important insight into the factors influencing motivation. According to attribution theory, individuals attribute their successes and failures to either internal or external causes (Dweck, 1986; Weiner, 1974). Individuals who are internally motivated attribute their success to ability or effort and take personal responsibility for their performance. Individuals who are externally motivated attribute their success to factors outside of their control such as luck or task difficulty.

Dweck (1986) contended that motivation involves two sets of goals. Learning goals are those in which individuals seek to increase their competence. Intelligence and learning for these individuals are malleable. Success or failure does not have a substantial effect on the learner's identity. Performance goals, in contrast, are those in which individuals seek a favorable evaluation of their competence. Intelligence following from a performance goal orientation is considered fixed and static. According to Dweck (1986), these two cognitive sets take individuals in vastly different directions. The individual who is competency oriented is more likely to attribute success to persistence and effort. Failure is not viewed as a reflection on personal identity. The individual who is performance oriented and sees intelligence as fixed does not see that effort and ability lead to success and therefore may take on academic tasks that are less challenging. They ask for a great deal of guidance on assignments, may avoid certain classes or teachers, and may be more inclined to cheat.

Interest and Motivation

Hidi and Harackiewicz (2000) examined the connections between student interest and motivation. Interest was conceptualized as the *interactive relation* between individuals and certain aspects of their environment (Hidi & Harackiewicz, 2000). Some individuals are interested in social studies, some soccer, others fashion. Interest can be considered a state and disposition of the individual and has cognitive and affective features. Research suggests that interest plays an important role in academic performance. It stands to reason that students will be more attentive to and expend more effort in subject areas that interest them.

Researchers differentiate between two types of interest. Individual interest is concerned with stable dispositions that develop over time in relation to a particular topic or subject area. Therefore, a student may develop an interest in history that lasts throughout his or her educational experience. Situational interest, in contrast, is generated by certain environmental features that draw attention and focus to a particular area. The interest fostered in this context may or may not last. For example, a dramatic lecture or novel experiential activity may activate student interest in a topic previously considered boring.

Hidi and Harackiewicz (2000) noted that individual and situational interests may be distinct, but they are not bipolar. Individual interest can serve as a filter for situational interest, and situational interest may feed individual interest. The authors contended:

> . . . individual interest in a particular topic may help students persevere through boring presentations or text about that topic, and situational interest elicited by presentations or texts may maintain motivation and performance when individuals have no personal interest in particular topics. (p. 155)

Interest is also related to intrinsic motivation. *Intrinsic motivation* is defined as the motivation to engage in activities for their own sake (Hidi & Harackiewicz, 2000). This definition incorporates both individual and situational interest. Some students may inhale the *Harry Potter* novels because they are positively disposed to reading. Interest in reading may also be promoted for situational reasons. Individuals may be assigned a *Harry Potter* novel for a class assignment and become so interested in it that they read the entire series.

It is simplistic to view motivation in either–or terms. That is, students are not either intrinsically or extrinsically motivated in all circumstances. Students may be intrinsically motivated in some subjects and extrinsically motivated in others. Some students may be very interested in math, but need an external reward to study literature. Similarly, some students may pursue mastery in some academic areas, but be driven by performance goals in others. For example, a student who is interested in history may want to explore all the factors that contributed to the Civil War. This same student may only do what is necessary to

pass geometry. In this example, the student's intellectual identity is connected to his competence in history, but not to math.

What then can teachers do with this information? We believe that teachers need to do all they can to cultivate both situational and individual interest. Dewey's (1913) notion of *catch and hold* is relevant to this point. For the disinterested students, educators need to develop teaching strategies that catch their attention and hold it long enough so that individual interest can be engaged. This goal is facilitated when students feel that the content is relevant and they have some mastery over it. Consider the following example. George is struggling with algebra. He studies but continues to fail the examinations at the end of the week. Over time his interest wanes and he starts to feel that algebra is a waste of time. One day while grading the tests, the teacher discovers that George transposes numbers when he is writing the algebra formulas. Rather than writing down the number 23 in a formula, he writes the number 32. The teacher reviews all of George's previous quizzes and finds that this is a consistent pattern. The teacher has a conference with George and carefully explains this error. In the next quiz, the teacher continues to remind George to make sure that he has not transposed any numbers. After George turns in the quiz, the teacher checks his answers and tells him that his scores improved significantly. After this intervention, George continues to show improvement in algebra and is spending more and more time in this subject.

In this example, the teacher used a situational stimulus to gain George's attention. He is frustrated with his math scores and wants to understand why he is having a problem. His interest is piqued when the teacher explains why his answers have been incorrect. She encourages George and states, "Hey bud, you can do this, but make sure you don't flop your numbers. I will watch to see if you make this mistake during the quiz."

George now understands his error and corrects it and, as a result, his test scores improve. When he corrected the problem and improved his quiz scores, his individual interest increased. This scenario is designed to illustrate the subtle ways that teachers can help students increase their interest and competence in academic areas. Some of the most powerful teaching occurs when a teacher helps student increase their competence. In the next section, we turn our attention to the communication processes that occur in the classroom context. First, we describe the dominant features of instructional communication, and then we explore behaviors linked to learning.

Reflection

- **Identify and discuss teaching strategies that increase student interest.**
- **What are your learning goals and how do they influence your motivation in a class?**
- **Identify and discuss your favorite academic subjects.**

COMMUNICATION PROCESSES

Thus far, we have discussed the effects of student ability and motivation on learning. We shift our focus to the third factor component of the learning model explicated by Friedrich (1982)—the quality of classroom communication. The effects of classroom communication are circular, and their impact on learning and achievement are difficult to determine. Further, differences in contexts and the methodological variations used to study communication make comparisons problematic. Nevertheless, there are some trends that have been identified. In the next section, we review the dominant communication patterns occurring in instructional contexts.

Bellack, Kliebard, Hyman, and Smith (1966) characterized classroom interaction as a game with rules that teachers and students follow. Four communication moves are used in the game. *Structuring* moves are used to establish the context for appropriate student behavior. Teachers might say, "This morning we are going to discuss the reading assignment I made yesterday." *Soliciting* moves seek to elicit a verbal response from the students. "Did you bring your cultural artifacts for today's discussion?" *Responding* moves follow from soliciting moves. They consist of the responses to student answers. *Reacting* moves are statements used to modify or evaluate what students have said. When *classroom communication* is defined in this fashion, the teacher is expected to do most of the talking. In most classrooms, teachers talk approximately 70% of the time.

Hazlett (1987) stated that instructional communication entails three language functions. One function involves *directing* students. This type of communication is concerned with giving students the information necessary to complete an instructional task. A second language function, *informing*, involves giving students new content. The third language function, *eliciting*, involves soliciting student responses. Asking students whether they understand a task is an example of eliciting.

Cazden (1988) stated that the fundamental pattern of classroom interaction is the three-turn unit called the IRE. In this pattern, the teacher initiates a communication exchange (I), a student responds (R), and then the teacher comments on the response (E). Cazden stated that the initiation usually comes in the form of a question. Teacher questioning then is one of the dominant forms of communication used in the classroom.

The research cited previously suggests that teachers engage in a limited range of behaviors. They give information, ask for information, and direct student behavior. These descriptions, although informative, do not provide insight on the effects of these communication patterns on student learning and achievement. Research shows that the use of questions and teacher clarity impact learning (Brophy & Good, 1986, 2000; Kindsvatter, Wilen, & Ishler, 1996).

Questions

Teachers use questions to invite student participation and engage them in learning. Brophy and Good (2000) stated that research spanning 30 years shows that frequent questioning by teachers correlates positively with student achievement. Maximum effects on learning, however, are related to the clarity of the question and the way it is managed. Kindsvatter, Wilen, and Ishler (1996) stated that student achievement is enhanced when teachers ask clearly phrased questions, probe student responses, redirect questions to nonparticipating students, wait for student responses, and provide feedback on the accuracy of student responses. Learning is not linked to the difficulty of the question. Teachers can ask a series of lower order questions and then build to higher level ones. Asking only one type of cognitive question (all low or all high) does not appear to promote learning. We discuss the use of questions in more detail in chapter 6.

Clarity

Teacher clarity has also been linked to learning. Clarity is facilitated when the teacher uses communication strategies to enhance understanding of instructional material. Bush (1977) conceptualized teacher clarity in terms of seven behaviors: (a) gives examples, (b) explains the work to be done and how to do it, (c) gives written examples, (d) uses common examples, (e) gives explanations that the student understands, (f) speaks so that all students can hear, and (g) takes time when explaining. Behaviors that detract from clarity include ambiguity, vagueness, hedging, bluffing, insufficient examples, and mazes (false starts, halts in speech, redundancy in spoken words). Bush, Kennedy, and Cruickshank (1977) used factor analysis to identify the underlying dimensions of teacher clarity. They found that clear teachers explained ideas and used ample illustrations while explaining ideas and giving directions.

Hines, Cruickshank, and Kennedy (1985) examined teacher clarity and its effects on student achievement and satisfaction. Three types of clarity behaviors were examined: (a) teacher stresses important aspects of content, (b) teacher explains content by use of examples, and (c) teacher assesses and responds to perceived deficiencies in understanding. The results indicate that cognitive achievement and satisfaction with the instruction were positively related to teacher clarity.

After a systematic review of the literature, Brophy and Good (1986) stated that achievement is maximized when teachers actively present material, structure it with overviews, provide internal summaries, and signal important main ideas. These communication strategies require teachers to use examples that connect with students' experiences.

Although the behaviors reviewed earlier may facilitate understanding, we want to emphasize that clarity is unlikely to occur when a teacher uses low-

inference clarity behaviors. Students process information in terms of their own frames of reference and signal their understanding or lack of understanding of the material to the teacher. Ultimately, clarity is the result of these negotiated processes. Think for a moment of the teacher who uses an example the students do not understand. According to research by Darling (1989), students signal their lack of understanding in one of three ways. First, they provide specific information on what they do not understand and request clarification (focused/directive strategy). Here the student is very direct ("How is self-efficacy different from internal locus of control?"). A second strategy (focused, nondirective) signals a lack of understanding, but the student does not ask for clarification ("I don't understand what you mean by multiple intelligence"). The third strategy (personally qualified) entails a series of questions or mazes that the teacher must work through to provide clarification ("Why am I wrong, I said the same thing that Lindsey said?").

The research by Darling (1989) and Kendrick and Darling (1990) suggests that clarity is relational. These findings resonate with Civikly (1992) and Eisenberg (1984), who argued that clarity is embedded in a relational context. Understanding is negotiated between teachers and students in instructional episodes. Teachers or students introduce concepts that are discussed, critiqued, and clarified. Clarity is compromised when closure is not brought to these episodes. The nature of the student–teacher relationship also plays a role in the way these episodes unfold. Some teachers can read the nonverbal behavior of students and recognize that an example does not make sense. From this feedback a new example is introduced and the information continues to be negotiated. In our judgment, then, it is best to consider clarity an episodic and relational process.

Teacher Immediacy

An extensive body of literature has examined the effects of teacher immediacy on learning. After summarizing the literature, Rodriguez, Plax, and Kearney (1996) claimed: "No other teacher communication variable has been so consistently associated with increases in both students' affective and cognitive learning in the classroom" (p. 293). This claim, although compelling, may be overstated. The role of immediacy in learning is a bit cloudy.

As we stated in chapter 1, immediacy was first conceptualized by Mehrabian (1969a, 1969b, 1970a, 1970b, 1971), who stated that people move toward those they like and away from those they dislike. It is important to emphasize that Mehrabian believed that immediacy was communicated through implicit nonverbal codes. Immediacy is primarily signaled through nonverbal behavior. Andersen (1979) extended the immediacy construct to the instructional setting. She reasoned that the nonverbal behaviors that reduce physical and psychological distance between teachers and students would positively impact learning. Behaviors such as smiling, eye contact, relaxed body posture, and movement

toward students signal immediacy. Andersen found that nonverbal immediacy positively influenced student affect or their feelings about the teacher and the course, but did not influence how well students did on a standardized measure of cognitive learning.

After the publication of Andersen's original article, a number of studies explored the effects of immediacy on learning. These studies have consistently reported positive correlations between measures of immediacy (nonverbal and verbal) and affective learning (e.g., Christensen & Menzel, 1998; Gorham, 1988; Kearney, Plax, Smith, & Sorensen, 1988; Kearney, Plax, & Wendt-Wasco, 1985; Kelly & Gorham, 1988; Moore, Masterson, Christophel, & Shea, 1996; Powell & Harville, 1990; Sanders & Wiseman, 1990). However, this research program has not been successful in explaining the effects of immediacy on cognitive learning. At best these studies reveal that students believe they learn more from immediate teachers. However, no study demonstrates that test scores or other cognitive measures are impacted by immediacy in any clear and consistent way.

Hess and Smythe (2001) contended that four models have been used to explain the relationship between immediacy and cognitive learning. The learning model was initially advanced by Andersen (1979) and proposed that immediacy directly influences learning. The teacher who engages in positive immediacy engenders positive student outcomes. Studies testing this assertion have found no association between immediacy and test scores. Andersen's seminal investigation found positive associations between immediacy and affective orientations to the class and teacher, but there was no impact on test scores.

A second model, the motivation model, hypothesized that immediacy facilitates an indirect effect on learning (Christophel, 1990; Richmond, 1990). Immediacy engenders state motivation (how students feel about a particular class and teacher); as a consequence, students study harder, go to class, increase their study time, and learn more.

Rodriguez, Plax, and Kearney (1996) advanced the affective learning model, which also hypothesized an indirect relationship between immediacy and cognitive learning. In this model, affective learning serves as a trigger or mediator for cognitive learning. Immediacy primes affective learning, which is a precursor to cognitive learning.

The arousal model twists the previous explanations and argues that immediacy creates arousal that increases attention and learning. Comstock, Rowell, and Bowers (1995) proposed that the relationship between immediacy and cognitive learning is curvilinear. They found that moderate amounts of teacher immediacy had the greatest impact on cognitive learning. The teacher who displays no immediacy puts students to sleep, and the teacher who has too much immediacy may create anxiety or tension.

According to Hess and Smythe (2001), the studies testing these models have several flaws. First, the studies have not provided cognitive explanations of immediacy. The studies show patterns of association between immediacy and a

number of outcomes such as affective learning, but they do not explain why these associations exist.

The measure of immediacy is the second flaw identified by Hess and Smythe (2001). The authors contended that too many studies have relied on self-reports rather than actual teacher behavior. The danger with self-report is that student judgments of immediacy might be confounded with other factors. For example, teachers might be considered immediate because they are an easy grader, bring food to class, or meet student needs. What is driving the student evaluation of immediacy is difficult to determine. In addition, extant instrumentation has departed from the original conception of immediacy. Gorham's (1988) measure of verbal immediacy, for example, is predicated on a presumed relationship between teaching effectiveness and immediacy. Immediacy and teaching effectiveness may be correlated, but they are different constructs.

The third flaw concerns the measures of cognitive learning. A number of studies have used student reports of learning. In a typical study, students are asked to estimate what they have learned, rather than specifically measure what they learned. Hess and Smythe (2001) argued that students are not able to accurately measure what they learned. Students may vary in terms of their personal orientations to learning and how the teacher facilitates it. Judgments of learning may also be influenced by the relationship between a teacher and student. Students may inflate what they learn from a teacher they like and may deflate what they learn from a teacher they dislike.

Hess and Smythe (2001) contended that previous studies attempting to delineate the relationship between immediacy and cognitive learning have been misdirected. They argued that immediacy's primary function is to promote a positive relationship with the student. To test their contentions, the authors designed a study to assess the impact of teacher immediacy on student affect and cognitive learning. The results indicate that immediacy was positively related to perceived learning and liking for the instructor. A positive relationship between teacher affect and reported learning was also found. However, immediacy did not impact test performance. Finally, the results indicate that students were motivated by self-interest rather than teacher behavior. Grades were the primary motivating factor for the students.

The results of this investigation support the theory advanced by Hess and Smythe (2001). Immediacy played a substantial role in student perceptions about the teacher, the course, and their perceived learning. It had little to do with how they performed on tests.

What can we say then about immediacy and its role in classroom learning? We agree that the primary impact of immediacy is to cultivate a positive relationship with the student. In terms of motivation, immediacy probably has its most pronounced impact on situational interest. This interpretation is closest to the arousal model explicated by Comstock, Rowell, and Bowers (1995). Test scores and other standardized assessments have more to do with student skill

and academic engagement time (amount of time studying for a test) than with teacher communication behavior.

We are hesitant to completely abandon the role that immediacy plays in cognitive learning. Let us return to Mehrabian's initial contention that people move toward those they like and away from those they dislike and consider its role in cognition. The research clearly indicates that immediacy teachers are perceived to be approachable. Immediacy helps shape an environment where students can engage in interactions that clarify concepts, debate ideas, discuss ideas that challenge their thinking and belief structures, and obtain feedback on areas of deficiency. Students probably do not think much about their teacher at night when they are studying for a quiz or deliberating on the assignments they should complete. Previous research has not found a link between academic engagement time and immediacy (Powell & Aston, 1992; Sine, 1995). Self-interest, levels of motivation, parents, and the significance of the assignment influence how much time students spend on academic tasks.

Reflection

- **What role does teacher immediacy play in learning?**
- **What are some negative aspects of teacher immediacy?**

Communication Apprehension

The previous section examined the communication behaviors and processes that are positively associated with learning. We conclude this chapter by discussing communication apprehension (CA)—a construct found to constrain learning in the classroom. Communication apprehension is one of the most researched constructs in the discipline of communication, but has not been discussed much in education. Literally hundreds of studies have been done, and the results are rather consistent. In terms of the instructional context, the research indicates that students who experience communication apprehension have more difficulty in school than students who are low in communication apprehension.

McCroskey and McCroskey (2002) identified four major effects of communication apprehension: internal discomfort, communication avoidance, communication withdrawal, and overcommunication. The one universal finding is that individuals with high CA experience internal discomfort and negative arousal when they face an event that requires communication. Frequently these feelings are connected with fear. These states may range from a warm flush to terror. Because individuals have such negative responses to the communication events related to the negative states, they frequently attempt to avoid them. Because an oral report may be terrifying, the apprehensive student will do everything to avoid giving it. If it is impossible to completely avoid the situation, a

communication apprehensive student may try to physically or psychologically withdraw from it. The student who is scheduled to do a report may say "I didn't do it" or may respond to a teacher's question by saying, "I don't know." Both strategies allow the student to step back from communication involvement. According to McCroskey and McCroskey (2002), on rare occasions, communication apprehensive students may attempt to deal with the negative arousal by overparticipating in communication. These students may attempt to talk through their anxiety. In these circumstances, the individual may be more concerned with the quantity than quality of interaction.

There are significant academic consequences for the student with high communication apprehension. They obtain lower grade point averages and have poorer attitudes about school (McCroskey & Andersen, 1976). Because of their feelings about communication, apprehensive students are less likely to seek help from teachers and are less likely to articulate their instructional needs. These students also have fewer peer friendships. In a study designed to assess college student retention and academic success, McCroskey, Booth-Butterfield, and Payne (1989) found that high communication apprehensives were more likely to drop out of school than low apprehensives. The effects of communication apprehension had its greatest effect in the first 2 years of college.

Similar findings have been observed in elementary and middle school. Comadena and Prusank (1988) assessed the relationship between communication apprehension and academic achievement among elementary and middle-school students. The findings indicate that students who had high communication apprehension received the lowest scores on all measures of academic achievement. The authors also found that communication apprehension increased with grade level. Communication apprehension increased 17% from second grade to eighth grade. The data do not indicate whether these shifts are related to academic success or other factors. Whatever the reason, communication apprehension seems to increase with grade levels and is associated with academic success.

Chesbro et al. (1992) conducted an extensive study on the potential role of communication apprehension for at-risk students. At-risk students were those failing to achieve in school or dropping out of school. The authors collected data at 14 urban, large, predominantly minority middle and junior high schools; 2,793 students participated in the study. The results indicate that at-risk students are substantially more apprehensive about speaking in groups and speaking in dyads. The authors noted that these data are troubling because so much instruction occurs in these contexts.

The results also indicate that at-risk students perceived themselves to be less competent in communication. The data indicate that nearly all of the differences were related to communication with acquaintances and strangers. The at-risk students did not feel competent in these settings. Once more these data are distressing because students frequently work in groups or teams. Their feelings

about communication in these contexts may have deleterious effects on their academic performance.

Rosenfeld, Grant, and McCroskey (1995) reasoned that if communication apprehension negatively affects at-risk students, it should have the opposite effect for academically talented students. The authors studied 7th to 10th graders who were accepted into a gifted program at Duke University and found that gifted students had lower apprehension than at-risk students assessed by Chesebro et al. (1992). Further, the findings indicate that gifted students had less apprehension in the small-group settings than at-risk students.

Causes of Communication Apprehension

The data showing the negative effects of communication apprehension are rather consistent. There is controversy about its causes. Daly and Friedrich (1981) stated that communication apprehension might be caused by genetic, skill acquisition, modeling, and reinforcement.

The genetic explanation proposes that communication apprehension is related to factors such as sociability, physical appearance, body shape, and competence in motor skills. Each of these predispositions are enhanced or constrained by environmental factors.

According to Daly and Friedrich (1981), another way that communication apprehension may emerge is the way in which social skills are acquired. Skills such as language use, sensitivity to nonverbal communication, and interaction management skills may be lacking in the communication apprehensive student. The prototypical *geek* or *nerd* may be the student who lacks social skill and cannot fit into the flow of social interaction. As a result, communication is not rewarding, and new skills are not developed.

The third explanation that Daly and Friedrich (1981) discussed is modeling. If the child is around communicatively apprehensive individuals, these are the behaviors modeled. When the individual is asked to engage in communication behaviors that have no frame of reference, anxiety or apprehension results.

According to Daly and Friedrich (1981), the most frequently advanced explanation of communication is explained through reinforcement theory. An individual who receives positive reinforcement for communication does not develop communication apprehension. The child who is told to be quiet and not encouraged to communicate may develop negative attitudes about communication. McCroskey and Richmond (1978) found that students from rural areas and small towns reported higher communication apprehension levels than students from medium sized and urban communities. The authors argued that this finding ". . . is the first theoretically projected relationship between an environmental factor and communication apprehension that has been empirically verified" (p. 247). When comparing the environmental factors influencing attitudes about communication, urban children face more communication demands

than rural children. For example, the rural students studied by McCroskey and Richmond (1978) attended small homogeneous schools with little ethnic diversity. A common and narrow set of skills led to communication competence in these communities. In contrast, urban students face a much wider set of communication constraints. As a result, they must develop a broader range of competencies to be successful.

A new perspective—one that challenges the reinforcement explanation—is emerging. Some researchers (Beatty, McCroskey, & Valencic, 2001; McCroskey & Beatty, 2000) have challenged the reinforcement explanation and contended that communication apprehension is primarily determined by neurobiological processes. Beatty, McCroskey, and Heisel (1998) stated that, "communication apprehension is primarily a function of two interrelated neurobiological systems, the thresholds of which are the products of genetic inheritance" (p. 224).

Opt and Loffredo (2000) assessed the relationship between communication apprehension and the Meyers–Briggs personality type preferences. The Meyers–Briggs assessment draws from Jungian psychology—a perspective that anchors personality in inborn traits. The authors argued that communication apprehension is not something to overcome, but is a preference not to communicate. The participants were assessed on extraversion–introversion, intuition–sensing, thinking–feeling, and judging–perceiving, as well as on their level of communication apprehension. The results indicate that introverts and sensors scored significantly higher on communication apprehension. The authors concluded that communication apprehension is perceived as a problem when it is viewed through the perspective of extroverts. For the introvert, it is normal to not openly communicate or seek out communication exchanges. The introvert prefers quiet places and solitary activities. The authors concluded by suggesting that one way to deal with apprehension is help them become more complete in their personalities by confronting and expanding less preferred competencies.

The nature–nurture debate of communication apprehension has not been resolved, and the reader is encouraged to read additional literature on this topic (Beatty, McCroskey, & Valencic, 2001; Condit, 2000). Whether communication apprehension is rooted in learning, theory, or biology, the teacher must have some strategy for dealing with it. The student who exhibits communication apprehension experiences numerous educational disadvantages. McCroskey and McCroskey (2002) discussed several ways that a teacher can prevent and reduce student apprehension. Specifically:

- Reduce oral communication demands
  1. Avoid testing through talk
  2. Avoid grading on participation
  3. Avoid alphabetical seating

4. Avoid randomly calling on students

- Make communication a rewarding experience
  1. Praise students when they participate
  2. Try to avoid indicating that any answer is completely "wrong"
  3. Try not to punish any student for talking
- Be consistent about communication
  1. Try to be consistent in how you handle student talk
  2. Be very clear about any rules you must have regarding talking
- Reduce ambiguity, novelty, and evaluation
  1. Make all assignments as clear and unambiguous as you can
  2. Be clear about your grading system
  3. Avoid surprises
- Increase student control over success
  1. Give the student options
  2. Be certain that the student can avoid communication and still do well in the course

Reflection

- **How would you deal with communication apprehension?**

This chapter has attempted to explicate the relationship between communication and learning. We have proposed that students bring a rich set of experiences, language skills, and interests that play an important role in the learning process. We believe that the relationship between classroom communication and learning is a function of three primary factors: student ability, motivation, and communication processes. The research reviewed here suggests that instructional strategies building on student strengths positively influence academic performance. We also examined different perspectives on motivation and suggested ways to promote self-efficacy and internality. Finally, we examined the communication processes that shape learning experiences. Teacher questions, clarity, and immediacy play important roles in the way instructional material is presented, processed, and understood.

Reflection

- **What student characteristics influence learning?**
- **How can teachers influence motivation?**
- **What communication behaviors influence learning?**

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THREE

Diversity and Classroom Communication

On the first day of class, LeAnne Young, a first-year teacher, waits enthusiastically for the students in her first-period English class to arrive. They trickle in, some quietly, others engage in heated conversations. The veritable rainbow of student colors impacts Ms. Young considerably. Finally, the students take their seats and look at Ms. Young as she takes out her roll sheet and begins to call out their names: Eduardo Martinez, Shanisha Knight, Teng Her, Sandi Chalensouk, Gabriela Gamino, Markus Tyson, Michael Smith, Azor Singh, Ignacio Vidales, Danny Castanon, Tamika Yosida, and Brian Moore.

Ms. Young faces a daunting task. She recognizes the vast diversity in her class, but is unsure how to deal with it. The one cultural studies course she took in college focused on the history of African Americans. Although interesting, the course did not provide Ms. Young with the skills needed to teach in a culturally diverse classroom.

In the 1990s, America's classrooms experienced profound demographic shifts. According to U.S. Department of Education (2000) statistics, minority students make up more than 40% of the total public school population, with Hispanics representing the fastest growing group. Asians, a group consisting of Southeast Asians, Chinese, Koreans, and Japanese, have also shown substantial increases. At the same time, more than 80% of the teaching profession is White.

The demographic changes can be threatening and exciting. Responsible schools and educators must struggle with ways to meet the needs of students with a wide range of experiences, skills, and interests. Understanding the ways in which culture influences educational contexts can empower teachers to reach all of their students. This is no easy task. Teachers must understand not only how culture influences the behavior of students, but also the way that it influences their own perceptions and behaviors. Like students, teachers come into the classroom with biases, perceptions, skills, and expectations that shape

their communication. Teachers, especially White teachers, frequently problematize culture by seeing it as a limitation that the student possesses. Students who *overcome* their culture succeed. Students unwilling to make this adjustment fail. Teachers seldom reflect on their own biases or the limitations of their pedagogical practices. Rather than placing all the responsibility on the students, we propose that teachers, regardless of their cultural heritage, increase their cultural competence so they can be better prepared to facilitate student learning. This journey can be difficult and threatening, but an honest, careful examination can also be rewarding.

Reflection

- **How do you define *culture*?**
- **To what cultural group do you belong?**

CULTURE

Culture is a difficult concept to understand. An examination of some representative definitions might be helpful. Lustig and Koester (1999) defined *culture* as "a learned set of shared interpretations about beliefs, values, and norms which affect the behaviors of a relatively large group of people" (p. 30). Orbe and Harris (2001) characterized culture as "learned and shared values, beliefs, and behaviors common to a particular group of people; culture forges a group's identity and assists in its survival" (p. 6). Individuals are taught, sometimes implicitly, sometimes explicitly, to view the world in a certain way and behave in a way that supports this viewpoint. Samovar, Porter, and Stefani (2000) offered the following conceptualization of culture: "the deposit of knowledge, experiences, social hierarchies, religion, notions of time, roles, spatial relationships, concepts of the universe, and material objects and possessions acquired by a group of people in the course of generations through individual or group striving" (p. 7).

Hence, culture influences what people know, how they came by that knowledge, what roles they play and how they should play them, what they value, and how they put their values into action. Clearly, culture plays a significant role in the education process.

Dimensions of Culture

A number of scholars have investigated the role culture plays in communication exchanges. The research of Hall (1976) and Hofstede (1980) is particularly relevant to our examination of culture in the classroom. Hall believed that individuals are faced with so many stimuli that they develop mechanisms for filtering

and making sense out of them. According to Hall, the context plays a significant role in the way the information is sifted and acted on. A communication context has physical, social, and psychological features. The physical feature is the actual setting for the interaction (e.g., classroom, principle's office, home). The social feature is the relationship among the participants (e.g., teacher/student, teacher/parent, teacher/teacher). Psychological features include the attitudes, sentiments, and motivations of the participants. Culture influences the degree to which communicators focus on these features.

Hall postulated a continuum with high-context messages on one end and low-context messages on the other. A high-context message has most of the relevant information in the physical setting or is internalized in the person. Much of the meaning in the message is implied. Japanese, Hmong, Koreans, Chinese, and Latinos are examples of high-context communities. Members of high-context groups have developed similar expectations about how to perceive and respond to a particular communication event. Consequently, explicit verbal messages are not necessary for understanding. Low-context groups require that the message include a great deal of explicit information. Uncertainty is reduced, and understandings are obtained through expressed verbal codes.

Most American classrooms are predicated on low-context exchanges. Teachers are expected to be clear, direct, explicit, and linear with their instructions and expectations. Students are expected to be clear, direct, and explicit with their answers. The further students depart from these communication conventions, the more at risk they become.

Teachers from low-context cultures may find managing communication with high-context students challenging and sometimes frustrating because high-context communication is indirect and circular. Consider the following example. A Hmong student wishing to discuss a personal problem with her teacher opened the conversation by asking how the writer was doing and what classes he was teaching the following semester. The student's voice sounded heavy, so the teacher, who understood the circuitous nature of high-context Hmong communication, asked her several times to share how she was. The exchange went as follows:

Student: "I guess I am a little depressed, but my best friend just got married."
Teacher: "Is this what is bothering you. Was the marriage arranged? Is the boy nice?"
Student: "No, he is nice, it's not that."

Concluding that the problem was not with the marriage, the teacher took a different direction:

Teacher: "Are you having difficulty in school?"

Student: "No, I am doing very well."

Teacher: "Your friend is doing well and school is going ok, but you still seem upset."

Student: "Well there is a boy I know that is running around with the wrong people, and I am worried about him."

At this point the teacher recognizes that the young woman's concern is how to get the young man out of a gang and back into school. This is never explicitly stated. The teacher also recognizes that the woman's social position provided several constraints. Because of his understanding of the Hmong community structure, the teacher made the following recommendation:

Teacher: "Would you feel comfortable sharing your concern with one of the clan elders?"

Student: "I can talk to one of the uncles."

Several days later, the boy's uncle and father met with him and instructed him to remain in school and stay away from the wrong crowd. This situation was resolved partially because of the teacher's understanding of Hmong social structure and communication patterns. Socially, most important problems and conflicts are resolved through clan elders who are always men. In communication, the issue is not explicitly stated. The student would not be respectful if she dealt with her problem before she acknowledged her interpersonal relationship with the teacher and obtained a feeling that her concern would be heard.

Hofstede (1980), another expert on intercultural communication, explained that individuals possess cognitive processes shaped by culture and expressed through the culture's dominant values. He identified four dominant patterns, and each has application to classroom exchanges.

The first dimension is *power distance*. This dimension is concerned with the way in which status differences are ascribed and negotiated. Some cultures believe that power should be distributed, whereas others hold that only a few people should possess power and authority. Euro-American students tend to believe that power should be distributed and everyone has an equal opportunity to possess it. Students from Latin and Southeast Asian cultures tend to believe that power should be held by a select few. As noted, clan elders possess a great deal of power in the Hmong community, and young women possess little.

A second dimension is *uncertainty avoidance*. This dimension is concerned with the ways in which a culture deals with change and unpredictability. Some cultures have little tolerance for circumstances that may threaten the culture's structure and hierarchy. Severe consequences follow for the individual who does not adhere to the culture's expectations. Individuals from cultures high on uncertainty avoidance have strict rules governing appropriate behavior, and

there are severe consequences for violating these rules. A young Laotian woman was kicked out of her house after breaking up with her Anglo boyfriend. In her mind (and the collective mind of her Laotian community), she had made a lifetime commitment to him; in his mind, they were only dating. The shame brought to her family could not be salvaged in the community.

A third dimension is *individualism–collectivism*. This dimension is concerned with the degree to which individuals commit to self or community. Competition, autonomy, privacy, personal opinion, and independence are core elements in individualistic societies. The United States is extremely high on this dimension. The school system, with its growing emphasis on grades and test scores, competition, and performance outcomes, strongly promotes individualistic values. Cultures subordinating the needs of the individual to the group are reflective of collectivist societies. Humility and sharing are core values in collectivistic cultures. Thus, bringing attention to the achievements of one individual can bring much stress. For example, it is inappropriate to single out the success of a Native American individual. Obligation is another core element in collectivist cultures. Some teachers have become frustrated with students who miss class because of family *business*. The teachers do not understand that, in some cultures, especially new immigrants from collectivist societies, family obligation transcends school and education.

The final dimension discussed by Hofstede is *masculinity–femininity*. This dimension concerns the degree to which the culture values assertiveness and achievement versus nurturance and social support. Some cultures judge others by their achievements and the manifestations of appropriate masculine behavior. In Mexico, for example, the male is the head of the household, is primarily responsible for the financial security of the family, and ultimately makes all important decisions. Women are expected to tend to home duties such as child-rearing and cooking.

The perspectives offered by Hall and Hofstede have great application for today's diverse classroom. Recall that culture shapes perceptions, values, and behaviors. The dominant perspective of America's classroom is low context and individualistic. Yet more and more students are from high-context, collectivistic cultural experiences. Seldom are these issues made clear to the students as they navigate the instructional system.

CULTURAL IDENTITY

The connection to a culture's values and dimensions is accomplished through the performance of cultural identity. Cultural identity denotes the ways individuals view themselves and the ways they wish to be viewed by others. Lustig and Koester (2000) noted that cultural identity involves learning about and accept-

ing the traditions, heritage, language, religion, ancestry, aesthetics, thinking patterns, and social structures of a culture.

According to Collier (1994), identities are co-created and negotiated through communication exchanges. A person may have different identities depending on the context. Students may have *home*, *playground*, and *classroom* identities. A student can be quiet and inattentive in the classroom and loud, boisterous, and aggressive in the school yard. Student identity plays a fundamental role in the groups they move toward and away from. Think about the ways students cluster and the way in which they navigate through the groups in which they participate. *Skaters*, *preps*, *jocks*, and *schoolboys* dress and talk in ways that support their identities.

Goffman's (1959) dramaturgical perspective is an excellent framework for viewing students' cultural identities. He claimed that whenever people participate in social interaction, they are engaged in a type of performance. Like actors in a play, they construct an image they want the audience to accept. Goffman (1959) stated that each person constructs a face and uses a line (way of talking) to support it. A successful performance, according to Goffman, requires the individual to look the part they are trying to play and talk in a way that supports the projected image. These performances are not always positive. For example, some students do not perceive that being a good student is cool so they slump in their desks, appear bored, and seldom participate in class discussion. These students construct a social performance that removes them from academic engagement.

In multicultural classrooms, a student may enact a performance that the teacher misunderstands or does not accept. Cupach and Imahori (1993) examined the way individuals from different cultural backgrounds manage the predicaments (a situation that is embarrassing or unpleasant) created by someone else. Although their research did not focus on instructional contexts, it has direct application to the topic discussed here.

The authors claimed that all individuals want to have their identities supported during social interaction. Receiving undue recognition, being criticized or corrected, having privacy violated, and being caused to look foolish are the types of situations causing individuals to lose face (Cupach & Metts, 1990, 1992). When individuals are confronted with these predicaments, they are compelled to invoke a strategy to save their face. Examples of the strategies individuals use to restore their identity are: apology (accepting blame and seeking forgiveness), excuse (minimizing responsibility), justification (downplaying harmful consequences), humor (joking or laughing), remediation (actively attempting to repair damage), avoiding (ignoring the transgression), escape (leaving the scene), and aggression (verbally or physically attacking).

Cupach and Imahori (1993) predicted that American and Japanese students would use different strategies to deal with face-threatening situations. The authors predicted that Americans would use humor, accounts, and aggression,

whereas Japanese would use apology and remediation. The results support the hypotheses. The authors concluded from the findings that Americans use strategies that support their own face, whereas Japanese use strategies to support others.

These findings have direct implications for classrooms. Teachers criticize students' dress, taste in music, and academic performance. Without meaning to, teachers may also threaten students' cultural identities. Shortly after the bombing of the World Trade Center, Muslim students and students who looked Middle Eastern were criticized, mocked, and challenged by teachers and students. Students create predicaments for teachers when they question grades, tell a teacher assignments are unclear, or challenge teachers' authority. The way in which these predicaments are managed can dramatically influence the climate of the classroom.

Reflection

- **What are some of the cultural labels you use?**
- **How do you feel about the students who perform these identities?**
- **How do you respond to face-threatening situations?**

Collier (1994) observed that cultural identities are expressed through core symbols, labels, and norms. Core symbols reference beliefs about the universe and people's positions in it. These symbols direct members of a cultural group to perceive the world in a particular way and behave in a way that is consistent with that definition. Core symbols for African Americans are authenticity, powerlessness, and expressiveness (Hecht, Collier, & Ribeau, 1993). Latino core symbols are obligation to family, respect, and faith.

Labels are important components of cultural identity. Students with ancestors from Mexico may at different times describe themselves as Mexican, Mexican American, Hispanic, Chicano, or Latino. Some students say they are African American, whereas others call themselves Black. White Hmong are different from Green Hmong, and an Afghan is different from an Iraqi.

Tanno (1997) discussed the different labels characterizing her cultural identity. Her formative years were spent in New Mexico, where she labeled herself Spanish. Tanno spoke Spanish and practiced some of the traditions introduced into New Mexico by the early Spanish settlers. When she moved from New Mexico, she was confronted with a different label. Outside of New Mexico the preferred label for her heritage was *Mexican American*. This label captured the duality of her heritage: the traditions of Mexico and dominant patterns of America. To be too Mexican was to reject the American in her. To reject the Mexican and become too American was to abandon her historical roots.

A third label found its way into her vocabulary. Whereas the label *Mexican American* captured a dual identity, the new label *Latina* captured her connectedness. The Spanish had captured vast territories and merged with indigenous

peoples from Cuba, Mexico, and South America. Language, religion, and numerous daily practices were common among a vast group of people. For Tanno, to be *Latina* was to belong to a broad cultural community.

The final label that Tanno discussed is Chicana. This label is unique because it was created by an ethnic group to describe an ethnic group. With this label came a political consciousness. The label *Chicana* recognizes the marginalization that Americans of Latin descent have experienced and the desire to reconstruct these structures through political action.

Tanno concluded her essay by arguing that each label represents a part of her identity. She noted that all individuals take on multiple roles and believed we should be respectful of this complexity. Teachers might also be mothers, fathers, husbands, wives, uncles, Little League coaches, and Big Sisters. Students may be sons, daughters, soccer players, and goddaughters. Further, these labels are not static, but fluid. Individuals may use different labels to define themselves at different times.

