

Instructor's Section

by

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to accompany

Educational Psychology:  
A Contemporary Approach

Second Edition

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# Chapter 1

## Introduction to Educational Psychology

### Focus

#### Chapter Overview

Borich and Tombari begin *Educational Psychology: A Contemporary Approach* by presenting a developmental pattern of teacher concerns that new teachers typically experience, a pattern that evolves from concerns about self, to concerns about teaching tasks, to concerns about impact on learners (Fuller, 1969). They note that four types of knowledge (practical, case, theoretical, empirical) are critical for teacher growth and development (Shulman, 1992), and they argue that educational psychology can play an important role in helping teachers gain theoretical and empirical knowledge and progressing through these stages of concern. Using four cases, they illustrate how the educational psychology knowledge base can assist teachers in their decision making and plans of action. Finally, the authors examine how new knowledge about teaching and learning is acquired, and how teachers might apply such knowledge using a classroom problem-solving process.

#### Intended Outcomes

After completing Chapter 1, teachers or prospective teachers should be able to

- explain how educational psychology can contribute to the development of teachers
  - explain how the knowledge base in educational psychology evolves
  - distinguish between independent and dependent variables
  - distinguish between qualitative and quantitative research methods
  - explain the value of theory and its role in teaching
- apply a process of problem solving to a common classroom learning problem

Outline

- I. Stages of teacher development
  - A. Student teaching and inservice differences
  - B. Three stages of teacher growth and development
    - 1. The survival stage
    - 2. The task stage
    - 3. The impact stage
  - C. Clarification of concerns theory
    - 1. Genesis
    - 2. Definition
    - 3. Implications
- II. The role of educational psychology in teacher growth and development
  - A. Knowledge is key for teacher growth and development
    - 1. Practical knowledge
    - 2. Case knowledge
    - 3. Theoretical knowledge
    - 4. Empirical knowledge
  - B. Educational psychology defined
  - C. The tasks of educational psychology
    - 1. Provide knowledge base
    - 2. Present process for implementing knowledge base in classrooms
- III. Understanding the knowledge base of educational psychology
  - A. Building a knowledge base
    - 1. The role of question formation
    - 2. The role of defining variables
      - a. Operational definitions
      - b. Independent and dependent variables

3. The role of formulating hypotheses
- B. Testing hypotheses
1. Qualitative research
    - a. Descriptive research
    - b. Ethnography
    - c. Case studies
  2. Quantitative research
    - a. Generalizability
    - b. Correlational studies
    - c. Experimental studies
- C. Building psychological theories
- D. A process of solving classroom problems
1. Observe behavior
  2. Understand learner characteristics
  3. Reflect on theories of development, learning, and motivation
  4. Choose and implement a classroom strategy
  5. Evaluate impact

Key Terms or Concepts

concerns theory

practical knowledge

case study knowledge

theoretical knowledge

empirical knowledge

variables

operational definition

independent variable

dependent variable

hypothesis

randomization

survival stage

impact stage

task stage

qualitative research

quantitative research

descriptive research

ethnography

generalizability

correlational studies

experimental studies

experimental group

control group

educational psychology

## Suggestions for Teaching

### Presentation

1. To introduce the chapter, ask students to form dyads or triads and develop responses to the following:  
“Describe the three stages of growth and development that teachers typically confront”; “Explain how educational psychology can contribute to a quicker and smoother transition among these three stages”; “From your own background as a student or teacher, provide three concerns that teachers might have at each stage of their development.” Have students present and discuss their written responses. Summarize using key ideas from the text and applications from your own experiences as a teacher. (You might also use transparencies from the *Instructor’s Manual*.)

2. In introducing the chapter, have students reflect on (using their notes and/or the book if necessary) and identify what they consider to be the three major ideas from the reading. Announce to students that they have 5 minutes to list the three ideas, check them with another student in class, and prepare to “Stand and Deliver” their opinions. After 5 minutes, call on several students to present their lists, and compare their ideas with the intended outcomes of the chapter.
3. Present an overview lecture that briefly reviews the five parts of the textbook and how the knowledge they provide can contribute to enhanced teacher decision making. Use examples from your own experience or research on teaching and learning to illustrate how educational psychology can and has made a difference in student learning.
4. Using overheads from the transparency section, review key concepts from the introduction, providing examples to clarify applications to classrooms and learners.