Sometimes teachers inappropriately label students or use a label that students do not prefer or perceive to be insulting or embarrassing. Students from Cambodia are often confused with students from China. It is important for teachers to recognize that the way in which they respond to these labels may indicate acceptance or rejection of the student. Although labels may seem helpful, they can be problematic. Every African-American student does not have the same attitudes, possess the same skills, or have the same interests.

Group norms also play an important role in cultural identity (Collier, 1994). Norms are the standards for competent participation in a community. There are norms for the way individuals are supposed to talk. To competently perform a cultural identity is to use language in a way that sustains and projects that identity (Ogbu, 1999). For example, a great deal of attention has been given to an African-American communication style sometimes called *Ebonics*. Although it is beyond the scope of this text to describe the roots of this language structure, it is important to note that it is not an inferior linguistic form. African-American identity, however, is intimately related to language style.

Hecht, Collier, and Ribeau (1993) outlined several structural features of African-American speech styles:

1. Shorting the third-person present tense by dropping the *s*: "He walk," "She go," "He talk."
2. Use of the verb *to be* to indicate continuous action: "He be gone" for "He is gone frequently/all the time."
3. Deletion of the verb *to be* in the present indicative: "He tired" for "He is tired."
4. Use of *been* to express a meaning of past activity with relevance: "I been know your name."

5. Use of a stressed *been* to emphasize the duration of something: "He been married" for "He has been married for a long time (and still is)."
6. Use of *done* or *be done* to emphasize an action that has been completed: "She done finished the book," "We be done washed all those cars soon."
7. Use of double and triple negatives: "Won't nobody do nothing about that," "He ain't got no money."
8. Simplification of consonants at the ends of words: "door" becomes "do."
9. The final *ng* sound drops the *g*: "talking" becomes "talkin."
10. The final *th* is sometimes replaced with *f*: "with" becomes "wif."
11. Substitution of the *x* sound for the *s* sound: "ask" becomes "axe."

In addition to the structure of speech, the African-American lexicon is dynamic and expressive. Words and phrases are constantly being developed to characterize and represent African-American experience. Something that is positive is *phat* or *bad*. Someone who is smooth and popular with girls *has game*.

African-American students who only engage in standardized speech patterns may receive negative sanctions and comments from members of their peer group and the community. Thus, African-American students and others who are bicultural must struggle with two or more identities. One identity is shaped and sustained by the home community and the other by the school.

Students reared in dominant Western society, where core symbols of individuality and self-expression are emphasized, do not hesitate to ask questions or challenge a teacher. For these students, knowledge is negotiated. Students from traditional Asian homes have a much different orientation. Their task is to absorb the information provided by the teacher. For Asians, a student's reflections or opinions are perceived to have little value, and to challenge a teacher is inappropriate.

In the previous section, we attempted to describe the role that cultural identity plays in the classroom. Students manage multiple identities through their styles of dress, ways of talking, and norms of behavior. Some of these identities are positively received and others are rejected. However, all impact the way interaction unfolds in the classroom.

CULTURE AND LEARNING

The relationship between student culture and preferences for learning has been discussed frequently, but teachers have not been particularly effective in incorporating culture into classroom practice. Kuykendall (1992) suggested that students who find their culture and learning styles reflected in instruction are more likely to be motivated and less likely to be disruptive. Therefore, it is important

to understand how culture influences learning and how to integrate this knowledge into the classroom.

Learning style is concerned with the characteristic ways of processing instructional information. Researchers generally agree that culture plays a role in preferences for learning (Guild, 1994; Wlodkowski & Ginsberg, 1995). Observational research suggests that Mexican-American students are more comfortable with broad concepts than with isolated facts (Cox & Ramirez, 1981). African-American students prefer tactile, hands-on learning and Native Americans relate well to instructional tasks requiring skills in visual discrimination and the use of imagery (Shade, 1989). Mainstream White students value independence, analytical thinking, and objectivity.

There are cultural differences in pencil-and-paper measures of learning styles. Researchers using assessments to develop style profiles for particular groups noted differences in field-dependent and field-independent learning (Gollnick & Chin, 1994). Field-dependent learners process information holistically, are more concerned with the social context, and are more intuitive. Field-independent learners process information sequentially, do not consider the social situation important, and are rational. Mainstream White students tend to be field independent, whereas students from minority groups tend to be field dependent.

It is important to note, however, that there is not a straightforward relationship between culture and learning style. As Guild (1994) noted, there are as many variations within a group as there are commonalities. Moreover, many conceptualizations on learning style are bipolar. One end is represented by analytic processes, whereas the other end is represented by holistic ones.

For many years, educators acknowledged the relationship between culture and orientations to learning, but few offered concrete recommendations on how a teacher can integrate culture into classroom practice. Claxton (1990) provided a framework that serves the interests of minority and nonminority students. He argued that, "Recognizing the need to teach minority students well . . . must also involve teaching white students more effectively" (p. 35). Claxton's framework is built on two approaches to learning. One he called *separate knowing*; it entails the separation of the object of inquiry and the knower. Ideas, facts, and information are isolated from the larger contexts in which they are found. The second approach is *connected knowing*. This implies a relationship with the thing being studied. The closer the relationship, the deeper the knowledge.

Claxton advocated developing teaching strategies that integrate the two ways of knowing. The model he developed is called the *connected teaching model* and consists of four central features. The central metaphor of the connected learning model is teacher as midwife rather than teacher as banker. Bankers, according to Claxton, deposit knowledge, whereas midwives help students draw it out. The role of the teacher is to help students build on what they know and connect to what they do not know.

The second feature of connected teaching is a focus on problem posing. Traditional teaching focuses on imparting information through lecture or print. Connecting teaching requires students to solve significant and relevant problems. When learning is relevant, students become engaged. Delpit's (1995) work on writing resonates with Claxton's position. She stated, "Actual writing for real audiences and real purposes is a vital element in helping students to understand that they have an important voice in their own learning processes" (p. 33).

The third feature of connected teaching is the insistence that dialogue is not one-way communication. This idea reinforces the points made by Sprague in chapter 1. Knowledge is not located in the teacher and transmitted to the student; it comes through the interaction between and among learners. In this view, learning is emergent and negotiated between and among participants.

The fourth feature of connected teaching is disciplined subjectivity. In traditional teaching, students are held accountable for the knowledge presented by the teacher. The instructor is the center, and students are expected to report what the teacher wants. In connected teaching, the emphasis is on the student. Teachers attempt to view content from where the students stand.

The final feature of connected teaching is fostering collaboration and community rather than competition and individualism. Students do not compete for grades, but create a community where knowledge is discovered. Cleary and Peacock (1998) reported that such cooperative environments are particularly useful for Native American students. Similar findings have been identified with other cultural groups.

Gay (2000) argued that eight key dimensions undergird multicultural instructional practice:

- Procedural—the preferred ways to approach and work through learning tasks. These include pacing rates; distribution of time; variety versus similarity; novelty or predictability; passivity or activity; task directed or sociality; structured order or freedom; and preference for direct teaching or inquiry and discovery learning.
- Communicative—how thoughts are organized, sequenced, and conveyed in spoken and written forms, whether as elaborated narrative storytelling or precise responses to explicit questions; as topic-specific or topic-chaining discourse techniques; as passionate advocacy of ideas or dispassionate recorders and reporters; whether the purpose is to achieve descriptive and factual accuracy or capture persuasive power and convey literary aestheticism.
- Substantive—preferred content, such as descriptive details or general patterns, concepts and principles or factual information, statistics or personal and social scenarios; preferred subjects, such as math, science, social stud-

ies, fine or language arts; technical interpretive and evaluative tasks; preferred intellectualizing tasks, such as memorizing, describing, analyzing, classifying, or criticizing.

- Environmental—preferred physical, social, and interpersonal settings for learning, including sound or silence; room lighting and temperature; presence or absence of others; ambiance of struggle or playfulness, fun and joy, or pain and somberness.
- Organizational—preferred structural arrangements for work and study space, including the amount of personal space; the fullness or emptiness of learning space; rigidity or flexibility in use of claims made to space; carefully organized or cluttered learning resources and space locations; individually claimed or group-shared space; rigidity or flexibility of habitation of space.
- Perceptual—preferred sensory stimulation for receiving, processing, and transmitting information, including visual, tactile, auditory, kinetic, oral, or multiple sensory modalities.
- Relational—preferred interpersonal and social interaction modes in learning situations, including formality or informality, individual competition or group cooperation, independence or interdependence, peer–peer or child–adult, authoritarian or egalitarian, internal or external locus of control, conquest or community.
- Motivational—preferred incentives or stimulations that evoke learning including individual accomplishment or group well-being, competition or cooperation, conquest or harmony, expediency or propriety, image or integrity. (pp. 151–152)

According to Gay (2000), some ethnic group members display *purer* learning style characteristics than others. The degree of purity is determined by group identification, gender, social class, and level of education. African-American students with a high degree of ethnic identification may relate best to instruction based on group activities in procedural, motivational, relational, and substantive dimensions of learning. Traditional Japanese or Chinese students might be bistylistic; because of their collectivistic cultural values, they may respond well to activities requiring group problem solving. These students may also perform well on mechanistic, technical, and atomistic learning tasks.

CULTURALLY RESPONSIVE TEACHING

We believe that the key to managing cultural diversity is to develop intercultural competence. Although it may be argued that this entire text is about culturally responsive teaching, the next section focuses on ways to accomplish

discussion of this topic. Wlodkowski and Ginsberg (1995) offered the following definition of *culturally responsive teaching*:

> . . . teaching that is culturally responsive occurs when there is equal respect for the backgrounds and contemporary circumstances of all learners, regardless of individual status and power, and when there is a design of learning processes that embraces the range of needs, interests, and orientations to be found among them. (p. 17)

Gay (2000) outlined the core characteristics of culturally responsive teaching. First, culturally responsive teaching is validating. It draws on the cultural knowledge, traditions, and styles of diverse students, extending and affirming their strengths and competencies. Among its other features, culturally responsive teaching incorporates multicultural information into the instruction of all subjects and uses a variety of instructional strategies.

Second, culturally response teaching is comprehensive. Teachers use cultural referents to impart knowledge. This requires teachers to be willing to learn about the cultural backgrounds, traditions, and histories of the students represented in the classroom. In addition, teachers must make efforts to enhance connections to the community, maintain cultural identity, and instill attitudes of success and commitment. Responsibility and commitment to self and others are encouraged. They are expected to internalize the value that learning is a communal, reciprocal, interdependent affair and manifest it habitually in their expressive behaviors (Gay, 2000, p. 30).

Third, culturally responsive teaching is multidimensional. Any topic or issue can be approached from multiple perspectives. Gay described ways that teachers could collaborate to teach the concept of protest. Students could be encouraged to discover the ways different groups symbolize their issues and concerns. By examining literature, poetry, music, art, interviews, and historical records, students could learn about what gives rise to protest and how it is exhibited. Assessments should also be multidimensional. In this framework, the teacher does not use one standardized assessment, but uses multiple assessments. Gardner (1984) and his seminal work on multiple intelligence is applicable to culturally responsive teaching.

Fourth, culturally responsive teaching is empowering. Teachers who successfully implement culturally responsive teaching expect all students to succeed and develop structures that increase the probability of student success. Success is accomplished by "boostering students' morale, providing resources and personal assistance, developing an ethos of achievement, and celebrating individual and collective accomplishments" (p. 32). Culturally responsive teaching shifts the emphasis from external to internal forces, thus engaging students in the learning process.

Fifth, culturally responsive teaching is transformative. Instructional practices build on students' strengths and extend them further in the learning processes. According to Gay, success is perceived to be a non-negotiable mandate for all students. Students are encouraged to give back to their respective communities and participate fully in the national society. Education is transformative when students come to understand the structures and processes related to discrimination and prejudice and when they develop skills to combat them.

Finally, culturally responsive teaching is emancipatory. Students are given the freedom to move beyond the traditional canons of knowledge and explore alternative perspectives and ways of knowing. Within this perspective, students challenge, question, and come to understand that no truth is total and permanent. According to Gay (2000), "These learning engagements encourage and enable students to find their own voices, to contextualize issues in multiple cultural perspectives, to engage in more ways of knowing and thinking, and to become more active participants in shaping their own learning" (p. 35). For example, consider the various ways that a lesson on the *discovery* of America could be taught. Loewen (1996) thoughtfully outlined what is omitted from most textbooks about the circumstances, events, and tragedies involving Columbus' voyages. Allowing students to explore and examine alternative stories may help them find connections that are not possible with dominant interpretations.

Reyes, Scribner, and Scribner (1999) showed that culturally sensitive teaching has tremendous payoffs. These authors studied eight high-performing Hispanic schools located in lower socioeconomic communities along the border of Texas and Mexico. One of the most significant findings was that the eight schools studied had a strong commitment to culturally responsive teaching. The authors reported: "Perhaps the most powerful finding pertaining to the classroom learning was the incorporation of the students' interests and experiences, the 'funds of knowledge' they bring with them into the learning situation, whether it be reading, writing, mathematics, or other subjects" (p. 14). Teachers built on the cultural values of the students and made the classroom a culturally inviting place.

Gay (2002) made specific recommendations on ways to accomplish culturally responsive teaching. She contended that culturally responsive teaching has four primary features. First, the teacher develops a cultural knowledge base. Developing this database requires teachers to understand the cultural characteristics and contributions of different cultural groups. Cultivating a cultural database on the specific contributions of specific cultural groups helps the teacher establish a context for learning. She stated that culturally sensitive teaching deals as much with multicultural strategies as it does with adding specific content into lessons. Weaving this knowledge into instructional practice helps the teacher make the connections necessary for learning.

The second feature involves converting cultural knowledge into relevant curricula. According to Gay, three types of curricula are present in the class-

room. The formal curriculum entails the standards approved by state policy boards. Gay recommended that teachers carefully assess the strengths and weaknesses of this curriculum and make the necessary changes to improve overall quality. The second type of curriculum Gay identified is the symbolic curriculum. This involves the images, symbols, and awards that are used to promote learning and values. Images displayed on bulletin boards, pictures of heroes, and statements about social etiquette are examples of this type of curriculum. Teachers need to ensure that these displays are representative and accurate extensions of what is taught in the formal curriculum. The final type of curriculum is societal. This curriculum involves the knowledge images about cultural groups that are reflected in the mass media. Culturally responsive teachers ask students to question and challenge the representations that appear on TV and in news.

The third feature of culturally responsive teaching is demonstrating cultural caring. To accomplish this, teachers need to build on the experiences of the students and broaden their intellectual horizons. Understanding the communication styles and knowing how to connect them to learning goals is a crucial feature of culturally responsive teaching. Thus, teachers must have ". . . knowledge about the linguistic structures of various ethnic communication styles as well as contextual factors, cultural nuances, discourse features, logic, rhythm, delivery, vocabulary usage, role relationships of speakers and listeners, intonation, gestures, and body movements" (Gay, 2002, p. 111). Culturally responsive teachers must also understand different "protocols of participation in discourse" and different ways that groups engage in task. The IRE pattern discussed in chapter 2 is dominant in mainstream classes. Students from groups of color, however, are more active, participative, and circular in their interaction patterns. Serious classroom management problems can unfold when teachers do not understand these communication differences. Wlodkowski and Ginsberg (1995) observed that, "Probably the area where the dominant perspective in education is in greatest conflict with other behavioral styles is that of language and dialect" (pp. 146–147). Therefore, it is crucial that teachers increase their communication competency in intercultural exchanges.

The fourth feature of culturally responsive teaching concerns the actual delivery of instruction. Gay argued that teachers need to *multiculturalize* instructional practice. This final feature involves the strategies teachers use to bring the material to life. Cooperative learning strategies follow from a knowledge that some ethnic groups prefer tasks that allow them to work with others. Knowing that some groups do not communicate in a linear analytic fashion allows the teacher to use narrative as a way to present material. Finding ways to integrate diversity into the high-status academic areas (i.e., math, reading, and science) is an excellent way to show a commitment to the worldviews of students.

The recommendations advanced by Gay (2000, 2002) can help teachers understand the role of student culture and preferences for learning and what

teachers can do. However, this goal is difficult to achieve. Teachers, administrators, school boards, and some parents may not support this type of approach. One school board in rural California would not allow students to do projects on Cesar Chavez, although 90% of the students were Latin. Some teachers fight against the goals of these perspectives, and school boards may criticize these types of strategies. Even with this information, however, some teachers will favor students whose behavioral and learning styles match their own. When there are language distinctions between teachers and students, teachers may use their own language as an evaluative lens for judging students' abilities. A student who uses nonstandard speech may be perceived as less intelligent and less competent. The notion that students with nonstandard English patterns are considered less competent has been documented in research (e.g., Powell & Avila, 1986).

In addition to speech pattern and accent, a teacher may respond negatively to other stylistic features of a student's communication. Latin students may use metaphor and other ornamental forms of speech. These forms depart from linear, reductionistic features of individualistic cultures. Teachers may consider the comments unclear or inappropriate.

Reflection

- **Design a lesson plan that is culturally responsive.**
- **How do teachers signal their lack of understanding of culture?**

CULTURAL ALIGNMENT

We take the position that everyone is cultural, yet teachers, especially those whose ancestors are from Europe, have difficulty understanding their cultural presuppositions. As a consequence, they may not reflect on the ways in which culture influences their attitudes, behaviors, and beliefs. Orbe and Harris (2001) suggested that Whiteness signals dominance, normalcy, and privilege. Yet many Whites do not accept these descriptions as portraying their lived experience. McAllister and Irvine (2000) argued that, to be effective, teachers must critically examine their worldviews and confront their personal biases. Kumashiro (2000) contended that educators can easily oppress students of color or students from other marginalized groups when those students are seen as the other. Teachers take important steps toward inclusion when they examine their own worldviews. Because the overwhelming majority of teachers are White, we wish to conclude this chapter by exploring *Whiteness* as a cultural construct.

In her book *White Teacher*, Paley (1989) examined the challenges of societal values reflected in today's classrooms through an examination of her own

prejudices as a White teacher. In her work with African-American children, she stated:

> The black child is Every Child. There is no activity useful only for the black child. There is no manner of speaking or unique approach or special environment required only for black children. There are only certain words and actions that cause all of us to cover up and there are other words and actions that help us reveal ourselves to one another. The challenge in teaching is to find a way of communicating to each child the idea that his or her special quality is understood, is valued, and can be talked about. It is not easy, because we are influenced by the fears and prejudices, apprehensions, and expectations, which have become a carefully hidden part of every one of us. (p. xv)

Before beginning the discussion, answer the questions posed by Manning and Baruth (2000).

Ask yourself these questions:

1. Are my opinions of parents and families based on myths and stereotypes or on accurate and objective perceptions?
2. Have my experiences included positive firsthand contact with people from culturally different backgrounds?
3. What means have I employed to learn about the customs, traditions, values, and beliefs of all people?
4. Do I understand the extended-family concept or do I only think "too many people live in the same house because of poverty conditions"?
5. Am I prejudiced, or do I have genuine feelings of acceptance for all people regardless of culture, ethnicity, race, and socioeconomic background?
6. Do I hold the perceptions that Native Americans are alcoholics, that African-American families are headed by single females, that Asian Americans are the model minority and have achieved what represents the American Dream, or that Hispanic Americans have large families and live on welfare?
7. Can I perceive that aunts, uncles, and grandparents are as important as more immediate family members (i.e., the mother and father)?
8. Do I understand the rich cultural backgrounds of families, and am I willing to base educational experiences on this diversity?
9. Do I know appropriate sources of information to learn more about parents and families from culturally diverse backgrounds?
10. Do I have the motivation, skills, and attitudes to develop close interrelationships with parents and families from culturally different backgrounds? (p. 284)

Some of these questions are difficult to answer. Few of the White individuals we know openly state that they have privilege and opportunity because of their ethnicity. Yet as Howard (2000), a White, multieducational scholar, noted:

> White Americans are caught in a classic state of cognitive dissonance. Our collective security and position of economic and political dominance have been fueled in large measure by the exploitation of other people. The physical and cultural genocide perpetrated against American Indians, the enslavement of African peoples, the exploitation of Mexicans and Asians as sources of cheap labor—on such acts of inhumanity rests the success of the European enterprise in America. (p. 326)

Howard (2000) further contended that daily survival for people of color is related to their knowledge of White America. Yet the survival of White Americans has not depended on an understanding of the structures, institutions, and language of minority groups. One area where this disparity is most obvious is in the area of education. We believe that all teachers should examine their cultural assumptions and consider ways these assumptions may influence their teaching.

McAllister and Irvine (2000) reviewed three process models used to explain the transitions from culturally ethnocentric to culturally sensitive orientations: Helms' (1990) Racial Identity Model, Banks' (1994) Typology of Ethnic Identity, and Bennett's (1993) Developmental Model of Intercultural Sensitivity. Each model focuses on a different feature of cultural identity and awareness, but each suggests that individuals progress through different stages of awareness and differentiation. In the early stages, individuals have limited and naive orientations about culture. For example, White teachers are not inclined to view themselves as cultural or see how their Whiteness influences their orientation to the world in general or the classroom in particular. In later stages, there is an understanding of cultural norms, expectations, and actions. In these stages, individuals are able to take the perspective of individuals from different cultural orientations and make context-appropriate adaptations.

After reviewing the studies conducted on these models, McCallister and Irvine (2000) concluded that the results offer important challenges for those involved in teacher education programs. The first challenge is realizing that individuals are at different places in their level of cultural awareness and understanding. For some cultural sensitivity is simply an unnecessary waste of time, whereas for others it is vital to effective pedagogy. The process models reviewed provide a framework for understanding where teachers stand on intercultural issues including resistance and denial.

Second, teacher training programs should be sensitive to the stages individuals experience as they struggle with cultural issues. Teacher training programs cannot assume that after one class or one workshop teachers are going to leap into cultural sensitivity. Teachers entrenched in the early stages will need to move incrementally. In addition, individuals must come to understand their own culture before they can begin to understand someone else's. In one professor's class, students are required to give microlessons on cultural artifacts. White students typically have the most difficulty with this assignment because

they do not see themselves as cultural. After a discussion of core symbols and cultural orientation, they discover that their world is full of cultural artifacts and symbols. After the lesson, they learn of great connections between themselves and those presumed to be culturally different.

Finally, perhaps the most difficult challenge is that teacher education programs need to invite honest conversations about race, racism, privilege, marginalization, and oppression. Frequently these topics invoke hostility, anger, guilt, and confusion. Although difficult, these conversations are necessary if we are going to help teachers face the complexity of today's diverse classroom. A teacher's sentiment about race, culture, and ethnicity is revealed in both subtle and explicit ways. Teachers' affective posture, the way they teach the facts of history, how they ask questions, how they discipline, who they call on, and who they talk to outside of class say much about how they view culture and cultural issues. Once teachers acknowledge the role of culture in the instructional process, they are in a better position to meet the needs of all the students in their classrooms.

The goal then for all teachers is to strive for culturally responsive teaching. Our teacher, Ms. Young, should start her journey by increasing her knowledge and understanding the cultural backgrounds of the students enrolled in her classes. Yet it is not enough to understand the cultures, but to exhibit a genuine respect and interest in them. According to the research, students who feel respected and understood are more likely to connect with the teacher and classroom experiences. Ms. Young also needs to examine her own cultural presuppositions and attitudes. In understanding the way in which culture shapes her orientations, she will be in a better position to understand her students. The end result is a better learning situation for everyone.

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FOUR

Gender and Classroom Communication

Leticia and Danny, two sixth graders, have just returned from school and are greeted at the kitchen door by their dad, Antonio, who asks, "How was school today?" "Good," says Danny as he opens the refrigerator door and forages through each shelf for something to eat. Leticia silently goes to her bedroom and takes out her calendar to check her homework. Antonio notices that Leticia seems bothered by something and follows her to the bedroom and asks her if everything is okay. She sits on her bed and says that everything is fine. Danny bounces down the hallway and asks his dad when soccer practice is. "Don't interrupt, I'm talking to your sister," Antonio barks. Once more Antonio asks his daughter, "Are you sure everything is okay, mi hija?" Danny hangs back in the hallway when Leticia opens up and says, "I don't get it, Mr. Hayes never calls on me in class. I work hard and know the answers, but every time I hold up my hand he ignores me and calls on Danny or one of the other guys in the class. Today he told me I was showing up the boys for doing so well in math. I don't think he likes me."

The events that Leticia describes and her feelings about them happen every day in America's classrooms. Research indicates that males and females are treated quite differently in educational settings (Condravy, Skirboll, & Taylor, 1998; Hall & Sandler, 1982; Murphy & Gipps, 1996; Nadler & Nadler, 1990; Sadker & Sadker, 1994; Wood, 2001). Summarizing a number of studies on the treatment of women, The American Association of University Women concluded that in comparison with males, females receive less attention, less praise, less effective feedback, and less detailed instruction from teachers (AAUW, 1991). This evidence suggests that educational goals are compromised when females' contributions are minimized and males' contributions are exaggerated. The problem is exacerbated by the fact that teachers are not adequately prepared to deal with gender issues in the classroom. Schools of education only

dedicate 2 hours of instruction per semester to gender issues (AAUW, 1999). We agree with Wood (2001), who argued that teachers need to do all they can to understand the way in which gender dynamics influence student and teacher behavior. In this chapter, we examine the ways that gender impacts the instructional process. Specifically, we examine the developmental and sociocultural factors that impact attitudes and behavior, intellectual differences between males and females, and the ways that males and females are treated by teachers. We conclude the chapter by exploring ways to create and sustain a more gender-responsive classroom climate.

SEX AND GENDER

Teachers often use sex and gender interchangeably. Sex, however, is a biological designation, whereas gender is a social psychological one. Boys are not made of frogs and snails and puppy dog tails, but an XY chromosome pair, and girls are not made of sugar and spice and everything nice, but an XX chromosome pair. Although there is contemporary sentiment that "boys will be boys" and "girls will be girls," biology alone does not determine behavior. According to Wood (2001), it is the way we deal with differences that is most important to understand. The sentiments, expectations, attitudes, and behaviors are connected to but not directed by biological sex. However, there are deeply rooted cultural expectations about male and female behavior, and schools are a place where these attitudes are reinforced. As a consequence, the interaction that occurs in schools can perpetuate and reinforce gender stereotypes to the detriment of students' intellectual and emotional development.

Gender

Gender is a social and symbolic construction. Individuals are born male or female, but are taught how to be masculine and feminine (Wood, 2001). Ivy and Backlund (2000) argued that the family is the most significant agent of gender socialization. Parents, siblings, and relatives send explicit and implicit messages about what it means to be male and female in the larger culture. In the United States, for example, masculinity is frequently connected with strength, ambition, rationality, and assertiveness. In contrast, femininity is usually associated with physical attraction, emotionality, and cooperation. Little boys are encouraged to roughhouse, be aggressive, and explore their surroundings. Little girls are encouraged to be cheerful, gentle, and cooperative. Research suggests that these expectations begin the day of birth and continue as they mature (e.g., Block, 1984; Rubin, Provensano, & Luria, 1974; Stern & Karracker, 1989).

The attitudes and expectations established in the family carry into the school setting. Messages about gender are communicated in a number of ways. A *tom-*

boy is criticized for acting too masculine, and a boy who likes to play with dolls is teased and called a *sissy*. A teacher's attitude about gender influences the way he or she manages a classroom and affects his or her expectations about student ability. Finally, the curriculum, the texts students read, and the assignments they do contain messages about gender.

In the attempt to maximize the talents, ambitions, and interests of all students, it is helpful to understand the way in which the gendering process unfolds in the schools. In the next section, we examine the forces that influence attitudes about appropriate male and female behavior.

Reflection

- **What does it mean to be male in our culture?**
- **What does it mean to be female in our culture?**

Females

Females struggle with a number of factors that influence classroom attitudes and performance. Females are bombarded with a multitude of contradictory messages about what it means to be female. These messages come from the media, family members, peers, and schools. Research from the American Association of University Women indicates that 8- to 9-year-old females are comfortable and confident with their identities, but their attitudes decline until they leave high school. The largest drop occurs between elementary and middle school (AAUW, 1991). In middle school, many females begin to lose interest in intellectual ideas and increase their interest on relationships and romance (Bate, 1992). At this stage, one of the biggest factors influencing girls' self-esteem is how they look. According to Wood (2001), females who feel they do not meet the cultural standard of attractiveness also believe they are less competent and capable in other areas.

Pipher (1994), author of *Reviving Ophilia: Saving the Selves of Adolescent Girls*, wrote that young girls feel an enormous pressure to be beautiful and are keenly aware of the evaluations about their appearance. Young women perceive that their popularity is connected to physical beauty. The media is powerful in communicating the social significance of attraction. As a consequence, young girls spend a tremendous amount of time focusing on their looks. Pipher (1994) observed,

> Beauty is the defining characteristic for American women. It's the necessary and often sufficient condition for social success. It is important for women of all ages, but the pressure to be beautiful is most intense in early adolescence. Girls worry about their clothes, makeup, skin, and hair. But most of all they worry about their weight. (p. 183)

Because of the pressure to be thin and attractive, many females, especially Euro-Americans, start to develop eating disorders in middle school. Females predisposed to eating disorders embody popular culture's definition of femininity—they are thin, passive, attractive, and eager to please. Although these students may be bright, their identities seem to be wrapped more in their looks than in their intellect. Schools, teachers, and peers may reinforce this cultural value. Teachers too often comment on how pretty a young girl is and not enough on the quality of her thinking (Sadker & Sadker, 1994).

The preoccupation with looks and the larger culture's ideal about women manifest themselves in peer group relations as well. Girls who wear the *wrong* clothes, who do too well in school, who are too large, or who are too athletic may be severely criticized by other girls. Because aggressive behavior is considered unacceptable for females, they learn to develop verbal competencies that serve to chastise, evaluate, and dissect others. Think about the conflicts that have occurred among adolescent girls. What were the topics and who were the targets of the conflict? Over time these verbal abilities become more refined and sophisticated.

Martin (1989) observed that peer groups are more accepting of individuals who adhere to gender stereotypes. However, peers seem to be more accepting of females who engage in masculine behaviors than males who engage in feminine ones. Girls who play sports and roughhouse are perceived more positively than boys who want to play with dolls.

Peer groups also play an important role in the way values are tested. Young females use communication to test the boundaries of appropriate behavior. "Girl talk," for example, plays a role in the construction of normative behavior. Discussions that focus on the behavior, dress, or activities of other girls help shape boundaries and expectations. Consider the following example of the way values are tested in peer communication exchanges. Three middle-school females—Elizabeth, Natalie, and Julie—are discussing Natalie's interest in Tony. The competition for Tony's affection is Monica, a girl outside of the clique described before. During their discussion, Elizabeth calls Monica a *hoochie mama*—a label used to describe someone who is overly sexual and violates the normative expectation for dress and behavior. The girls conclude the session by noting that if Natalie must *stoop* to Monica's level, Tony is not worth having as a boyfriend. This discussion reveals the group's values and expectations of behavior. Through this interaction, the girls establish how far one should go to pursue a boy. Eder and Sanford (1986) stated that gossip, teasing, and humor are other ways to communicate unacceptable behavior without direct confrontation.

The larger society places substantial pressure on females to embrace certain values. They should be physically attractive, feminine, and passive especially in public contexts. In addition, females are discouraged from maximizing their intellectual abilities.

Males

The school setting also influences the gender identity of males. Research indicates that boys account for the majority of behavior problems in schools and represent a large proportion of students in special education classes. Educational difficulties with boys start in elementary school and continue through high school. Expectations about appropriate male behavior are also shaped by the media, families, peers, and schools.

Pollack (1998), author of *Real Boys: Rescuing Our Sons from the Myths of Boyhood*, addressed many of the factors that place boys at risk. At the core of boy's development is the *boy code*—a masculine ethic directing feelings and emotions inward. Boys are encouraged to wear a mask that hides or obscures any difficulty or problem. Boys are quick to state that everything is fine when it is not.

Young boys may be expressive at birth, but by the time they reach elementary school begin to hide their feelings as their gender identity starts to take shape. Pollack (1998) identified two contributors to the gender identity of boys. The first is the use of shame. Little boys are made to feel ashamed of feelings, weakness, vulnerability, anxiety, or fear. The second is the separation processes that society places on boys. Boys are encouraged to separate from their primary caregivers before they are emotionally ready.

The use of shame to control boys is significant according to Pollack (1998). The pressure to *act* like a man comes from many directions. The media idealizes men who are strong, aloof, and detached. Peers refer to each other as *woman*, *sissy*, *faggot*, or *mama's boy* if emotions are not held in check. Parents communicate concern if a young boy does not act masculine enough. Teachers are not tolerant of boys who play too much with girls or have a communication style or interests that seem feminine.

The second contributor discussed by Pollack (1998) is the premature separation from the primary caregiver. In most cases, this is the mother, but it can be father, grandmother, aunt, or some other significant person. The 5-year-old boy who wails after being dropped off at kindergarten is often told to be "a big boy, so stop crying." The boy who falls off a swing is not held and comforted, but told to "be tough."

Some research suggests that the different emotional struggles that young boys face influence their orientations to learning situations. Hudson and Jacot (1991) suggested that boys must learn to compensate in some way if they are taken from a primary caregiver before they are emotionally ready. Because of their limited social skills, they are drawn to material objects not requiring the management of relationships. Interest in science, computers, and math may be related to these social processes.

Pollack (1998) argued that in elementary school teachers see little boys for the feeling, vulnerable beings they are. As they grow older, the emotional core of the boy is lost in a body that appears masculine. Their vulnerability is hidden

in faces with growing facial hair, voices that grow deeper, and bodies that sometimes tower over the teacher. In addition, teachers may not understand the boy code or be sensitive to a range of messages that inform a boy to be tough, aggressive, and strong. Teachers may in fact reinforce the very behaviors they are critical of in other contexts.

SEX AND LEARNING STYLE

A number of studies have investigated the way in which males and females approach learning tasks. Head (1996) argued that males and females can be differentiated on four categories of cognitive style. The first is field independence and field dependence. Field-independent learners approach the environment in an analytic fashion. Responses to assessments such as the Group Embeddedness test show that males more than females are inclined to extract figures from the backgrounds in which they are embedded. Field-dependent learners consider the larger context and approach learning tasks from a more connected standpoint.

A second category discussed by Head (1996) is impulsiveness and reflection. Males have been found to be more impulsive, whereas females exhibit care and deliberation. For example, it is not uncommon for boys to race through multiple-choice items or blurt out answers without carefully evaluating the question. Head argued that the consequences for an incorrect response are not as high for boys. Think about student responses to questions in the classroom. The research indicates that males are called on more than females, but this pattern may unfold because males may leap into the interaction and capture the teacher's attention. Females may think more about the question because they want to answer it correctly. This pattern of male dominance may create an implicit assumption that males' voices should be heard and females' voices should be quiet. Wood (2001) argued that classrooms are masculine speech communities that reward students who compete and speak in absolute terms.

The third category discussed by Head (1996) is locus of control. Males tend to attribute academic success to their own efforts and failures to external factors. Females exhibit a different response. Success is attributed to luck and failures to internal factors. When individuals feel they have the skills necessary to complete a task, they put forward the effort to accomplish it. However, if an individual does not feel they can achieve a task, they do not put forth the necessary effort. This pattern can lead to what Dweck (1986) labeled *learned helplessness*. Hence, teachers need to develop teaching strategies that require females to take personal responsibility for success and thus build internal locus of control.

The final category discussed by Head (1996) is cooperation versus competition. Much educational philosophy is driven by a competitive system of external rewards. Competition is believed to motivate students to achieve. How-

ever, this system may work better for boys who are socialized through athletics and other activities to be aggressive, assertive, and dominant. Females, in contrast, may work better on tasks that require cooperation and the management of relationships. We explore the benefits of cooperative learning in chapter 6. The point we stress here is that there is not one way to move students toward a learning goal. A competitive classroom may both motivate and intimidate students.

Other researchers have examined differences between males and females. Belinky et al. (1986), for example, investigated the ways females come to know. The authors contended that traditional educational curriculum is predicted on a masculine way of knowing, whereas rationality and objectivity are valued over intuitive and personal knowledge. After interviewing 135 women, the authors identified four ways of knowing: silence, received knowledge, subjective knowledge, and constructed knowledge. These orientations or styles depart from the rational orientation that appears to dominate educational practice. From this research, a coding system called *educational dialectics* was developed. The assessment consists of 12 bipolar scales; one choice is masculine, the other is feminine. Readers can evaluate their orientation to knowledge by completing this assessment.

Kolb (1976) provided a typology of learning based on two dimensions: active experimentation versus reflective observation and concrete experience versus abstract conceptualization. Four styles can be identified with the system. An accommodator is best at hands-on experience. Divergers are best at learning that requires imagination and brainstorming. Convergers are best when seeking practical solutions, and assimilators are most adept at logic and organization.

Philbin, Meier, Huffman, and Boverie (1995) examined sex differences on educational dialectics and learning style. The authors asked 45 females and 25 males to complete the Learning Style Inventory (Kolb, 1985) and the Educational Dialectics Instrument (Belinky et al., 1986). The results indicate that the preponderance of males used an assimilator learning style. In terms of educational dialectics, the majority of males were more concerned with self than others when it came to educational decisions. The authors contended that the traditional learning environment—one that celebrates rationalism—may not fit the learning style of females. Although this study is exploratory, the findings and recommendations do resonate with authors like Gilligan (1982), who contended that education does not do enough to find a best fit between educational practice and learning style. The manner in which content is presented and the methods used to assess learning may favor the learning preferences of males.

Although the studies examining the effects of sex on learning style have yielded some noteworthy findings, there is not overwhelming evidence that these results warrant the conclusion that males are superior in some intellectual endeavors and females are superior in others. The following section reviews a series of studies examining sex differences in math, science, and verbal ability.

SEX AND INTELLECTUAL ABILITY

There is a prevailing belief that males are good at math and females are good at language arts. Scores on standardized tests tend to reflect this commonly held belief. The standardized tests used nationally are the ACT (the American College Testing Program), the PSAT (Preliminary Scholastic Assessment Test), and the SAT (Scholastic Assessment Test). Between 1990 and 1997, males outscored females on the verbal and math sections of the SAT. Females outscored males on the verbal section of the ACT, but males scored higher than females on the mathematics and scientific reasoning sections of the ACT (AAUW, 1999). With the inclusion of the writing portion of the PSAT, differences in gender showed a dramatic shift. The differences between boys and girls were narrowed considerably.

Grades do not follow the patterns reflected in standardized testing. According to the American Association of University Women (AAUW, 1999), girls earn equal or higher grades throughout schooling. Interestingly, girls who receive lower scores on the SAT receive higher college grades. For females, then, SAT scores do not necessarily predict academic success in college.

A closer analysis of the data on sex and scores on achievement tests reveals some rather interesting insights. Hyde and McKinley (1997) reviewed meta-analytic studies conducted on gender differences on a variety of achievement tests. Meta-analysis is a procedure for aggregating results across a series of studies, thus reducing the possibility of error that may result from a traditional review of literature. The purpose of their investigation was to determine whether some of the findings on gender abilities reported in the literature were supported by the meta-analytic procedures. Four areas were analyzed: verbal ability, mathematics performance, spatial ability, and science achievement.

In terms of verbal ability, the results of two meta-analysis studies (Hedges & Nowell, 1995; Hyde & Linn, 1988) were examined. The results indicate that any general difference between males and females is extremely small. The authors argued, however, that there are different types of verbal ability that may be lost in traditional testing. For example, females may be superior in speech production and males may have more difficulties with verbal performance.

The results of the meta-analyses conducted on mathematical ability did not indicate male superiority. The data did indicate that males received higher scores, but the amount of this difference was minimal.

Similar to verbal ability, there are different types of mathematical competency not frequently discussed in the literature. Mathematical ability entails computation, concepts, or problem solving. Each of these subsets might be lost when scores are summarized. A meta-analysis conducted by Hyde et al. (1990) found that females scored higher than males on computation tasks by a small amount in elementary school and junior high, but not in high school. There were no differences at any age in understanding mathematical con-

cepts, and there were no differences in problem solving in elementary or junior high. Males received higher scores in problem solving in high school and college.