#### In-class Applications

1. Ask students to form dyads or triads and develop three questions related to what works better for learners (e.g., “Do mathematics students learn better if I assign one or two long homework assignments or consistently short assignments?”). Ask students to identify and define the variables involved in each of their questions (e.g., practice and mathematics achievement). Finally, have students state hypotheses about how the variables might be related to one another (e.g., distributed practice is related to higher achievement). Provide examples. Have students present their questions, variables, and hypotheses.
2. Using Transparency 1.1 from the *Instructor’s Manual* as a review, have students create three examples that might apply to each stage of the teacher concerns theory.
3. Use Activity 1.1 as a brief review or “concept check” of the various methods and concepts that may be used when conducting qualitative and quantitative research. Have students complete these sheets individually, check their answers with peers, and prepare to ask any questions they might still have.

4. Use Activity 1.2 as a brief review or “application assessment” of the various methods that may be used when conducting qualitative and quantitative research. Have students complete these sheets individually, check their answers with peers, and discuss their answers in a large-group discussion.

#### Out-of-class Applications

1. Ask students to interview a relatively inexperienced teacher about his or her first year of teaching. Have students develop a set of questions based on the teacher concerns theory discussed in class (e.g., “What was your first year of teaching like?”; “What were your major concerns during your first year of teaching?”; “What type of support was most helpful?”; “What things became easier as you gained experience?” “Can you characterize your progress or development as a teacher in any way?”).
2. Identify a set of important quantitative and qualitative studies that have provided important findings for teaching and learning. Put these on reserve and have students review them to solidify their understanding of the different approaches to conducting research and developing a knowledge base in educational psychology.
3. Have students read an additional article or book chapter on how theory and research can inform practice. For example, Good and Brophy (1994) or Duke (1990) provides numerous examples of how research has contributed to enhancing teaching/learning.

#### ACTIVITY 1.1

##### Concept Check

*Directions:* As a check of your knowledge on the various methods and concepts that may be used when conducting research, fill in the blanks of the sentences below with the appropriate term.

1. Describing a condition that varies in explicit terms so that you may measure it or demonstrate it is to give it a/an \_\_\_\_\_ .
2. A prediction of a relationship between two variables is called a/an \_\_\_\_\_ .

3. Research that uses ethnography, case study methods, or description is called \_\_\_\_\_ research.

4. Measurement through use of questionnaires, interviews, and systematic observation may be characterized as \_\_\_\_\_ research.

5. A condition that is hypothesized to bring about an effect or the outcome desired is termed the \_\_\_\_\_ .

6. Correlational and experimental research are methods typically associated with \_\_\_\_\_ research.

7. Studies that concentrate extensively on life in a particular classroom or school and how those involved interpret and make sense of daily events or circumstances are called \_\_\_\_\_ .

8. \_\_\_\_\_ studies are those that seek to determine if there is a relationship between two variables.

9. The presumed effect of the treatment or condition is termed the \_\_\_\_\_ .

10. A \_\_\_\_\_ study focuses on a single or small number of persons or situations but does not involve extensive data gathering.

### ACTIVITY 1.2

#### Concept Check

*Directions:* In the blanks below, place the letter of the following methods/terms with the italicized activity that it describes.

- |                        |                         |
|------------------------|-------------------------|
| a. case study          | f. ethnographic study   |
| b. control group       | g. experimental group   |
| c. correlational study | h. generalizability     |
| d. dependent variable  | i. independent variable |

e. descriptive study                      j. randomization

\_\_\_\_\_ 1.                      A researcher selects *30 teachers* for involvement in a study but, instead of providing them with the experimental program, he elects to use their student achievement as *a measure against which to compare another group* of 30 selected teachers who used the special treatment (program).

\_\_\_\_\_ 2.                      To *provide equal opportunity* for students to participate in an innovative, computer-based writing and mathematics program in which curriculum integration is featured, Principal Fran Smith *draws the 60 students from a pool of all junior high students*.

\_\_\_\_\_ 3.                      A researcher, interested in having his descriptive results *represent what is currently occurring* across the United States, carefully selects his sample of elementary schools from each section of and type of school in the United States, ensuring that he has numbers proportionate to the larger population.

\_\_\_\_\_ 4.                      Deciding to collect data about their new computer programming course in order to evaluate it, a teacher and principal discuss what *effects would be most appropriate*, and they set out to investigate whether instruments have been developed to measure these *effects*.

\_\_\_\_\_ 5.                      Using a narrowly focused coding scheme, a researcher *observes the teacher–student and student–student interaction involved in small-group teaching in three social studies and three mathematics classes* because she suspects major process differences.

# Part I

## What Teachers Need to Know About Development

## Chapter 2

### Cognitive Development

#### Focus

#### Chapter Overview

Chapter 2 focuses on major issues and theories of human growth and development, cognitive and language development, and how teachers might use this knowledge in their thinking about students and instruction. Borich and Tombari begin the chapter by identifying three fundamental questions about learner development: (1) Is there one typical path to development or many unique paths? (2) What are the major influences on learner development? and (3) What is the best way to describe developmental change? After exploring these questions and explaining how their answers will assist teachers in understanding and enhancing learners' development, they present Piaget's cognitive development theory, highlighting his four stages. The authors then present two development theories that have expanded on and, in some respects, contradicted Piaget's work: Gagné's intellectual skills hierarchy and Vygotsky's sociocultural theory. Further, Borich and Tombari discuss (a) the importance of language and language development for cognitive development, (b) three explanations for how children develop language competence, and (c) how teachers can promote language development. Finally, Borich and Tombari respond to the question, "How does learning two languages affect cognitive development?"

#### Intended Outcomes

After completing Chapter 2, teachers or prospective teachers should be able to

- identify issues or major questions that have been the focus of much research on human development
  - explain how the nature/nurture question holds important implications for teachers
  - explain Piaget's basic theory and four stages of development

- using Piaget's stages, develop teaching activities or experiences that are likely to be appropriate and inappropriate for your students
- explain the implications of Gagné's and Vygotsky's theories for teaching and learning
- illustrate Vygotsky's zone of proximal development concept by applying it to content or skills in their subject matter area
- explain how schools can promote language development
- distinguish among the types of bilingual programs and their effects as demonstrated by research

## Outline

### I. Issues raised by developmental theorists

#### A. Is there one or many paths to development?

1. Developmental patterns
2. Individual differences
3. Implications for teachers

#### B. What are the major influences on human development?

1. Nature
2. Nurture
3. Implications for teachers

#### C. What is the best way to describe developmental change?

1. Quantitative description
2. Qualitative description
3. Implications

### II. Cognitive development

#### A. Piaget's theory and methods

1. Schemata
  - a. Behavioral (sensorimotor)

- b. Symbolic
  - c. Operational
  - 2. Constructing and changing schemata
    - a. Organization
    - b. Adaptation
    - c. Assimilation
    - d. Accommodation
    - e. Equilibration
  - 3. Piaget's stages of cognitive development
    - a. The sensorimotor stage (birth to 2 years)
    - b. The preoperational stage (2 to 7 years)
    - c. The concrete operational stage (7 to 11 years)
    - d. The formal operational stage (12 years and older)
  - 4. Piaget's legacy
  - 5. Criticisms of Piaget's theory
    - a. Gagné's intellectual skills hierarchy
    - b. Vygotsky's sociocultural theory
  - 6. Neo-Piagetian theory
- B. Language development
- 1. What are language and language development?
    - a. Language as a system of symbols
    - b. Language as a system of rules
    - c. Language as generative or creative
    - d. The role of pragmatics
  - 2. How a child develops language competence
    - a. Learning theory
    - b. Nativist theory

- c. The interactionist perspective
- 3. How teachers can promote language development
  - a. Enhancing mediation
  - b. Enhancing communication
  - c. Enhancing self-regulation
- C. How does learning two languages affect cognitive development?
- D. Summary

#### Key Terms or Concepts

developmental theories

nature-nurture

individual differences

developmental stages

behavioral schemata

operational schemata

organization

adaptation

equilibrium

sensorimotor stage

concrete operational stage

object permanence

transductive reasoning

reversibility

propositional thought

vertical decalage

language acquisition device

developmental norms

clinical method

schemata

social learning theory

symbolic schemata

cognitive development

accommodation

assimilation

disequilibrium

preoperational stage

formal operations stage

laws of conservation

egocentric

hypothetico-deductive reasoning

zone of proximal development

pragmatics

## Suggestions for Teaching

### Presentation

1. Using the overheads from the transparencies section of the *Instructor's Manual*, review the chapter with students, asking appropriate questions to add specificity and to clarify key points and definitions.
2. Using Case Study 2.1, ask students (individually or in small groups) to determine which theoretical perspective or perspectives appear to hold the most promise for addressing the problem. Have them then develop rationale or support statements that bolster their answers using fundamental concepts from the theory or theories. Use the case study and students' responses during a follow-up lecture and discussion on the chapter.
3. Invite graduate students, practicing teachers, or higher-education colleagues to participate in a real or mock panel debate focusing on questions about how children develop and what implications incremental versus

stage theories hold for teaching. Have each panelist represent or role play one of the three theoretical perspectives presented in the text (Piaget's, Gagné's, Vygotsky's).