The third area reviewed by Hyde and McKinley (1997) was spatial ability. They reviewed a meta-analysis conducted by Linn and Petersen (1985). Three types of spatial ability were analyzed: spatial perception (the person's sense of horizontality or verticality), mental rotation (how well one can mentally rotate a three-dimensional object that is depicted in two dimensions and match it to other illustrations), and spatial visualization (visually locating a simple figure within a complex one). The results of the analysis conducted in spatial ability yield no clear-cut gender differences.

Finally, Hyde and McKinley analyzed science achievement. Three meta-analytic studies were reviewed (Becker, 1989; Fleming & Malone, 1983; Hedges & Nowell, 1995). Fleming and Malone (1983) analyzed the science performance of kindergarten to 12th-grade students. Boys scored higher than girls, but the differences were small. The largest gender difference was found in the middle-school age group. An analysis conducted by Becker (1989) found that the largest gender difference was related to the subject matter tested. Boys received significantly higher scores in physics. Hedges and Nowell (1995) investigated high school achievement and found that males outscored females in science. Hedges and Nowell (1995) noted that fewer females elect to take science in high school, and therefore the findings are subject to bias.

The results of the science performance meta-analyses indicate that males outscored females by a relatively small amount. Further, the findings seem to relate to the particular subject matter examined. Males did best in physics and physical science.

The research reported previously does not provide compelling evidence for sex differences in intellectual capacity. This is not to say that there are no cognitive differences between males and females, but it is difficult to ascertain what these differences are and what they mean. Numerous methodological problems cloud the research on sex and gender. One problem is that the research tends to focus on biological sex and not on the social psychological features of gender. This approach makes it difficult to ascertain if any difference found is related to sex, gender, or some other intervening variable. One study that tried to account for the effects of gender was conducted by Kirtley and Weaver (1999). The authors argued that gender conceptions serve as filters that modify cognitions and behaviors. The authors identified two cognitive schemes. The agentic role construct includes characteristics such as goal orientation, assertiveness, and self-activation. In contrast, a communal orientation involves characteristics such as selflessness, openness, caring, and kindness. In the classroom, an individual with an agentic role identity may positively respond to tasks requiring analytical thinking, whereas an individual with a communal identity may prefer verbal learning tasks.

INTERACTION PATTERNS

A rather substantial body of literature indicates that males and females are not treated the same in the classroom (Diller, Houston, Morgan, & Ayim, 1996; Sadker & Sadker, 1994). Diller et al. (1996) summarized the findings by stating:

> Studies on teacher-student interactions indicate that within the coeducational classrooms, teachers, regardless of sex, interact more with boys, give boys more attention (both positive and negative) and that this pattern intensifies at the secondary and college levels. Girls get less attention and wait longer for it. When they do get attention, it is more likely that the teacher will respond to them neutrally or negatively (although this depends some on the girls' race and class). The reinforcement girls do get is likely to be for passivity and neatness not for getting the right answer. (p. 52)

Sadker and Sadker (1994) conducted a great deal of research on gender differences and emphasized the following points:

- Teachers typically initiate more communication with boys than with girls in the classroom, strengthening boys' sense of importance.
- Teachers tend to ask boys more complex, abstract, and open-ended questions, providing better opportunities for active learning.
- In class projects and assignments, teachers are more likely to give detailed instructions to boys and more likely to take over and finish the task for girls, depriving them of active learning.
- Teachers tend to praise boys more often than girls for intellectual content and quality of their work. They praise girls more often for neatness and form.
- When boys perform poorly, teachers often blame failure on lack of effort. When girls perform poorly, it is for reasons other than effort.
- All too often teachers discourage girls from courses of study that lead to high-skilled, high-paying careers.

Sadker and Sadker (1994) further noted that when student culture is included in the analysis of interaction patterns, another trend emerges. White males received the most attention, followed by minority males, White females, and minority females. The group of students most impacted by the lack of teacher attention may be minority females. The American Association of University Women reported that African-American girls enter school with high self-esteem, but grow increasingly negative about school and their teachers. Hispanic girls show the most negative shifts. Between elementary school and high school, the self-esteem of Hispanic girls drops more than any other ethnic group studied (AAUW, 1991).

Sadker and Sadker (1994) identified four types of responses from teachers: praise ("good job"), remedies ("check your addition"), criticizes ("this is not correct"), and accepts ("okay"). Teachers praise 10% of the time and criticize 5% of the time. The most frequent form of feedback provided by teachers is a verbal or nonverbal "okay." Of the groups receiving praise, boys receive the most. Praise is an important educational resource and one that seems to benefit boys the most because it is typically tied to intellectual endeavors.

When females receive praise, it is frequently for the way they look. Teachers complement hair styles, dresses, and smiles. These comments do not come during lectures, but in small-group discussions and between class exchanges. Sometimes students pull the teacher into this *gendering exchange*. Think about how you would respond to the following: "Teacher what do you think of the dress my dad brought me from his trip to Albuquerque?" The culturally reflective teacher would consider ways to offer a compliment, but also to make an intellectual comment as well.

Research also indicates that teachers give males more time to answer questions. Most teachers wait about 1 second for a student to answer, but teachers wait less time for females. Further, boys are more likely to display nonverbal cues that they want to answer. Hands leap in the air, and some may blurt out an answer before being called on by the teacher. Sadker and Sadker (1994) called these "green arm" students. Their arms are in the air so long the blood seems to drop from their arms. Females may be more passive and hesitant in the way they signal an answer. Also knowing the correct answer may be more important to the females so they may be more tentative in their responses.

Houston (1996) summarized the problem when she stated:

> If teachers fail to notice the gender of the student who is talking, if they pay no attention to who is interrupting whom, whose points are acknowledged and taken up, who is determining the topic of discussion, then they will by default perpetuate patterns that discourage women's participation in the educational process. (p. 54)

Nonverbal Behavior

The nonverbal orientations of the student and teacher play an important role in the way in which communication is managed in the classroom. Research suggests that males and females developed different orientations to nonverbal behavior. Wood (2001) noted that nonverbal codes are significant in managing identities and interpersonal relationships. She drew from the work of Mehrabian (1981) and identified three features of nonverbal communication that are used differently by females and males. These features are responsiveness, liking, and power. Understanding these features of communication helps teachers manage the communication exchanges in the classroom.

Responsiveness is concerned with how expressive individuals are in interaction. Both females and males are responsive, but communicate it in different ways. Generally, males are more expansive in their gestures. Wood contended that males are socialized to command attention. Think about the number of times young boys are told to look someone in the eye and speak up when asked a question. Females, in contrast, learn to use nonverbal behavior to manage interpersonal connection. Females learn to read subtle cues such as eye contact, and males learn strategies for getting and holding the floor.

A second important dimension of nonverbal behavior is liking. Some theorists suggest that females are encouraged to put more stock into this feature of their communication and, as a consequence, develop more skills in communicating liking than males (LaFrance & Mayo, 1979; Wood, 2001). Females tend to sit closer than males and engage in more eye contact and affiliative touch more than males. It is not uncommon for middle-school females to hug and walk with interlocked arms. Some research suggests that females are much more concerned with how the teacher feels about them.

The final dimension of nonverbal behavior is power or control. Control is concerned with who decides topics, who interrupts whom, who has the most space, and who initiates touch. Males tend to engage in more nonverbal behaviors of control than females. Young males wrestle slap, poke, and push to gain control and authority. To whom is the admonition "keep your hands to yourself" uttered? Males tend to interrupt females more and command more space in interaction. Look around the classroom and compare how males and females sit.

MINIMIZING DIFFERENCES

What can teachers do to create gender-safe environments? In chapter 1, we contended that individuals act on the meanings they construct. Language has a substantial effect on classroom exchanges. Some of the effects are subtle, but others are most substantial and significant.

Sexist language can be defined as "words, phrases, and expressions that unnecessarily differentiate between females and males or exclude, trivialize, or diminish either gender" (Parks & Roberton, 1998, p. 455). Unfortunately, many teachers see little need or value to be conscious of the way in which our language creates images and shapes expectations.

For example, it has been consistently documented that male generic language excludes women (Wood, 2001). Words like *chairmen* and *mailmen* are not inclusive. What are teachers implying when they say that a young female student is a *bombshell* or a young male is a *stud*? It is not enough for teachers to change the pronouns they use to recognize that language shapes deeper expectations about gender. Wood (2001) observed that language could be used to de-

value and trivialize females. Richmond and Dyba (1982) identified four effects of sexist language: (a) the use of sexist language promotes sexual stereotyping and the adoption of sex-typed attitudes and behaviors; (b) teachers serve as important models for language learning of children; (c) when teachers employ sexist language, their behavior is likely to promote sexism and sexist behavior in their students; and (d) when the use of sexist language on the part of the teachers can be reduced, an attendant reduction in sexism and sexist behavior in their students can be expected.

Richmond and Dyba (1982) tested the effects of modeling on a group of elementary and secondary teachers. They found that teachers frequently engaged in sexist language such as the generic *he* or masculine pronouns. However, after intervention, teachers could learn to reduce the use of such language form. Similar positive effects on teacher modeling were obtained by Cronin and Jreisat (1995). The authors studied the effects of modeling nonsexist written language and found that students could learn to incorporate nonsexist language into written messages. The research suggests that teachers can have a positive effect on students' use of sexist language. At the end of this chapter is an instrument designed to assess attitudes of sexist language that will give the reader valuable information on language use.

In addition to modeling nonsexist language, teachers need to select curriculum that stresses accomplishments of women and men and note their achievements in other ways. Teachers need to be aware of and engage in interaction about the larger culture's expectations about intelligence, academic success, physical attraction, beauty, health, masculinity, and femininity.

The powerful effect of peer groups should not be ignored. Research by Ryan (2001) indicated that peer groups have a dramatic affect on attitudes toward school. Peers who enjoy school create social groups with peers who enjoy school. Similarly, peers who dislike school tend to select friends who also dislike school. Ryan (2001) also found that students who hung out with friends who disliked school grew more negative about school over time. This research suggests that peer groups influence attitudes about school and academic achievement. Some peer groups create norms and expectations for success, whereas others create expectations for failure. Additional research suggests that peer groups influence attitudes about gender identity and norms for appropriate behavior (Eder & Sanford, 1986). Although it may be difficult for teachers to influence peer group selection, they can influence the way students group in the classroom. Encouraging connections among a wide range of students with a wide range of abilities may prove helpful. Through these connections, students, especially those who do not like school, may discover new areas of interest. Facilitating new relationships may garner positive academic rewards.

Teachers need to be aware of the findings on learning style and try to create activities and assessments that are matched with students' abilities. It may be unreasonable to expect a teacher to abandon multiple-choice tests, which seem

to favor males, but they can limit how much weight such assessments have in the allocations of grades. Research suggests that there are a number of other instructional strategies that can benefit boys and girls. Cooperative learning and active learning strategies, for example, have been found to be helpful for a wide range of learning styles. Our discussion on multiple intelligence will provide more guidance on these issues.

Teachers need to help young women filter the multitude of confusing messages they receive about physical beauty, popularity, health, femininity, and intelligence. Helping females understand and embrace the significance of intellect and good health will empower them in important ways. Females need to understand that the world of math and science is not the sole territory of males. Teachers play an important role in the way in which gender messages are processed.

Teachers should be sensitive to the needs of boys as well. Pollack (1998) suggested that schools fail boys in four ways: (a) They do not recognize the problems boys face in certain academic areas such as reading and writing; (b) schools and teachers tend to be poorly versed in the special socioemotional needs of boys and mishandle their difficulties; (c) a good number of schools are not environmentally friendly or warm for boys; and (d) schools do not have curricula and teaching methods designed to met boys' needs and interests.

One important step that teachers can take is to recognize the forces that contribute to the boy code. In early elementary school, teachers may have difficulty recognizing little boys as vulnerable and feeling. As Pollack (1998) noted, when they grow older and become adolescents we start to see them in a different way, but underneath their façade of strength is a swirling pool of emotions and feelings. One moment boys may be aloof and the next fighting back tears from a poignant movie. Teachers do much to reinforce the gender stereotypes and view boys as the *bad guys* who should be controlled to accomplish learning goals.

This chapter has examined the way in which gender influences classroom communication. Although gender expectations run deep, classrooms can be a place where new insights and expectations are shaped and formed. Teachers who understand gender issues can do much to manage curriculum and communicate in ways that celebrate the talents of all students.

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FIVE

Students With Special Needs

The following story, "Welcome to Holland," appeared in *The Fresno Bee* newspaper in October 2002.

I am often asked to describe the experience of raising a child with a disability—to try to help people who have not shared that unique experience to understand it, to imagine how it would feel. It's like this. . . .

When you're going to have a baby, it's like planning a fabulous vacation trip—to Italy. You buy a bunch of guidebooks and make wonderful plans. The Coliseum, The Michaelangelo David. The gondolas in Venice. You may learn some handy phrases in Italian. It's all very exciting.

After months of eager anticipation, the day finally arrives. You pack your bags and off you go. Several hours later, the plane lands. The stewardess comes in and says, "Welcome to Holland."

"Holland?" you say, "What do you mean, Holland? I signed up for Italy! I'm supposed to be in Italy. All my life I've dreamed of going to Italy!"

But there's been a change in the flight plan. They've landed in Holland and there you must stay.

The important thing is that they haven't taken you to a horrible, disgusting, filthy place, full of pestilence, famine and disease. It's just a different place.

So you must go out and buy new guidebooks. And you must learn a whole new language. And you will meet a whole new group of people you would never have met.

It's just a different place. It's slower paced than Italy, less flashy than Italy, But after you've been there for a while and you catch your breath, you look around, and you begin to notice that Holland has windmills; Holland has tulips; Holland even has Rembrandts.

But everyone you know is busy coming and going from Italy, and they're all bragging about what a wonderful time they had there. And for the rest of your

life, you will say, "yes, that's where I was supposed to go. That's what I had planned."

And the pain of that will never, ever, ever go away, because the loss of that dream is a very significant loss.

But if you spend your life mourning the fact that you didn't get to Italy, you may never be free to enjoy the very special, the very lovely things about Holland.

EMILY PEARL KINGSLEY

This story from a parent of a child with a disability reminds us of the experience of new teachers as they plan for the perfect group of students—school ready, enthusiastic, motivated. Yet no situation is perfect. Early on many teachers become disenchanted as they learn that they will be responsible for teaching students from differing cultural backgrounds, representing different spoken languages, and with varied learning abilities.

Students with disabilities often present physical, social, and academic challenges to classroom teachers. The inclusion of students with special needs into general education classrooms has increased in recent years. According to the 22nd Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act (IDEA), 75% of the more than 5.5 million 6- to 21-year-olds with disabilities served under IDEA were educated in regular classrooms with their nondisabled peers. General education teachers can expect to have several students with mild disabilities included in each of their classes. Students with moderate to severe disabilities are included less frequently.

In the first chapters of the book, we discussed different types of diversity—ethnic, cultural, linguistic, sexual, and gender—as they relate to classroom communication. Students with disabilities present another type of diversity challenge for classroom teachers. The terms *disability*, *exceptionality*, *handicap*, and *special needs* are often used interchangeably to refer to the categories of disabilities specified by the federal law. Students with special needs have skill diversity significant enough to require a specialized program of instruction to achieve educational equity. Most students with special needs are educated in the general education classroom. We discuss the benefits of inclusion. Pertinent legislation and eligibility criteria that qualify students for special services are discussed. We define the low-incidence disability categories—those less commonly served in public and private school settings. Next, high-incidence disabilities, those most often served in public and private school settings, are defined, and practices that promote positive social interactions in inclusive education settings are highlighted. The importance of collaboration in the delivery of services to students with disabilities is discussed, and, finally, strategies for working effectively with parents and families are recommended.

THE SPIRIT OF INCLUSION

Today, most students with special needs receive the majority of their education in general education classes, with special services provided as needed either in the classroom or learning lab. This has not always been the case. In the early days of education in the United States, students with special needs were placed in general education classes, but without the assistance of trained specialists. Students with severe disabilities were often excluded from school. As special education grew, students with severe disabilities were sent to special schools, and students with milder disabilities, who presented a difficult challenge to general education teachers, were removed and placed in separate special classes. Concerns regarding such issues as segregation, labeling, and high incidence of minority students identified as disabled led parents and educators to question current practices. The pendulum swung from segregation of special students in separate schools and classes to inclusion into the mainstream of education. *Inclusion* is the term most often used today to refer to the placement of students with special needs in general education. Today students with disabilities are served in general education classrooms with the assistance of specialists, including special education teachers, speech and language pathologists, and other service providers deemed necessary for students to succeed in school.

One of the most important goals of inclusion is to help students with special needs succeed academically and socially. Most students who are eligible for services have identified academic goals they are working toward. Socially, a goal for these students is to learn to perform competently in interactions with others, invoke social support, and develop long-lasting friendships with others.

Gresham (1981) identified peer acceptance, positive judgments by significant others, improved classroom behavior, high self-esteem, play skill acquisition, and academic achievement as positive effects of social competence. Social skills are the specific abilities required to work and socialize with other people. Students with special needs often exhibit deficits in social skills (Hallahan & Kauffman, 1994; Kavale & Forness, 1996; Walker & Leister, 1994). They experience lower self-perceptions and are often less accepted and more often rejected by their nondisabled peers.

There is good news. Studies have shown that students with disabilities can benefit both academically (Helmstetter, Curry, Brennan, & Sampson-Saul, 1998; Malian & Love, 1998; Shinn, Powell-Smith, Waldron, & McLeskey, 1997) and socially (Kennedy & Itkonen, 1994; Kennedy, Shukla, & Fryxell, 1997) from being educated alongside their nondisabled peers. Benefits include more opportunities for social interaction, improved communication and social skills, friendships, appropriate models of behavior, and perceived higher standards of performance from teachers. Researchers have found that students without disabilities can also benefit from association with their peers with special needs. They benefit as role mod-

els for students with disabilities, thereby improving their social competence and decreasing feelings of loneliness and rejection in inclusive classrooms (Pavri & Monda-Amaya, 2000). Students without disabilities also benefit by learning about tolerance, individual difference, and human exceptionality. They learn that students with disabilities have many positive characteristics and abilities.

Academic achievement and improved social competence is most likely to be achieved when instruction is individualized and support is provided to teachers as well (Madden & Slavin, 1983; Schulte, Osborne, & McKinney, 1990). Teachers play a critical role in developing a climate of acceptance through curriculum design, instructional strategies, and activities that encourage positive social interactions among students with special needs and their nondisabled peers.

Reflection

- **What experience have you had working with students with disabilities?**
- **Do you think students with disabilities should be included in general education classrooms? Explain your answer.**

PERTINENT LEGISLATION FOR STUDENTS WITH DISABILITIES

Teachers working with students who have disabilities should understand three major laws—the Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act of 1973, and the Americans With Disabilities Act (ADA). IDEA is a federal law that governs all special education services in the United States. Funding is provided to state and local education agencies to guarantee special education and related services to students who meet the eligibility criteria within the categories of disabilities. Each category has specific criteria defining the disabling condition. In each category, the disabling condition must adversely affect the student's educational performance. IDEA ensures that all children, from 3 through 21 years of age, regardless of type or severity of disability are entitled to a free, appropriate, public education. An individualized education plan (IEP) is developed for every child served under IDEA.

In contrast, Section 504 of the Rehabilitation Act of 1973 is a civil rights law. It prohibits discrimination against a person with disabilities. The statute states, in part, that, "No otherwise qualified handicapped individual in the United States . . . shall, solely by reason of his [her] handicap, be excluded from the participation in, be denied benefits of, or be subjected to discrimination in any program or activity receiving federal financial assistance." This means that individuals eligible for accommodations under this law must demonstrate the exis-

tence of an identified physical or mental condition (e.g., asthma, attention deficit disorder [ADD]) that substantially limits a major life activity (e.g., walking, seeing, hearing breathing, caring for oneself). Section 504 does not require that the student needs special education to qualify. The school district determines eligibility. Both IDEA and Section 504 require that school district personnel develop a plan for eligible students, which includes specialized instruction, related services, and accommodations within the general education classroom.

The Americans with Disabilities Act was signed into law in 1990 and provides that individuals with disabilities not be discriminated against and that such individuals be provided with reasonable accommodations in the workplace. This law is an important extension of IDEA in that it provided protections for individuals with disabilities enrolled in colleges and universities, meaning that they are also entitled to appropriate accommodations in the classroom. ADA extends services beyond the high school years. High school teachers are often involved in transition planning for youth with disabilities.

ELIGIBILITY FOR SERVICES

Under IDEA, students who exhibit academic and/or social and behavior problems that negatively affects their education performance may qualify for services under one of the following disability categories: learning disabilities, mental retardation, emotional disturbance, speech or language impairments, autism, hearing impairments, visual impairments, traumatic brain injury, orthopedic impairments, other health impairments, or multiple disabilities. Infants and toddlers with disabilities birth through age 2 and their families receive early intervention services. These children may need early intervention services because they are delayed in one or more of the following areas: cognitive development, physical development, vision and hearing, communication development, social or emotional development, adaptive development, or diagnosed physical or mental condition that has a high probability of resulting in developmental delay. School-age children and youth ages 3 through 21 receive services through the school system. These children may experience delays in one or more of the following areas: physical development, cognitive development, social or emotional development, or adaptive development. Each child seeking services under IDEA must receive a full evaluation, including academic and psychological testing.

Children with attention deficit/hyperactivity disorder (ADHD) can be served under the federal law if they meet eligibility criteria for a learning disability, emotional disturbance, or other health impairments. Students who are gifted and talented are not served under the federal special education law for students with disabilities unless they qualify as learning disabled, emotionally disturbed, or communication disordered. Most states provide for initial screen-

ing and adapted instructional programs for gifted students. Special education eligibility provides students with disabilities opportunities for specialized instruction designed to more appropriately meet their needs in general education and/or special education classrooms.

LOW-INCIDENCE DISABILITIES

Low-incidence disabilities include autism, visual impairments, hearing impairments, physical and other health impairments, traumatic brain injury, and severe and multiple disabilities. Low-incidence disabilities are often present at birth or can be acquired later in life.

IDEA defines *autism* as:

> a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects educational performance. Characteristics associated with autism are engaging in repetitive activities and stereotyped movements, resistance to changes in daily routines or the environment, and unusual responses to sensory experiences. The term autism does not apply if the child's educational performance is adversely affected primarily because the child has emotional disturbance. (U.S. Department of Education, 2000)

Related to autism is autism spectrum disorder, which may be diagnosed after the age of 3 and implies a qualitative impairment of social interaction and communication (Hallahan & Kauffman, 2003). Included are several disorders: Asperger Syndrome, Rett's disorder, childhood disintegrative disorder, and pervasive developmental disorder. Children who have Rett's disorder, for example, develop normally for 5 months to 4 years followed by regression and mental retardation.

Peterson and Hittie (2003) identified two programs that have been successfully implemented with students who have autism. Each program is built on a different philosophy. One program is referred to as TEACCH (Treatment and Education of Autistic and Related Communication-Handicapped Children). Teachers organize the school environment by visual materials to create schedules that students can follow to learn new skills. Initially, the teacher prompts students, but the goal is that students will learn to move through their daily tasks independently. The visual schedule is based on students' skills, interests, and needs. A program called PECS (Picture Exchange System) provides students with a concrete way to communicate their needs. Two computer programs—*Boardmaker* and *Writing With Symbols 2000*—can be used to share information.

Visual impairment means impairment in vision that, even with correction, adversely affects a child's education performance. The term includes both partial sight and blindness. An educational definition of *blindness* suggests that a stu-

dent must use braille or aural methods to receive instruction (Heward, 2000). Visual impairment accounts for less than 0.5% of the total special education population (U.S. Department of Education, 2000).

Deaf-blindness means concomitant [simultaneous] hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness (U.S. Department of Education, 2000).

Under IDEA, *hearing impairment* is defined as a loss, whether permanent or fluctuating, that adversely affects a child's educational performance, but is not included under the definition of *deafness*. *Deafness* refers to a hearing impairment so severe that a child has difficulty processing linguistic information through hearing with or without amplification that adversely affects a child's educational performance. *Hard of hearing* describes individuals who have hearing loss, but are able to use the auditory channel as their primary mode for perceiving and monitoring speech or acquiring language (Diefendorf, 1996).

Turnbull, Turnbull, Shank, Smith, and Leal (2002) recommended the following strategies for inclusion of students with disabilities in general education classrooms:

1. Utilize activities that allow students to experience concepts such as role play, experiments, and field trips.
2. Make use of collaborative learning and peer tutoring to provide students who are deaf or hard of hearing with opportunities to be equal participants with peers during learning activities.
3. Present information visually or in sign language. Use illustrations, semantic maps, graphic organizers, flowcharts, and computer technology.
4. If the students use an assistive listening device, use the microphone at all times. Pass the microphone to other students who are talking.
5. Always speak with the light on your face, not behind you.
6. Speak slowly and distinctly, but do not exaggerate your mouth movements or speak more loudly. Keep your hands away from your face while talking.
7. If the child uses a sign language interpreter, provide enough time between asking a question and calling on a student so that the interpreter has completed interpreting the question. Most students who are deaf in general education classrooms will have sign language interpreters and note takers.

IDEA refers to *physical disabilities* as *orthopedic impairments*:

> . . . The term includes impairments caused by congenital anomaly (e.g., clubfoot, absence of some member, etc.), impairments caused by disease (e.g., poliomyelitis, bone tuberculosis, etc.), and impairments from other causes (e.g., cerebral

> palsy, amputations, and fractures or burns that cause contractures). (C.F.R. Sec. 300.7 (b)(7))

Curricular goals for students with physical disabilities vary depending on the specific disability. Teachers need to work with other service providers (e.g., nurses, occupational, and physical therapists) and families to help students improve mobility, increase communication, learn daily living skills, and learn self-determination skills. Special education teachers and students' parents are an important resource for general education teachers. They are familiar with adaptive equipment to improve mobilization, technology to improve communication, and medical technology assistance (e.g., tracheostomy, colostomy) utilized to replace or augment vital body functions.

Other health impairments, often referred to by educators as physical disabilities, is another category of disabilities covered by IDEA. Individuals with *other health impairments* have limited strength, vitality, or alertness, including a heightened alterness with respect to the educational environment, that is due to chronic or acute health problems such as asthma, ADD or ADHD, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, and sickle cell anemia and adversely affects a child's educational performance.

Students with human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) are served under this disability category. Students who have cancer, diabetes, or epilepsy are also served under the *other health impairment* category.

The educational needs of students with health impairments are similar for those students without disabilities. However, the teacher should be willing to make allowances for absences. Keeping in close contact with family members and medical personnel is necessary when working with students with health impairments. Other students in the class may need to be educated as to specific health issues. Peers may be helpful in assisting with a student's care or with classroom and homework assignments.

Under IDEA, *traumatic brain injury* means

> an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child's educational performance. The term applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgement; problem solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech. The term does not include brain injuries that are congenital or degenerative, or brain injuries induced by birth trauma. (34 C.F.R., Sec. 300.7[6] [12])

Children with mild to severe traumatic brain injury often have poor coping and social skills. Traumatic brain injury thrusts them into a situation dramatically different from the one they previously knew. Relationships are often strained as these individuals respond with anger, anxiety, fatigue, and depression (Tyler & Mira, 1999). Tyler and Mira suggested that teachers should obtain as much knowledge as they can about the injury and long-term outcomes. Behavior and instructional expectations should be clearly stated. Do not assume that the student knows what is expected. Learning to foresee what triggers problem behavior can help both teacher and student to respond appropriately.

IDEA defines *multiple disabilities* as follows:

> *Multiple Disabilities* means concomitant impairments (such as mental retardation—blindness, mental retardation—orthopedic impairment, etc.), the combination of which causes such severe educational problems that they cannot be accommodated in special education programs solely for one of the impairments. The term does not include deaf-blindness. (34 C.F.R., Sec 300: (b) (6)

Severe disabilities is defined as follows:

> The term "children with severe disabilities" refers to children with disabilities who, because of the intensity of their physical, mental, or emotional problems, need highly specialized education, social, psychological, and medical services in order to maximize their full potential for useful and meaningful participation in society and for self-fulfillment. . . . Children with severe disabilities may experience severe speech, language, and/or perceptual-cognitive deprivations, and evidence abnormal behaviors, such as failure to respond to pronounced social stimuli, self-mutilation, self-stimulation, manifestation of intense and prolonged temper tantrums, and the absence of rudimentary forms of verbal control, and may also have intensely fragile physiological conditions. (34 C.F. R. Sec. 315.4(d)

Students who have multiple or severe disabilities are likely to receive services in a variety of settings, including a special education classroom within a regular school, separate schools, residential facility, at home, or in the hospital. Curricular goals for these students include teaching skills that will help them be successful at school, at home, and in the community.

Reflection

1. **Emily is a seventh-grade student with a mild hearing impairment in your physical education class. Today you will be requiring students to work in teams for basketball practice. What accommodations might be needed to include Emily in this activity?**

2. **What types of information would a general education teacher need to obtain to adequately serve students with other health impairments such as diabetes or epilepsy in the classroom?**

HIGH-INCIDENCE DISABILITIES

The disabilities most commonly seen in schools are high-incidence disabilities. High-incidence disabilities include learning disabilities, emotional or behavioral disorders, mild or moderate mental retardation, and speech and language disorders. Under IDEA, these disability areas make up about 90% of the total population of students ages 6 to 21 served. General education teachers likely serve students with high-incidence disabilities in their classrooms.

Learning Disabilities

The National Joint Committee on Learning Disabilities (NJCLD, 1994) defined *learning disabilities*:

> Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the lifespan. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapped conditions (for example, sensory impairment, mental retardation, and serious emotional disturbance) or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences. (pp. 3–8)

Students with learning disabilities constitute the largest percentage of students (about 50%) served in special education. Clearly, the predominant problem for students with learning disabilities is academic. These students achieve at a level far below what is expected given their intellectual abilities. Learning problems may occur in the area(s) of reading, written language, mathematics, memory, and metacognition. The old adage "You can lead a horse to water but you can't make it drink" applies to learning and students with learning disabilities. As a group they are not risk takers when it comes to academics. They often avoid asking questions and participating in class activities. Teachers can best serve these students by varying instruction (e.g., lecture, small group, discus-

sion, video), academic activities (e.g., journaling, storytelling, activity centers, cooperative groups, role play), and evaluation (e.g., presentation, project, portfolio). Refer to Armstrong's (2000) book, *Multiple Intelligences in the Classroom*, for other suggestions. Explicit instruction is often needed for students to learn main concepts. The student's special education teacher should be consulted for specific educational goals and recommendations regarding instructional strategies and accommodations. This is of course needed when working with any student identified as having a disability and who has an IEP. Harwell (2001) offered some of the following accommodations that are beneficial for students with learning disabilities:

1. seat student near teacher
2. assess prior knowledge
3. use high-interest materials of the student's choosing when possible
4. teach students to use mnemonics, story mapping, advanced organizer, and webs to organize and remember information
5. prioritize tasks to be done
6. break down assignments into shorter tasks
7. give extra time to complete assignments and tests
8. provide a buddy or peer tutor to help with clarifying and completing assignments
9. use a calculator, computer, spell check, and tape recorder
10. provide immediate, specific feedback
11. use rewards to encourage effort and completion of work
12. involve parents with homework, field trips, and in-class activities

Students with learning disabilities also lack social and communicative competence. Kavale and Forness (1996) analyzed over 100 independent studies and found that 80% of students with learning disabilities are perceived to have deficits in social competence. These children tend to be less accepted and are less socially skilled than their nondisabled peers (Coleman, McHam, & Minnett, 1992; Toro, Weissberg, Guare, & Liebenstein, 1990; Vaughn & Hogan, 1994). Students with learning disabilities exhibit deficits in verbal and nonverbal communication skills and are less able to adjust to changing social situations than are their nondisabled peers (Weiner & Harris, 1997). Other socioemotional problems presented by students with learning disabilities include low self-esteem, anxiety, depression, and delinquency (Bryan, Pearl, & Herzog, 1989; Scruggs & Mastropieri, 1996). Students with learning disabilities often report feelings of isolation and alienation toward peers and teachers as reasons for dropping out of school (Bryan, Pearl, & Herzog, 1989; Seidel & Vaughn, 1991). Researchers offer varied explanations for these problems from neurological deficits (Little,

1993) and cognitive processing problems (Mathinos, 1991) to difficulty perceiving the feelings and emotions of others (Stone & LaGreca, 1983).

Peer tutoring is a strategy that has been successfully used to improve socialization and academic performance of students with learning disabilities (Fuchs & Fuchs, 1998). Guidelines for developing classwide peer tutoring—an approach to benefit all students—has been developed by Fulk and King (2001). Students are trained in the roles of tutor and tutee and further taught feedback for correct and incorrect responses and error correction procedures. Peer-Assisted Learning Strategies (PALS) in reading has been quite successful with students with learning disabilities (Fuchs, Fuchs, & Burish, 2000). Visit http://www.sharingsuccess.org/code/ep for research and guidelines on this strategy. Cooperative learning activities provide learning disabled students opportunities to practice social skills while working on academic tasks. In one study, middle-school students with learning disabilities were taught to recruit peer assistance during cooperative learning activities (Wolford, Heward, & Aber, 2001). This skill is especially important in small-group instruction arrangements in general education settings where most students with learning disabilities are educated.

Emotional and Behavioral Disorders

Children with emotional or behavioral disorders have IQs that range from low average to gifted (Duncan, Forness, & Hartsough, 1995). The Individuals with Disabilities Education Act (IDEA) definition of serious emotional disturbance specifically recognizes the difficulties these children have in establishing and maintaining positive relationships. The term *serious emotional disturbance* means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance:

1. An inability to learn that cannot be explained by intellectual, sensory, or health factors;
2. An inability to build or maintain satisfactory relationships with peers and teachers;
3. Inappropriate types of behavior or feelings under normal circumstances;
4. A general pervasive mood of unhappiness or depression; or
5. A tendency to develop symptoms or fears associated with personal or school problems.

The term includes children who are schizophrenic, but does not include children who are socially maladjusted unless it is determined that they are seriously emotionally disturbed (U.S. Department of Education, 1998).

These children can present with internalizing or externalizing behaviors. Internalizing behaviors may include social withdrawal, anxiety, or depression. Externalizing behaviors include aggressive, acting out, and noncompliance behaviors. Students with externalizing behaviors often have difficulty adjusting to the behavioral expectations of their teachers, are often rejected by peers, and have difficulty developing and maintaining friendships (Schonert-Reichl, 1993; Walker & Leister, 1994). It is usually the social skill deficits, not academic difficulties, that cause these children to be removed from general education settings. D. Smith (2001) noted that young children without disabilities responded negatively to children exhibiting externalizing types of behavior, whereas children with internalizing behaviors were less likely to be noticed. Adolescents rejected their disabled peers who exhibited externalizing and antisocial behaviors. Children with psychological problems were viewed less favorably by their nondisabled peers than were those with medical problems.

Gresham and Elliott (1989) referenced social learning theory to explain social skill deficits in students with disabilities:

> A social skill deficit results from failure to acquire a social skill due to lack of opportunity to learn the skill and/or lack of exposure to models of appropriate social behavior. A social performance deficit results from a lack of opportunity to perform social skills and/or lack of reinforcement for socially skilled behaviors. (p. 122)

There is a plethora of evidence that exists showing that students with emotional and behavioral disorders can benefit from specific social skills instruction (Forness & Kavale, 1999; Mathur, Kavale, Quinn, Forness, & Rutherford, 1998). Numerous commercial programs are available for teaching social skills to students with mild disabilities. These include: The ACCEPTS Program (a Curriculum for Children's Effective Peer and Teacher Skills; Walker et al., 1983), The ACCESS Program (An Adolescent Curriculum for Communication and Effective Social Skills; Walker et al., 1988), and Skillstreaming the Adolescent (Goldstein & McGinnis, 1997). These programs all focus on teaching specific skills (e.g., listening, asking for assistance, resolving conflicts peacefully) rather than global skills (e.g., self-esteem building). All three programs have pre- and postassessment measures to determine whether teaching certain skills is necessary and whether students have learned skills taught.

The following effective instructional strategies were recommended by Wehby, Symons, Canale, and Go (1998):

- provide appropriate structure and predictable routines
- establish a structured and consistent classroom environment

- implement a consistent schedule with clear expectations, and set rules and consequences
- foster positive teacher–student interaction with adequate praise and systematic responses to problem behaviors
- promote high rates of academic engagement
- encourage positive social interaction and limited seat work
- use medication to increase attention and reduce aggressive behaviors (Forness & Kavale, 1988).

It is important for teachers to collaborate with parents and physicians to monitor behavior and side effects.

Mild or Moderate Mental Retardation

The American Association of Mental Retardation (AAMR) definition of *mental retardation* reads as follows:

> Mental retardation refers to substantial limitations in present functioning. It is characterized by significantly sub-average intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure, and work. Mental retardation manifests before age 18. (Luckasson et al., 1992, p. 5)

Greenspan and Granfield (1992) argued that determining an individual's ability "to perform certain crucial social roles (e.g., worker, friend, neighbor) more than ability to master academic tasks" (p. 443) should be the determining factor when diagnosing mental retardation. Children with mental retardation exhibit a variety of social problems. They often have difficulty making friends and have low self-esteem (Hallahan & Kauffman, 1994; Luftig, 1988). These deficits may be the result of low cognitive ability, making it difficult for them to process social cues and other information, or may be the result of a display of disruptive behavior, due to frustration when they experience difficulty, that is interpreted as inappropriate by their nondisabled classmates (Hallahan & Kauffman, 1994).

Teaching life and self-determination skills is a main goal for teachers working with students who have mental retardation (Wehmeyer & Schwartz, 1997). Training is focused on helping students adjust to environments where they will live, work, and play after they leave school. Instructional strategies are varied from large-group instruction and individual conferences to one-on-one behavioral interventions. Students are taught to set goals, solve problems, and advocate for themselves. Wehmeyer, Argan, and Hughes (1998) proposed that students learn to be *causal agents* or actors in their own lives instead of being acted

on. A synthesis of research in the area of self-determination for individuals with disabilities can be found in Algozzine et al. (2001). Many of the strategies recommended for students with learning disabilities, emotional and behavioral disorders, and ADHD, such as cooperative learning, peer tutoring, praise, and reinforcement, are also successful for students with mental retardation.

For students with special needs to be successful in inclusive settings, they must learn and exhibit socially competent behaviors. It is not enough to assume that exposure to their nondisabled peers alone will help students with special needs learn appropriate social skills (Gresham, 1981; Sale & Carey, 1995).

Communication Disorders

The American Speech-Language-Hearing Association (1993) differentiated language and speech disorders. A speech disorder is characterized by an inability to deliver messages orally, such as an individual's production of sounds, rhythm of speech, or voice quality. A language disorder is characterized by difficulty in receiving, understanding, and formulating ideas and information. Approximately 22% of all students receiving special education services are provided speech and language services.

Smith, Polloway, Patton, and Dowdy (2001) recommended some of the following classroom accommodations for students with speech and language disorders:

- Work closely with the speech-language pathologist, following suggestions and trying to reinforce specific skills. Also consult with the special education teacher to determine IEP goals and objectives specific to speech and language development.
- Provide opportunities for students to participate in oral group activities.
- Give students lots of opportunities to model and practice appropriate speech.
- Maintain eye contact when the student speaks.
- Increase receptive language in the classroom.
- Teach listening skills for class discussions.
- Encourage students' conversations through story reading.
- Use music and play games to improve language.
- Be a good listener and do not interrupt or finish the student's sentence for him or her.
- When appropriate, educate other students in the class about speech disorders and about acceptance and understanding.

As discussed in chapter 3, culture influences communication in small ways. Children's speech and use of language reflect their culture. Teachers must be careful not to assume a difference in dialect means disorder. Walker et al. (1983)

stressed the importance of teachers making home visits, trying to understand the world from the student's perspective, and allowing flexible hours for conferences. He encouraged teachers to consider student behavior in the context of the student's cultural values, motivation, and worldview.