4. Have students get into their dyad or triad groups and construct a 15-minute presentation on one of the following topics from Chapter 2: (1) Cognitive Development According to Piaget: The Process of Learning to Mediate; (2) Alternative Perspectives on Cognitive Development: Gagné and Vygotsky; (3) Language Development: Definitions, Theories, and Implications. Then, select several students to present the key points from their assigned topic. Reinforce key points and fill in particulars and implications if not covered sufficiently.
5. Develop a lecture that contrasts typical learning environments (e.g., see Goodlad, 1984) with those that cognitive developmentalists would propose. For example, explain how current research shows that most classrooms tend to be highly passive, teacher-directed contexts in which lower-level learning tasks are featured. Contrast this context with one that is cognitively oriented (e.g., students are actively constructing their own knowledge; experiencing environments through sight, sound, manipulation; sharing experiences with others; problem solving; etc.).

#### In-class Applications

1. After a large-group lecture or activity, have students pair-up with a partner (or two) and complete Case Study 2.1 from the supplemental resource section of the manual.
2. Ask students to form dyad or triad groups and pass out several fundamental questions that might be used as the basis for the role-playing debate in instructor presentation idea number 3 above. Ask students to address these questions from each of the perspectives presented in the text. Invite students to present their answers.
3. Ask students to form dyad or triad groups and to develop a case study including aspects that might relate to each of the three developmental theories, and that might lead one to apply the concepts or principles of one theory to a real teaching problem, that is, a case study that implies application of theory to practice.
4. Have students reflect on their own experiences related to the three theories and identify one experience from each theory that stands out in their minds as influencing their own learning. For example, have students

identify a teacher who may have used social

interactions with key students and parents or other important resources to encourage learning, or a teacher who apparently used Piaget's theories in his or her instructional methods. Have students explain how the teachers' behaviors reflect the theory.

5. Have each student reflect on the concepts of organization and adaptation and how these processes might be used in the teaching of their subject. Then, have them develop a lesson plan or series of lessons that presents subject matter or experiences in such a way that learners would be using the processes of organization and adaptation to acquire the new information or concepts.
6. After presenting a lecture on the major concepts, processes, and the like, have students develop a lesson plan in their subject area that uses cognitive development strategies. Provide a model lesson in your own area to clarify the task. Have several students in different subject areas present their lessons, pointing out the connections to cognitive development theory.
7. Have students get into dyad or triad groups by subject matter areas (e.g., mathematics, science, English). Then, have them identify a major topic and a major goal of this topic (e.g., topic=The Civil War; goal=understand prejudice). Finally, have them develop four instructional approaches to accomplishing this goal using strategies that are tied to cognitive development from the perspectives of Piaget, Gagné, and/or Vygotsky.
8. Have students get into their dyad or triad groups and review Piaget's stages of cognitive development. Then, ask them to develop general teaching implications for birth to two years old, preschool and primary school, upper elementary school, and middle school.
9. After presenting a lecture on the major concepts and processes from Chapter 2, have students develop an alternative lesson plan for the same material that better illustrates use of the concepts and processes of cognitive development from the perspectives of Piaget, Gagné, and Vygotsky. Have several students present their ideas.

## Out-of-class Applications

1. Have students visit three classrooms to observe lessons at the level (elementary school, middle school, high school) or subject area (mathematics, English, etc.) in which they hope to teach. Ask them to look for and to jot down specific strategies that teachers use to capitalize on theoretical aspects of cognitive development. Ask them also to reflect on how each lesson might have added alternative activities for enhancing cognitive development.
2. Ask students to reflect on the chapter section on activities that promote language and cognitive development. Have them write papers that focus specifically on how these strategies might be applied to particular lessons in their subject areas. Require students to include at least two or three strategies for each of the three areas—enhancing mediation, enhancing communication, and enhancing self-regulation.
3. Place several readings about Piaget, Vygotsky, and Gagné on reserve at the library. Have students read these and other sources about these theorists and write a four- to five-page historical essay that might contribute to a “spotlight on the theorist” feature in the textbook. Encourage the authors to send Borich and Tombari a copy.
4. As a partial alternative to a final or midterm assessment, have students develop a curriculum unit of four or five days emphasizing major concepts from cognitive development theory. Provide students guidance in terms of the framework for lesson development (format for goals, objectives, learning experiences, lesson functions, etc.). Share these units with future classes to illustrate how students from your classes have planned implementation of the three theoretical perspectives presented in Chapter 2.
5. As a partial alternative to a final or midterm assessment, give students the option of developing a case study similar to Activities 2.1, 2.2, or 2.3 in their subject areas. Inform students that the case must have at least three major activities per alternative answer.
6. As an alternative assessment activity, provide students the opportunity to develop a case study or scenario that illustrates a student’s development over time, similar to the “Portrait of Maricela” that introduces Chapter 2 in the text. Have students include at least ten references (five clearly normal and five that would be considered

more atypical) to physical, cognitive, social, or emotional developmental growth and maturity. Then, have students explain how various developmental theorists might view these specific traits or characteristics.