Advances in technology such as communication boards and mechanical or electronic communication devices allow students with severe communication disorders to communicate with teachers, peers, and family members. For example, a voice synthesizer is used to produce speech output. Communication boards can be made of paper or a sturdier material and allow students to point to words or pictures to communicate. Computers can be used to make communication boards with programs such as *Boardmaker* from Mayer–Johnson Company. This program contains more that 3,000 picture symbols in black and white or color. The print labels accompanying each symbol are available in more than 10 languages. These devices are easy for teachers to program and allow students with communication disorders to participate in classroom activities.

OTHER STUDENTS WITH SPECIAL NEEDS

Gifted

Most discussions of inclusion concentrate on children and adolescents with disabilities. In this book, we have expanded the concept of special students to include those who are gifted and talented. *Gifted*, as defined in the Gifted and Talented Children's Act of 1978 (PL 95-561, Section 902), is a term meaning:

> . . . children, and whenever applicable, youth who are identified at the preschool, elementary, or secondary level as possessing demonstrated or potential abilities that give evidence of high performance capabilities in areas such as intellectual, creative, specific academic, or leadership ability, or in the performing and visual arts, and who by reason thereof, require services or activities not ordinarily provided by the school.

Although gifted students do not qualify for special education services, they often provide challenges, both academically and socially, for classroom teachers. Gifted students are often rejected by their peers and feel isolated in school. Classroom teachers must consider the unique needs of these students. Teachers should be aware that many gifted students, including underachievers, girls, students from culturally and linguistically diverse backgrounds, and students with learning or physical disabilities, remain unidentified and therefore may not receive appropriate educational services.

Kennedy (1995) offered several inclusion tips for teachers working with gifted learners:

- Resist policies requiring more work of those who finish assignments quickly and easily. Instead explore ways to assign different work, which may be more complex and abstract. Find curriculum compacting strategies that work, and use them regularly.
- Seek out curriculum and supplementary materials that require analysis, synthesis, and critical thinking, and push beyond superficial responses.
- Deemphasize grades and other extrinsic rewards. Encourage students to learn for learning's sake, and help perfectionists establish realistic goals and priorities.
- Encourage intellectual and academic risk taking. The flawless completion of a simple worksheet by an academically talented student calls for little or no reward, but struggling with a complex, open-ended issue should earn praise.
- Help all children develop social skills to relate well to one another. Help them see things from others' viewpoints. Training in how to "read" others and how to send accurate verbal and nonverbal messages may also be helpful. Tolerate neither elitist attitudes nor antigifted discrimination.
- Take time to listen to responses that may at first appear to be off target. Gifted students are often divergent thinkers who get more out of a story or remark and have creative approaches to problems. Hear them out, and help them elaborate on their ideas.
- Provide opportunities for independent investigations in areas of interest.
- Be aware of gifted girls' special needs. Encourage them to establish realistically high-level educational and career goals, and give them additional encouragement to succeed in math and science. (pp. 223–234)

Attention Deficit/Hyperactivity Disorder

Attention deficit/hyperactivity disorder (ADHD) is not a specific category under IDEA. However, students with attention deficit disorder (ADD) or ADHD may be served under IDEA if they meet the criteria under the category of learning disabilities or emotional disturbance or under "other health impairment." The American Psychiatric Association (1994) defined ADD as a "pervasive pattern of inattention, impulsivity, and/or hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals at a comparable level of development" (p. 78). Children can experience ADD with or without hyperactivity. Students with ADHD have poor attention, impulsive behavior, and overactivity. They often have difficulty staying in their seats and rarely complete assignments as they tend to shift from one activity to another. Students with ADHD are estimated to be rejected 50% to 60% more often than their nondisabled peers (Guevremont, 1990). Students who present with

ADHD are most challenging to classroom teachers. Teacher intolerance of movement in the classroom is often blamed for the overidentification of ADHD.

Parker (1996) offered numerous strategies for accommodating students with ADHD in the classroom. For example, to improve socialization, Parker recommended that teachers utilize the following strategies:

1. Praise appropriate behavior.
2. Monitor social interactions.
3. Set up social behavior goals with student and implement a reward program.
4. Prompt appropriate social behavior either verbally or with private signal.
5. Encourage cooperative learning tasks with other students.
6. Provide small-group social skills training.
7. Praise student frequently.
8. Assign special responsibilities to student in presence of peer group so others observe student in a positive light.

To reduce motor activity, Parker suggested the following:

1. Allow student to stand at times while working.
2. Provide opportunity for seat breaks (i.e., run errands, etc.).
3. Provide short break between assignments.
4. Supervise closely during transition times.
5. Remind student to check over work product if performance is rushed or careless.
6. Give extra time to complete tasks.

A complete list of strategies for impulsiveness, inattention, academic skills, organization planning, and compliance are available online at: http://www.addwarehouse.com. Medical management is also an important component in managing students with ADHD. Teachers need to work closely with parents and physicians to monitor side effects and behavior changes.

Reflection

1. **Roberto is a third-grade student with ADHD. He is larger and louder than his classmates. He always wants to be the center of attention, which he accomplishes through clowning around, making jokes, and entertaining his classmates with a variety of sound effect noises. If you**

knew Roberto was coming into your classroom, how would you help him succeed?

2. **Tamara's parents are divorced and, for the last few years, she and her mother have moved from one place to another, sometimes living out of their car. Tamara is often absent and when she is in class she seems withdrawn and disinterested in class assignments. What are the issues involved in working with Tamara?**
3. **Yenny is a fourth-grade student who just this year became eligible to receive special education services for emotional and behavioral disorders. Yenny is included, for the first time, in your general education classroom. Her IEP goals are mainly behavioral. She has average intelligence, but has difficulty relating to her peers. Yenny has been known to have a quick temper and often hits other students when things do not go her way. How could you find out more about Yenny? What strategies could you implement in your classroom to help Yenny improve her relationships with other students?**

PRACTICES THAT PROMOTE POSITIVE INTERACTIONS AMONG STUDENTS WITH AND WITHOUT DISABILITIES IN INCLUSIVE CLASSROOMS

In his text, *Creating Inclusive Classrooms: Effective and Reflective Practices*, Salend (2001) recommended strategies for teaching about individual differences. Some of those strategies include utilizing:

1. disability simulations (contact the American Red Cross for sample simulations and questions)
2. successful individuals with disabilities as guest speakers (contact community agencies, parent organizations, special education teachers)
3. films (e.g., *My Left Foot*, *Dead Poet's Society*, *Children of a Lesser God*, *What's Eating Gilbert Grape*, *Shine*)
4. HBO specials (e.g., "Educating Peter")
5. books (local bookstores have numerous suggestions as well as online information specific to children's literature and disability: http/www.kidsource.com/NICHCY/literature.htm.)
6. information about adaptive devices (contact special education teachers or speech-language pathologists)
7. collaborative problem solving (e.g., cooperative groups, project-based learning, service learning, class meetings)
8. multicultural materials

Salend further suggested that teachers teach about language diversity and different dialects, family differences, gender equity, homelessness, stereotyping, and discrimination.

As stated earlier, most students with disabilities receive instruction in general education or inclusive classrooms. The philosophy of inclusive education requires the building of community support and a strong sense of belonging in all students. Villa and Thousand (1995) identified a number of promising practices that support the philosophy of inclusive education: outcome-based education, multicultural education, multiple intelligence theory, constructivist learning, interdisciplinary curriculum, community-referenced instruction, authentic assessment of student performance, multi-age grouping, use of technology in the classroom, peer-mediated learning, teaching responsibility and peacemaking, and collaborative teaming among adults and students. Many of these strategies are discussed in detail in preceding chapters.

COLLABORATING TO MEET STUDENT NEEDS

Students with disabilities are entitled to receive a variety of services that enable them to be successful in school. Many individuals play an important role in providing these services to students with special needs. Special education teachers' primary responsibility is to manage and coordinate the services a student receives. Students with disabilities all have an IEP that indicates educational goals and objectives and services needed to enable each student to maximize his or her potential. Special education teachers must learn to collaborate with other teachers, parents, administrators, and other service providers (e.g., psychologists, social workers, speech-language therapists, interpreters, and paraprofessionals) to provide the best service to students. General education teachers must take responsibility and ownership for the students with disabilities included in their classrooms. They are responsible for identifying students who exhibit suspected disabilities. They attend IEP team meetings and participate in development, review, and revision of students' program. Implementation of a student's program may include classroom accommodations, modifications, and other supports.

Collaboration can be defined as working with other people to meet shared goals. For example, a team of individuals sometimes referred to as a multidisciplinary team or student study team meets to determine where, when, and how a student with special needs will be educated. Collaboration also takes place when a teacher meets individually with parents, siblings, guardians, or other service providers to discuss issues related to students with disabilities. Collaboration is voluntary, requires parity among participants, is based on mutual goals, depends on shared responsibility for participation and decision making, and requires shared accountability for outcomes (Friend & Cook, 1996).

Collaboration is the process for ensuring that students with special needs receive a free, appropriate education mandated by IDEA. The goal is for all of those involved to work together to meet the needs of students with disabilities.

Working Effectively With Parents and Families

Establishing a good relationship with parents and/or family members is important to the success of students with special needs. Parents come from varied ethnic/racial and socioeconomic backgrounds. They bring a day-to-day understanding of their children that, as teachers, we may not have. Their perspective on the goals of education for their children is important for teachers to understand. It is important for teachers to encourage parents/families to be partners in their children's education.

Research links parent involvement to both academic and social success of children in school (Liontos, 1992). Some of the results of parent involvement include:

1. Improved academic achievement
2. Improved student behavior
3. Greater student motivation
4. More regular attendance
5. Lower student dropout rates
6. A more positive attitude toward homework
7. Improved attitudes and better parent ratings for teachers
8. More positive interaction with children for parents
9. More parental cooperation with school personnel in solving children's academic and behavior problems. (p. 14)

Some of the obstacles to parent involvement involve emotional barriers felt by the parents. Parents may have negative attitudes based on their own bad experiences with school. A level of distrust and anger results when parents pick up the phone only to hear, "Your son is causing problems in math class again." Many low-income parents and parents from other cultures see teachers as authority figures and believe it is best left to the schools to educate their children. Cultural and language barriers often lead parents to maintain a respectful distance from the schools. This choice is often misinterpreted by educators as a lack of concern for their child's education. Other barriers evolve out of time constraints and logistical problems such as transportation or child care.

Mostert (1998) noted that facilitating parent involvement could be both rewarding and frustrating. He reminded us that the assumptions we make can enhance or destroy relationships with parents and families. Mostert recommended that teachers begin by assuming that parents want the best for their children.

Effective communication is essential for collaboration to be successful. Gordon (1987) identified the following common elements in effective interpersonal interactions: active listening, depersonalizing situations, identifying common goals and solutions, and monitoring progress to achieve goals. Families should be included whenever possible in the decision-making process involving their child's education. Home visits, newsletters informing parents of class activities, or asking for parents to volunteer in the classroom or share their wisdom with students are all examples of ways to show respect to families and encourage their involvement.

SUMMARY

An important goal for any classroom teacher is the participation of all students in as many classroom activities as possible. For students with special needs, this means that teachers must be able to identify academic and social disabilities and, further, choose strategies that help these students succeed in the classroom. In this chapter, we defined the 13 categories of disabilities eligible under IDEA, including ADHD and Gifted. In each category, we provided some suggestions for teachers to facilitate inclusion of students with special needs. The successful inclusion of students with special needs can only be met when we develop an attitude of acceptance and model that acceptance to students in the classroom. For more information on identifying and teaching students with disabilities, see the Council for Exceptional Children Web site: www.cec.sped.org.

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Building Relationships

Wen Shu runs up to her teacher, Mr. Puentes, to show him the kocapeli figure that her mother bought her on a recent business trip. Mr. Puentes interrupts Wen Shu's story about the doll and tells her to get back to her seat because the class needs to study for the state examinations that come at the end of the month. Dejected and somewhat embarrassed, Wen She returns to her seat, but is not very interested in the practice multiple-choice test Mr. Puentes wants her to take.

In the era of high-stakes testing and accountability, teachers are pressured to produce students who meet or exceed state standards and expectations. However, some of the moves that teachers make to meet these expectations may in fact be counterproductive. Specifically, teachers may be putting less effort into cultivating positive relationships with their students. This is unfortunate because the interpersonal relationship between a student and teacher has a profound effect on instructional outcomes and activities. Research consistently shows that interpersonal processes influence the way that students feel about the content they study and their motivation to study it. Teachers are also affected by the relationships they have with their students. The desire to prepare for class, give extra attention to students, and develop creative teaching strategies are related to the types of relationships teachers establish and maintain. Therefore, this chapter focuses on the interpersonal processes that play a role in the classroom context. In this chapter, we discuss the importance of positive teacher–student relationships, discuss the perspectives that describe the way these relationships develop, and review the communication processes found to promote positive teacher–student relationships.

TEACHER–STUDENT RELATIONSHIPS

How students feel about school and their classes is in large part determined by the quality of the relationships they have with their teachers. Teachers who are caring, friendly, helpful, understanding, and dependable foster supportive relationships with their students (Goodenow, 1993; Rosenfeld & Richman, 1999; Skinner & Belmont, 1993). Noddings (1995) argued that, "we should want more from our educational efforts than adequate academic achievement and . . . we will not achieve even that meager success unless our children believe that they themselves are cared for and learn to care for others" (pp. 675–676). Noddings argued that spending time developing relationships with students, talking to them about their problems, and guiding them toward sensitivity and competence are significant teaching activities. These connections are important because they encourage learning that may not occur otherwise.

Kohn (1996) also stressed the role of positive teacher–student relationships when he stated:

> Caring teachers converse with students in a distinctive way; they think about how what they say sounds from the students' point of view. They respond authentically and respectfully rather than giving patronizing pats on the head (or otherwise slathering them with "positive reinforcement"). They explain what they are up to and give reasons for their requests. They ask students what they think, and then care about their answers. (p. 112)

Bosworth (1995) interviewed middle-school students regarding their ideas of what it means to be a caring teacher. Helping with schoolwork was the frequently mentioned characteristic of a caring teacher. Valuing individuality and recognizing different learning styles were important to seventh and eighth graders and among males. Providing guidance and helping with problems outside of school time was the second most frequently mentioned characteristic.

The previous discussion outlines the value of developing positive teacher–student relationships. However, this discussion provides little guidance on ways to obtain these goals. We believe it is helpful to examine the ways that the student–teacher relationship develops in the classroom context. Once we outline these developmental processes, we turn our attention to the ways teachers can use friendship as a context for promoting care in the classroom.

RELATIONSHIP DEVELOPMENT

The student–teacher relationship evolves and changes over the school year. As the school year unfolds, teachers and students share information and experiences; as their understanding of each other increases, the way in which they communicate changes. Research suggests that the management of two aspects

of communication—breadth and depth—influence the trajectory of an interpersonal relationship (Altman & Taylor, 1973; Knapp, 1978).

Breadth refers to the number of different topical areas available during communication. As teachers get to know students, they learn about their family situations, their extracurricular interests, and their academic strengths and weaknesses. *Depth* refers to how much information a person has about a particular topic. A teacher may learn that a student's mother who is recently divorced is starting to date someone whom the child does not like. When the child reveals how he or she feels about this circumstance, the dialogue involves more depth. It is not uncommon for teachers to learn a great deal from a student when they discuss the reasons why homework was not turned in on time, why a student seems lethargic, or why a student misbehaves. Over time the number of topics and opportunity to explore them increase.

Communication changes in other ways over time. Knapp and Vangelisti (2000) stated that communication shifts along eight primary dimensions. Communication in developing relationships becomes more:

1. Broad—more topics are discussed in more depth.
2. Unique—people are viewed as unique individuals rather than in stereotyped roles.
3. Efficient—accuracy, speed, and efficiency of communication increase as a relationship develops.
4. Flexible—the number of different ways an idea or feeling can be communicated verbally and nonverbally.
5. Smooth—the ability to predict the other's behavior increases so that there is "greater synchrony in interaction."
6. Personal—people reveal more about themselves such as fears, feelings, likes, and dislikes.
7. Spontaneous—informality and comfort increase and we feel less hesitant about how to react, what topics to discuss, and how much can be said about a topic.
8. Overt—praise and criticism are less inhibited as a relationship grows.

According to Knapp and Vangelisti (2000), as relationships start to unravel or deteriorate, communication becomes narrow, stylized, difficult, rigid, awkward, public, and hesitant, and judgments are suspended. Teachers frequently have difficulty with one or more students. In this stage, communication may be strained, difficult, and awkward. Sometimes teachers search for ways to reconnect and even start over, but they find that such attempts are difficult if not impossible. Because the relational reservoir is not as deep in teacher–student relationships, damage or hurt can have severe consequences.

Knapp (1978) explicated several stages that mark the development of intimate relationships. In his theory, relationships go through a linear progression of stages. His theory can be extended to the student–teacher relationships as well. The stages we believe are applicable to teacher–student interactions are initiating, experimenting, intensifying, differentiating, and dissolution. It is also important to note that teachers and students go through the stages at different rates. Some relationships develop rapidly, whereas others trudge along and seem locked in one place.

Initiating

The first relationship stage we enter is initiating. As a popular TV ad states, "we don't get a second chance at a first impression." The moment students walk into the classroom, teachers start to form impressions that in many cases are difficult to change. In turn students develop expectations about teachers. In college, some students shop to find a teacher whom they feel will be *easy*. They come to the first day of class, listen to the introductions, and examine the course syllabus; from this limited information, they decide whether they want to say in the class or drop it.

Friedrich and Cooper (1999) discussed the importance of the first day of class and provided strategies for managing it. They argued that early meetings play an important role in initiating students to the knowledge and skills students need to successfully perform the role of student in a particular context. Students also obtain a great deal of information about the teacher's affective orientation to the class. A smiling and expressive teacher is perceived to be friendly, whereas a frowning neutral teacher is considered mean or grumpy. These first impressions play an important role in the trajectories of teacher–student relationships.

Experimenting

A second stage of development is experimenting. During this stage, teachers and students try to identify common ground and locate points of difference. Teachers start to obtain information about the student that might influence a teaching strategy. For example, teachers may ask students about their favorite hobbies, activities, and family situations. These conversations sometimes occur during class discussion, in a student conference, or during recess. The information obtained in these exchanges provides data used to form impressions about students and helps shape subsequent communication behavior.

Similarly, students *experiment* with teachers. Students try to sort out teachers' likes and dislikes, their real rather than professed boundaries (if you give a real good excuse, they will let you turn in late work), and their grading biases. In

chapter 3, we discussed ways that teachers can gain and use cultural knowledge. Obtaining this information and testing its use relates to the experimenting stage of development. In many ways, elements of experimenting exist throughout the academic year as students and teachers explore ways to manage their relationships.

Intensifying

As students and teachers obtain more depth and breadth in their interactions, their relationship moves to an intensifying stage. This label is most suited for romantic partners, but the communication reflected in this stage is illustrative of teacher–student interactions as well. During this stage, interactants make communication choices based on psychological rather than sociological information. That is, the communicators make choices based on the individual rather than stereotypic roles. It is in this stage that teachers start to communicate authentic care for the students and the circumstances that enhance and constrain learning.

According to Knapp (1978), there are several features of the intensifying stage. In romantic relationships, forms of address become more informal, use of first-person plural becomes more common, private jargon may be used, verbal shortcuts built on background information may be used, and more direct expressions of commitment may be employed.

Differentiating

Over time, as participants learn more about each other, they may determine that they really do not care for the other person very much. Although it is socially inappropriate to admit it, the fact remains that teachers sometimes dislike some of their students, and students may come to dislike their teachers. In this stage, participants try to distance themselves physically and emotionally. The most obvious indicator of differentiating is conflict. Teachers will sometimes say, "it's like pulling teeth to get her to work" or "he argues about every assignment I give." Students may argue that they do not do well in class because they have a personality conflict with the teacher. Every teacher has a story about a difficult student, and every student has had a teacher they felt was Cruella Daville. Unfortunately, this stage is particularly problematic for learning. The negative affect accompanying this stage influences motivation and the willingness to learn. Students avoid the teacher, and the teacher avoids the student; as a consequence, learning is compromised.

Deterioration and Dissolution

The final stage is dissolution. In this stage, the formal teacher–student relationship is severed. There are several ways that this occurs. In some cases, a student–teacher relationship becomes so problematic that the student is removed from the class. Another example is when a student is moved because he or she has special learning needs that the teacher is not prepared to address or accommodate. A third way is through matriculation. Each year a class is ushered to the next grade. Even for students who are not passed, it is unlikely that they will have the same teacher.

Although the formal teacher–student relationship can be dissolved (the teacher no longer has the student in class), the interpersonal relationship does not evaporate. Rather, the teacher–student relationship is redefined. Teachers and students cannot erase the history they shared and the way they affected each other. Relationships between teachers and students never really stop, but are transformed or redefined. As students move to the next level or transfer to another school, they take a part of that teacher with them. Many students return to their teachers many years later to praise their efforts. When these relationships rekindle, they do not start from scratch, but are based on the history and events that were shared. We prefer to say then that a teacher–student relationship is never really terminated, but redefined.

The developmental perspective advanced by Knapp helps teachers understand some of the ways their relationships with students develop and change over time. Teacher–student relationships may not follow the linear progression explicated by Knapp (1978), however the communication that characterizes these stages does appear in teacher–student relationships. Teachers worry about the ways to start the school year out on a positive note (initiating), stress when they feel the students are testing them (experimenting), delight when they feel a special connection with a student (intensifying), and obsess when they have conflicts that seem to have no end (differentiating). Knapp's perspective provides one view of the developmental features of the teacher–student relationship, whereas other theorists have looked at this relationship from different perspectives.

RELATIONAL DIALECTICS

The theory of relational dialects, initially advanced by Leslie Baxter and her colleagues (e.g., Baxter, 1987, 1988, 1990, 1992, 1993; Dindia & Baxter, 1987; Rawlins, 1992, 2000), proposes that in every relationship there are contradictory tensions, and the way individuals deal with these tensions influences the way in which it evolves. The key features of dialectical theory are *contradiction* and *process*. Contradiction is conflict between two opposing forces such as the desire

for closeness and the desire for distance. People in long-term relationships know about the need to have space and the need to be close and connected. The need for space finds its meaning through its opposite—the need for connection.

The second feature of dialectical theory is process. Like our theory of communication, relationships are fluid and always in a state of adjustment. Participants continually struggle and work through tensions through communication and other symbolic activities.

Researchers have identified three relational dialectics: integration/separation, stability/change, and expression/privacy. The integration/separation dialectic involves the tension between wanting to integrate with another person and wanting to be separate from others. The stability/change dialectic involves the tensions between wanting predictability and wanting novelty or stimulation. The final dialectic involves the desire to be open and expressive on one hand and private and reserved on the other.

Rawlins (2000) applied the theory of relational dialectics to the instructional context. Specifically, he used a dialectic perspective to explore teaching as a mode of friendship. According to Rawlins, friendship consists of affection, equality, and mutuality.

Affection means caring about and for others. Rawlins (2000) stated: "We can care deeply and significantly about students without desiring an exclusive, intimate connection with them, either as a close friendship that might imply unwarranted favoritism, or as a sexual relationship that involves exploitation and abuse of power differences" (p. 6). Rawlins contended that in the instructional context affection is concerned with the classical tradition of *philia*—a posture concerned with good will and helping the other prosper. With good will come respect and a concern for the student to do well.

Equality is the second facet of friendship and is more problematic for the teacher–student relationship. Teachers are considered authorities on most issues that touch classroom life. Theoretically they have more knowledge of content and are in positions of power. For Rawlins, however, it is not necessary to exercise these power differences. Rather, teaching as friendship attempts to minimize status differences and create an atmosphere where all can learn. Teachers can learn a great deal when they open themselves to the world of students.

The final feature of friendship is mutuality. This aspect of friendship follows from the previous ones. According to Rawlins, learning is promoted when teachers and students "create an enterprise of colearning." Mutuality occurs when teachers and students recognize their interdependency in the pursuit of academic goals.

Rawlins (2000) outlined four dialectical tensions that characterize interaction between teachers and students in the context of educational friendship. The first is the dialectics of freedom to be independent and the freedom to be dependent. The degree to which educators direct and the degree to which stu-

dents are allowed to discover have been historical issues. Individuals typically have freedom to choose friendship, but such volition is constrained in the educational context. Teaching as friendship entails cultivating a student's independence in thought and action while being available to provide expertise and guidance when necessary.

Rawlins acknowledged that some students should not be pushed into independence when they are not ready for it. The degree of independence that is appropriate depends on the grade level and amount of competence the student has to complete the task. However, the sense of independence and accountability also fosters attitudes of accountability and ownership—important features of academic success.

The second dialectic involves affection and instrumentality. Most teachers admit they want their students to like them, but this is not the only goal that teachers should seek. Rawlins cautioned teachers not to be too hard on students they like to guard against the perception of favoritism or too easy on them because you feel they deserve the benefit of the doubt. Similarly, teachers should not be too hard on students with whom they have not established good will. Teachers should not give themselves permission to dislike students without giving students permission to dislike teachers. The key here is that the way in which teachers manage this dialectic influences how safe students feel to take risks and develop new competencies.

The third dialectic is concerned with judgment and acceptance. Teachers must balance feedback about how they feel about a student as a person and how the student has completed an instructional task. This is perhaps one of the most difficult dialectic tensions to manage. Students may misread the fun, expressive teacher as one who has loose standards and is overly flexible on requirements. Teachers who have the best interests of the student have high expectations, but are flexible in how they are obtained.

The fourth dialectic is concerned with expressiveness and protectiveness. On the one hand, being open and expressive in pursuing knowledge are important, but so is discretion and respect. One university professor loved to put students on the spot in seminars. He played a game called "shooting fish in a barrel." He required students to give reports on a research article. After the report, the professor would literally ask question after question at the student with the goal of showing the class that the student did not understand the article, thus requiring the sage professor to explain it. The professor was verbally aggressive as he challenged students to respond to his questions. This strategy did little to foster interest in the topic, but much in creating anxiety and anger. A thoughtful teacher helps create trust and comfort so that students do not feel overly vulnerable about what they do not know, but not too smug in what they do.

Relational dialectics provides a useful perspective for understanding the daily strains of interpersonal relationships. Rawlins' notion of teaching as a mode of friendship is particularly interesting. Effective teachers manage relationships

that promote the best interests of the students whom they teach. These teachers recognize that the student–teacher relationship establishes a context that facilitates learning and motivation. The next section of this chapter reviews five major constructs that positively influence the student–teacher relationship. Teacher immediacy, affinity seeking, self-disclosure, humor, and credibility impact the development of a positive teacher–student relationship.

TEACHER IMMEDIACY

Teacher immediacy was introduced in chapter 2 and has a profound effect on the teacher–student relationship. Immediacy consists of the verbal and nonverbal behaviors that reduce psychological distance. Smiling, eye contact, touch, a relaxed body orientation, and close physical proximity are examples of nonverbal immediacy behaviors. Addressing students by name, using humor, using personal examples, and referring to the class as *my class* are examples of verbal immediacy behaviors. Although the thrust of research on teacher immediacy has attempted to assess its role in motivation and learning, we agree with Hess and Smyth (2001), who argued that its function is primarily relational.

One consistent finding is that teacher immediacy promotes affective learning, the feelings students have about the instructor, and course content. Nonverbal immediacy appears to play a significant role in the feelings the student have about the teacher and course. Richmond (2002), a leading scholar on teacher immediacy, argued that:

> The primary function of teachers' nonverbal behavior in the classroom is to improve affect or liking for the subject matter, teacher, and class, and to increase the desire to learn more about the subject matter. One step toward this is the development of a positive affective relationship between the student and the teacher. When the teacher improves affect through effective nonverbal behavior, then the student is likely to listen more, learn more, and have a more positive attitude about the school. (p. 70)

The research conducted on immediacy shows that it is positively associated with a number of affective factors that unfold in the classroom. Students who see a teacher who is approachable may feel more comfortable in the learning situation, may be more inclined to listen to instructional material, and may be more comfortable in seeking clarification on information they do not understand. Frymier and Houser (2000) found that immediacy was positively correlated with two important communication skills: referential skill and ego support. Referential skill is concerned with explaining content, and ego support is how teachers meet student needs. The way is which a teacher explains instructional material is mediated by immediacy. This finding is consistent with Powell and Harville (1990), who found that immediacy was related to teacher clarity es-

pecially for students from Latin and Asian backgrounds. Immediacy may help teachers give form to important instructional contexts. Also the immediate teacher may also be more psychologically connected to students. During instructional episodes, immediate teachers may consistently assess student feedback and adjust instructional messages to meet their needs.

Research by Baringer and McCroskey (2000) investigated the effects of student immediacy on teachers. The authors reasoned that the nonverbal behavior of students is one way that students indicate they are accurately receiving information and are positively disposed to it. The authors examined the effects of student immediacy and found that teachers are more positively disposed to students who engage in immediacy behaviors and are more motivated to teach students who engage in immediacy behaviors.

It is important to emphasize that immediacy involves implicit codes. Therefore, maximum effects occur when teachers interpret the immediacy cues in the same way. Difficulty arises when implicit codes are misinterpreted or not acknowledged. An immediate teacher may be perceived as easy or less rigorous. Students may believe that a teacher who they like will accept late work or give them the benefit of the doubt. Other difficulties can arise when the immediate teacher fails a student or is critical on an assignment. In addition, because most of the studies are correlational, it is difficult to sort out the causal direction of the effects. Do the positive effects start with the student, the teacher, or some combination of both? Our belief is that teachers who exhibit immediacy behaviors foster positive relationships and, in turn, promote positive attitudes about learning.

AFFINITY SEEKING: THEY LIKE ME, THEY REALLY LIKE ME

As the prior research suggests, liking is an important part of a positive relationship. Researchers have examined the strategies teachers use to get students to like them. Bell and Daly (1984) developed a typology of the strategies individuals use to generate liking that have been extended to the classroom context. Richmond (1990), for example, identified five affinity-seeking strategies that influence motivation and affective and cognitive learning (facilitate enjoyment, assume control, nonverbal immediacy, optimism, and self-concept definition). For the complete list of affinity-seeking strategies, see Table 6.1.

Frymier and Thompson (1992) investigated the relationship between affinity-seeking and credibility and found that nonverbal immediacy was significantly related to perceptions of teacher character. This dimension of credibility is concerned with how much a person is liked, respected, and admired. Immediacy appears to increase the positive regard for the teacher, which in turn may influence student attitudes about learning.

TABLE 6.1
Affinity-Seeking Strategies

1. Altruism. The affinity-seeker strives to be of assistance to the target in whatever she or he is currently doing.
2. Assume Control. The affinity-seeker presents him or herself as a person who has control over whatever is going on.
3. Assume Equality. The affinity-seeker strikes a posture of social equality with the target.
4. Comfortable Self. The affinity-seeker ignores annoying environmental distractions, seeking to convey a "nothing bothers me" impression.
5. Concede Control. The affinity-seeker allows the target to assume control over relational activities.
6. Conversational Rule-Keeping. The affinity-seeker adheres closely to cultural rules for polite, cooperative interaction with the target.
7. Dynamism. The affinity-seeker presents her or himself as an active, enthusiastic person.
8. Elicit Other's Disclosures. The affinity-seeker encourages the target to talk by reinforcing the target's conversational contributions.
9. Facilitate Enjoyment. The affinity-seeker tries to maximize the positiveness of relational encounters with the target.
10. Inclusion of Other. The affinity-seeker enthusiastically participates in an activity the target is known to enjoy.
11. Influence Perceptions of Closeness. The affinity-seeker engages in behaviors that cause the target to perceive the relationship as closer than it actually has been.
12. Listening. The affinity-seeker listens actively and attentively to the target.
13. Nonverbal immediacy. The affinity-seeker signals interest in the target through various nonverbal cues.
14. Openness. The affinity-seeker discloses personal information to the target.
15. Optimism. The affinity-seeker presents him or herself to the target as a positive person.
16. Personal Autonomy. The affinity-seeker presents her or himself to the target as an independent, free thinking person.
17. Physical Attractiveness. The affinity-seeker tries to look and dress as attractively as possible in the presence of the target.
18. Present Interesting Self. The affinity-seeker presents her or himself to the target as someone who would be interesting to know.
19. Reward Association. The affinity-seeker presents him or herself in such a way that the target perceives the affinity-seeker can reward the target for associating with him or her.
20. Self-Concept Confirmation. The affinity-seeker demonstrates respect for the target and helps the target to "feel good" about him or herself.
21. Self-Inclusion. The affinity-seeker arranges the environment so as to come into frequent contact with the target.
22. Sensitivity. The affinity-seeker acts in a warm, empathetic manner toward the target.
23. Similarity. The affinity-seeker seeks to convince the target that the two of them share many similar tastes and attitudes.
24. Supportiveness. The affinity-seeker supports the target in the latter's social encounters.
25. Trustworthiness. The affinity-seeker consistently fulfills commitments made to the target.

Frymier (1994) built on the previous research and proposed a causal model of affinity-seeking, liking, and learning. A causal model charts the direction and strength of a set of variables. Frymier (1994) contended that affinity-seeking strategies increases liking, which in turn impacts motivation and learning. Frymier (1994) found that the use of affinity-seeking had a significant effect on the degree to which students liked their teachers. The strategies most predictive of liking were *assume equality* (teacher does not appear superior), *dynamism* (teacher is active and enthusiastic), and *facilitate enjoyment* (teacher develops a classroom environment that is enjoyable). Six other strategies were associated with liking and motivation: *comfortable self* (the teacher is at ease and relaxed), *concede control* (the teacher allows students to control the relationship), *conversational rule-keeping* (teacher is polite and follows rules for appropriate conversation), *elicit other's disclosure* (teacher inquires about student's interests), *nonverbal immediacy* (teacher signals liking and interest), and *optimism* (teacher presents a positive outlook). Frymier (1994) argued that teachers' improved interpersonal relationships helps motivate students to work on instructional tasks.

Wanzer (1998) explored the strategies students use to engender liking from an instructor. She also examined how instructors respond to the strategies students use. Students were asked to identify five examples of the ways they get a teacher to like them. Sixty-six percent of the responses fell into five categories: conversational rule keeping (19%), nonverbal immediacy (13%), elicit disclosure (13%), requirements (11%), and self-inclusion (10%).

Teacher perceptions of student strategies fell into five categories, accounting for 53% of the total responses. Teachers viewed students using self-inclusion (16%), conversational rule keeping (14%), achievement (8%), elicits other's self-disclosures (8%), and self-concept confirmation (7.5%).

Although the data on teacher immediacy and affinity-seeking are overwhelmingly positive, there are some additional issues to consider. The bulk of the research has been conducted on young adults in university or college settings. The studies have been based on self-report data. Few observational or experimental studies have been conducted. Status differences and relationship expectations are not the same at this level as they are in elementary, middle, and high school. Although we have reason to believe that immediacy and affinity-seeking are also important to younger students, their role in learning and attitudes about instruction may be different from those in older audiences.

Also the research has not explicated all the consequences of being perceived as approachable. In some cases, a student may perceive that an approachable teacher will accept an excuse for not turning in work on time. An approachable teacher might be expected to give students the benefit of the doubt or not grade as rigorously. Uncertainty is created when the interpersonal behavior does not seem to match the instructional behavior. An approachable hard grader may not go together well in the students' minds. Teachers can help this circumstance by continually reminding students of grading criteria and expectations.

SELF-DISCLOSURE

One of the processes that is central to management of interpersonal relationships is self-disclosure. Cooper and Simmonds (1999) argued that self-disclosure is necessary for effective teacher–student interactions. Self-disclosure occurs when someone reveals something of themselves that the other person would not know unless otherwise disclosed. Through direct comments, stories, and illustrations, teachers reveal themselves to students. These revelations in turn influence relationships with students, which influence how students feel about the content. Several investigators have explored the effects of self-disclosure in the instructional context. Nussbaum and Scott (1979) were among the first to investigate the role of self-disclosure in instructional relationships and found that the perception of honesty in disclosure had the most positive effect. Downs, Javidi, and Nussbaum (1988) found that award-winning teachers tended to use moderate amounts of self-disclosure. Further, these teachers' disclosures were relevant to course content or utilized to clarify course material. When teachers overdisclose or share information that is unrelated to the course, self-disclosure may have more negative consequences. At one university, students frequently complained about one of the professors who spent an inordinate amount of time discussing the difficulties in her personal life. Although the students did not dislike the professor, they did feel that the class was becoming a waste of time.

Sorensen (1989) investigated how the management of self-disclosure differentiated good and poor teachers. She found that good teachers were more likely to engage in disclosive statements reflecting a concern for students. Evaluative disclosures or ones reflecting a negative outlook were reflective of poor teachers. These types of messages were also related to affective learning. Positive disclosures positively impacted affective learning, whereas negative ones did not.

Culture plays a significant role in self-disclosure. Individuals from individualistic cultures are the most likely candidates for self-disclosure because explicitness and revelation are part of their cultural experience. Students from Euro-American backgrounds probably disclose the most in a class. Students from high-context cultures are less likely to engage in self-disclosure. Native Americans, Asians, and Latinos are less likely to engage in self-disclosure or feel that it is appropriate.

Effective use of self-disclosure requires that teachers be attentive to students. When teachers use self-disclosive statements to help illustrate a concept, reveal a struggle, or show difficulty learning a concept, the disclosure is likely to have positive effects. Disclosures about personal life issues are more problematic and risky. During class discussions and in individual meetings or conferences, teachers need to be attentive to the role of culture. Students from high-context cultures may be less willing to volunteer information or reciprocate when the

teacher discloses. One of the least effective strategies a teacher can use is to demand a student to reveal something he or she is uncomfortable sharing.

HUMOR

In our judgment, a sense of humor is a powerful way to promote positive relationships in the classroom. Whether in kindergarten or college, students respond positively to teachers who can make them laugh. Humor also appears to be a cross-cultural phenomenon. Kluver (1990) found that a sense of humor was the most frequently ranked characteristic of effective teachers in China. Through humor, important connections both affectively and cognitively are made.

Meyer (2000) contended that humor has four major functions. The first two serve to create connections, and the second two serve to differentiate and create distance. The first connecting function is identification. Humor can be used to link speakers with their audiences, which helps create group cohesiveness. For example, when teachers make fun of themselves, they lower their personal status while raising students' status. Humor that reduces tension and reveals that the teacher is also human increases the connection between teacher and student.

A second connecting function is clarification. Humor that is used to encapsulate a view or idea may result in more clarity. Meyer noted that ideas referenced in memorable stories or phrases may lead to greater recall. Because humorous stories are frequently presented incongruously or unexpectedly, they make the receiver do a bit more cognitive work, which influences recall of information.

A third function of humor, according to Meyer, is enforcement. Humor can be used to level criticisms while maintaining some degree of identification with the audience. Teachers frequently use this type of humor to reinforce class rules and expectations for normative behaviors. Students may ask a teacher to repeat instructions to a task because they were talking to a neighbor and not paying attention. A teacher may use any number of humorous statements to comment on the students' lack of attention.

The final function that Meyer discussed is differentiation. People use humor to contrast themselves with the views of others. Humor of this kind is frequently revealed in political humor. In the classroom, humor of this type may come in the form of sarcasm or teasing. One professor with a class full of athletes once claimed the phrase *scholar athlete* was an oxymoron. She asked one member of the class if he was a student or an athlete because he did not have the skills to be both. Needless to say, her *humor* did little to connect the student with the teacher or the class. When humor is used effectively, positive outcomes can be achieved.