7. Have students write a short essay that compares the three human development perspectives and some of their basic implications for curriculum and instruction.
8. Have students interview two or three teachers about their views on human growth and development and the major implications they have drawn from the various theories. For example, a prospective middle-school mathematics teacher might interview middle-school teachers about their application of Piaget's stage theory (especially how formal operations might have an impact on curriculum or instruction), their experiences with cooperative learning and other social-interaction activities, or how they (or the school) address preadolescents' dramatic social and physical changes.
9. As an alternative assessment activity, provide students with an opportunity to write up results from interviews with at least two psychologists (e.g., cognitive, social learning) about how, from their perspectives, teaching or schools should be reformed to better apply what we know about human growth and development.
10. Have students write up a lesson plan on an important concept or skill in their subject areas, illustrating three ways to teach the lesson, one based on the theory of Piaget, one on Gagné, and one on Vygotsky.

## CASE STUDY 2.1

### The Case of Miguel and Chavez Junior High

*Directions:* Read the following case study and identify some of the features of Miguel's development that might help explain his problems, using the theoretical perspectives introduced in Chapter 2. Develop rationale or support statements that bolster your hypotheses, using fundamental concepts from the theory or theories.

Miguel Carlos, the last of four children in his family, is 12 years old and in his first quarter as an eighth grader at Chavez Junior High School. Although Miguel's parents are second-generation immigrants from Mexico who dropped out of high school to help support their families, and although their three older children have likewise dropped out of school to

pursue vocations, they have always had high educational aspirations for Miguel. From birth, Miguel was an active and inquisitive child, aware of his surroundings and reacting to every sound or movement. Miguel's mother, Juanita, worked at a local laundry shop during his brothers' and sister's preschool days, but she has worked at home as a babysitter since Miguel's arrival. The child-care arrangement has provided some stability in the Carlos household, especially since Miguel's father, a longtime truck driver, was assigned to cross-country routes 15 years ago. Juanita often reminds Miguel that *she* was his first teacher, and that she and *Sesame Street* taught him and his playmates the alphabet before they were 2. Miguel was always small, but his energy and social skills were most notable. Other parents remarked about his day-care leadership and creative games or art projects; his building of forts, classrooms, and sets for plays or game shows; and his designing of elaborate speedways and obstacles for racing his several tricycles and "big wheel" bikes. His active manipulation of his environment and apparent mechanical talents often led his mother to comment that Miguel would one day be a famous architect or engineer. Elementary school went smoothly for Miguel. He was one of the youngest students in his class, but he demonstrated above-average achievement, social skills, and an uncommon industriousness; his grades and behavior markings were "top of the class." Although he occasionally had problems with long-term projects entailing elaborate outside-of-class efforts, and although his physical development was still delayed, he received one of the three "Chavez Top Student" awards as a sixth grader. Seventh grade at the junior high went well for Miguel, though his grades dropped slightly during the first semester. He seemed to adjust well to Chavez; he made several new friends from across town, he earned the role of the Tin Man in the school play, *The Wizard of Oz*, and, despite his 5' 1" and 105-lb. frame, he made the basketball team. However, eighth grade was a different story, as Miguel began to experience major problems with his algebra and English classes, and these problems seemed to affect his attitude and progress in other classes. Although Miguel had received the highest marks in mathematics and English in elementary school and an A in these subjects during the seventh grade, he achieved a B in each class during the first quarter and a C in mathematics during the second quarter. Miguel, normally quite upbeat, was troubled by his mathematics grade, especially since his father had said he would not be able to play baseball in the spring if his grade did not rise. He seemed to be having trouble with many of the new concepts, and even a weekly tutoring session arranged by his mother during the second quarter did not seem to pay dividends. His diligence in completing homework and group projects in class was helpful, but his test scores were low, especially on activities involving problem solving and concept application. On receiving second-quarter grades and phoning Miguel's counselor, Juanita arranged a conference with Miguel's mathematics and English teachers. At the

conference, she indicated that Miguel was beginning to rebel against the weekly tutoring sessions, to complain about what he perceived to be a heavier homework requirement in both subjects, and to blame his performance in mathematics on the teacher's lack of explanation of the material. She also shared her son's increasing concern about having to give up baseball if he failed to raise his grades. Finally, she remarked that Miguel seemed to be going through a difficult phase lately, with increased concern about his friends, his appearance, his lack of physical growth, and his out-of-school activities.