Pollack and Freda (1997) outlined six positive effects of teacher humor in the middle-school context. Their recommendations apply to a broad range of in-

structional settings. The first is *building rapport*. Teachers who can laugh at themselves and with students shape a climate where students are more willing to work together on instructional tasks. Students like teachers who can laugh. The second is *empowering* learners. Humor helps level status differences and create a culture of learners. Teachers frequently make mistakes, and the degree to which these errors are dealt with humor models appropriate behavior for students. Teachers who want to passionately hold onto the mantle of authority do not do much to create positive learning environments. The third is *thinking creatively*. Creative thinking requires individuals to see things from different perspectives. Humor is a way to sort through the incongruous or incompatible, which in turn promotes problem solving. The fourth is *creating interest*. Humor serves to increase arousal and attention. Students tend to remember content and lessons that are presented in an exciting and humorous way. The fifth is *enhancing self-esteem*. Teachers can help students laugh at themselves, discover realistic expectations, and promote a willingness to work through difficult situations. Teachers with no sense of humor are perceived to be rigid, and students perceive they have little room to make mistakes. The final feature is *emphasizing socialization*. A good sense of humor can help teachers turn a tense situation into a challenging, intriguing one. Humor helps students discover appropriate models of behavior and helps establish a sense of intellectual humility. Humor can do much to engender the joy of learning.

Several attempts have been made to categorize teacher humor (Bryant et al., 1979; Gorham & Christophel, 1990; Nussbaum et al., 1985). For example, Neuliep (1991) developed a taxonomy of high school teachers' humor. He asked high school teachers to assess their humor using the taxonomy developed by Gorham and Christophel (1990). The teachers were also asked to indicate how frequently they used humor and their reasons for using humor. Finally, teachers were asked to describe their last attempt at humor. Based on the responses, Neulip developed a 20-item taxonomy of humor consisting of five major sections: (a) teacher-targeted humor, (b) student-targeted humor, (c) untargeted humor, (d) external source humor, and (e) nonverbal humor.

Teacher-Targeted Humor

The teacher is the object of humor. Three types of teacher-targeted humor emerged. One type involves the teacher self-disclosing personal information that may be related to the course content, not related to the course content, or something of an embarrassing nature. The second form of teacher-targeted humor involves role playing by the teacher. A teacher imitating a public figure is an example of this type of humor. The final type of teacher-targeted humor involves the use of self-deprecating humor, where the teacher pokes fun at him or herself.

Student-Targeted Humor

The student is the target of this type of humor. Four types of student-targeted humor emerged. The first involves a teacher making fun of a student mistake. A second involves teasing in a nonhostile or friendly fashion. The third type of student-targeted humor involves the teacher insulting the student in a nonhostile manner. The final type of humor involves student role playing.

Untargeted Humor

The third type of humor is untargeted. The focus of the humor is not on a teacher or student, but an issue or a topic. Three types of untargeted humor were identified. One involves an awkward comparison or incongruity. For example, one teacher likened the sword fight between Tybalt and Romeo to a WWF Wrestling Match. The teacher blended Shakespearean language with wrestling jargon to make his point. The second type of untargeted humor is when a teacher tells a joke. The joke may or may not be related to the topic being studied. A third type of untargeted humor entails a play on words or puns. The final type of untargeted humor was labeled *tongue in cheek* or *factious humor*. This type of humor involves witty remarks by the teacher that are not directed at the student or teacher.

External Source Humor

External source humor requires the teacher to draw on a source other than the teacher. One type of external humor is to relate some historical event to something the students find humorous. For example, numerous comedians made fun of the ballot counting process during the 2000 presidential campaign. A second type of external source humor is when the teacher utilizes cartoons, photos, or editorials that have humorous intent. Calvin and Hobbs is a popular comic strip that reveals many of life's difficulties and dilemmas. In the final type of external source humor, the teacher demonstrates some natural phenomena in a way that the class finds amusing. Neulip used the example of a teacher releasing a balloon to demonstrate high versus low pressure.

Nonverbal Humor

Nonverbal humor entails affect displays and kinesic humor. Using a funny face or other type of gesture to accentuate a point or using your body to mock or illustrate something are illustrative of this type of humor.

Civikly (1992) provided five guidelines for the use and assessment of teacher humor:

1. Review and assess how humor has been used in the class. Placement of a tape recorder in an unobtrusive location while teaching is simple and review of the tape can provide excellent feedback.
2. Analyze and assess the classroom atmosphere. Each class develops norms and relational bases distinctive to itself.
3. Identify humor styles comfortable for you. There is a wide range of choices from which to select: stories and anecdotes, puns, riddles, limericks, cartoons and visuals, understatement and exaggeration, impersonation, mime, teasing, satire, witticisms, jokes on oneself, and political humor.
4. Work on planned spontaneity of instructional humor. This involves doing some preparation of examples and incidents that the students see as relevant and humorous and then presenting these in a spontaneous manner.
5. Evaluate the humor developed and used. Watch for student reactions and ask for feedback regarding their interest, attentions, liking, and comprehension of the material presented. . . . Use this feedback to direct use of humor in class, and refine any rough edges that may be identified. (p. 137)

The research indicates that there are numerous advantages to using humor in the classroom. Although we do not advocate that teachers attempt to be stand-up comedians, we do believe that humor should be integrated into teaching. Appropriate humor is the key, however. Humor for humor's sake, tasteless and off-color jokes, hostile teasing, and mocking have no place in the classroom. Teachers also need to be aware of the cultural factors influencing humor. Humor is inextricably defined by context ("I guess you had to be there" phenomena), and students from some cultures may not have the background information necessary to understand the joke. To test this notion, ask a student from a culture different from yours to tell a story or joke from his or her native orientation. Then ask the student to explain why the example is humorous. This exercise should illustrate how context influences humor.

TEACHER CREDIBILITY

The last concept we believe is important to the teacher–student relationship is credibility. We typically apply the concept of credibility to political or legal contexts, yet the principles have a great deal of application to instructional settings. Two primary dimensions are related to teacher credibility: competence and character. *Competence* refers to content knowledge that the teacher possesses. *Character* refers to the trustworthiness of the person.

The interplay of competence and character appear to be important in the classroom as well. At lower grades, many students are most concerned about the social characteristics of the teacher. One second grader indicated that she wanted to be placed in Ms. West's class because she is nice. Even in college, students seek instructors who have positive personal characteristics. Content competence is seldom the only factor influencing the choice to enroll in a particular class. At the same time, students form judgments about how well teachers present instructional information, clarify instructional goals, and criticize student work. These judgments also influence the perception of teacher credibility.

Frymier and Thompson (1992) investigated the relationship between affinity-seeking strategies and credibility and found that affinity-seeking was positively related to the character dimension of credibility and moderately related to the competence dimension. The authors acknowledged that it is possible to view someone as competent but not likeable. Teaching effectiveness is enhanced when a teacher is judged highly on both dimensions. Frymier and Thompson (1992) identified 12 strategies that relate to both character and competence. The strategies were: listening—paying close attention to what the student says and querying to ascertain whether the student's intended meaning is the interpreted meaning; facilitate enjoyment—developing a classroom environment that is enjoyable, an environment in which learning is both interesting and entertaining; dynamism—physically indicating to students that one is dynamic, active, and enthusiastic via physical and vocal animation; elicit other's disclosure—inquiring about students' interests and opinions and providing positive reinforcement for responses; optimism—presenting a positive outlook and oneself as someone who is pleasant to be around, someone who will not be self-critical or critical of others; sensitivity—communicating empathy, sympathy, and an "I care about you as a person what you think about" attitude; conversational rule-keeping—following the cultural norms for socializing, being polite, and demonstrating interest in what the student says; comfortable self—displaying a confidence in the setting, oneself, the students, and presenting self as a relaxed, contented individual; nonverbal immediacy—smiling, making frequent eye contact with students, exhibiting forward leans and other nonverbal cues indicating interest; altruism—attempting to be of assistance to the student by doing things for her or him giving advice; present interesting self—highlighting of past accomplishments, positive qualities, and demonstrating one's knowledge; and trustworthiness—letting the student know that as a teacher he or she is responsible, reliable, fair, honest, sincere, consistent in beliefs and behaviors, and will fulfill promises. Collectively these behaviors appear to shape a global judgment that a teacher is both knowledgeable and caring.

SUMMARY

The classroom is a context full of interpersonal challenges. Effective teachers need to understand that learning goals are embedded in relational dynamics. The research suggests that the path to learning is less rocky and contains fewer hairpin turns when there is a positive relational foundation. By studying the stages and dialectical processes involved in relationship development and utilizing the strategies that enhance relationships, teachers can be in a better place to accomplish instructional goals and objectives.

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Logic Puzzles
Logic Puzzles
Games
Illustration
Puzzles
Writing

SEVEN

Building a Community of Learners

Mr. Kiyuna is a first-year science teacher at Mark Twain Middle School. He enters his classroom on the first day of the new semester to find some students slumped in their chairs staring into space. Others are sitting on top of the desks chatting with friends. Mr. Kiyuna knows he has a challenge ahead because many of his students have serious academic and social problems. Chung has a learning disability in reading. He is reading on the third-grade level and has a great deal of difficulty comprehending what he has read. Mateo has an attention deficit/hyperactivity disorder (ADHD) and has difficulty with impulsiveness. Other teachers have told Mr. Kiyuna that Mateo is capable of disrupting his entire class. Irene is an adorable girl who has autisticlike tendencies and is nonverbal. Her intelligence is above average. As you read through this chapter, put yourself in Mr. Kiyuna's shoes and think about how you would go about addressing some of the special needs his students present.

Teachers can easily become discouraged when faced with the challenges we have described for Mr. Kiyuna. Unfortunately, traditional approaches such as punishment, failure, and exclusion have become preferred practices for dealing with students who do not fit the norm. Students who have special needs often fail to experience a sense of belonging and academic achievement in school. In recent years, the focus on exclusion has been replaced by research suggesting that creating classroom communities in which students' academic and social needs are met reduces the need for discipline. According to Elias et al. (1997),

> when schools attend systematically to students' social and emotional skills, the academic achievement of children increases, the incidence of problem behaviors decreases, and the quality of the relationships surrounding each child improves. And, students become the productive, responsible, contributing members of society that we all want. (pp. 1–2)

Addressing their needs may improve students' motivation, behavior, and learning. In this chapter, we define *social and emotional learning* and discuss the concepts of *community* and *belongingness*. Teacher support, peer-mediated learning, classroom meetings, and service learning are discussed as strategies for increasing students' sense of community.

SOCIAL AND EMOTIONAL LEARNING

Over the years, educators have been bombarded with programs designed to counter the negative effects of poverty, drugs and alcohol, violence, and so on. Many of these programs have come and gone as fads do in education. Teachers have reported that these programs have many positive components, but seem to be tried for only short periods of time and are then put on the shelves in the materials center to collect dust.

Elias et al. (1997) contended that social and emotional development, and the recognition that learning is relational, is a missing piece in our educational system. They defined *social and emotional competence* as:

> the ability to understand, manage, and express the social and emotional aspects of one's life in ways that enable the successful management of life tasks such as learning, forming relationships, solving everyday problems, and adapting to the complex demands of growth and development. (p. 2)

Social and emotional competence includes such skills as self-awareness, understanding communication processes, working cooperatively, self-management, problem solving, and decision making. In chapter 2, we discussed the work of Gardner (1983) and Goleman (1995), who stressed that emotional and interpersonal competences play dramatic roles in the learning process.

In *A Celebration of Neurons*, Sylwester (1995) also discussed the importance of emotion in student performance: "We know that emotion is very important to the educative process because it drives attention, which drives learning and memory" (p. 72). Social and emotional issues may be at the core of many problem behaviors exhibited by children today. A student who is hungry and traumatized over a recent violent episode at home may not be enthusiastic about a math assignment. Such a student, when asked by the teacher to "get busy," may get angry instead and throw books on the floor. Goleman (1995) referred to this type of response as the thinking brain being hijacked. A teacher who has little understanding of the ways emotions direct learning may respond to the student with harsh discipline. Unfortunately, many students and teachers experience hijacking as they attempt to deal with complex issues presented in today's classrooms. Much has been written about the importance of

developing classroom communities to meet the academic, social, and emotional needs of today's students.

DEFINING COMMUNITY

The term *community* has many definitions in the literature. McMillan and Chavis (1986) identified four elements of community. The first element is membership (the feeling of belonging or personal relatedness). The second element is influence: Members make a difference to a group, and the group matters to its members. The third element is reinforcement—the feeling that members' needs can be met by the resources received through their group membership. The last element is emotional connection, which occurs when members share history, common places, time together, and similar experiences. Communication is central to building community. Kohn (1996) defined *community* as:

> a place in which students feel cared about and are encouraged to care about each other. They experience a sense of being valued and respected; the children matter to one another and to the teacher. They have come to think in the plural: they feel connected to each other; they are part of an "us." And as a result of all this, they feel safe in their classes, not only physically but emotionally. (pp. 101–102)

Dewey (1963) reflected on the social nature of schooling, observing that most children are sociable. He stated,

> A genuine community life has its ground in this natural sociability. Community life does not organize itself in an enduring way purely spontaneously. It requires thought and planning. The educator is responsible for a knowledge of individuals and for a knowledge of subject-matter that will enable activities to be selected which lend themselves to social organization, an organization in which all individuals have an opportunity to contribute something, and in which the activities in which all participate are the chief carrier of control. (p. 56)

In this type of community, the teacher maintains the position of leader of group activities instead of boss or dictator.

Several researchers (Baumeister & Leary, 1995; Deci & Ryan, 1985; Solomon, Battistich, Watson, Schaps, & Lewis, 2000) suggested that an effective school environment supports a student's basic psychological needs to (a) belong to a social group whose members are mutually supportive and concerned; (b) have age-appropriate opportunities to be autonomous, self-directing, and influential; and (c) feel competent and effective in valued activities. Unfortunately, many students—especially those of color and those with learning and emotional and behavioral problems—continue to feel isolated and lonely because

most schools focus on academics and pay little attention to students' affective or socioemotional needs.

STUDENTS' NEED FOR BELONGING

According to some researchers, belonging is one of several basic psychological needs that is critical to academic and social growth and development (Brendtro, Brokenleg, & Bockern, 1990; Deci, Ballerand, Pelletier, & Ryan, 1991; Ryan, 1995). In a true story of an orphan, Brendtro et al. (1990) and Schutz (1966) described the tragedy of a young man who was abandoned, living in shelters, group homes, and treatment facilities. "Each time he was moved was like pulling a piece of used tape from the wall and trying to fasten it again," the authors explained. This young man, failing in school and desperate to belong, hanged himself suspended from two trees at his last foster home. This story typifies the loneliness and feelings of worthlessness that so many youth feel. Unfortunately, the needs for belonging and connectedness are often ignored in schools.

In an extensive review of literature, Osterman (2000) found many positive outcomes associated with feelings of belongingness. Children who experience a strong sense of belonging or relatedness have more positive attitudes toward school, teachers, and peers. They are more likely to enjoy school and be engaged in learning. Children who experience a lack of belonging, who feel rejected and alienated, are more likely to display problem behavior (aggression or withdrawal) in the classroom, show less interest in school, have lower achievement, and may drop out of school. Other research suggests that many psychological and behavioral problems, such as drug use, eating disorders, depression, dropouts, teen pregnancy, and so on, exist as a result of lack of belongingness (Baumeister & Leary, 1995).

Much has been written about bullying—a serious problem involving one student or group of students harassing a victim verbally or physically without provocation (Barone, 1997; Batsche & Knoff, 1994; Horne & Socherman, 1996). There are serious and devastating consequences for both bullies and their victims. Bullies often have problems with the law in adulthood and are likely to continue the cycle of abuse with their spouses and children (Batsche & Knoff, 1994; Lochman, 1992). Victims of bullies often experience high levels of anxiety, have low self-esteem, and are without friends at school (Lane, 1989; Slee, 1994). Schools and teachers can make a difference by providing students with positive environments that encourage a sense of community and belonging.

A significant body of literature regarding students' sense of community comes from the Child Development Project, in which researchers were assigned to help school districts become communities of support that address students' needs for belonging. A goal was to help students experience the classroom as a supportive and caring environment, in which students were involved in decision making and goal setting. This was the first comprehensive, longitu-

dinal, school-based project that focused on prosocial education. In two separate longitudinal studies, researchers found a positive relationship between students' sense of community and intrinsic academic motivation (Battistich, Solomon, Kim, Watson, & Schaps, 1995; Solomon et al., 2000). These studies also found that belongingness is associated with positive feelings about school, class work, and teachers.

Battistich and Hom (1997) found that increases in school level sense of community were associated with lowered levels of drug use and delinquent behavior among fifth- and sixth-grade students. Other studies reported positive effects of peer support or acceptance on students' academic behavior and interest in school (Ladd, 1990; Ryan, Stiller, & Lynch, 1994; Wentzel & Asher, 1995). The absence of peer support—feeling rejected or alienated—was linked to students' emotional distress, behavior problems in the classroom, disliking for school, lower achievement, and dropout.

In a review of literature regarding gender differences and belongingness, Wentzel and Caldwell (1977) found that boys are less likely to experience a sense of belongingness than girls. Girls experienced higher peer acceptance rates and had more friends, whereas boys experienced more negative relationships. Problem behavior may indeed be an indicator that students' needs for belongingness and relatedness are not being met.

Solomon, Watson, Battistich, Schaps, and Delucchi (1996) identified teacher interventions utilized in the Child Development Project to enhance students' sense of community. Several elements were found to contribute positively to students' sense of community: (a) cooperative learning, (b) developmental discipline, (c) use of literature to promote interpersonal understanding and discourse about prosocial values, (d) helping/prosocial activity, (e) schoolwide and parent activities, and (f) promoting nonexclusionary attitudes. Developmental discipline involved building trusting relationships between teachers and students, providing students opportunities for autonomy, and teaching appropriate social skills. Students were actively involved in classroom governance. Classroom meetings and discussions encouraged students to take responsibility for their own behavior. Literature was used to help students gain an understanding of not only what they read, but also the needs of others. Inclusion was promoted through various cooperative groupings and noncompetitive science fairs and service projects across grade levels. Most of the research cited suggested many positive academic and social outcomes for students who experience a sense of belonging and community in their schools and classrooms.

TEACHER SUPPORT

How students feel about school and their classes is in large part determined by the quality of relationship they have with their teachers. That relationship is supportive for the student when the teacher is caring, friendly, helpful, under-

standing, and dependable (Goodenow, 1993; Skinner & Belmont, 1993; refer to chapter 4 for additional information on student–teacher relationships and teacher immediacy). Caring teachers are important to the development of classroom communities (Kohn, 1996; Noddings, 1995; Osterman, 2000). Noddings (1995) suggested that "we should want more from our educational efforts than adequate academic achievement and . . . we will not achieve even that meager success unless our children believe that they themselves are cared for and learn to care for others" (pp. 675–676). Noddings argued that spending time developing relationships with students, talking to them about their problems, and guiding them toward sensitivity and competence are legitimate teaching activities. Noddings supported the integration of themes of care into the core curriculum because it fosters teacher–student connections and encourages learning that may not occur otherwise.

Kohn (1996) noted that:

> caring teachers converse with students in a distinctive way: they think about how what they say sounds from the students' point of view. They respond authentically and respectfully rather than giving patronizing pats on the head (or otherwise slathering them with "positive reinforcement"). They explain what they are up to and give reasons for their requests. They ask students what they think, and then care about the answers. (p. 112)

Teachers demonstrate caring by empathizing with students' feelings and dilemmas and by protecting students with clear boundaries (Elias & Tobias, 1996). They communicate caring in their teaching by showing enthusiasm for the subject, teaching to students' strengths and abilities, and providing opportunities for students to be challenged yet successful. Caring teachers express optimism about their students' educational futures.

Bosworth (1995) interviewed middle-school students regarding their ideas of what it means to be a caring teacher. Helping with schoolwork was the frequently mentioned characteristic of a caring teacher. Valuing individuality and recognizing different learning styles were important to seventh and eighth graders and among males. Providing guidance and helping with problems outside of school time was the second most frequently mentioned characteristic.

Noddings (1995) noted that caring teachers (a) model appropriate behavior, (b) provide dialogue in which students can affect decision making in the classroom, (c) arrange opportunities for students to demonstrate caring through such activities as community service, and (d) validate student growth in their development of caring.

Many students come to school facing what seem to be insurmountable odds to becoming successful. Much has been written about the resilient child who, despite many difficult challenges, is able to bounce back. Resilient children usually display such qualities as social competence, problem-solving skills, auton-

omy, and a sense of optimism about the future (Bernard, 1993). Sagor (1996) talked about the need for educators to provide all students, and especially those at risk, with a "resiliency antibody." Teachers must provide opportunities in each child's daily routine to experience feelings of competence, belonging, usefulness, potency, and optimism. Sagor suggested that certain activities can help students develop resilience (e.g., mastery learning, authentic assessment, learning style-friendly instruction, cooperative learning, service learning, problem-solving approaches to discipline, goal setting). One of the most protective factors identified in resilient children is that of a trusting relationship with an adult who accepts them unconditionally (Werner & Smith, 1982). The adults could be a teacher, counselor, or other adult who serves as a role model.

Good (1983) indicated a relationship between teacher expectations and student achievement and behavior. Good and Brophy (1997) cautioned that teachers' expectations can become self-fulfilling prophecies and affect outcomes such as student achievement, class participation, and social competence. Teachers prefer and have higher expectations for students who are high achievers and engaged over those who are perceived to be less capable (Ladd, 1990; Swift & Spivack, 1969; Wentzel & Asher, 1995).

Perceived teacher support has been found to be related positively to student engagement, liking for school, and motivation (Goodenow, 1993; Skinner & Belmont, 1993). Ryan and Patrick (2001) found that students who perceived their positive relationships with their teachers to be positive engaged in more self-regulated learning and less off-task or disruptive behavior. Positive teacher–student relationships often serve as a buffer against developing social and academic problems. Deci et al. (1991) found that, in classes where teachers encourage autonomy, children were more intrinsically motivated and had higher self-esteem than in classrooms where teachers were more controlling.

Good and Brophy (1973) identified four personal qualities that teachers must acquire to manage the classroom successfully:

1. They must have the respect and affection of the students.
2. They must be consistent, credible, and dependable.
3. They must assume responsibility for the students' learning, seeing their responsibility as teaching, not mothering, babysitting, or entertaining the students.
4. They must value and enjoy learning and expect the same from their students.

Jones and Jones (2001) talked about the importance of establishing and maintaining *positive relationship bank accounts* with students. They noted that teachers can build positive relationships by getting to know their students, maintaining a high ratio of positive to negative comments, communicating high expectations, and creating opportunities for personal discussions. For ex-

ample, Ms. Gonzales, a high school teacher, has "Teach Me Tuesdays" every week, when students are allowed to talk for about 10 to 15 minutes about what they did over the weekend or to teach Ms. Gonzales something new about current trends in music or dress. Ms. Gonzales is amazed how much she learns about her students. Her students really look forward to Tuesdays. This time is validating to the students and also gives the teacher information that helps in planning instructional activities.

Reflection

- **Observe a classroom teacher or, if you have your own classroom, have a peer observe and document your positive and negative comments to students in the classroom. What did you learn from this observation?**
- **Identify some specific ways that teachers can build positive relationships with their students.**

PEER-MEDIATED LEARNING

We all know that peers can be powerful influences, both positive and negative, on the ways people behave. Researchers have found the heavy reliance on peers to be one of the strongest predictors of problem behavior in adolescents. Bronfenbrenner (1986) noted that adolescence is a time of challenge when young people seek creative outlets for their energy. When constructive challenges are not available to them, they find their challenges in such peer group-related behaviors as poor school performance, aggressiveness or social withdrawal, absenteeism or dropping out, drug abuse, promiscuous sexual activity, and delinquency. Two studies found that peer acceptance and group membership were related to academic achievement (Ladd, 1990; Wentzel & Caldwell, 1997).

Most teachers start the school year with their academic agendas in mind, whereas students begin the school year with their social agendas in mind. Brown and Bauer (1994) suggested that students demonstrate their need to connect through visual, verbal, and physical behaviors. Visual behaviors include watching another student, making eye contact, and looking and smiling at another student. Verbal behaviors consist of using the same phrase as another student, making a similar comment or agreeing with another student, making parallel statements, or making a statement referring to gender (i.e., "we're sisters"). Finally, students attempt to connect with others through touching, mirroring another student's movements, or moving closer to another student. Many times teachers misperceive students' need to connect socially as purposeful disruptive behavior. Teachers must learn to harness peer support in the classroom in ways that improve student achievement and conduct.

Peer-mediated learning includes such strategies as observational learning, cooperative learning, and peer tutoring. Montagu, Mecham, and McLaughlin (1991) identified the advantages of peer-mediated learning to both students and teachers. Peer-mediated strategies:

- Foster positive peer relationships that can lead to a greater appreciation for all students' strengths and weaknesses.
- Help develop cooperative attitudes and mutual respect among students.
- Individualize instruction and allow students time for practice and repetition. This can be particularly helpful to students with learning problems.
- Provide more opportunities for students to make relevant academic responses and allow opportunities for informal talk as well.
- Give students immediate feedback.
- Allow the teacher to move ahead when students are ready.
- Are cost-effective.

When students spend more time on academic tasks and have more opportunities for response and engagement, they are generally more motivated to complete their work. Ryan and Patrick (2001) found students to be more engaged in learning when their teachers supported peer interaction in academic work, when their ideas were shared and respected, and when their performance was not compared to that of others.

OBSERVATIONAL LEARNING

Children and adolescents observe and learn from one another and from the teacher in the classroom. Teachers must be aware that all of what they say and do will be observed and perhaps modeled by their students. Practicing what we preach becomes of paramount importance. Teachers who are keenly aware of the influence of peers in the classroom can use modeling to improve student behavior.

Kauffman, Mostert, Trent, and Hallahan (1998) recommended that a student who is chosen as a model be seen by the target student as attractive and influential. If you are looking for a model to help a target student become less anxious about word problems in math, the model should be someone for whom the student has respect and who does well in solving math problems. If you are trying to involve a withdrawn student in class discussion, a model student may be one who enjoys class discussion and is encouraging to the target student. The model should exhibit a competence level in the desired behavior just above that of the target student. Kauffman et al. cautioned that teachers often choose models who are *too good* to be encouraging to the target student. Mica, a student with Down's syndrome included in a regular education elementary classroom, spent

the first few weeks of school hitting other students. The teacher worked with the students to teach them to teach Mica other ways to get positive attention. A few weeks later and after a few more knocks on the head, Mica was learning to work cooperatively. Teachers should remember to praise models and target students for attempting new behaviors.

COOPERATIVE LEARNING

In chapter 6, we discussed the benefits of cooperative learning and specific cooperative learning strategies. Just to reiterate, cooperative learning has been touted as providing many benefits to students of all ethnic backgrounds and ability levels. As discussed in chapter 7, African-American learners, Asian and Latino students, Central Americans, Native Americans, and Hawaiian-American children prefer cooperative learning activities to teacher lectures. Mainstreamed students with disabilities learn more in cooperative groups, compared with those in controlled classes, and they also develop friendships with their nondisabled peers (Johnson & Johnson, 1986; Madden & Slavin, 1983).

Cooperative learning provides students with opportunities for social and emotional growth as well as academic achievement. Students practice appropriate social skills as they learn to take turns, listen, and provide feedback to their peers. Cooperative learning groups are effective for increasing student interaction and mutual respect. Students learn perspective taking and problem solving. All of these strategies help build a student's sense of belonging and community in the classroom.

Peers can be powerful in their influence to modify student behavior. For example, group-oriented contingencies or peer pressure can be used to encourage positive interaction and productivity among group members. Kauffman et al. (1998) identified several types of group contingencies. Independent group contingencies apply to the entire class regardless of the group's performance. All students who finish their work are allowed free time on the computer. In a dependent group contingency, the performance of one peer may determine the consequences received by the entire group. If one student does not complete an assignment necessary for a group presentation, each student in the group may receive a lowered grade. This works best when group members are responsible and not as well when the behavior of the group is generally disruptive. Interdependent group contingencies apply when a reward is given for the performance of individual group members as well as for the performance of the group. Team sports are a good example of this type of contingency.

There are advantages and disadvantages in using group contingencies. Sarafino (2001) identified several advantages of group contingencies over individual contingencies. Monitoring and dispensing reinforcers is easier with a group than with individuals within the group. Group contingencies have built-in in-

centives encouraging group members to discourage inappropriate behavior. Also group contingencies increase cooperation. Problems can occur when using any of these contingencies when peers threaten or harass a student who does not perform as directed. To avoid negative peer pressure, Kauffman et al. (1998) recommended the following guidelines when choosing group contingencies:

1. Be certain that the performance standard is not too high.
2. Emphasize reward for appropriate performance rather than punishment for undesirable behavior.
3. Keep the competition fair. Kohn (1998) reminded us that competition or win–lose structures undermine the spirit of cooperation and diminish the goals of developing caring communities in which students learn empathy, perspective taking, and generosity.
4. When using interdependent group contingencies, encourage everyone to participate, but do not require it. Allow those who do not want to be team members to sit out.
5. Make allowances for those who do not work well as part of any group you can construct. Set up individual contingencies for them and allow them to rejoin the group when they are ready to work cooperatively.

The use of group-oriented contingencies is an indirect way to involve peers in encouraging appropriate behavior and participation. Teachers must be aware of the needs of individual students and group goals if they are to maximize the effectiveness of these strategies. A more direct way to involve peers is through the use of peer tutoring.

PEER TUTORING

Jenkins and Jenkins (1985) defined *peer tutoring* as "a system of instruction in which pairs of students help one another understand and learn by teaching" (p. 2). A synthesis of the literature highlights the benefits of peer tutoring: (a) peer tutoring is academically and socially beneficial for tutees and tutors alike; (b) benefits for tutors and tutees occur frequently and at consistently high rates; (c) students with disabilities can function effectively as tutors for other students; (d) the effects of peer tutoring interventions are aligned closely with the subject matter and reveal significant improvements in academic subjects; (e) social benefits are restricted to attitudes toward school, the academic content taught, and social interactions between tutors and tutees; and (f) the outcomes of peer tutoring strategies are related to the research design, experimental–control group comparisons, and pre- and posttreatment only group designs (Utley, Mortweet, & Greenwood, 1997).

Peers can be used to tutor students in specific skills, teach appropriate social skills, encourage student involvement, reinforce positive behavior, and mediate student conflicts. Peer tutors can be especially helpful to second-language learners and students with disabilities. Cross-age tutoring, in which older students tutor students 1 or more years younger than they are, has become increasingly utilized, especially with typical students tutoring students with disabilities or older students with disabilities tutoring younger students with similar problems. Tutors may or may not be from the same school as their tutees. These types of arrangements allow teachers to attend to the individualized learning needs of students.

Peer tutors must be chosen carefully and trained to perform their role. Peer tutoring can create more problems than it can resolve if not carefully implemented and monitored. A student who has significant problems with attention may become more manageable when tutoring a peer. However, if not properly trained, this student may carry his inattentiveness into the tutoring situation and disrupt the other student's focus on a task. The best peer tutors are those who attend school regularly, have good relationships with their peers, can follow directions, and have the skills teachers have deemed desirable for target students to obtain. Training peer tutors requires a time commitment on the part of teachers to teach trainees the specific skills needed.

PEER MEDIATION

Peer mediation has become a popular response to increased school violence. There are many types of peer mediation programs available. One program developed by Myrick and Erney (1984, 1985) was piloted at Bucholz High School in Gainsville, Florida. Initially the program focused on training high school students in basic counseling skills and providing them with information about substance abuse prevalent in their community. After completing the training, the high school students worked as peer facilitators with children in elementary schools. The program was broadened to include elementary and middle-school students in the training. These students learn to be good listeners, group leaders, and role models for one another. Training focuses on student achievement, parental issues, making friends, and career choices.

Peer mediation—or what is often referred to as *conflict resolution*—programs are becoming part of schoolwide efforts to curb student violence. The process involves training student volunteers or students who have been nominated by their teachers to mediate conflicts between their peers and help their peers find reasonable solutions to their conflict. The goal is to provide students an opportunity to share their feelings and their account of the conflict with their peers. The hope is that this process will teach students ways to handle conflict other than with violence. The mediation process as outlined by Conboy (1994) proceeds as follows:

1. The peer mediator asks all parties involved to agree to listen to the others' points of view without put-downs or name-calling.
2. Conflicting parties are guided to define the problem, what happened, and how they responded or felt.
3. The mediator paraphrases what has been said to ensure that everyone feels their points of view and feelings about the conflict have been correctly reflected.
4. The mediator asks participants to brainstorm solutions that would be fair to both sides.
5. Once the participants have agreed to a solution, a written contract is developed and signed by both parties.

Conboy suggested that peer mediation offers administrators and teachers a positive alternative to resolving conflict, prevents conflicts from escalating, helps create a more positive school climate, and encourages students to think of alternative solutions to solving problems with their peers. Peer mediation programs focus on such topics as gossip, theft, harassment, and fighting. Several high school programs offer anger management classes. Research points to the effectiveness of peer mediation programs in reducing violence and increasing cooperation among students (Johnson & Johnson, 1996). Students learn alternatives to conflict and become more responsible for their own behavior (Thompson, 1996). When students are involved in solving their own conflicts, teachers report less stress because they have more time to spend on academics. Mediators report improved attitudes toward school and better academic performance. Even after they leave school, mediators report the benefits of their training in solving their own problems (Carruthers, Sweeny, Kmitta, & Harris, 1996).

Reflection

- **Armando and Hector are two students in Mr. Kiyuna's class who are always arguing. Today Hector slapped Armando on the side of the head in response to a comment he claims Armando made about his nose. How would you go about responding to this situation? How would you facilitate a workable relationship between these two boys?**

CLASSROOM MEETINGS

Many teachers use class meetings as a tool to build a sense of community and belonging. Zionts and Fox (1998) noted that the goal of classroom meetings is to teach students to communicate, solve problems, and accept and appreciate di-

versity. Kohn (1996) suggested that classroom meetings are the best places for sharing, deciding, planning, and reflecting on a myriad of issues—from what the students did over the weekend to what kind of place the classroom should be. Kohn (1998) noted that structured opportunities for class members to meet help children feel respected, build a sense of community, and contribute to the development of such skills as perspective taking and problem solving.

Perhaps the guru of classroom meetings is William Glasser. In his 1969 book, *Schools Without Failure*, Glasser discussed three types of meetings: (a) social problem solving, (b) open ended, and (c) educational/diagnostic. Social problem-solving meetings attempt to solve individual and group problems that involve problems of the class and the school. Students identify problems, propose alternative solutions, and commit themselves to a plan of action. In open-ended meetings, children are asked to discuss any topic relevant to their lives, including classroom curriculum. Glasser gave the example of an incredible discussion that evolved around the children's interest in what it would feel like to be blind. Glasser noted that "a class that is involved, thinking, and successful will have few disciplinary problems." The third type of meeting is the educational/diagnostic one, in which the topic is directly related to what the class is studying. This type of meeting gives the teacher the opportunity to determine students' prior knowledge of a topic and evaluate the extent to which information presented is understood and generalized to other areas. For example, a teacher who is teaching about HIV/AIDS may want to use an initial meeting to determine what students know about the topic. A meeting held after information has been taught could determine whether students would be willing to design a group project focused on HIV/AIDS awareness.

The goals of classroom meetings may vary by grade level. In elementary classrooms, teachers often use classroom meetings to teach social skills. In secondary classrooms, teachers see several different groups of students, and the focus may be more specific to projects or small- and whole-group concerns. One teacher at the middle-school level used class meetings to discuss group projects, identify group roles and rules, and evaluate process. Another teacher used a *solutions box* to encourage students to identify topics or issues they wanted to discuss during class meetings.

One teacher of a self-contained class for students with emotional and behavioral problems held class meetings three times a week. The meetings usually focused on problem solving for interpersonal issues, but were also used to plan field trips and class projects. The teacher described one class meeting that *saved the melodrama*. The principal was on her way to the class to see the students (who were not exactly her favorites) perform when two students who were having a relationship issue walked out of the class. Several peers were successful at getting the students to return to class. A brief classroom meeting was held to resolve the conflict and the show continued. Students are much more likely to take responsibility when they are allowed to solve their own problems.

Organization

Jones and Jones (2001) provided the following guidelines for organizing classroom meetings:

1. Discuss the concept of class meetings with students. Tell students the meeting is an opportunity to discuss what they like and dislike about the class and offer suggestions for change.
2. Class meetings should be held in a tight circle with all participants, including the teacher, seated in the circle.
3. All problems related to the class as a group can be discussed. Problems involving two or three individual students may be discussed outside the class meeting unless the problem affects the class as a whole.
4. An agenda that is created by students should be written on the board prior to each class meeting. Items are discussed in order.
5. Discussions during class meetings should be directed toward finding positive solutions to problems and not toward criticism. Decisions should be recorded to encourage group or individual commitment, and group meetings should end on a positive note.
6. If an individual student's behavior is on the agenda, that student must agree to have the behavior discussed. The focus should be on providing positive feedback with positive suggestions for altering behavior. If students choose not to have their behavior discussed, they may decide to allow other students to discuss options in their absence, listen to a tape-recorded discussion of the group's suggestions, discuss the problem with a small group of students, or discuss the problem with the teacher and develop an alternative plan for behaving.
7. Students' responsibilities during class meetings include: (a) raising hands and being called on to speak, (b) listening to the speaker and not talking while someone else is speaking, (c) staying on the topic until it has been completed, and (d) being involved by sharing ideas that will help the group. To increase students' involvement in class meetings, we recommend assigning jobs such as discussion leader, task observer, and behavior and feeling observer. Students should be instructed in these particular roles. Students should function in the role for five to six meetings so they can master the skills and model them for another student.
8. The teacher serves as facilitator for the class meetings.

Zionts and Fox (1998) identified several basic interpersonal skills that teachers must possess to be effective leaders. They must be good listeners who are able to reflect the thoughts, perceptions, and feelings of others. They must seek clarification by asking questions and summarizing concisely. They must be able to give information to the group to ensure the flow of the conversation—a sort

of *guide on the side*—and communicate encouragement and support. They can use self-disclosure, which is leading by example. We caution that teacher self-disclosure should not include too much personal information. The meeting should be focused on students' needs.

Zionts and Fox (1998) recommended that class meetings be organized ahead of time. Rules should be developed by students and the teacher. Meetings can be held one to five times a week and last from 30 minutes to 1 hour. Length may depend on the students' attention spans. Glasser (1969) recommended 10 to 30 minutes for the lower grades and 30 to 45 minutes for the upper grades. It is important to determine the purpose(s) of class meetings. For students with emotional and behavioral disorders, a meeting format may include solving problems of the member or members, teaching new skills, and evaluating the results. Nelson, Lott, and Glenn (1993) offered guidelines for effectively using classroom meetings in their book, *Positive Discipline in the Classroom*.

Jones and Jones (2001) noted:

> Whenever people live close together for many hours each day, it is mandatory that time be taken to resolve minor conflicts openly. Like an automobile engine that may appear to run smoothly but will suddenly boil over unless properly lubricated, classrooms require proper maintenance checks and minor tune-ups. When implemented in a positive, supportive atmosphere, class meetings serve as the lubricant for a smoothly running classroom. (p. 342)

Reflection

- **How could Mr. Kiyuna utilize classroom meetings to build a sense of belonging?**

SERVICE LEARNING

Ms. Buckman involved her students—all diagnosed with learning disabilities—in a project with senior citizens. The seniors, from a convalescent hospital, and the special education students joined forces once a week to make cards and craft items to donate to homeless children at a local shelter. The students were involved in service learning.

Students from elementary school through college benefit from service learning projects. Projects can range from advocating for animal rights to adopting grandparents in a nursing home, planting a garden and donating the food to needy families, cleaning up graffiti, recycling, and raising money for survivors of disasters.

In his book, *Greater Expectations*, Damon (1995) described the need for children to experience a sense of purpose. He stated: "The surest antidote to youthful demoralization is a sense of purpose: acquiring, that is, a belief in (and dedi-

cation to) something larger than oneself" (p. 240). Damon suggested that schools and communities must offer children opportunities to contribute to the welfare of others.

Brendtro et al. (1990) agreed that young people cannot develop a sense of their own value unless they have opportunities to be of value to others. Brendtro and colleagues argued that today's youth at risk have become alienated, discouraged, and self-centered. Service learning projects bring young people beyond the "narcissism of self-absorption." As young people find that they can make a difference in the lives of others, they validate their feelings of self-worth. Kohn (1991) suggested that schools would best serve students and our society by focusing on teaching students to be not only good learners, but also good people. He noted that schools are ideal places to teach children about generosity and caring.