## ACTIVITY 2.2

Enhancing Cognitive Development:

The Case of Rosa Garcia

*Directions:* From the choices below, (1) select the activity that appears to best implement concepts from cognitive development theory and that therefore apparently holds the best promise for learning; and (2) provide a rationale supporting your selected answer.

Novice fifth-grade teacher Rosa Garcia is beginning to think about introducing the life-science unit on the metric system, a major curriculum unit that provides students their first experience with these concepts. She thinks about the various learning experiences she might use to acquaint students with the major concepts involved in metric measurement. After perusing several textbooks, reviewing the district curriculum guide, and visiting with her colleagues about how they teach the unit, she has settled on three alternatives, each of which she feels would be a good approach to introduce the unit. However, she wonders, "From a cognitive development perspective, would any of these activities be most appropriate as an introduction to the unit?"

- a. A local mechanic introduces the metric system unit by sharing his experiences and the importance of understanding metrics. This activity is followed by a lecture from Mrs. Garcia on the history of the metric system and then a recommended film, *Metric Matters*, that introduces students to basic terms and concepts and illustrates these terms and concepts with vivid examples.
- b. Mrs. Garcia introduces metrics by asking students what they know about metrics, listing their knowledge on the board in a weblike system that links and categorizes terms and ideas by types (length, volume); quantities

(millimeter, centimeter); and examples (“My dad runs 5K and 10K races”; “My parents are always checking the grams of fat on the stuff we buy at the store”). She then provides directions for using eight small-group learning centers on various detective themes and metric activities aimed at solving an overall problem through several student investigations using metric measurement.

- c. Mrs. Garcia has students read the introductory section in Chapter 5 on “The Metric System” and write down all terms in their “definitions notebook.” Uncovering a large table, she then provides several concrete examples of every term that will be used in the metric unit (e.g., a meter stick with a doorknob attached to illustrate the height of a meter, four small cartons of milk to illustrate a liter), and she carefully explains each term and its corresponding place as a unit of length, volume, or mass. She then passes out activity sheets that ask students to check their understanding of the terms by filling in the blanks with the appropriate prefixes given different lengths, weights, and volumes.

### ACTIVITY 2.3

Enhancing Cognitive Development:

The Case of Ron Brush

*Directions:* From the choices below, (1) select the three lessons that best implement concepts from cognitive development theory and that therefore apparently hold the best promise for learning (i.e., one lesson from the two a’s, one from the two b’s, and one from the two c’s); and (2) provide a rationale supporting your selected answers.

Ron Brush has taught eighth-grade social studies at Johnson Junior High School for 16 years. Although his curriculum has included Chapter 11 on local government for the past 8 years, his department has recently attended a series of “improving instruction” workshops based on new theories from cognitive psychology, and his chairperson and colleagues have decided to alter social studies curriculum and instruction toward strategies linked to these theories. A new curriculum unit is due next month, and the department is meeting tomorrow to put together first drafts on the two-week local government unit. Mr. Brush’s assignment is to provide three lessons on “organization of local governments.” After reviewing his workshop notes and reflecting on his task, he develops six lessons for the meeting, two lessons each on the following goals: (a) understanding key vocabulary, (b) basic forms of local government, and (c) the roles officials play in

governing. Reviewing his lessons the night before, he asks himself, “Can I rank each of the lessons in each goal area?”;

“Does one lesson better correspond to Piaget’s and Vygotsky’s cognitive development theory?”

- a1. Present key vocabulary through (1) a review of “words to know” from the reading in Chapter 11, (2) charts of the different forms of government, and (3) pictures from the local newspaper of key officials from the Johnson City Council, the nearby St. Louis City Council, and the St. Charles County government. Follow this activity with a game of “Local Government Jeopardy” in which each small group collectively vies for points.
- a2. Give students two minutes to list what they know about city government. Map their ideas on an overhead by type (e.g., organization, function, processes, etc.), probing to fill in “map gaps.” Identify terms for vocabulary notebooks. Pass out a feature on Johnson City’s adoption of a city manager form of government and ask students to form groups, read the first page, and jointly identify key points and five local government terms for their list. Have each group present key points and terms to the larger class.
- b1. Ask student groups to develop a presentation on “Three Types of Local Government.” Give them the afternoons of Monday through Thursday (12 hours) to develop support materials, with the project and materials to be presented on Friday. Provide a list of suggested resources (e.g., library, class readings, learning centers, films, people to interview), handouts that outline delivery options (play, overhead presentation, video, a news show, etc.), and criteria for a successful presentation.
- b2. Ask students to use their journals to outline and write notes on the section “Organization of Local Governments” in Chapter 11. Have students get into their small groups, jointly respond to the review questions on pages 218 and 225, and prepare for group competition with a game of “Quizzmo Basketball.”
- c1. Take students on a series of field trips (city council meeting, county board of supervisors meeting, board of education meeting) to view the activities of these governing bodies. Schedule small-group interview sessions with individual officials and their support staff, using questions derived from the readings and an assignment on the role of local government officials, ongoing issues, and major problems they presently face. Tape record these interviews and have students write up their interviews in a form appropriate for publication in the school newspaper or a class publication featuring local government.