Serving others takes on many forms. For example, volunteerism is contributing time without being paid. Community service is helping the community by choice or court order also without pay. Volunteerism and community service do not necessarily involve the integration of academics, curriculum, or reflection. Service learning is a philosophy and teaching methodology that integrates service experiences into the curriculum and connects schools with their communities to enrich students' learning and facilitate their academic, social, and emotional growth.

Service learning was defined in the National and Community Service Act of 1990, signed into law by President George Bush, and reauthorized in 1993 under President Bill Clinton. America's Promise—The Alliance for Youth led by Colin Powell—has mobilized the nation to provide young people opportunities to give back through community service. In May 1993, the Alliance for Service Learning in Education Reform defined service learning and set forth standards of quality for its use in school-based programs. *Service learning* is defined as a method by which young people learn and develop through active participation in thoughtfully organized service experiences that:

- meet actual community needs
- are coordinated in collaboration with the school and community
- are integrated into each young person's academic curriculum
- provide structured time for young people to think, talk, and write about what they did and saw during the actual service activity
- provide young people with opportunities to use newly acquired academic skills and knowledge in real-life situations in their own communities
- enhance what is taught in the school by extending student learning beyond the classroom
- help foster the development of a sense of caring for others

The standards set by the National and Community Service Acts are as follows:

1. Effective service-learning efforts strengthen service and academic learning.
2. Modeling service learning provides concrete opportunities for you to learn new skills, think critically, and test new roles in an environment, which encourages risk taking and rewards competence.
3. Preparation and reflection are essential elements in service learning.
4. Students' efforts are recognized by their peers and the community they serve.
5. Youth are involved in the planning.
6. The service students perform makes a meaningful contribution to the community.
7. Effective service learning integrates systematic formative and summative evaluation.
8. Service learning connects a school and its community in new and positive ways.
9. Service learning is understood and supported as an integral element in the life of a school and its community.
10. Skilled adult guidance and supervision is essential to the success of service learning.
11. Preservice and staff development, which includes the philosophy and methodology of service learning, best ensure that program quality and continuity are maintained.

There are several different types of service learning experiences: direct service, indirect service, and advocacy. In direct service, students have personal contact with those whom they are serving. Projects such as mentoring, tutoring, and working with senior citizens in retirement homes are all examples of direct service. Indirect service requires the students to address a problem in the community, rather than have direct contact with others. Examples are raising money, sorting clothes at a homeless shelter, and writing letters to hospitalized children. Advocacy service learning projects allow students to lend their voice to increase public awareness of a problem such as teenage smoking by writing letters to legislators or tobacco companies or creating fact posters and presenting them to young children.

Kaye (2000) identified four steps in service learning. The first step is preparation, which requires the teacher to guide students in identifying a need in the community. Students learn new information and collaborate with community partners. A plan is developed that encourages student responsibility and focuses activities on the integration of service and learning. The project should help students master their subject matter.

In Step 2, students take action through direct service, indirect service, or advocacy. The integration of action and service provides students with opportuni-

ties to actively apply knowledge and skills and simultaneously contribute to the community. A well-known Chinese proverb applies to this step: "I hear and I forget. I see and I remember. I act and I understand."

The third step involves a systematic and ongoing process of reflection through role play, discussion, or journal writing. This is a guided experience in which students are asked to think critically about their service experience. Reflection activities have been found to increase student self-confidence, autonomy, risk taking, self-respect, and sense of usefulness and purpose (Cairn & Kielsmeier, 1991). In their review of research on service learning, Conrad and Hedin (1991) found that reflection afforded students the opportunity for social and personal development.

The last step requires students to demonstrate their learning through presentations and performances; visual art forms; or written articles or letters to their peers, parents, and/or community members. Students may choose to extend their activities to developing other projects that may be of benefit to the community. Others have added a fourth step: celebration. This component recognizes students for their accomplishments through special assemblies, certificates, parties, and sometimes media coverage. Service providers and recipients may participate.

Benefits and Barriers

Service learning has proved to be beneficial to both general education and special education populations. Studies on the effects of service learning for typical children have reported improved academic and social skills (Brugh, 1997; McPherson, 1997; Wade, 1994). Dundon wrote about the value of service learning: "The most enduring value comes with the connection to our own deepest selves—to the place where empathy and compassion live. Once we have tapped that core being, once we know what that feels like, we will want to go there again" (p. 37).

Many students with special needs have significant difficulties in both academic and social domains and have experienced continual failure leading to feelings of inadequacy and helplessness. Students with disabilities are often the recipients of service and seldom have an opportunity to view themselves as valuable to others. Studies that involved students with disabilities pointed to positive gains from service learning in behavior, academics, attitudes, functional skills, social skills, attendance, and relationships with nondisabled peers (Brill, 1994; Malmgren, Abbott, & Hawkins, 1999; Muscott, 2000; Wade, 1994; Yoder, Retish, & Wade, 1996). Curwin (1993) noted the benefits of service learning for at-risk students: "Opportunities to help others may provide a way to break the devastating cycle of failure-to substitute caring for anger and replace low self-esteem with feelings of worth" (p. 36).

Service-learning projects can be labor-intensive. According to Rockwell (2001), service-learning projects require (a) an understanding of the benefits, (b) a method of incorporating state standards into the service-learning experience, and (c) an evaluation of resources. She warned of the difficulties in scheduling, integrating curricular content, and acquiring resources (e.g., time, money, and transportation).

Although there are many positive outcomes of service-learning programs, Muscott (2001) suggested that we view these outcomes with cautious optimism. Many of the service-learning programs involving students with emotional and behavioral problems, for example, have been assessed qualitatively using anecdotal information from teacher observation, questionnaires, and students' interviews. Muscott stressed the need for more rigorous research to support the claims of service-learning programs.

Resources

Kaye (2000) published *The Service Learning Bookshelf*—a collection of book titles to aid teachers and family members in connecting student learning with service to the community. Kaye recommended that books be used as catalysts that allow readers to consider what they have in common with the characters, understand how the actions of the characters make a difference in the lives of others, and identify and address problems in the neighborhood and community. *The Service Learning Bookshelf* lists categories commonly selected for service-learning experiences—from AIDS awareness and education to special needs and disabilities. Also numerous Web sites are included for those interested in learning more about service learning. For more information, check some of the following Web sites:

National Service-Learning Cooperative Clearinghouse: http://www.nicsl.coled.umn.edu

The Service Learning Bookshelf: http://www.abcdbooks.org

Corporation for National Service: http://www.cns.gov

Service Learning 2000 Center: http://www.leland.stanford.edu/group/SL2000/

Youth Service America: http://www.yscal.org

SUMMARY

Educational philosopher John Dewey (1971) began working for educational reform in the late 1800s. He believed that education should involve the whole child in a variety of activities that would prepare students to be productive citizens of the community. He wrote,

> When the school introduces and trains each child of society into membership within such a little community, saturating him with the spirit of service, and providing him with the instruments of effective self-direction, we shall have the deepest and best guaranty of a larger society which is worthy, lovely, and harmonious. (p. 29)

In this chapter, we discussed the importance of community building in and out of school, including establishing healthy relationships with peers and adults to promote students' socioemotional and academic growth. Students learn best when they are motivated and actively involved in the learning process. Teacher support and peer-assisted strategies such as cooperative learning, classroom meetings, and service learning all serve to give students a sense of ownership in their learning. Students learn to work together to serve others or solve real problems in the school or community. We hope that you will move beyond what we have referred to as the *curriculum of control* and consider the affective needs of your students when designing your classroom.

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England Pilgrims
religious freedom
Mayflower
September 6, 1620
gun powder, food, guns,
water, blanket
clothes, tools

EIGHT

Behavioral Management

Professor Donovan's students are studying to be teachers. In one assignment, he asked his students to observe in a classroom with children who have been identified with emotional and behavior problems. Four students zeroed in on Julius, a 12-year-old African-American boy mainstreamed into Ms. Zimmer's seventh-grade history class. The students observed Julius' behavior over a 30-minute period. After a brief discussion, together students noted the following.

Julius walked in after the class period started and announced, "I'm here, let's party!" Most of the students in the class laughed and then continued their work. Students were working on a map activity at their desks. Written instructions were on the board. Julius began tapping his pencil on his desk and rapping a song inappropriate for the classroom. Several students decided to rap with him. Ms. Zimmer asked the students in the class to get back to the assignment.

Under the pretense of sharpening his pencil, Julius walked down the aisle greeting each of his buddies with "Waaasssup!" and a high-five. Ms. Zimmer commented, "Julius, you are always moving. Get back to your seat."

Julius muttered under his breath, "I'll show you a few moves." A few minutes later, with a smile and a wink, Julius shouted out, "Ms. Zimmer, this class is boring and not exactly meeting my needs."

Ms. Zimmer made the mistake of asking Julius how she could meet his needs. He muttered a few explicit sexual suggestions under his breath. Ms. Zimmer replied, "Julius, your smart mouth is not going to help you pass this class."

Julius then got up from his seat and headed toward the front of the class. With the entire class focused on him, Julius said, "Why don't we have a discussion about why this class is so boring?"

Ms. Zimmer, looking quite flustered, responded, "Julius, I need to talk to you privately." Julius shouted a few obscenities, overturned a desk, and left the classroom.

After class ended, Ms. Zimmer explained that Julius lives with his grandmother and two younger siblings. His mother left the family when Julius was 2 years old. His father's whereabouts are unknown. Julius' achievement scores place him at approximately fifth-grade level in reading and comprehension. His verbal scores, however, are quite high. Julius has been diagnosed as inattentive, easily distracted, and hyperactive. His peers admire him because of his quick wit. He is very athletic, but misses too many classes to be involved in any team sport.

Professor Donovan asked each student in his classroom management course to reflect on why Julius misbehaved. Their comments about Julius' behavior are as follows:

> "Julius is behaving poorly because he has an attention problem. He needs to be on medication. That would probably rein him in."
>
> "Julius has a definite anger problem. It's important to help Julius find out what's driving his anger."
>
> "Julius doesn't know how else to behave. He needs to be taught appropriate classroom behavior, not just told to get back to work."
>
> "I think there's a lot going on with Julius. His family situation, his learning problems, and the fact that the teacher's instructional style doesn't fit his need for activity all contribute to his acting out behavior."

CLASSROOM AND BEHAVIOR MANAGEMENT

In the words of Bob Dylan, "The times they are a-changin'." Since 1969, discipline has been noted in the Gallup Poll of the Public's Attitudes Toward the Public School as the biggest problem facing the public schools (Jones & Jones, 2001). Since the early 1990s, the issues of violence and lack of discipline have been rated as the biggest problems facing the public schools.

We all know that numerous factors (e.g., society, culture, school, teacher) influence students' behaviors. Fisher and Smith-Davis (1990) pointed to pervasive poverty, substance abuse, child abuse and neglect, the effects of divorce and single-parent homes, teenage pregnancy, school dropout, delinquency rates, increasing need for mental health services, and homelessness among other factors making the teaching–learning process far more difficult for teachers and school personnel. These out-of-school factors have become significant predictors of school behavior (Levin & Nolan, 1996).

As argued in chapter 3, culture is another factor influencing both student behavior and teacher responses to it. Since 1980, there has been a significant increase in the Asian and Pacific Islander, Hispanic, and Native-American populations in the United States. McLaughlin (1995) reported that one fifth of American school children come from homes in which a language other than

English is spoken. The enrollment of these students is growing at 2.5 times the rate of students whose first language is English.

Linguistically and culturally diverse students find themselves in a vulnerable position on entering U.S. schools (Garcia, 1999). These students often experience conflicts in school when educators are insensitive to their culture, family background, language, and learning styles (Baca & Cervantes, 1998). Encouraging, however, is the fact that educators are becoming more aware of the importance of multicultural education, respecting each child's cultural background, and choosing curricula and strategies that motivate and enhance learning.

Although student behavior is influenced by many factors outside the control of the school, teachers and schools also have major impacts on student learning and behavior. Student behavior is more positive in schools where students experience a sense of belonging and support and in which instructional activities engage them in ways that connect to what is meaningful in their lives and cultures. Teachers' expectations about student behavior, their organization and management skills, and their use of instructional strategies all influence students' behavior. However, few teachers understand the connection between teaching effectiveness and student behavior.

This chapter covers theoretical perspectives of behavior including etiology and educational application. Cultural influences that may relate to interpreting problem behavior in the classroom are addressed. This chapter explores the use of punishment and suggests effective strategies for dealing with disruptive behavior.

THEORETICAL PERSPECTIVES ON BEHAVIOR

Educators' perceptions about the behavior children exhibit affect the way they instruct and manage students in their classrooms. Teachers constantly struggle with understanding the factors influencing behavior. Although numerous theoretical models have been developed to explain problem behavior, five major theories prevail: biophysical, psychoeducational, behavioral, ecological, and needs-based theories. "For purposes of explanation and control of behavior, humans have been variously conceptualized, for example, as spiritual beings, biological organisms, rational and feeling persons, and products of their environments" (Kauffman, 1997, p. 193). The descriptions of these perspectives on behavior presented here are cursory, and much additional reading is required to fully understand each theory.

Biophysical

The biophysical theory is basically a medical model placing an emphasis on organic origins of behavior. According to this perspective, problem behavior lies within the individual. Proponents of this model believe that physical defects,

malfunctions, and illnesses directly affect an individual's behavior. Disorders such as autism, schizophrenia, hyperactivity, and depression are considered to have biophysical causes.

Biophysical interventions (e.g., drug therapy, surgery, biofeedback, and nutrition therapy) require the services of physicians, psychiatrists, neurologists, and so on. The role of the teacher is that of liaison to the specialists and parents. For example, a teacher may have a student who is depressed and on medication. A goal of the medication may be to help the student be more alert and receptive to the classroom environment. Another goal, less often discussed, may be to move the student to behavior of a normative expectation. Teachers should be aware of the purposes and benefits of various medications prescribed to students and the potential side effects these drugs may have on academic performance and behavior. A teacher's observations can provide valuable information to parents and physicians. In addition, Walker and Shea (1999) suggested the supportive role of the teacher may also include referral, modifying the classroom environment and curriculum to meet students' unique needs, and obtaining permission for administering medication to the child in school.

Psychoeducational

The psychoeducational approach is an educationally focused version of the psychodynamic approach evolved from the original theoretical formulations of Freud (1935). Proponents of the psychoeducational approach (Glasser, 1969; Gordon, 1974; Long, Morse, & Newman, 1965) stressed the importance of teachers understanding the meaning of children's behavior. Behavior is seen as a symptom of inner thoughts and feelings. The underlying belief is that children have the primary responsibility of controlling their own behavior.

A teacher's responsibility in this approach is to help children deal with the thoughts and feelings that motivate the disruptive behavior. The education process should be less repressive, more encouraging of children's emotional expression, and more sensitive to crisis situations (Rezmierski & Korte, 1974). Teachers might use conferencing and good communication skills, such as reflective listening and questioning, to help students solve problems. Other creative activities (e.g., play therapy, puppetry, role playing, dance and physical activities, music, art, photography) are interventions that encourage students to express their feelings and emotions (Walker & Shea, 1999). Helping students gain control over their own behavior is seen as a long-term goal rather than a quick-fix solution.

These strategies probably work best for students who are self-directed and mature. Unfortunately, this strategy is not often used by classroom teachers. Students are not often given opportunities to be expressive and work toward solving their own problems.

Understanding problem behavior from this perspective helps educators understand the importance of providing a supportive, caring environment that encourages students to express their feelings openly and appropriately. This theory highlights the importance of socioemotional issues as they relate to learning. It also emphasizes the resource that counselors, psychologists, psychiatrists, and social workers provide outside the school setting.

Behavioral

The roots of behaviorism can be traced to a philosophical movement called *positivism* popular in the 19th century (Maag, 1999). Positivism supported the notion that the only real knowledge was that which is observable. This approach was different from the medical focus of the biophysical model and the thoughts and feelings concern of the psychoeducational theory. The behavioral model includes a number of theories and points of view about human behavior (Bandura, 1977; Skinner, 1971; Wolpe, 1961). Problem behaviors are thought to be learned and maintained by interactions within the environment. Events in the environment can reinforce behavior either positively or negatively (Cullinan, Epstein, & Lloyd, 1991). Because behavior is learned, it can be unlearned and new behaviors can be taught. Determining the function of the behavior provides important information that can be used to develop and implement behavior management interventions. Behaviorists stress reinforcement as the primary tool to establish and maintain behavior. These basic principles of behaviorism are common to most behavioral theorists.

Behavioral techniques are the most commonly used interventions in classrooms today. A main goal of classroom management is to control external student behavior. Controlling student behavior is primarily the responsibility of the teacher. Teachers are expected to reinforce positive student behavior, withhold reinforcement when behavior does not meet expectations, and/or punish students who consistently display negative behaviors. Traditional techniques might include positive reinforcement, behavior modification, contracting, praise, token systems, and group contingencies. Negative reinforcement might include time-out, loss of privileges, or suspension. These techniques have been highly developed and researched across a wide range of settings, populations, and behaviors. These strategies have been criticized for the lack of generalization and maintenance of behaviors over time.

The Punishment Paradigm. For many teachers, controlling children seems to be the focus of their entire day. This control mentality, says Maag (2001), is pervasive throughout education. In their 1990 book, *At the Schoolhouse Door: An Examination of Programs and Policies for Children With Behavioral and Emotional Problems*, Knitzer, Steinberg, and Fleisch used the term *curriculum of control* to characterize classrooms for students labeled emotionally or behaviorally handi-

capped. They reported that in such classrooms, "too often the dominant curriculum is not the traditional academic curriculum, nor is it about concepts, thinking, and problem solving. Instead the curriculum is about controlling the behaviors of children" (p. 5). Brophy and Rohrkemper (1981) found that when teachers felt threatened, angry, or frustrated by student behavior, they selected more punitive interventions (e.g., reprimand, time-out, detention, suspension, or expulsion). Problems with student behavior are among the main sources of teacher stress and often given as a reason for leaving the profession.

Let us return to our scenario about Julius from the beginning of the chapter. Many teachers would be frustrated by Julius' behavior. Remembering that Julius is an African-American male student with learning disabilities and an attention deficit disorder, how do you think most teachers would have responded to his behavior? Chances are they would respond with some type of punishment. Unfortunately, punishment has not proved effective in addressing problem behavior in the schools (Skiba & Peterson, 2000). In fact physical and verbal punishment can increase the very behaviors that teachers wish to suppress (Kazdin, 2001).

Miltenberger (2001) identified a number of undesirable side effects associated with punishment:

- Punishment may produce elicited aggression or other emotional side effects.
- The use of punishment may result in escape or avoidance behaviors by the person whose behavior is being punished.
- The use of punishment may be negatively reinforcing for the person using punishment and thus may result in the misuse or overuse of punishment.
- When punishment is used, its use is modeled, and observers or people whose behavior is punished may be more likely to use punishment themselves in the future.
- Punishment is associated with a number of ethical issues and issues of acceptability. (p. 115)

Although punishment has many undesirable side effects, it may be an appropriate response when the undesirable behavior is physically dangerous or when, along with punishment, an alternate behavior is taught to replace the negative behavior. A student who is suspended for fighting will likely continue to fight to resolve conflict. The student may need to learn more appropriate ways to deal with anger. If a student shouts out answers during classroom discussions, he needs to be taught to raise his hand and wait for the teacher to call on him. Reprimanding the student in front of the class, ignoring the student, or taking away privileges do not teach the student what you want him to do. Although punishment may bring about a change in behavior, that change is usually temporary. Punishment teaches children what *not* to do, not what to do.

Why the Overreliance on Control? The answers may be deeply rooted in the assumptions we make about why children behave the way they do. If we think children are acting out because they have poor skills in reading, we may react in one way; if we think they are acting out to be defiant, we may react another way. If we believe certain children are unable to perform because they come from a low socioeconomic background and a culture other than our own, we may not be willing to find strategies that will help them be successful.

The choice of punishment over other strategies may be more of a symbolic gesture to appease administrators, parents, and other teachers. It suggests that strong action is being taken in response to a perceived breakdown of order in the schools (Noguera, 1995). Glasser (1969) demonstrated this with the gun analogy. He suggested that when we punish, we may as well be threatening with a gun because most punishments are poor motivators for changing behavior and only work as long as the gun is pointed and as long as the person is afraid. Although guns do not work, Glasser observed schools attempt to solve their problems by resorting to bigger guns—more threats, more control, and more punishments. Schools do this instead of finding ways to involve students and teachers in a rich curriculum of thinking and problem solving.

Maag (1999) suggested that punishment continues to be used because it works for about 95% of students attending public schools. Mild forms of punishment, such as verbal reprimands, loss of privileges, or removals from the classroom, control most students' behaviors. These strategies do not work for the 5% of students who display the most challenging behaviors. Maag cautioned that teachers start to think that the 5% need to be punished using the same strategies more severely and more often. Of course if the punishment worked in the first place, it would be used less rather than more frequently. Punishment does not teach alternative behaviors.

Teachers use punishment because it is quick and easy and works in the short term. For example, a teacher sends a student to the principal's office for talking back and refusing to read aloud. The teacher is reinforced because the student is no longer disrupting the class, and the teacher is able to return to the reading assignment. If this student has low reading skills and is afraid to read aloud, getting out of class has reinforced the student. This is referred to as *negative reinforcement*. Teachers feel they are expected to have good classroom control. A quiet classroom is highly regarded by administrators and parents.

Many teachers who are ill prepared in the area of classroom management choose an authoritarian approach when dealing with students with problem behaviors. This may be because being controlling is part of their personality or because they are afraid of the student(s). Kohn (1996) suggested that we punish because it makes us feel powerful; we think we need to win the battle. In any case, this approach often leads to power struggles that escalate the problem. Brendtro, Brokenleg, and Bockern (1990) observed that when adult strategies are in vogue, two opposing cultures arise: controlling adults and countercon-

trolling youth. Adult control becomes self-perpetuating: The more one controls, the more one needs to control.

Social Learning Theory. Fortunately, behaviorism is not all about punishment. Social learning or modeling is one principle proposed by behaviorists. According to Bandura (1977), children learn behaviors by observing the actions of siblings, parents, teachers, friends, and others. Behaviors—both negative and positive—can be learned through exposure to a model. Aggression, fear, and phobias can be learned vicariously. An individual's identification with the model, and his thoughts and feelings about an event, may override reinforcements in the social environment. Educators use social skills training programs to teach new behaviors. Training programs involve direct instruction, modeling, behavioral rehearsal, and social reinforcement (Goldstein & McGinnis, 1977).

Cognitive-Behavior Modification. The melding of behavioral and cognitive research has brought about intervention strategies called *cognitive-behavior modification* (Bandura, 1986; Meichenbaum, 1977, 1980). These strategies support the notion that how individuals think and feel about events as well as environmental influences must be taken into consideration when modifying behavior. Interventions common to this approach include self-instruction, self-monitoring, self-reinforcement, and cognitive-interpersonal problem solving (Zirpoli & Melloy, 2001). Researchers have identified some advantages to using self-management (Alberto & Troutman, 1999; Schloss & Smith, 1998):

- Self-management strategies are proactive rather than reactive.
- Self-managed students learn to behave more appropriately without teacher direction.
- Self-management strategies are more likely to generalize to other settings.
- Self-management strategies may be more resistant to extinction than behavior improvements established through external controls.

The goal of cognitive-behavior modification interventions is to help individuals become more aware of their reactions to difficult events and actively engage them in taking control of their own responses. Proponents of this model believe that externally oriented behavior interventions do not teach students new behavior and make students overly dependent on a teacher to monitor their behavior.

Understanding behavioral psychology is critical to implementing these strategies appropriately. Teachers need to learn how to observe behavior, collect data, design interventions, and evaluate results. For a thorough understanding of principles and procedures of behavior modification, see Kazdin (2001), Maag (1999), Miltenberger (2001), and Sarafino (2001).

Ecological

From an ecological perspective, behavior is seen as the expression of the relationship between an individual and the unique environment in which that individual functions (Brofenbrenner, 1979). To understand inappropriate behavior, one must understand the context in which the behavior occurs. The ecological approach considers many variables in the family, classroom, school, and community. It is meaningless to discuss problem behaviors in isolation from the contexts in which the behaviors exist because it is the contexts that define the behavior as a problem. From an ecological perspective, problem behavior is viewed as a problem within the system. Therefore, the child can be viewed as part of the problem rather than the sole owner of the problem. Ecological interventions focus on changes not only in the child, but also in systems in the child's environment.

According to Rhodes (1967, 1970), problem behavior often lies in the expectations of those with whom the child interacts. Kauffman, Pullen, and Ackers (1986) identified several factors that teachers contribute to students' problem behavior: inconsistency in management strategies, reinforcement of inappropriate behavior, unrealistic expectations of students, lack of responsiveness to individual differences, irritability with children, and reliance on punishment to manage behavior. Montgomery and Paul (1982) also noted conditions within the classroom that may contribute to problem behavior: unfair competition, autocratic or permissive teaching style, excessive structuring or lack of structure, overstimulation, or understimulation. Teachers are a powerful influence on the way students approach their academic work and the way they behave in the classroom.

Peer groups are also a major influence on students' behavior in school. Children are likely to imitate the behavior of those who are socially popular, physically powerful, attractive, and in command of important reinforcers (Bandura, 1986). Students who act out are likely to gravitate toward peers who are also disruptive (Kauffman, 1997). Rejection by peers can cause aggression or depression in some students. Teachers need to be aware of peer influence when planning seating arrangements, assigning cooperative projects, and designing behavioral consequences or rewards.

In addition to classroom pressures, students may be dealing with problems at home (e.g., divorce, illness, death, or loss of employment) that make it difficult for them to attend to school tasks. A student who is angry over a family dispute the night before may not be available for math instruction. We must remember that parents and teachers hold certain values and beliefs and set behavioral expectations based on the cultures in which they live and work. Students come to school with their own beliefs, values, skills, and expectations about how things should happen. They may react negatively or withdraw when things do not go as expected.

From an ecological perspective, the classroom must be organized to facilitate student learning and behavior management. Among the factors that must be considered are the use of space, materials, and equipment; procedures for classroom routines; and rules for guiding student behavior. Classroom interventions may include the use of group discussion and class meetings to support students' working through conflicts and seeing those conflicts from another's point of view.

Understanding problem behavior from an ecological perspective requires teachers to consider their own behaviors, classroom routines, and other factors that may influence a child's behavior. The teacher role is that of liaison among the numerous individuals and agencies involved in their students' lives. All systems must be analyzed for factors that may contribute to a child's problem behavior and, then, possible solutions can be determined and implemented.

Needs Theories

Another approach to understanding children's behaviors suggests that problems occur when children's needs are not met in the classroom environment. Many times students act out because they did not understand the instructions, the work is too hard or too simple, or peer or teacher interactions are difficult. Some may not have the academic or social skills to be successful. Students may have problems at home that interfere with their ability to concentrate on schoolwork. Some students would prefer to act out rather than look stupid. Teachers may be able to minimize problem behavior by determining student needs, modifying instructional strategies, and/or teaching new skills.

A number of researchers have written about students' basic psychological needs and how those needs influence behavior in the classroom (Brendtro et al., 1990; Coopersmith, 1967; Dreikurs & Cassel, 1972; Glasser, 1969, 1990, 1992; Kohn, 1993; Maslow, 1968). Each of these authors resonated with our discussion of culturally responsive teaching. For example, Brendtro et al., drawing on European tradition and Native-American philosophies of childrearing, indicated that students need to feel a sense of belonging, experience mastery and interdependence, and have an opportunity to be generous to others to be successful in school. Native-American childrearing practices focus on educating and empowering children.

Maslow (1968) suggested that students' needs fall within a hierarchy beginning with the basic physiological needs for shelter, sleep, food, and water. Many children come to school with these basic needs unmet. Problem behavior is viewed as a child's reaction to the frustration of not getting his or her needs met. It is difficult to focus on math when you have not eaten or have not had adequate sleep. Physiological needs are followed by safety needs (e.g., freedom from danger), love needs (e.g., acceptance from teachers, peers), esteem needs

(e.g., competence, mastery), and ultimately the need for self-actualization (e.g., creative self-expression, satisfaction of curiosity).

Glasser (1969) maintained that all behavior is an attempt to meet five basic needs—survival (food, shelter, freedom from harm), belonging (security, comfort, group membership), power (sense of importance, consideration by others), fun (enjoying emotional and intellectual endeavors), and freedom (exercising choice and responsibility). In his book, *The Quality School*, Glasser (1990) further identified the needs for love and self-worth.

Glasser suggested that our current school system is based on a philosophy of noninvolvement, nonrelevance, and a limited emphasis on thinking, which is a formula for school failure. To achieve self-worth, students must learn to think and solve problems. Love and self-worth lead to the most important need: self-identity. It is the responsibility of schools and teachers to help children find a successful identity. Some students who have not learned to think and solve problems may develop an identity that is delinquent or nonproductive. This identity leads to failure. A good teacher–student relationship is especially critical for those children who are unable to fulfill their needs at home.

Kohn (1993) suggested that to be motivated to learn students need what he called the three Cs: content, community, and choice. Students need to be taught content that has meaning to their lives. Kohn believed that cooperative learning helps children feel they are part of a safe community. Kohn felt that "kids learn to make good choices not by following directions but by making choices" (p. 16). Kohn argued that teachers spend too much time manipulating student behavior instead of providing students with an engaging curriculum and a caring atmosphere.

The theoretical perspectives discussed provide a way for educators to think about, understand, and manage student behavior. Each perspective focuses on different issues, emphasizes different etiologies, and arrives at different conclusions regarding intervention. No one theory suffices to fully explain student misbehavior. Rather, we hope that prospective teachers draw on the theoretical approaches, their own experience, and the experiences of others to diagnose behavior problems and choose interventions that best meet the needs of individual students.

Reflection

- **Discuss Julius' behavior from each theoretical perspective.**
- **What intervention strategies would you choose for Julius and why?**
- **Which theoretical perspective(s) best fits your view of problem behavior?**
- **Brainstorm activities to meet each of these basic needs of students in a classroom: safety, belonging, power, fun, and freedom.**

CULTURAL INFLUENCES

Culturally and linguistically diverse students are likely to experience conflicts when schools and teachers are not sensitive to their culture, language, family background, and learning styles (Baca & Cervantes, 1998). Cartledge and Talbert-Johnson (1998; cited in Utley & Obiakor, 2001) noted that:

> We are all products of our environment, and [our] experiences greatly determine how we perceive the world and respond to environmental events. With a largely White female teaching force, cultural discontinuities enter in when the student population consists of racially/ethnically diverse youngsters who are disproportionately impoverished. When teachers and students are out of sync, they clash and confront each other, both consciously and unconsciously in matters concerning proximics (use of interpersonal distance), paralanguage (behaviors accompanying speech such as voice tone and pitch and speech rate and length), and verbal behavior (gesture, facial expression, and eye gaze). Examples of these transactions are the ways status in the classroom is determined, the degrading connotations attached to the use of other languages and dialects, and the ways we differentially affirm group membership and cultural identity. The resulting dissonance in communicative processes contributes to the development of communication gaps and misunderstandings. (pp. 8–9)

Zirpoli and Melloy (2001) contended that cultural influences on behavior have been largely ignored in the field of behavior management and must be addressed. Teachers must understand that selected behavioral interventions can be influenced by the students' cultural backgrounds and their own beliefs and backgrounds (Ishii-Jordan, 2000). Grossman (1995) pointed out that:

> Even well-meaning teachers can misperceive and misunderstand students' behaviors when they interpret them from their own perspective. They can perceive problems that do not exist, not notice problems that do exist, misunderstand the causes of students' behaviors, and use inappropriate techniques to deal with students' problem behaviors. (p. 358)

Boutte (1999) suggested that teachers enter the teaching profession to help children and often do not think they have biases—a situation that may be harmful to students. Boutte noted that negative attitudes are not unique to White teachers. Because our society has traditionally been viewed from a Eurocentric perspective, teachers of color are equally as likely to hold negative attitudes about children of color. These attitudes may not be intentional or even recognized by teachers, but can have serious consequences for students.

As the student population becomes more diverse, teachers must become knowledgeable and sensitive about different ethnic and cultural groups. As we view cultural information, it is important to avoid stereotyping and remember that within any cultural group there is a great deal of diversity and individualism.

African Americans

Grossman (1991, 1995) reported that educators tend to maintain more prejudicial behavioral expectations for minority students than for nonminority students. For example, teachers tend to have lower expectations for poor African-American students, criticize them more often, and use more punitive disciplinary strategies with them. In a recent study of urban school districts, African-American male students were sent to the office more often and were suspended more often than any other ethnic group (Skiba, Peterson, & Williams, 1997). African-American students were suspended for physical aggression, noncompliance, and insubordination. Other related data indicate that African-American male students with disabilities are more likely to be suspended at an early age and for a longer period of time (Forness, 1988). These practices exclude African-American students from opportunities to learn.

Townsend (2000) identified several cultural conflicts in the classroom that may pose a threat to African-American students. One is the ability of African-American students to engage in multiple tasks simultaneously. The need to socialize while working on assignments may be perceived as defiance when tasks require individualized work. African-American students also have a need to prepare to work, which has been referred to as *stage-setting* behavior. This entails socializing with others, sharpening pencils, and getting out the right notebook before beginning a task.

Townsend identified language differences that may create opportunities for misinterpretation. He referred to the use of nonstandard English and slang spoken by African-American students and unfamiliar to most school personnel. Nonverbal communication is also misinterpreted. The example Townsend gave is of African-American girls who act in a very *impassioned* and *emotive* manner. Teachers may choose to punish students for what they perceive as combative or argumentative behavior. Julius, our student at the beginning of the chapter, demonstrated some of these behaviors typically exhibited by African-American students. Townsend recommended that educators examine their own attitudes and expectations regarding African-American students. Instruction should involve active learning, including opportunities for physical movement, and opportunities to work collaboratively with peers. Teachers should get to know their students and their families.

Asian Americans

Although it is difficult to ascribe general behavioral characteristics to specific cultural influences, teachers tend to describe the behavior of Asian-American students as highly motivated, respectful, obedient, and modest. Fewer problem behaviors are reported for Asian-American students than for other minorities.

Schwartz (1996) offered the following suggestions for teachers working with Asian-American students:

1. Reject the stereotype that most East Asian children are gifted and generally docile.
2. Distinguish between behavioral/physical disorders and communication difficulties. Communication problems may be related to language differences and culture.
3. Pay particular attention to signs of hearing impairment, a highly prevalent disability among southeast Asians.
4. Understand that smiles or laughter may express confusion and embarrassment, not pleasure.
5. Understand that emotional restraint, formality, and politeness may be considered essential for appropriate social behavior.
6. Understand that when a teacher reprimands a student, the student may believe that he or she is bringing shame to the family.
7. Understand that periods of silence may be important to communication.

Native Americans

Many Native-American children have not been exposed to their own tribal customs, but some of the subtleties of Native-American culture can be found in children regardless of their knowledge. Behaviors such as lack of eye contact when talking to others may be misinterpreted as noncompliance by some teachers. Maintaining eye contact may be considered an act of disrespect, hostility, or rudeness by many Native-American students. Silence may be a way to express respect for the teacher.

Native Americans often emphasize generosity, sharing, and cooperation, which sometimes conflict with the competition that is a focus in the mainstreamed classroom. Native-American students should be given opportunities to work in teams or cooperative groups. Native Americans often have a different concept of time and may not be as concerned about being on time to class or turning in assignments on schedule. Teachers need to be careful not to perceive this as laziness or not caring. Native-American students may need time to assess a situation before responding to questions or may need more time to complete tests or assignments. LaFromboise (1982) advised educators to watch for visual clues from Native-American children because body language and movements can reveal a person's feelings and attitudes. Guild (1994) noted that Native-American students enjoy learning through visual imagery, perceive information globally, and have reflective thinking patters. Teachers should provide a context when presenting new information and allow quiet times for reflection.

Hispanic Americans

Undoubtedly, many of the problems Hispanic-American students experience stem from their difficulties with English. Hearing Spanish at home and being expected to communicate in English in school often results in academic and behavioral problems, lower self-esteem, negative cultural identities, and a general pessimism toward teachers and schools (Manning & Baruth, 2000). Some students are even punished for speaking Spanish. Second-language learners can receive academic support through bilingual programs, English language (ESL) programs, and other remedial programs.

Many Hispanic-American children enjoy working in cooperative groups and helping one another complete assignments. Sharing materials and personal belongings is common among these children, as is the expectation that others will want to do the same. Zirpoli and Melloy (2001) recommended that teachers working with Hispanic/Latino children establish personal rapport and encourage student group participation and discussion because opportunities for socialization are important. Loyalty to family is also important, and teachers should make every attempt to involve family members in school communication and activities.

Underachievers

Students with disabilities, students from lower socioeconomic backgrounds, and students speaking minority languages or nonstandard dialects of English tend to be overrepresented among the ranks of underachievers (Gollnick & Chin, 1994). Good and Brophy (1997) highlighted teachers' differential treatment of high- and low-achieving students. For example, they found that teachers allow less wait time for low-achieving students, giving them the answers or calling on other students to respond. Some other responses to low-achieving students included: being more critical of student failure; interacting less often and giving them less attention; engaging in less friendly interactions (e.g., less smiling, fewer nonverbal signs of support), providing differential treatment in the administration/grading of tests and assignments; and providing low-achieving students with a poor curriculum (limited/ repetitive content, emphasis on factual recall, recitation, and drill and practice).

Students from lower socioeconomic backgrounds are also more likely to experience physical or verbal punishment and be excluded from the classroom. Students receiving these types of responses can become callous and turned off to school. Acting out is often a response to not being successful in school and feeling that the teacher does not care.

Cultural differences affect the way children process information—the way they organize and learn material. Utilizing effective instructional strategies can produce positive academic and social outcomes for nearly all students, minimiz-

ing the occurrence of problem behavior. Generally, teachers who use a variety of approaches in instruction and assessment meet children's needs. Banks (1999) recommended a multicultural curriculum be implemented—a curriculum

> with teaching strategies that are involving, interactive, personalized, and cooperative. The teacher should listen to and legitimize the voices of students from different racial, cultural, and gender groups. Multicultural content is inherently emotive, personal, conflictual, and interactive. It is essential that students be given opportunities to express their feelings and emotions, to interact with their peers and classmates, and to express rage or pride when multicultural issues are discussed. (p. 111)

Banks and Banks (1989) warned that, "although membership in a gender, racial, ethnic, social class, or religious group can provide us with important clues about individuals' behavior, it cannot allow us to predict behavior" (p. 13). The information gleaned from a person's group affiliation allow teachers to begin thinking about their own beliefs, values, and prejudices and their effects on the teachers' responses to behaviors exhibited by children from cultures other than their own. Teachers are encouraged to recognize cultural diversity as a strength on which to build a positive educational foundation for students.

Reflection

- **As Julius' teacher, what cultural considerations might influence your planning to include him in classroom activities?**
- **What are some ways that teachers could make the classroom environment inviting to students from different cultural backgrounds?**

PROACTIVE BEHAVIORAL SUPPORTS

Numerous factors influence a teacher's ability to effectively manage a classroom. Earlier in the chapter, we discussed the importance of identifying the assumptions teachers make about behavior and the influence of students' cultural background on how teachers relate to students. Understanding one's own experience and biases as they relate to classroom goals and student behavior can be a starting point toward effective classroom management. Good and Brophy (1991) identified key principles in effective classroom management:

- Students are likely to follow rules they understand and accept.
- Discipline problems are minimized when students are regularly engaged in meaningful activities geared to their interests and aptitudes.

- Management should be approached with an eye toward maximizing the time students spend engaged in productive activities rather than from a negative viewpoint that stresses control of misbehavior.
- The teacher's goal is to develop self-control in students, not merely to exert control over them. (p. 199)

Proactive behavioral supports refer to positive strategies designed to prevent or minimize problem behaviors. Proactive strategies minimize the occurrence of common classroom problems (e.g., talking, making noise, fidgeting, roaming). We agree with the key principles for effective classroom management identified by Good and Brophy and follow with guidelines for implementation.