- c2. Present the film *Local Government: Officials and their Roles* to students, having them take notes in their social studies journals. After the film, ask questions about the content, and discuss key points and the responsibilities of various officials. After a brief quiz to check student understanding, have students prepare questions for a visit by a city councilperson. Have a city councilperson present information about the roles and responsibilities of a councilperson in Johnson City, and have students ask their questions and take notes on the answers. Write up the answers and turn them in as part of the social studies journal.

## Chapter 3

### Personal-Social Development:

### The Feeling Child

#### Focus

#### Chapter Overview

Chapter 3 focuses on (1) how children develop personal and social attitudes, (2) how children develop behavior based on ethical and moral reasoning, and (3) how teachers can enhance learners' self-esteem, social skills, and ethical and moral behaviors. Borich and Tombari begin the chapter by presenting three theories of personal-social development (biological theory, social learning theory, and psychoanalytic theory), the research evidence that supports each theory, and implications for using these theories for analyzing social behavior. An integrated theory of personal-social development (Bee, 1995) is then presented by the authors, followed by a definition of self-esteem and social relationships and a discussion of how these constructs affect learners. Finally, Borich and Tombari review three major areas of social cognition: the development of empathy, the development of understanding about relationships, and the development of moral judgment and reasoning.

#### Intended Outcomes

After completing Chapter 3, teachers or prospective teachers should be able to

- explain the importance of affective development
  - describe three theories that explain how children develop affectively
  - explain the implications that understanding personal and social development have for teaching
  - identify strategies for developing personal and social relationships and ethical and moral behavior
  - explain why children learn positive behaviors that attract other students
  - define self-esteem and recall strategies that teachers might use to develop learners' self-esteem
  - recall teaching behaviors that enhance learners' ability to think about their moral and ethical behavior

- differentiate between vertical and horizontal relationships and explain the role they play in social development
- explain how moral development occurs according to Herbert Kohlberg's theory and how a teacher might apply this theory in his or her teaching

## Outline

### I. Introduction

### II. Three theories of personal-social development

#### A. Biological theory

1. Basic assumption: traits inherited from parents
2. Evidence supporting the biological approach
3. Using the biological approach for analysis of social behavior

#### B. Social learning theory

1. Basic assumption: social learning develops by observing others
2. Evidence supporting the social learning approach
3. Using the social learning approach for analysis of social behavior

#### C. Psychoanalytic theory

1. Basic assumption: social learning develops in stages and through interaction among inborn drives, physical maturation, and experiences with the environment (child-rearing process).
2. Erikson's eight stages of psychosocial development
  - a. Stage 1: Infancy: basic trust versus mistrust
  - b. Stage 2: Toddlerhood: autonomy versus shame
  - c. Stage 3: Early childhood: initiative versus guilt
  - d. Stage 4: School age: industry versus inferiority
  - e. Stage 5: Adolescence: identity versus role confusion
  - f. Stages 6–8: The adult stages

- (1) intimacy versus isolation
  - (2) generativity versus stagnation
  - (3) ego integrity versus despair
3. Evidence supporting psychoanalytic theory
  4. Using psychoanalytic theory for analysis of social behavior
- III. A synthesis of personal-social development theories
- A. Bee's synthesis of theories of personal-social development
    1. Role of temperament
    2. Role of child rearing and modeling
    3. Role of child's temperament on the family
    4. Reciprocal influence of self-image and the family
    5. Reciprocal influence of self-image and personality
    6. Role of workplace, neighborhood, and larger community
    7. Role of the child's personality in shaping parents'/others' behaviors
  - B. Using Bee's integrated model for analysis of social behavior
- IV. Self-esteem
- A. Self-concept and self-esteem
  - B. Development of self-esteem
  - C. Physical development and self-esteem
  - D. Self-esteem and academic achievement
- V. Social relationships
- A. Vertical relationships
    1. The development of vertical relationships
    2. Vertical relationships and their effects on learners
  - B. Horizontal relationships
    1. The development of horizontal relationships
    2. Horizontal relationships and their effects on learners