Classroom Organization

Research on teacher effectiveness indicates that effective teachers organize their classrooms so as to prevent disruptive behavior (Jones & Jones, 2001). Spending time at the beginning of the year designing the physical environment and teaching and clarifying classroom rules and procedures minimize the occurrence of problem behavior later.

Rules and Procedures

Rules and procedures are necessary if students are to work in a safe, caring environment. The way the rules are selected and implemented can impact students' classroom behavior greatly. Smith and Rivera (1993) identified several steps in developing and implementing good rules:

1. Discuss with students the importance of having rules and procedures. Soliciting student ideas encourages student ownership.
2. Determine no more than seven rules that can be followed and understood by all. Rules should be age appropriate.
3. Identify positive consequences for rule compliance and negative consequences for infractions.
4. Inform parents and administrators of the rules and consequences especially if they are in addition to school rules.
5. Model the appropriate response to the rule or procedure and then ask students to practice until the rule or procedure is performed correctly.
6. Reinforce students when they are following rules and procedures correctly.
7. Revise rules when circumstances change.

Glasser (1990) talked about the importance of students having a voice in determining the curriculum and the rules of their school. He believed that democracy and responsibility are learned by *living* them.

Students are involved in numerous classroom activities that require specific procedures if the classroom is to run smoothly. There are procedures related to equipment (e.g., desks, storage areas, learning centers, pencil sharpener), individual seat work (e.g., asking for help, participation, assignments, make-up work), group work (e.g., student roles, expected behavior), and out-of-class activities (e.g., lining up, fire drills, playground, cafeteria, library, bus). Teachers usually complain that most problem behavior occurs during transition periods—changing from one activity to another. Students who finish assignments early and have nothing else to do are likely to find something to do, not usually something the teacher had in mind. Planning for downtime is critical to effective classroom management.

Procedures need to be clearly defined and taught to students. Again the time spent clarifying and teaching classroom procedures to students lessens opportunities for problem behavior to occur. Asking for student input in creating classroom rules and procedures empowers students and allows teachers to teach and monitor student learning.

Reflection

- **Think about the grade level you teach or are interested in teaching. Identify several rules you think would be appropriate for your students. Justify your choice of rules.**
- **Describe how you will establish rules in your classroom and how you will teach the rules to your students.**
- **Identify five classroom activities that may encourage problem behavior and develop a procedure for each.**

Student Engagement

Classroom management is often conceptualized as a matter of control of students rather than as a dimension of curriculum and instruction. The key to classroom management is what the teacher does ahead of time to engage students in learning and minimize the potential for problems to occur. Kohn (1993) suggested that the curriculum is part of the larger classroom context from which a student's behavior or misbehavior emerges. Kohn called on teachers who were responding to behavior problems to ask the question, "What is the task?" Curriculum that is not relevant to students' needs and assignments that are boring, too difficult, or too easy may be antecedents for inappropriate behavior.

Glasser (1969) suggested that when relevance is absent from the classroom students are not motivated to learn. He discussed the importance of emotion in learning. He noted, "Laughter, shouting, loud unison responses, even crying, are part of any good learning experience. . . . A totally quiet, orderly, unemotional class is rarely learning; quiet and order have no place in education as all-encompassing virtues" (p. 56). Glasser reminded us that every child has background experience, and it should be the business of the school to communicate with students by "plugging into their background."

Hoover and Collier (1986) suggested some specific teaching and management techniques for meeting the needs of diverse learners:

- Provide alternative modes of response (e.g., oral rather than written, visual or graphic rather than verbal).
- Shorten assignments or divide tasks into segments.
- Ensure students' success by beginning with simpler tasks and moving to more complex assignments.
- Incorporate student input in curricular planning in ways that promote students' sense of ownership in the process and decision-making skills.
- Allow students to choose among alternative assignments and activities.
- Modify the presentation of abstract concepts with concrete learning activities (e.g., visual aids, manipulatives).
- Select written texts with an appropriate reading level in terms of complexity of vocabulary and concepts and/or provide first-language materials for limited English-proficient students.
- Use clues or prompts to assist students working on assignments.
- Communicate classroom and behavioral expectations clearly and concisely to students.
- Use positive reinforcement to reward appropriate behavior.
- Use nonverbal signals and cues that do not draw attention to individual students.

Failure has been the key school experience for many low-achieving students, including those with mild learning disabilities. Numerous strategies can be used to teach *all* students about the learning process, thereby engaging them in their own learning. Jones and Jones (2001) talked about the importance of demystifying the learning process. Some of the strategies they recommended are as follows:

- Work with students to clearly and explicitly define learning.
- Write and verbally explain the goals and objectives for each lesson and why these have been chosen.
- Relate learning to students' own lives and interests.

- Have students establish learning goals.
- Teach students about learning styles, learning abilities, and disabilities.
- Use peer tutoring, and teach students how to be tutors.
- Explain your philosophy of assessment to students.
- Clarify when assessment will be used, how it will be used, what to study, and how to study.
- Teach students to monitor their own learning gains and grades.
- Involve students in developing classroom rules and procedures and allow them to assess their progress towards following the rules and procedures. (p. 196)

For many at-risk students, negative attention is better than no attention at all. Teaching students about the learning process and their strengths and weaknesses, as well as providing them with strategies to address learning tasks, serve to reduce the occurrence of minor classroom disruptions. Once students experience academic progress, they are less likely to seek attention in a negative way.

Positive Reinforcement

As Good and Brophy (1973) pointed out, an effective approach to classroom management involves rewarding desirable behavior and utilizing techniques that prevent problems from emerging. Positive reinforcement such as praise increases the probability that the behavior it follows will recur. Wielkiewicz (1995) noted that the effectiveness of positive reinforcement is a universal principle that is in effect regardless of gender, age, culture, or disability of a child. In fact many strategies using positive reinforcement (e.g., praise, behavioral contracts, token economies, and group contingencies) have been empirically validated regardless of student characteristics.

Teacher praise has been found to be one of the most empirically sound teacher competencies (Maag & Katsiyannis, 1999). Unfortunately, strategies using positive reinforcement have rarely been used, or used correctly, to manage students' behavior. Teachers respond more often to disruptive behavior than to on-task behavior. The expectation is that students will behave well, hence when they do they are ignored. By acknowledging students' positive behavior, teachers encourage students to take responsibility for their own learning. Students are most drawn to teachers who are encouraging and supportive, recognize effort and achievement, and show genuine enthusiasm when students are successful.

Brophy (1981) developed guidelines for effective praise. Some of those guidelines are as follows:

1. Effective praise is delivered contingently. Praise must immediately follow desired behaviors. One teacher said, "I can't find anything to praise this student

for." She finally started with, "Jacob, it's great to see you here on time today." Another teacher was observed praising a student for sitting down, not talking, putting his pencil on the paper, and for just about everything else the student did that day. We know you have to start somewhere, but too much praise is confusing and not useful as a motivator. Students with disabilities and other at-risk students have already experienced failure and may need to be encouraged for small steps toward their goals.

2. Effective praise specifies the particulars of the accomplishment. "Good job" does not always tell students what they have done to receive praise. "Your project report was well written and addressed the critical issues of inclusion and implications for teacher training." This statement more clearly identifies the specifics of the accomplishment.

3. Effective praise shows spontaneity, variety, and other signs of credibility. "I like the way you chose to solve that problem—very creative." Most secondary students know whether you are genuine in praising them. They may perceive praise given for easy tasks as an indication that the teacher had low expectations of them.

4. Effective praise rewards attainment of specified performance criteria, including effort criteria. "You followed all of the steps to get the right answer. Your persistence paid off."

5. Effective praise provides information to students about their competence or the value of their accomplishment. "Your presentation showed me that you have a good understanding of the impact of smoking on pregnancy. I would like to display the posters you developed in the library."

6. Effective praise orients students toward better appreciation of their own task-related behavior and thinking about problem solving. "I observed your hard work on this project, especially the way you brought your group members together. Great collaboration."

7. Effective praise uses students' own prior accomplishments as the context for describing present accomplishments. "This is the second week in a row that you've gotten 100% on your spelling test. Using mnemonics is really paying off."

8. Effective praise attributes success to effort and ability. In the movie *Stand and Deliver*, the teacher tells his students, most of whom are Hispanic, that math is in their blood. If they work hard, they will succeed.

9. Effective praise gives students need to receive immediate and specific feedback about their performance.

Effective feedback provides students information about their progress on any given task and also communicates that the teacher is involved in helping them reach their goals. Positive feedback such as praise can be a powerful motivator for student learning. Teachers need to be careful not to praise inappropri-

ate behavior and not to praise every desired behavior. The key to using praise effectively "lies in its quality rather than its frequency" (Good & Brophy, 1984, p. 193). Praise can be a practical means to affect students' motivation to engage in behaviors associated with learning.

Positive reinforcement, including special privileges or tangible rewards, should always be accompanied by positive comments such as praise. Offering students rewards (e.g., extra points, food, stickers and stars, free time) for achievement gains can be positive for some students and counterproductive for others. What is reinforcing for one student may be punishing for another. For example, a student who is low in reading may prefer to have extra computer time as a reward for the successful completion of work. Another who is reluctant to use the computer may prefer reading as a reward.

In his 1993 book, *Punishment by Rewards*, Kohn argued that rewards are ways to manipulate student behavior. He cautioned teachers that rewards can be most damaging when the task being rewarded is already intrinsically motivating to the student. A student who is praised every time he or she completes math facts may lose interest in the task, especially if math comes easily for him or her.

Good and Brophy (1987) commented, "The quality of task engagement and of ultimate achievement is higher when students perceive themselves to be engaged in a task for their own reasons rather than in order to please an authority figure, obtain a reward, or escape punishment" (p. 227). We recommend that rewards be used sparingly, perhaps for end-of-the-year celebrations or for individual and group successes that involve challenging tasks.

As discussed, students are more likely to display fewer problem behaviors when the classroom is well organized and when rules and procedures are clearly defined. Effective managers involve students in classroom processes such as developing rules and procedures, teaching them about learning styles, engaging them in productive work, and providing informational feedback.

Responding to Minor Disruptions

Sometimes students' disruptive behaviors require intervention. Levin and Nolan (1996) presented a hierarchy of strategies to deal with what Redl and Wineman (1952) called *surface behaviors*. Surface behaviors include verbal interruptions (talking, giggling, whispering), off-task behavior (daydreaming, sleeping, drawing), "busy" physical movement (roaming, fidgeting, touching others), and disrespect toward teachers and other students (arguing, yelling, profanity). Interventions are in a hierarchical format from Level I—techniques designed to give more control to the student—to Level III—where teacher control is more apparent. Teachers are encouraged to move through strategies be-

ginning with nonverbal interventions to more directive actions when earlier interventions have not led to appropriate student behavior.

The first level in the hierarchy is nonverbal intervention: planned ignoring, signal interference, proximity control, and touch control. Planned ignoring means intentionally not responding to problem behavior. Planned ignoring is most successful with behaviors that do not necessarily disrupt the teaching/learning process such as whistling, humming, and pencil tapping. Students may not even be aware of some of these behaviors. One teacher recalled a time when a female student expelled gas at the end of a class period and laughter permeated the entire room. This was at a psychiatric school program where points were deducted for such behavior. The teacher, with a blank face, simply deducted the points and handed her her point sheet. The teacher waited until the classroom was vacant to have a good laugh and breathe a sigh of relief that the incident had not happened during the lecture. If it occurred earlier in the period and if the student was intent on getting attention, ignoring may not have worked. Ignoring is also not appropriate with behaviors that may be dangerous, such as threatening other students or fighting. Generally, planned ignoring works when you are sure that others in the classroom will also ignore the behavior.

Signal interference provides nonverbal cues to the student that certain behavior is inappropriate. Providing cues to individual students or to the class can be an effective way to obtain expected behaviors. Hoover and Collier (1986) suggested using nonverbal signals and cues that do not draw attention to individual students. Facial expressions, gestures, eye contact, ringing a bell, and clapping hands are examples of nonverbal signals. A teacher once said she practiced for hours in the mirror trying to perfect the *evil eye*. She had a chance to try it out when a student in her class was caught eating a candy bar from his pocket. She started laughing when she tried to use the evil eye, acknowledging to the student that she had been practicing at home and it was not working. The student laughed too and threw away the candy. This is an example of how signal interference and a little humor took care of a problem.

Proximity control—moving toward the vicinity of the student or standing at the side of or behind the student—is sometimes all that is necessary to reduce student distraction or interrupt misbehavior. Teachers who frequently walk around the room, checking in with students, are practicing proximity control. Teachers who stand at the door, greeting students in the morning or during transition periods, minimize opportunities for problem behavior to occur.

Levin and Nolan (1996) defined *touch control* as nonaggressive physical contact with a student. A teacher may take the hand of a wandering student to guide him back to his desk or may use a hand on the shoulder to redirect a student's attention or reassure a student who is frustrated. Hoover and Collier (1986) cautioned that touch control can be a culturally sensitive form of non-

verbal communication. Standing behind students to monitor behavior can convey messages different from those intended. Tapping a student on the head or shoulder could violate accepted norms of interpersonal contact for some students. Teachers need to be sensitive to students' responses. Some students may find touch reassuring, whereas others may respond with anger and aggression. Physically aversive strategies such as hitting or grabbing students are unacceptable.

Level II strategies are verbal interventions. Verbal interventions fall into three categories: hints, questions, and requests/demands. A hint is usually a public commendation of a student's appropriate behavior. If the teacher is angry with Melissa for shouting out the answer and not raising her hand, she can commend another student for displaying the appropriate behavior: "Marc, I really appreciate you remembering the rule to raise your hand." This strategy probably works best at the elementary level and when the teacher is highly regarded by most students. At the secondary level, when peer influence is generally more powerful, teacher praise may not be effective. Levin and Nolan suggested that reinforcement of the group as a whole may be a more appropriate intervention at the secondary level. Verbal interventions should be private and brief. Stooping down right next to the student or asking someone to come to your desk is less embarrassing to students than criticizing or confronting them in front of the class. Using sarcasm, preaching, judging, and yelling are examples of verbal interventions that do not work.

Questions are used to determine whether students are aware of how they are behaving and how their behavior is affecting others. For example, a teacher who is frustrated with Samuel for loudly humming a tune might say, "Samuel, that's a great tune but some students are complaining that they can't concentrate on their work. Could you keep it down?" This is best done privately at Samuel's desk so as not to embarrass him. Students often misbehave because they do not understand the assignment or they find the work too easy, too difficult, or not interesting. Asking questions gives the teacher information about what the student needs to complete the task.

Requests/demands are more direct responses to inappropriate behavior. A student who calls out answers instead of raising a hand may be responded to by the following request: "Roberto, what is the rule about raising your hand?" Another demand that might be used is: "Roberto, I will call on you as soon as you raise your hand."

Finally, Level III interventions involve the use of consequences related to student misbehavior. Levin and Nolan (1996) identified two types of consequences: natural, which results directly from the student's misbehavior without any teacher intervention; and logical, which is closely related to the student's behavior. A student who fails to turn in a homework assignment receives no grade—a natural consequence. A logical consequence, such as requiring the stu-

dent to stay after school to finish the homework, requires teacher intervention and is somewhat related to the behavior. These consequences can be effective for behaviors that actually have natural and logical consequences. The choice of logical consequences is sometimes difficult to determine. For example, what is a logical consequence for students who talk all the time but always finish their work? No, duct tape is not the answer.

INSTRUCTIONAL APPROACH TO MANAGING DISRUPTIVE BEHAVIOR

For many students, academic instruction is a negative event. Inappropriate behavior is displayed to escape the task. To illustrate, Nu is a second-grade student who has difficulty with simple math concepts, adding, and subtracting. Every time the teacher asks Nu to work at the board, he refuses and becomes angry. Nu's behavior is likely to be an attempt to avoid the math task. If avoiding the task is the purpose of Nu's behavior, the teacher needs to spend time teaching Nu math skills. Nu needs to experience some level of comfort and competence with the math concepts before being asked to work on the board.

Teaching is not just about eliminating or suppressing problem behavior. Teaching involves giving children the skills and knowledge they need to be successful socially and academically. Instructional approaches to management that teach appropriate behavior rather than punish misbehavior provide alternatives to exclusionary discipline. Darch, Miller, and Shippen (1998) observed that teaching appropriate behavior is instructional and proactive. They viewed student behavior problems as failures of learning rather than purposeful misconduct. Correcting a behavior after it has occurred is reactive not proactive. The authors encouraged teachers to strategically teach what is required so students have the skills necessary to behave appropriately. They suggested that teachers often respond to academic problems differently from behavior problems.

Darch et al. (1998) recommended the Instructional Classroom Management (ICM) approach to managing behavior. In this strategy, the teacher spends some time teaching children appropriate skills for behaving in a group (e.g., listening, taking turns, giving appropriate feedback). An instructional approach helps the teacher determine whether students cannot do what they are being asked because they do not know how or they will not do what they are asked. When students make academic errors, we assume they do not know the answer. We assume they need further instruction. When students are disruptive, we assume the problem is a *won't* problem—that the student knows how to behave, but chooses not to do so. The instructional approach may prevent teachers from punishing students inappropriately. Behavior management, like instruction, is a process that requires planning and reflection and takes place over time.

Kohn (1996) likened appropriate discipline to constructivist classrooms in which the process is just as important as the product. He argued for the value of conflict:

> In an important sense, the conflict is the lesson—or at least it can become one if the teacher doesn't take over and solve (or end) the problem. The wrestling with dilemmas, the clash of ideas, the need to take others' needs into account—these are ultimately more meaningful that any list of rules or guidelines that may ultimately result. (p. 74)

Glasser (1990) talked about the importance of students learning to take responsibility for their own behaviors. He commented, "The process of stating the problem, finding reasonable alternatives, and implementing what seems to be the best alternative is education" (p. 36).

Reflection

- **Develop your own management plan including your philosophy of behavior, strategies for preventing problem behaviors from occurring, and strategies to respond to minor disruptions.**

SUMMARY

Numerous factors such as teacher perception, student characteristics, and cultural and environmental influences affect students' learning and behavior. Effective teachers are aware of their own beliefs and biases regarding students' academic and behavioral goals. They have an understanding of research and theory in classroom management and students' social and psychological needs. They provide a classroom environment that is safe, nurturing, and engaging, and they utilize proactive strategies to minimize problem behavior. Classroom rules and procedures are developed by students and teachers and are clearly defined and consistently reinforced. Academic and social goals are developed according to individual students' learning styles and needs. Effective teachers use various teaching and assessment methods to engage students in learning and minimize problem behavior. When problems do occur, they are seen as opportunities for learning. Students are encouraged to take responsibility for their own behavior through guided instruction and self-management, not through teacher control. Thus, a goal of classroom management is to create a community of learners in which students feel they belong—a place where they have opportunities to actively participate with peers and adults in the learning process.

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Dictionary

NINE

Instructional Strategies

Mr. Dullard peers over the top of his horn-rimmed glasses in a futile attempt to make eye contact with the blurry eyed students trying to pay attention to his lecture on the Continental Congress. His body seems frozen to the lectern where his faded notes rest. His voice, deep, muffled, and monotone, has a numbing effect on the students. Steven is in the back of class, eyes shut, with his head precariously perched on his hand. Several snickering students in the class are watching to see whether Steven's hand will slip, causing his head to crash on the desk. Another student, Gerald, reads from a novel that he has tucked inside his history text. Debbie and Janis are passing notes about Carlos, the star athlete at the school. Robert is sitting straight up grinning and nodding, pretending to listen while he rehearses football plays for Friday's game. Once more, Mr. Dullard has lost the battle to engage his students in his lesson. In this chapter, we focus on ways teachers present instructional material. The chapter is divided into two parts. First, we discuss the ways teachers structure instructional material. We explore teacher-centered strategies such as lecturing, and then we explore student-centered communication strategies such as cooperative learning. The second part of the chapter focuses on the communicative processes used to facilitate understanding regardless of the teaching method. We examine ways that teachers explain information and review ways that questions are used in the classroom.

THE LECTURE METHOD

The instructional strategy with the longest history is the lecture and its derivative, the lecture/discussion. Unfortunately, many teachers lecture like Mr. Dullard. They stand up in front of the class and impart information with little con-

cern about making the content interesting or exciting. Book (1999) stated that people learn best when they: "(a) actively participate in the learning, (b) have knowledge (or specified feedback of the results of learning, (c) know what they are expected to learn, (d) know the purpose of what they are learning, and (e) find the learning to be meaningful to them" (p. 333). Incorporating these concerns into the lecture format is challenging, but necessary.

One of the first decisions a teacher should make is when to lecture. Not all instructional goals call for this approach. McKeachie (1986) contended that lecturing is not appropriate when the information is available in printed form. Mr. Dullard could have taken the time to distribute handouts for the students to read, thus leaving time in class for other learning activities. Lecturing is most appropriate when it is used to give students the most up-to-date information or unique insight from a teacher. There frequently is a lag in time between the information that is in textbooks and new developments in an academic area. Lectures can help bridge these gaps. Lectures are also appropriate for synthesizing material collected from a wide range of sources. Finally, lectures can be used to adapt material to a particular audience. Instructors can take information that is written for one type of audience and adapt it to another.

Book (1999) outlined other practical reasons for using the lecture method. Lectures require few materials or equipment, thus giving the teacher a great deal of flexibility. A teacher can go from room to room or place to place to deliver the information. A lecture is not dependent on the size of room or size of class. A good lecture can be presented to 2 or 102 students.

Studies investigating the effects of lectures indicate that when measures of knowledge are used, lectures appear to be as effective as other modes of instruction. When the measures are concerned with problem solving, delayed recall of information, transfer of learning, or attitude change, discussion methods are more effective (McKeachie, 1987).

According to Book (1999), an effective lecture arouses student interest about the content, organizes key concepts, and provides an opportunity for students to apply the information to their own experiences. The centerpiece of the lecture is the instructor's knowledge and understanding of the content. The inability to provide explanations, examples, and illustrations are reflective of an instructor who does not have a good working knowledge of the content and does not know how to adapt the information to the students.

An effective lecture does not attempt to cover too much information. Book (1999) stated that a good lecture covers two or three main points with appropriate elaboration to make them meaningful and memorable. One way to highlight important points is to provide an organizational pattern that complements the lecture material. Table 9.1 contains examples of frequently used organizational patterns. Teachers should select the pattern that matches their goals and objectives.

According to Book (1999), an effective lecture establishes a learning set that helps students focus on important concepts and principles. Several strategies

TABLE 9.1
Organizational Patterns

Topical. The lecture is divided into discrete topics that are developed and explained. A topical organizational pattern works well when the goal is to explain the components of a topic.

I. The First Continental Congress was convened in Philadelphia.
   A. Twelve Colonies were represented.
   B. The representatives produced the Declaration of Rights and Grievances.

Chronological: This pattern follows a time sequence. History lessons frequently report on the sequence of events that occurred. This pattern can also be used to explain how to do or make something.

I. Two meetings were convened to deal with grievances against England.
   A. On Sept 5 1774 the Continental Congress was convened in Philadelphia.
   B. On Oct 26, 1774, a second meeting was convened.

Problem–Solution organization: In this pattern a particular problem is posed and then the solutions are identified and discussed.

I. The colonies believed that the British policies were unacceptable.
   A. The British created the Intolerable Acts.
   B. The British levied inappropriate taxes.
II. Several solutions were implemented.
   A. Boycott Trade with England.
   B. Committees of Safety were created to enforce actions against England.

Cause and Effect/Effect to Cause: In this pattern, the causes of certain conditions are proposed and explained.

I. The British Tax on tea created several problems.
   A. The Boston Government refused to pay for tea that was shipped from England.
   B. Several Bostonians, dressed as Native Americans, dumped the tea into Boston Harbor.

can be used to create a learning set. One strategy is to use the techniques for starting a speech, such as posing a significant problem, telling a story, or using an activity that brings focus to the content. Another strategy is to use an advance organizer. Orlich, Harder, Callahan, and Gibson (2001) stated that an advance organizer is a frame of reference that presents the main facts, concepts, or ideas to be learned. The advance organizer can be a study guide, chart, or list of ideas students have prior to the lesson. Teachers and students are better able to focus on relevant information when the main ideas are known in advance. Consider the following example:

In this lesson, we focus on:

- Ways to organize a lecture.
- Strategies for making lectures more exciting.
- How to write an advance organizer.

Instructors can also reinforce the learning set by using strategies to emphasize important points. Statements such as "Think about this" or "This is very important to understand" help frame important concepts and ideas.

A good lecturer must also attempt to actively engage students in the learning. Unlike Mr. Dullard, the effective lecturer checks for student understanding of the new material that has been provided in the lecture. Book (1999) stated that teachers should engage students by asking them to summarize the content in their own words.

Sitler (1997) advocated the use of the *spaced lecture* to increase student comprehension of material. In the spaced lecture, the instructor pauses for 2 to 3 minutes throughout the lecture and gives the students an opportunity to write information in their own words. The instructor can collect this material to check student learning or use pauses to give students an opportunity to ask for clarification or further explanation. This strategy is designed to connect listening, note taking, and learning.

The final feature of effective lecturing discussed by Book (1999) is delivering the information in a stimulating fashion. McKeachie (1986) argued that teacher enthusiasm is an important component of effective teaching. Recently, Patrick, Hisley, and Kempler (2000) demonstrated that enthusiasm positively influences student intrinsic motivation. Their findings indicate that a lesson delivered with high energy leads students to experience greater interest in and enjoyment of the instructional material.

Studies examining communication style indicate that dramatic teaching is related to judgments of effective teaching. Norton and Nussbaum (1980) tested the proposition that effective teachers are optimally dramatic. They found that effective teachers were entertaining, told good stories, were humorous, and used double takes. Javidi, Downs, and Nussbaum (1988) studied the classroom behaviors of award-winning teachers. They found that award-winning high school and middle-school teachers used humor, self-disclosure, and narratives during lectures primarily in relation to course content. However, these teachers tend to use humor less frequently than award-winning college teachers.

Dramatic teachers do more than entertain; they increase arousal and interest in the content being discussed. A humorous story or the use of expressive and animated nonverbal behavior reinforces and complements content. One professor used a puppet named Cecelia to explain the processes involved in relationship development. Another professor taught an entire lesson dressed as Mrs. Doubtfire, a character Robin Williams played in a popular film. Although there are instructional benefits to a dramatic teaching style, we do not equate good instructional practice with entertainment. Our goal is to help teachers think about ways to help students attend to and remember important concepts. In the context of the lecture, teacher enthusiasm and expressiveness are tools that can help an instructor accomplish these goals.

Technology can also complement and enhance lecture materials. More and more teachers are using power point or other software programs to outline and highlight important lecture content. Some teachers integrate video clips, Web sites, and other graphics into the lecture material. An overdependence on tech-

nological tricks and gimmicks can work against learning goals. We explore technology further in chapter 9.

Reflection

- **Describe the characteristics of an effective lecturer you have had.**
- **Based on the reading, identify three strategies that can be used to improve a lecture.**
- **Can a teacher be too dramatic? Explain.**

SMALL-GROUP DISCUSSIONS

In our judgment, the use of small-group discussion is an underemployed teaching strategy. One of the principal reasons is that a teacher must feel comfortable shifting responsibility to students. Teachers who have a high need for control and believe that a good class is quiet and attentive have a difficult time assigning group projects. However, the research suggests that small groups are an effective instructional tool (McKeachie, 1986; Orlich, Harder, Callahan, & Gibson, 2001; Stahl & Clark, 1987). Group discussion moves students from passive to active modes of learning. In addition, as we indicated in chapter 3, groups are a preferred mode of learning for females, Native Americans, African Americans, and Latins.

Throughout this text, we have advocated building on the competencies that students bring to the learning situation. Students come to classes with a good deal of experience in groups. They belong to primary groups where the fundamental goal is to provide for basic needs and emotional and social support. Families, clans, cliques, and gangs are examples of these types of groups. Students also belong to secondary groups, whose purpose is to complete a task, solve a problem, or participate on some function. Church, community, and classroom groups are examples of secondary groups.

Schutz (1966) identified three basic needs that individuals have, and each of these needs are connected to group participation. One need is inclusion. Group participation helps individuals feel they are part of something. Students who are isolated and disconnected are less likely to be interested in school and are more likely to experience failure. A second need is affection. Care, concern, and support are frequently expressed in group settings. Being liked and loved is a fundamental need, and individuals feel better about themselves when they are in a context where this need is communicated. The final need is control. This need is concerned with the degree to which individuals have some power over themselves, others, and tasks. Many students feel that no amount of classroom effort will make any difference so they stop trying. These same students, however, may exercise a great deal of control and power on the playground or in other

contexts where their skills matter. Clearly, academic success can be better accomplished when educators build on the natural needs that students desire and seek out.

Why Small Groups Are Successful

Small-group instructional practices are effective because they engage the learner in active learning processes. As the old adage goes, "Two heads are better than one." The act of talking about a topic or issue engages the student in cognitive processes that are not stimulated in passive learning situations. Students must articulate, defend, plan, criticize, and analyze issues and problems. Some research suggests that, through the process of collaboration, students are able to solve difficult problems that they would be incapable of solving alone (Forman & Cazden, 1985). As a result, numerous benefits can be achieved:

- Increased problem solving
- Creative thinking
- Critical thinking
- Social skill development
- Increased cultural sensitivity

There are two primary ways to use small groups in the classroom. The first is small-group discussion, and the second is cooperative learning groups. In small-group discussion, groups are created and given a topic or issue to discuss. The topic should be related to classroom content and be able to hold student interest (Orlich et al., 2001). Almost any topic can be adapted to a class discussion, but the ones that have connections to students' lives are appropriate topics. One high school class had a lively exchange about "Stan," a song about an obsessive fan who put his pregnant girlfriend in the trunk of a car and drove over a bridge crashing to the water below. In a discussion of character education, another class discussed whether friends should *tell* if they caught a friend's girlfriend/boyfriend with another person. Group discussions give students voice that they may not have otherwise and provide those teaching moments that are frequently lost with other forms of instruction.

Small groups are also effective contexts for analyzing and addressing historical facts. After reading alternative accounts, students could discuss the bombing of Hiroshima, the causes of the Civil War, or the purpose of the electoral college.

Orlich, Harder, Callahan, and Gibson (2001) provided a taxonomy of discussion groups varying in the amount of control required of the teacher. These discussion groups are: *brainstorming, tutorial, task group, role playing, simulation, and inquiry groups*.

Brainstorming groups are designed to stimulate creative thinking. The purpose of brainstorming is to generate many ideas on a topic. Discussion and criticism of the ideas generated is discouraged. Brainstorming is usually an initiating activity. The information obtained can be used in other discussion formats or classroom activities. For example, brainstorming is an effective way to identify topics for research projects.

A second type of group, the *tutorial*, is utilized to help students who are having difficulty mastering or understanding certain subject material. The tutorial leader assumes a great deal of control by identifying the learning problems, providing feedback on the skills needed to achieve mastery, and encouraging students to use other students as resources.

The use of tutorials can be an effective way to remediate learning problems. Cohen, Kulik, and Kulik (1982) found that students can learn as much from other students as they learn from teachers. Students share experiences and language forms that teachers may not know or understand. New insight and understanding can be obtained by drawing on the expertise of peers.

The third type of group is the *task* group. Each participant in a task group is expected to make a specific contribution to the group. For example, one student may be responsible for computer graphics, another for library research, and a third for typing a final report. Task groups can be effective in facilitating student cooperation and accountability. It is important to make students responsible for the tasks they have been assigned. Teachers should also discourage students from taking over the tasks assigned to other members. In our experience, some students have strong control needs and, as a consequence, can literally take over the group. The behavior of autocratic participants can be divisive and counterproductive. Teachers need to help students understand that there is always more than one way to complete a task.

The fourth type of group involves *role playing*. In role-playing groups, students are asked to simulate real-life situations. One university professor uses role playing to teach protest rhetoric in his public address seminar. Students dress up in either hippie outfits or pin-striped suits and engage in the type of discourse used in the Vietnam war protests. Another professor has student teachers role play student–teacher conferences to prepare them for the types of experiences they are likely to have.

The focus of role playing is to dramatize the behaviors or symbols under investigation. Teachers should provide clear instructions on the roles students are supposed to play, discuss how the roles were played, and reflect on what was learned as a result of the exercise.

The fifth type of group involves *simulation*. The purpose of a simulation is to re-create a real object, problem, or event. Business organizations and the military have used simulations as a central feature of their training programs. Teachers can also take advantage of this instructional strategy. For example, a

fifth-grade history teacher in Madera, California, annually takes his students on a covered wagon trip to complement their study of California history. This activity gives students a genuine feeling and understanding of frontier life.

The final type of group format discussed by Orlach et al. (2001) is the *inquiry-centered* discussion. The purpose of the inquiry group is to simulate scientific thinking, develop problem-solving ability, and promote the discovery of new perspectives and insights. Students are given a problem or question to examine. They collect and analyze data and then draw conclusions or make recommendations based on their efforts. This format is appropriate for the investigation of civil rights or other social issues. One of the values of this approach is to give students an opportunity to challenge and test their implicit theories and beliefs.

Teachers also need to be aware of how their own ideology can influence their response to this type of assignment. Teachers sometimes develop assignments to promote their own beliefs. Although difficult, teachers must maintain a facilitative role and help students make their own connections.

Cooperative Learning

Cooperative learning is an extension of the discussion methods discussed earlier. The research on cooperative learning is extremely positive (e.g., Johnson & Johnson, 1999; Johnson, Johnson, & Holubec, 1993; Kagan, 1994; Morton, 1998; Sharan, 1994; Sharan et al., 1984). Kagan (1994) identified three benefits of cooperative learning: (a) academic gains, especially for minority and low-achieving students; (b) improved race relations among students in integrated classrooms; and (c) improved social and affective development among all students. Teachers genuinely interested in culturally reflective teaching should give serious attention to cooperative learning methods.

Johnson, Johnson, and Holubec (1993) identified five essential features of cooperative learning.

Positive Interdependence. The group's success is dependent on the members' cooperative activities. Positive interdependence is achieved when students believe that one cannot succeed unless all succeed. Without positive interdependence, cooperation is impossible.

Individual and Group Accountability. There are two types of accountability. At one level, the group must be held accountable for achieving its goal, and each individual must be held accountable for his or her contribution to the group goal. Individual accountability achieved when the performance of each individual is assessed and the results are given to the group. Cooperative learning strengthens individual performance through continuous feedback and the opportunity to take corrective action.

Face-to-Face Interaction. Students need to do real work in which they promote each other's achievements, share resources, and encourage learning. The importance of face-to-face communication cannot be overstated. Learning and understanding are facilitated when students orally explain, correct, and reexplain ideas, processes, and concepts. In cooperative learning situations, students interact, assist one another in learning tasks, share diverse ideas and beliefs, and work as a team to accomplish instructional goals.

Interpersonal and Small-Group Skills. In cooperative learning, students are not only required to learn academic subject matter, but also learn the social skills necessary to work in a group. Cooperative learning requires students to simultaneously engage in task work and team work. Among the skills necessary for successful group participation are leadership, decision making, conflict management, trust building. These skills must be taught as precisely as academic skills.

Group Processing. Group processing exists when group members monitor their progress on task and working relationships. Improvement requires an analysis of what works and what creates problems in the group. Each student is held accountable for his or her academic work. The final evaluations come from teachers, peers, and self.

Development of Social Skills. Cooperative learning helps students develop the types of interpersonal skills necessary to succeed in work, school, and home. Students enhance interpersonal skills, develop conflict management skills, and increase critical thinking.

Cooperative learning groups should be comprised of students from different academic, social, ethnic, physical, religious, sexual, and attitudinal orientations. The benefits of peer interaction are increased in heterogeneous groups. Cooperative groups provide an excellent opportunity to celebrate diversity, thus instructors must be willing to create diverse groups. Our experience is that some teachers do not want to take the risk and contend that "the students can't handle it," so they create homogeneous groups.

Depending on the instructional goals, several types of cooperative groups can be structured. There are several excellent texts available on ways to use cooperative learning in the classroom (Johnson & Johnson, 1999; Johnson, Johnson, & Holubec, 1993; Kagan, 1994).

One type of cooperative procedure is called Student Teams-Achievement Divisions (STAD). First, the instructor presents a lesson, frequently using the lecture mode discussed earlier. Second, student teams are created and designed to prepare students for quizzes or other evaluation procedures. Third, students take individual quizzes. The content for the quizzes comes from the course content the students studied in the groups. Fourth, students receive a team score on

how much each student improved over their previous score. Fifth, team scores are publicized in a newsletter or other publication.

Another type of cooperative group is called Teams Games-Tournaments (TGT). This procedure is similar to STAD. In TGT, quizzes are replaced with a system of academic game tournaments in which teams of students compete against other teams of students. Odyssey of the mind and academic decathlon are some examples of this type of group. Kagan (1994) cautioned against this type of cooperative format for classes that have a great deal of ethnic and academic diversity. There is a danger that these competitive scenarios may provide a structure where students from individualistic value orientations excel. Students from cooperative value orientations are less likely to be successful in this type of format. Academic tasks can play an important role in how academic ability is displayed and measured, and teachers need to give attention to these issues.

Teams-Assisted Individualization (TAI) combines cooperative teams with individualized instruction. Students work in four- to five-member teams on self-instructed materials at their own rate and level. Students are responsible for checking and managing the assignments. Teams are rewarded if they achieve preset standards.

In the original Jigsaw (Aronson et al., 1978), students were assigned to heterogeneous teams. Each member was given a unique set of information to discuss in expert groups made up of students from different teams who were also given the same information. The experts returned to their teams and taught the new information to the other members. At the end of instruction, students were assessed.

Slavin (1995a) modified the Jigsaw procedure to more closely match the Student Team Learning Format. In Jigsaw II, students work in four- to five-member teams. All students are assigned some material, but each member is assigned a subtopic to master. Students discuss their topics in expert groups and then teach their teammates. Quiz scores are summed to form team scores, rather than individual scores. Kagan (1994) provided a number of ways to adapt Jigsaw procedures.

In group investigation, students are placed into small groups and select a topic from a unit being investigated by the class. The group reports the findings of its investigation to the class. Among the skills reinforced in this group are cooperative inquiry, group discussion, and cooperative planning.

Teachers can adapt any of the methods described earlier to a cooperative learning context. Educators have applied cooperative learning to mathematics, language arts, social studies, critical thinking, history, and physical education. For maximum rewards, however, it is crucial that students be held accountable for the product the team produces. Cooperative learning does not work if teachers choose to place students in groups and grade them only on individual achievement or participation. Teachers interested in cooperative learning are encouraged to consult a number of the texts dedicated to this

pedagogical practice and develop cooperative learning activities for their classrooms.

The previous section outlines different ways that teachers can organize and present instructional material. Lectures are appropriate for some instructional goals, whereas cooperative learning groups are best for others. There are some communication practices that must be understood regardless of the approach. Teachers must explain material in lectures and group settings, and teachers ask questions in lectures and in group settings. In the next section, we examine these communication practices.

Because students want to understand a lesson, clarity is essential to effective teaching. Clarity is concerned with the message strategies used to increase the fidelity of instructional messages. As stated in chapter 2, there are several characteristics of teacher clarity. Hines, Cruckshank, and Kennedy (1985) argued that clarity behaviors consist of: (a) stressing important aspects of content, (b) explaining by the use of examples, and (c) assessing and responding to perceived deficiencies in understanding.

Book and McCaleb (1985) characterized teacher clarity as the quality of being comprehensible. They argued that teacher clarity entails the use of the following types of communication behaviors: (a) definition of major concepts, (b) accuracy of examples, (c) sufficiency of examples, (d) sufficiency of explication, (e) checking student understanding, (f) connective discourse, and (g) specific examples. Powell and Harville (1990) stated that the behaviors detracting from clarity include ambiguous terms, vagueness, hedging, bluffing, insufficient examples, mazes, and vague language. Other behaviors used to define the lack of clarity are nonfluencies, false starts, and vocal fillers.

Enhancing Explanations

Rowen (1999) provided a useful framework for examining teacher explanations—a central feature of teacher clarity. She stated that one of the principal responsibilities of teachers is to provide explanations that promote the understanding of subject matter. There are typically three areas where confusion occurs in instructional discourse. One source of confusion involves explaining unfamiliar concepts or using language in unfamiliar ways. A second source of confusion involves difficult-to-picture processes. The final sources of confusion involve counterintuitive explanations.

Rowen (1999) discussed three types of explanations that can be used to facilitate understanding. The first is called *elucidating explanations*. These explanations are designed to help students understand the meaning of a term or concept. According to Rowen, a good elucidating statement contains (a) each concept's critical features, (b) an array of examples, and (c) opportunities to practice distinguishing examples from nonexamples by looking for critical features.

The second type of explanation is quasiscientific. When teachers try to help students understand complex processes such as osmosis, evolution, open systems theory, life cycles, or math formulae, they engage in quasiscientific explanations. Several strategies can be used to facilitate the discussion of quasiscientific discussions. Signaling devices that focus on main points, figurative language (analogies—the San Joaquin Valley is California's bathtub), and graphics are effective strategies for bringing focus to important points.

Rowen (1999) recommended an instructional technique known as *elaborative interrogation* for quasiscientific explanations. Students are asked to read an explanatory passage about how some phenomenon occurs and then explain it in their own words. This process requires students to construct their own mental models for difficult to understand processes. In lectures, elaborative interrogation could be used in a number of ways to engage students in the material under investigation.

The third type of explanation Rowen (1999) discussed is *transformative explanations*. This explanation helps students deal with circumstances or events that do not resonate with their personal theories. For example, politicians argue that more standardized testing and holding teachers responsible for test scores will improve education. Transformative explanations may help students understand the limitations of the accountability movement. Teachers will be pressured to teach the test, students will not be engaged in the learning process, and students from lower socioeconomic backgrounds will be punished. Rather than helping education, the result will have negative effects. Rowen (1999) stated that the best transformative explanations: (a) state the implicit or lay theory about the phenomenon, (b) acknowledge the plausibility of this theory, (c) demonstrate its inadequacy, (d) state the more accepted account, and (e) demonstrate the greater adequacy of the alternative theory. Engaging students in these alternative views promotes critical thinking and shapes new insights and understandings.

In chapter 2, we emphasized that clarity does not occur simply because a teacher uses examples or illustrations. If the examples do not relate to the students' experiences, they are not likely to have much of an effect. We also explained the different ways that students signal their lack of understanding. As Darling (1989) and Kendrick and Darling (1990) observed, student clarifying tactics vary according to the point the teacher is trying to make. We also believe that the relationship between the teacher and student influences clarity and the way it is managed. For example, the teacher who criticizes students for asking dumb questions or nonverbally is impatient (rolling eyes, sighing) sends a clear message to students—do not ask questions. In contrast, the teacher who is open and willing to address his or her lack of understanding sends a different message—let us stay with the idea until we get it. The relationship between the teacher and student is also related to clarity. As teachers become closer with students, they are more attentive to language and nonverbal cues that indicate un-

derstanding. Just as intimates grow more competent in assessing implicit messages, teachers and students grow more able to understand each other as their relationship develops. A look, glance, or smile may say a great deal about student understanding. Finally, the student's culture influences how students signal their lack of understanding. Students from high-context, collectivistic cultures (Japanese, Hmong, Chinese) are unlikely to signal their lack of understanding because such a behavior would threaten the face of the instructor (he or she did a bad job of explaining the idea) and self (I am embarrassed because I do not understand). Students from these orientations may ask for clarification after class or ask another student for an explanation.

Reflection

- **In what ways do you signal that you do not understand a teacher?**
- **How do teachers indicate that they do not want to clarify information?**

QUESTIONS

Asking and managing questions is an essential component of classroom interaction. Questions play an important role in both lectures and small-group discussions. Research suggests that teachers spend a tremendous amount of time asking and processing student questions (Cleg, 1987; Hoetker & Ahlbrand, 1979). Effective discussions and lecture discussions require thoughtful attention to questions. However, many teachers often fall into a pattern of asking the same type of questions over and over again. Teachers could better manage questions if they possessed an understanding of what they want a question to accomplish and how the question is related to learning.

There is a variety of ways to use questions. Some are used to glean unknown information, whereas others are used to check student knowledge. For example, pseudoquestions are used to determine whether students understand concepts or know certain facts. During a discussion of the Puritans, a teacher may ask, "Who gave the sermon, 'Sinners in the Hands of an Angry God'?" The teacher knows that the answer is Jonathon Edwards and is using the pseudoquestion to get students to recall this fact. Questions may also serve as directives. A misbehaving student may be asked a question to get him or her back on task. A teacher may ask a student who is not paying attention to an instructional task: "Johnny, have you finished your worksheet?" On hearing this question, Johnny is likely to stop what he was doing and get back to work.

The Bloom et al. (1956) taxonomy of learning is a helpful framework for conceptualizing discussion of teacher questions. Bloom's taxonomy (see Table 9.2) consists of a hierarchy of objectives that represent different levels of thinking. The six classes of objectives are knowledge, comprehension, application, analysis, synthesis, and evaluation.

TABLE 9.2
Bloom's Cognitive Domain of Learning

Level of Learning	*Example*
Knowledge: Recall of factual information	Who developed the teacher immediacy scale?
Comprehension: Understands meanings	What are the major components of teacher immediacy?
Application: Problem solving, applying information to produce a result	How can teachers increase the perception of immediacy in their students?
Analysis: Breaking ideas or problems down into their relevant parts	What other communication behaviors are related to teacher immediacy?
Synthesis: Creating a unique or original product	Use three types of immediacy behavior in a 5-minute microlesson.
Evaluation: Using criteria to produce a judgment	How well did the teacher in your previous class communicate nonverbal immediacy?

Bloom's taxonomy provides teachers with a framework for developing a variety of questions. Research by Gall (1984) indicated that teachers seldom ask questions that require higher levels of thinking (application, analysis, synthesis, or evaluation). Teachers tend to ask questions requiring students to recall facts. This is unfortunate because higher order questions stimulate critical thinking. However, achievement is not accomplished if teachers only ask higher order questions. We believe that the best strategy is to use a combination of questions that can move students from lower levels to higher levels of learning.

Cunningham (1987) provided a framework that can be used to accomplish this goal (see Fig. 9.1). Cunningham argued that, "For every cognitive operation, there is a complementary affective operation" (p. 69). In the cognitive area, Cunningham identified three levels of questions. The first level consists of

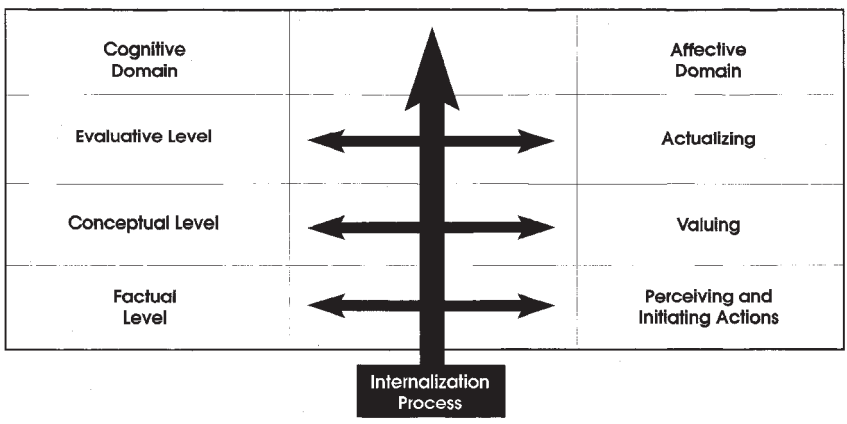

FIG. 9.1. Question types.

factual recall questions. These questions are concerned with student recall and recognition. Key processes are naming, recalling, identifying, writing, listing, and distinguishing.

The second level consists of conceptualization questions. According to Cunningham, convergent and divergent questions characterize this level. Questions vary on how open ended they are. Low-convergent questions are used when the teacher is looking for the right answer, but they are more complex than questions about the recall of facts. For example, the question "What type of state government is used in Nebraska?" requires students to sort through the various definitions of state government and select the one that applies to Nebraska.

High-order convergent questions require students to demonstrate their comprehension of a concept or principle. These types of questions require students to provide evidence and reasons for their responses. At this level, students must be able to differentiate facts from opinions. Here is an example of this type of question: "Does exposure to media violence cause viewers to act violently?" To adequately answer this question, students must understand causal reasoning.

Divergent questions give students the freedom to wrestle with a variety of issues without the constraint of searching for a correct answer. To respond to divergent questions, students should have a reasonable information base for their responses. Low-divergent questions require students to create new or different ideas. An example of a low-divergent question is, "What are the ways of dealing with school overcrowding?" High-divergent questions call for creative thinking. Students are expected to think in new and novel ways. Cunningham (1987) contended that only 5% of classroom questions are of this type. An example of a high-divergent question is, "What role should schools play in fighting racism?"

The third level concerns evaluative questions. These questions are based on the other levels. This level of question requires students to judge the validity of materials and ask and argue through a response. Responses to these types of questions require the teacher to probe for additional support and reasoning. The following is an example of an evaluative question: "What are the problems with the death penalty?"

Affective Domain

Students do not process information neutrally, therefore questions have affective consequences. Some ideas connect and resonate with their experiences, whereas others seem distant and irrelevant. Frequently teachers miss the affective implications for the questions they ask, however. Cunningham (1987) discussed three levels of questions that are influenced by the affective domain.

The first level is *perceiving and initiating action*. This level of question is concerned with perceptual awareness. This level is concerned with how much at-

tention a student needs to dedicate to the situation. For example, in a history class, a teacher may simply ask who in the class is aware of Cesar Chavez, the founder and leader of the United Farm Workers Union. Questions at this level are not designed to make assessments or evaluations, but simply to note awareness.

The second level, *valuing questions*, address the worth or merit to the objects under examination. One of the teacher's roles is to help students scrutinize and assess the values they hold. On some issues, students are aware of the topic under consideration but hold no strong attitudes about it, whereas others feel a great sense of commitment and ego involvement in the topic. As values become more internalized, students are more likely to seek out affirming information. Questions can be used to facilitate an examination of the value. Let us go back to our example of Cesar Chavez and consider the following question: Did Cesar Chavez act in a heroic fashion? Students viewing Chavez as a champion of the rights of farm workers will respond one way, whereas students viewing him as a threat to agribusiness will view him in another. Teachers facilitating a discussion on this topic might face a lively debate that would increase student awareness on both sides of the issue. Unfortunately, many teachers avoid such discussions because they perceive them as too controversial.

The third level, *actualizing questions*, are designed to challenge existing values and consider the merit of competing ones. At this level, students are exposed for what they believe in and stand for. Through this exploration, the total development of the learner is exposed. Teachers attending to the affective domain must remember that, unlike cognitive questions, the teacher's role is not to direct the responses, but to help students understand how they view the world (Cunningham, 1987). After discussing the civil rights movement, students might be asked the following: "Who had the greatest impact on the civil rights movement, Martin Luther King or Malcolm X?" This type of question taps into students' ideas about racism, nonviolence, religion, justice, and communication style.

Teachers need practice and guidance on asking a variety of questions. Effective questions engage students in learning and help them shape the direction of classroom discourse. Further, its is through the management and negotiation of questions that important meanings emerge.

Another dynamic that is related to teacher questions involves wait time. Teachers seldom wait more than 1 minute to answer their own questions. Students quickly learn that if they sit quietly the teacher will provide the necessary information. One rule for teachers to follow is wait 3 seconds before answering a question or calling on a student to respond. The extra time will help students formulate better answers and give teachers an opportunity to connect student responses to important content. Competency in using questions takes time and effort. Other theorists offer important insight on questions in the classroom (Andersen, Nussbaum, Pecchioni, & Grant, 1999; Brophy & Good, 1986; Hunkins, 1976).

Reflection

- **What type of questions do you prefer that teachers to ask?**
- **Which type of questions leads to class discussion?**

SUMMARY

The purpose of this chapter was to overview a number of teaching strategies that can be used in the classroom. There is no perfect method. The selection of a strategy should be based on the instructor's goals, the instructor's teaching strengths, student strengths, and resource availability. The greater the repertoire of strategies available to a teacher, however, the greater the opportunity to adapt to the students' needs. By using the strategies that make for more exciting lectures, by using groups to engage students in learning, and by effectively asking questions, teachers can avoid the classroom climate created by Mr. Dullard.

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TEN

Technology and Instructional Communication

Lee Harrison, a seventh-grade teacher at Kennedy Middle School, is on his way to the special meeting for all faculty and staff. Rumors have been flying around the school about some major curriculum change about to take place. After everyone is seated, the principal, Mrs. Dorothy Knight, steps to the microphone and makes the following announcement:

> Today I am happy to announce that we are creating a partnership with Hyperspeed Learning Systems to create an integrated technological learning community here at Kennedy. We will begin by offering a laptop for learners program in our advanced classes, and in the next five years we will phase in several additional programs until we are fully integrated. Hyperspeed will create and manage the infrastructure, provide the computers the students will purchase, and train all teachers. We believe that this new partnership move take us to where we need to go in the new millennium.

The hands of several faculty members shoot into the sky as they bombard the principal with questions: "Why was this decision made?" "How do we know it will positively affect learning?" "Who is Hyperspeed and what's in this for us?" "What's going to happen to the kids who can't afford laptops or don't have computers at home?" "Why weren't we consulted?" Other teachers seem rather content and smug. One was heard to say, "It's about time, technology is revolutionizing education, it is time to jump on board or stay in the dark ages."

Mr. Harrison leaves the meeting a bit overwhelmed. He is unsure about how this technological revolution will impact him, his teaching, and his students. No single educational development is more dramatic than the technological advancements of the last decade. Because these developments occurred so quickly, there are little data to determine their educational consequences. Some

educators are blindly committed to the benefits of technology. Others resist technology and believe that it threatens the human core of the educational enterprise. We can say this: Technology will continue to be a significant force, and education will be served best by understanding the way in which the teaching–learning process is influenced by it. The focus of this chapter is how technology influences the communication process and learning in the classroom.

TECHNOLOGY AND EDUCATION

Technology refers to the mechanisms used to facilitate or mediate the teaching–learning process. Although teachers have used videos, TV programs, films, audiotapes, and film strips for a number of years, it is the computer that has had the most substantial impact. No other teaching tool has been mandated to become a central part of the educational process. In 1996, the Clinton administration issued an initiative to make all students computer literate by the 21st century (*Getting America's Students Ready*). Literally millions of dollars have been committed to this goal. Let us turn our attention to how computer technology is influencing instructional practice.

Whenever technologies are employed, teachers' and students' roles change. According to Chizmar and Walbert (1999), technology allows the teacher to move from the "sage on the stage" to the "guide at the side." When technologies become infused into the curriculum, the teacher's role shifts from being primarily an information source to a facilitator, coach, guide, and co-learner. Jones, Valdez, Nowakowski, and Rasmussen (1995) outlined the way in which these teacher roles are enacted in technologically rich classrooms. They contended that teachers are facilitators when they provide environments and opportunities for students to work collaboratively and solve authentic problems. When they act as a guide, teachers mediate, model, and coach. Teachers model when they competently demonstrate the use of technology. They coach by giving hints and encouraging students to refocus and practice their skills. Finally, teachers are co-learners when they participate with students in the discovery and management of new information and insight.

Clearly, the technological developments in the last few years have dramatically influenced classroom interaction patterns. The increase of computers and Internet access has increased substantially. In 1999, for instance, 63% of public schools had Internet access of some form (National Center for Educational Statistics, 2000). The computer and its ability to provide access to the information highway alters the type of assignments developed, the form in which the assignments are presented, the competencies the students must possess to complete the assignments, the type of learning that will occur, the kinds of behavioral and technological problems that will be remediated, and the way the teacher will respond.

Some advocate that technological developments offer limitless opportunities, but teachers need a clear idea of how to use technology to extend their instructional goals. Bransford, Brown, and Cocking (2000) argued that technology is not an educational panacea:

> Technologies do not guarantee learning but ineffective use of technologies can hinder learning—for example if students spend most of their time picking fonts and colors for multimedia reports instead of planning writing and revising ideas. And every body knows how much time students can waste on surfing the Internet. (p. 206)

The authors went on to offer five ways to use technology:

- Bringing real-world problems into the classroom.
- Providing scaffolds and tools to enhance learning.
- Giving students and teachers more opportunity for feedback, reflection, and revision.
- Building local and global communities that include teachers administrators, students, parents, practicing scientists, and other interested people.
- Expanding opportunities for teacher learning.

A brief discussion of these areas may help teachers and prospective teachers develop a working paradigm for instructional technology.

Real-World Learning

There are several ways to utilize technology to provide new types of learning opportunities for students. Utilizing a problem-solving orientation is not a new concept, but technology does offer the potential to change the boundaries of the typical classroom. Computer software can be used to simulate problems and give students a variety of ways to work through them. Bransford, Brown, and Cocking (2000) described two such programs: The Voyage of Mimi and the Jasper Woodbury Problem Solving Series. In the Voyage of Mimi, students use video and the computer to *go to sea* and learn about whales and the Mayan culture of the Yucatan (Char & Hawkins, 1987). The goal of this instructional package is to help students refine their problem-solving skills in a real-world (albeit simulated) environment. The Jasper Woodbury problem-solving series developed at Vanderbilt includes 12 videodisk adventures that focus on mathematical problem solving. Each adventure provides opportunities for problem solving, reasoning, and making connections to other areas such as science, social studies, literature, and history. Students are able to explore specific parts of a lesson and receive immediate feedback. They can revisit parts they do not understand and

probe deeper into more challenging environments (Cognition and Technology Group at Vanderbilt, 1997).

A second way to use technology to facilitate real-world problem solving is to connect students with practicing scientists. In some schools, student–scientist partnerships are created. Students identify a significant problem and consult with professionals examining it. Through the Internet, they share tools, curricula, methods, and data to pool their knowledge and publish their findings. O'Neil, Wagner, and Gomez (1996) advocated the use of telementoring for linking students with professionals. In these programs, students are connected with practicing professionals, university faculty, or graduate students. Through e-mail, these mentors help the students as they investigate a significant problem. Bransford, Brown, and Cocking (2000) reported other projects that successfully utilized these interconnected learning communities.

Providing Scaffolds

Vygotsky (1978, 1981) argued that learning is facilitated when learners are provided models and guidance until they are able to perform tasks alone. Without this help, which he called *scaffolding*, students are often overwhelmed and do not know how to determine what is important. Computer-aided instruction can provide valuable scaffolding tools (Oliver, Omari, & Herrington, 1998). Bransford, Brown, and Cocking (2000) likened computer scaffolding with using training wheels to teach someone to ride a bike. The training wheels help the learner master some of the mechanics of bike riding without falling. Similarly, computer scaffolding allows learners to perform tasks and solve problems they could not do without the computer. With a coach or tutor, the learner receives hints and guidance in solving problems. Once this competency is established, the learner has a foundation to move on to solve tasks without help.

There are several ways to develop scaffolded experiences. One option is to use an apprenticeship model. In this approach, an expert (such as the teacher) models a learning function and guides learners in practice until they can perform the task alone. Another approach is to allow individuals to work collaboratively because in most real-world applications individuals frequently work with others.

Although there is potential for scaffolding technologies, there are some potential pitfalls. Because of time constraints and lack of patience, teachers and mentors may be inclined to do the work for the novice. The goal of scaffolding is to teach new skills, however; the new skill is not taught when the teacher or mentors lose sight of their roles—to help the novice use the skill independently. Over time a pattern can unfold where the novice sits back and waits for someone else to take over the task.

Feedback, Reflection, and Revision

Feedback to students can be facilitated with the use of Internet technology. In addition to traditional e-mail and Web sites, new software allows for a more interactive educational environment. For example, Blackboard is a Web-based program with a number of interactive features that allow teachers to post course outlines, announcements, and assignments; provide feedback to students on projects; answer questions from parents; and use interactive tests (Yaskin & Gilfus, 2001). Traditional Web pages provide information and a certain amount of interactivity, but students cannot receive immediate feedback on their work. Innovations such as Blackboard were developed to meet this need. Several other programs are available.

Tele-Web integrates server side software and plug-ins with a Web server. Zhao et al. (2000) discussed the way this tool can be used to teach literacy. With this technology, teachers develop multimedia learning materials and conduct collaborative learning projects. Teachers can use this tool to archive student assignments and track performance. Students are encouraged to explore independent ideas and collaborate with others. The curriculum focuses on four primary environments: Writing Room, Reading Room, Library, and Publishing Room. Each environment allows teachers and students to create projects and comment on progress.

Not only do these technological developments have the potential to link students with teachers, they also provide a way for students to connect with peers and tutors. Technologies such as Blackboard and Tele-Web provide the opportunity to create learning communities. Say, for example, student teams are asked to do a problem-solving activity. Each team member is required to investigate the different aspects of the problem. Information can be shared by e-mailing attachments with the different information obtained. Through this process of information exchange and revision, the problem question can be explored and solutions can be devised.

Finally, technology provides tutorial opportunities. For example, tutorial software is available in algebra and writing. In algebra, the computer software program guides students through simple to more complex tasks, and the writing software provides students with guidance on grammar and style.

Connecting the Classroom to the Community

There are numerous ways technologies can link the school to the home and the larger community. For example, every school in Clovis Unified School District in California has a home page Web site with links to extracurricular and curricular activities. Some faculty members have a Web site with course assignments and grading criteria. The old student response, "I don't have any homework to-

night, dad," can be verified by connecting to the Web site and checking the assignments posted on a class Web site.

One common complaint from parents is that they do not know what is going on in the school. This is particularly problematic for divorced families where announcements may only go to one household. Many schools provide announcements on telephone message systems so that a parent can find out the time of a football game or open house. The same system can be used to leave voice mail with an instructor or administrator. The time has passed when the school newsletter was the primary tool for disseminating information.

Teacher Learning

The final area that Bransford, Brown, and Cocking (2000) addressed is teacher learning. Technology has dramatically changed the teaching and learning process. The authors contended that technology influences classroom instructional practices and affects the teacher's professional development.

Teachers effectively using technology in the classroom model ways to use these tools to advance learning. For example, when teachers guide students through an instructional task, they may explore and experiment with different ways to solve a problem. This collaborative process helps students discover new insights, but the teacher learns new information as well. Also there may be occasions when a student understands more about the use of a particular technology than the teacher. In these occasions, the learning event unfolds into a collaborative venture where the roles of teacher and student are blurred or redefined. The student takes the lead as instructor and the teacher becomes student.

Obtaining access to new teaching strategies and sharing information with other teachers can also be facilitated because of new technological developments. Teachers can explore teaching Web sites, read articles in virtual libraries, and download information pertaining to teaching standards. The traditional role of teacher as expert is changed to teacher as facilitator.

One of the more exciting developments is the way in which technology can be used to help teachers prepare for their teaching responsibilities. CD-ROMs with segments illustrating the use of different behavioral management approaches and videodisks illustrating reading or math instruction are also available (i.e., Duffy, 1977; Risko & Kinzer, 1998).

Reflection

- **How does technology facilitate learning?**
- **Select a Web site from the back of this chapter and discuss the way it influences learning.**

UNANSWERED QUESTIONS ABOUT THE USE OF TECHNOLOGY

The research reviewed earlier suggests that technology impacts education in a number of positive ways. Yet before we accept all of these benefits on face value, we must also understand that many of these benefits do not reach all students and are not applicable to all educational goals. Narrative arguments exceed the objective data on the positive effects of technology on learning (Selfe, 1999). Healy (1998) observed, "Unfortunately, the political pressures to toss computers into classrooms and to get internet connections before people even know what to do with them is an attempt to run around the teaching profession" (p. 8). We want to emphasize that technology should not be a substitute for an effective teacher.

In this next section, we explore the problems associated with the infusion of technology. We frame this discussion in terms of the daily practices of a teacher such as Mr. Harrison, which we described in opening this chapter.

Access to Technology

Perhaps the most glaring problem concerns access. Numerous theorists have commented on what is termed the *digital divide* (Brown, Higgins, & Hartley, 2001; Holloway, 2000; Swain & Pearson, 2001; U.S. Department of Commerce, 1998; Yoder, 2001). There are substantial differences between those who have access and those who do not. As a result, the benefits we outlined previously do not extend to all students.

The U.S. Department of Commerce reported data illustrating the patterns of computer access. We focus on three areas: (a) the percentages of people who have computers, (b) the percentages of people who have access to the Internet, and (c) the effects of income on computer access. Table 10.1 reports the percentage of households with a computer by geographical area.

TABLE 10.1
Percentage of U.S. Households With Computers by Race/Origin and Geographical Area

	1998		
Race Origin	*Rural*	*Urban*	*Central City*
White-non-Hispanic	42.6	48.6	47.4
Black-non-Hispanic	17.9	23.8	21.8
AIEA non-Hispanic	26.8	38.7	35.6
API non-Hispanic	40.6	55.6	55.5
Hispanic	23.2	25.7	21.4

Source. U.S. Department of Commerce (1998). Falling Through the Net II: New Data on the Digital Divide [On-line], Available: http://www.ntia.doc.gov.

These data suggest that White students are far more likely to have access to computers than African-American and Hispanic students. Students who have access to more than one computer in the home or the type of computer they have was not reported.

Other important data collected by the U.S. Department of Commerce is the percentage of households using the Internet. Taking advantage of the information age requires more than just a computer, but the computer must also have the capacity to link with the Internet through a dial-up modem or broadband connections. Table 10.2 shows the percentage of households that have this capacity.

These data indicate disparities between Whites and Asian Pacific Islanders and African Americans and Hispanics. Whites and Asian Pacific Islanders have substantially more access to the Internet than African Americans and Hispanics.

The final area that is important to understanding the digital divide is the role of income. As income increases so does access to computer technology for all ethnic groups. Table 10.3 reports the percentage of U.S. households with a computer by income and ethnicity.

The data reported in Table 10.3 show that the digital divide narrows for each group as income increases. The gap is largest among low-income African Americans and Hispanics. If the computer does enhance learning, these findings suggest that there remain great disparities in the educational opportunities of lower income ethnic groups. Furthermore, as some divides are bridged new ones open. Broadband technologies, for example, are marketed to families in higher socioeconomic brackets, leaving the hand-me-down technologies to the less financially able.

Higher income families are likely to have more than one computer available for their children. Some wealthier families may have a sophisticated desktop computer in their home and provide laptops to each of their children. In the same school, there may be families who struggle to provide one hand-held calculator. The education access for these two families is substantial.

TABLE 10.2
Percentage of U.S. Households Using the Internet
by Race/Origin by Geographical Area

	1998		
Race Origin	*Rural*	*Urban*	*Central City*
White non-Hispanic	23.7	32.4	32.3
Black non-Hispanic	7.1	11.7	10.2
AIEA non-Hispanic	12.8	22.5	20.2
API non-Hispanic	24.7	36.5	33.3
Hispanic	9.8	12.9	10.2

Source. U.S. Department of Commerce (1998). Falling Through the Net II: New Data on the Digital Divide [On-line], Available: http://www.ntia.doc.gov.

TABLE 10.3
Percentage of Households With a Computer by Income and Ethnicity*

	1998			
	Under 15	*15–34*	*35–74*	*75+*
White non-Hispanic	17.5	32.5	60.4	80.0
Black non-Hispanic	6.6	19.4	43.7	78.0
AIEA non-Hispanic	16.8	35.3	50.9	80.5
API non-Hispanic	32.6	42.7	65.6	85.0
Hispanic	9.4	19.8	49.0	74.8

Source. U.S. Department of Commerce (1998). Falling Through the Net II: New Data on the Digital Divide [On-line], Available: http://www.ntia.doc.gov.

Not only are there educational consequences for these differences, there are also socioemotional ones. In some school districts, there is a country club mentality with types of programs discussed in the opening of this chapter. Students who can afford to be in a laptop program are considered part of the educational in-group, and those who do not are marginalized. One divorced single father who could not afford to buy a laptop computer offered through the school program said that his son cried all night because he would not be able to be in the program. His son was not distraught over the threat to his educational opportunity; he was upset because he wanted to be with his friends whose parents could easily afford the computer.

According to Brown, Higgins, and Hartley (2001), questions of access reveal themselves in other ways. Schools with diverse student bodies restrict the access to technology. In many schools, computer stations are placed in labs with restricted access. By placing computers in labs, schools are sending two messages: one, the computer is not an integral part of the learning processes; two, students from poverty or diverse backgrounds cannot be trusted with computers in the classroom. Together these messages indicate that technology is not central to the learning experiences of students from diverse cultural backgrounds (Swain & Pearson, 2001).

The type of computer instruction is different for students from diverse backgrounds. Research indicates that culturally diverse students receive instruction where the computer directs the learning, whereas White students receive instruction that encourages problem solving and student initiative (Anderson et al., 1984; Crist-Whitzel, 1985; Kozma & Croninger, 1992). Technology for some students is considered a tool to facilitate and explore learning, whereas for others it is a tool to complete repetitive tasks such as word processing or data entry. One type of student is given freedom to use the computer to explore ideas, whereas another is limited to developing remedial competencies.

Brown, Higgins, and Hartley (2001) pointed out an additional pedagogical facet of the digital divide. The software reflects the concerns and interests of a

diverse population of students. The authors observed that sound software is not available for students from diverse ethnic backgrounds, students with disabilities, students who are female, and students who have been identified as at risk. Software companies, like textbook companies, have been inattentive to the interests and concerns of certain groups.

Therefore, access presents difficult problems for teachers, especially for those in lower socioeconomic areas. The first obstacle is financial. Teachers do not have the power to change the financial circumstances of families. However, they can think through the ways in which they teach about the use of technology.

Brown, Higgins, and Hartley (2001) offered a set of recommendations for increasing access:

- Create mini-labs throughout the building.
- Have roving computer stations that stay in classrooms for extended periods of time.
- Offer computer labs for each department.
- Offer and allow typically underserved students opportunities to take technology courses and earn extra credit for graduation.
- Encourage all students to join technology clubs.
- Encourage students to use technology in their own time and for their own purposes.
- Have girls' technology day—use female students and students from diverse ethnic backgrounds as technology monitors and have more sign-up slots for female students during free time.
- Encourage all students to attend summer technology camps.
- Develop funding formulas that equalize technology spending across rich and poor districts.
- Lend laptop computers to students, much as band students receive musical instruments.
- Ensure equal technology use regardless of gender, ethnicity, or achievement level by removing some of the biases and stereotypes associated with technology use.
- Target all students for higher level cognitive skills by having them use more problem-solving tools and learn programming.
- Consider summer school courses that meet at atypical times to accommodate students who work after school.
- Blend technology into the daily routine to promote learner-centered environments.
- Schedule individual and group time for students.

- Offer evening classes to involve parents and other community members.
- Encourage students to take training classes in the use of computers.
- Make computers available to the public through schools, libraries, and community centers.
- Encourage students to use public library technology for after-school homework assistance and to take advantage of mentoring and tutoring programs.
- Consider extending school hours.
- Create partnerships with universities to establish apartment schools in neighborhoods where access is limited. (p. 35)

The previous recommendations can help teachers reduce the gaps between the technological haves and have-nots. Other researchers offer recommendations on the digital divide (e.g., Becker & Sterling, 1987; Crist-Whitzel, 1985; Kozma & Croninger, 1992; Swain, & Pearson, 2001; Yoder, 2001).

Reflection

- **What are additional ways to narrow the digital divide?**
- **Should educational programs such as laptop for learners be implemented in public schools?**

Technology and Learning

The significance of the digital divide is predicated on the strong belief that technology positively influences learning. Many people do not even question its value as they search for a bigger, faster, and more sophisticated machine. The objective data showing the effects of technology on learning however are less than straightforward. Cuban (2001) argued that there are little data warranting the argument that computers enhance achievement.

Kulik (1994) conducted a meta-analysis on a set of 97 studies examining the effects of technology on learning. A meta-analysis is procedure that compares the effects of a relevant variable across a range of studies. Kulik argued that, to understand the effects of computers, it is necessary to identify how they are used. For example, a computer can be used as a tutor, to manage information, for simulations, or for programming. Each of these uses may influence learning in a different way. The results indicate that the most positive and consistent effect concerned tutoring. Elementary and high school students generally learned more in classes that used computer tutoring. No other computer application had a consistent effect. In another meta-analysis, Bayraktar (2001) investigated the effects of computer-aided instruction on science achievement. The results

indicate that the effect of the computer varied by the way it was used. The most effective mode of instruction was simulation, followed by tutorial. These findings by Kulik (1994) and Bayraktar (2001) suggests that the computer may be best used for some instructional goals and not for others.

Student learning style may also influence the effects of computer technology on learning. Ross, Drysdale, and Schulz (2001) examined learning style and performance in a computer applications class. Students were measured on the Gregorc Style Delineator (Gregorc, 1982). This assessment categorizes learning in four ways: concrete sequential (practical, thorough, well organized, analytical), abstract sequential (evaluative, analytical, logical, and orderly), abstract random (focus on the world of feeling and emotion), and concrete random (organize information in three-dimensional patterns, think intuitively and impulsively). The authors assessed whether learning style influenced the grades obtained in the class. The results indicate that abstract sequential (AS) and concrete sequential (CS) learners performed better computer course than abstract random and concrete random students. The authors argued that students with CS and AS learning styles are suited to computer tasks such as programming because these activities require linear processing and logical reasoning skills. These findings suggest that the learning style mediates the positive effects of computer-aided instruction. The positive effects of computer application are not equivalent for all learners.

Healy (1998), a more vocal critic, explicated other problems with computer technology and education. One problem is that computers will not turn bad teachers into good ones. A teacher's philosophy and orientation are not likely to be changed as a result of technology. Teachers are likely to select software and assignments that fit into their existing ideologies. If teachers believe they should feed facts to students, the technology is used to collect and categorize facts. If teachers believe that they should facilitate problem solving and collaboration, they will use technology to accomplish these goals.

Additionally teachers may not be adequately trained to take full advantage of technological opportunities. Selfe (1999) stated that when teachers are not adequately trained they resort to commercial programs written by programmers who do not have substantial educational training. Programs designed to teach composition, for example, may be little more than electronic versions of a printed grammar textbook. Prepackaged programs simply do what has always been part of the curriculum: drill, memorization, and word processing. How these tasks prepare students for the 21st century is not clear.

One argument often advanced in support of technology is that it makes learning fun. Healy (1998) countered that just because something is fun does not mean that it has educational value. Learning can be fun, but it is also hard work. Technology can short circuit the process of cultivating a work ethic that

is vital to academic and real-world success. Advocates may contend that technological competence helps individuals work smarter not harder. Yet there is a rather compelling database on the positive effects of diligence and effort on academic success (e.g., Covington, 2000; Dweck, 1986). However, much computer software allows students to develop impulsive and trial-and-error responses that simply do not facilitate higher order thinking.

Healy (1998) also observed that newer technologies emphasize rapid processing of visual symbols such as computer icons and minimize verbal fluency fostered through reading, interaction, and argument. Westby and Atencio (2002) raised similar concerns. They observed that printed texts require readers to read left to right and up and down. Computers, in contrast, may use hypertext that includes graphics, animation, video, and digitized sound. With this medium, readers move rapidly from one text chunk to another nonsequentially. Visual and aural texts have taken the place of the written and spoken word. Watch how students *surf* through different Web sites. They may be drawn to images that are aesthetically appealing rather than cognitively challenging.

The computer may be more that just a tool to promote decision making and problem solving. A shovel, lawnmower, or broom are tools we use to complete certain tasks, but they do not have much of an affect on the way the brain processes information. Westby and Atencio (2002) observed: "The ways that children access information on a computer, the manner of its presentation, and the ways it can be manipulated all alter children's perceptions of knowing and doing" (p. 74).

Technology influences socioemotional development and relational competency. Think for a moment about students who are labeled the *computer geeks*. These students may be socially awkward, isolated, and immature. The computer does not tell these students to blow their noses when they run, how to take turns in conversation, to "get a grip" when they do not get their way or feel shame when they hurt someone's feelings. These competencies are only developed and refined through face-to-face communication with significant others. Think about the way these students react when their computer goes down or freezes. Do they become agitated, unsure of what to do, or unable to decide on alternative activities?

Authors such as Goleman (1995) and Gardner (1993) contended that emotional and interpersonal skills are extremely important to academic and personal success, but are often neglected in the instructional process. The emotionally mature individual can take the perspectives of others, read emotional states, and suspend immediate gratification. Excessive time watching TV or using a computer limits the amount of time a child is engaged in meaningful social interaction. Technology, according to Healy (1998), cannot develop *feeling* centers of the brain.

Thus, there appears to be a dark side to technology, but it is naive to believe that we can or should eliminate technology from our educational and personal lives. Postman (1995) commented on this point when he stated:

> To be against technology makes no more sense than to be against food. We can't live without either. But to observe that it is dangerous to eat too much food, or to eat food that has no nutritional value is not to be "anti-food." It is to suggest what may be the uses of food. Technology education aims at students' learning about what technology helps us do and what it hinders us from doing; it is about how technology uses us, for good or ill, and about how it has used people in the past, for good or ill. It is about how technology creates new worlds, for good or ill. (p. 192)

To deal effectively with technology in its many forms, teachers have a clear idea on what they want to accomplish. Postman (1995) offered principles that teachers should consider about the use of technology:

1. All technological change is a Faustian bargain. For every advantage a new technology offers, there is always a corresponding disadvantage.
2. The advantages and disadvantages of new technologies are never distributed evenly among the population. This means that every new technology benefits some and harms others.
3. Embedded in every technology there is a powerful idea, sometimes two or three powerful ideas. Like language, a technology predisposes us to favor and value certain perspectives and accomplishments and subordinate others. Every technology has a philosophy that is given expression in how the technology makes people use their minds, in what it makes us do with our bodies, in how it codifies the world, which senses it amplifies, and which of our emotional and intellectual tendencies it disregards.
4. A new technology usually makes war against an old technology. It competes with it for time, attention, money prestige, and a worldview.
5. Technological change is not additive, it is ecological. A new technology does not merely add something; it changes everything.
6. Because of the symbolic forms in which information is encoded, different technologies have different intellectual and emotional biases.
7. Because of the accessibility and speed of their information, different technologies have different political biases.
8. Because of the physical form, different technologies have different sensory biases.
9. Because of the conditions in which we attend to them, different technologies have different social biases.
10. Because of their technical and economic structure, different technologies have different content biases.

SUMMARY

In this chapter, we explored the conundrum evolving around educational practice and technological development. Mr. Harrison, the teacher in the opening of this chapter, faces and will continue to face some difficult decisions. New technologies will continually be developed. Just as one is mastered, a new one will come along. Some of these developments will contribute to classroom goals, whereas others will amount to bells and whistles that on the surface look good but do not have much of a direct influence on learning. Sorting out these differences is not easy. School districts, publishing houses, and families will put pressure on Mr. Harrison to make the right choice. The digital divide will not go away, but will continue. Students from privilege will continue to have increased access that may or may not prepare them academically. For some students, access to some of the exciting developments we reviewed earlier in this chapter will not be equal for all students. Yet Mr. Harrison has an obligation to teach all of the youngsters assigned to his class. He will be well aware of the substantial role that interpersonal communication plays in the classroom, and that technology will not help him create empathy, caring, and character. The way in which he will balance and manage these differences will have a major impact on the learning and the student affective orientations to learning.

Reflection

- **How would you advise Mr. Harrison to best use technology?**
- **How should schools accommodate students who cannot afford computers?**

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WEB SITES

www.thegateway.org (lesson plans by content areas; a free service of the U.S. Department of Education)

www.teacherfirst.com

www.lessonplanspage.com (developed by Kyle Yamnitz and the faculty and students at University of Missouri; focuses on elementary level)

www.lessonplanz.com (lesson plans, songs, thematic units, worksheets, and coloring pages)

www.eduniverse.com (collection of lesson plans generated from the 1998 and 1999 Intel Applying Computers in Education project)

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