VI. Social cognition

A. Empathy

B. Social relationships

1. Level 0: egocentric level
2. Level 1: reciprocal trust
3. Level 2: mutual perspective taking

C. Moral judgment and reasoning

1. Kohlberg's stages of moral development
2. Gilligan's challenge to Kohlberg

D. Concluding remarks about social cognition

VII. Summing up

Key Terms or Concepts

biological theory of personal-social development

social learning theory of personal-social development

psychoanalytic theory of personal-social development

modeling

self-efficacy

stages of identity

self-esteem

self-concept

vertical relationships

horizontal relationships

schema of attachment

affectional bonds

prosocial behavior

social cognition

empathy

levels of interpersonal understanding

## Suggestions for Teaching

### Presentation

1. Using the overheads from the transparencies section, present a review of the major theories, models, and concepts from the chapter, providing examples to clarify content.
2. After organizing students to work in dyad or triad groups and assigning each group a number, ask students to develop a presentation on one of the four theories introduced in the chapter (biological, social learning, psychoanalytic, Bee's integrated model). Pass out overheads and transparency pens and explain to students that groups will be selected to present their theories. Communicate that presentations should include key assumptions of the theory, research evidence supporting the theory, and implications for teaching and analyzing problematic students.
3. Focus specifically on the work of Erikson (stages of identity development), Bee (integrated model of social-personal development), or Kohlberg (stages of moral development), delivering a lecture that more clearly articulates their theories, providing examples that highlight key stages and factors.
4. Use a Socratic approach to probe students about the chapter. Develop a set of 10–15 questions that focus on the major theories, their concepts, and their implications for teachers. With some of the higher-level questions, ask students to work in pairs to develop their answers.

### In-class Applications

1. After a lecture on the major theories of personal-social development, have students develop questions about the additional information they would want in order to better understand Yvonne Mitchell's case, the seventh-grade student discussed by Allison Wendler and Dr. Ann Bohm in the text. Ask students to identify questions from each perspective presented in the chapter.
2. Ask students to get into their dyad or triad groups and to reflect on the implications that may be derived from the chapter. Have each small group develop a list of ten implications, and select three or four groups to "Stand

and Deliver” their lists. Alternatively, take individual implications and list them on an overhead for the whole class.

3. Using Case Study 3.1, have students analyze the scenario and identify the level at which the student appears to be according to Kohlberg’s moral development hierarchy. Also have them identify strategies that might be used to raise this student to a higher level.
4. After reviewing the overhead transparency on Kohlberg’s hierarchy, have students get into their dyad or triad groups and develop three examples that illustrate this hierarchy. Have several students share their examples with the larger class.

#### Out-of-class Applications

1. Place several readings on personal-social development on reserve in the library. Have students select one reading, identify the major thesis of the reading, and write a reaction essay that responds to the thesis. For example, the January 1986, May 1988, and January 1990 readings from *Educational Leadership* focus on developing character, cooperative learning, and moral education, respectively.
2. Have students interview a teacher or principal from a local school and discuss the issue of personal-social development versus academic development. Ask students to develop several appropriate questions related to clarifying the school’s philosophy about social and moral development. Also, have them identify specific activities or programs they feel are aimed at developing self-esteem, self-concept, or social development. As an alternative assessment activity, have students write up their results in report form.
3. Have students explore the library and other resources (e.g., schools or psychological centers) for curricula aimed at developing self-esteem and self-concept. Ask students to begin to develop a personal set of activities that might be appropriate for various personal, social, and moral development issues that might arise in teaching their subject area and level.
4. As an alternative assessment activity, give students the opportunity to write an editorial to a newspaper or magazine about the need for proper balance between personal-social and academic development in schools.

Ask students to include numerous references to the literature on personal-social development, the role that schools can play in this effort, and a strong rationale for such an emphasis.

### CASE STUDY 3.1

#### Nona's Moral Development

*Directions:* Analyze the scenario below, identifying the level at which the student appears to be operating according to Kohlberg's moral development hierarchy. Reflect on the student's level and develop one or two strategies that a teacher might use to address the specific situation and to thereby develop the student's moral reasoning.

Nona is upset by the new policy requiring each teacher to walk his or her class out of the building, across the playground, and into the cafeteria lunch line, ultimately to sit in seats assigned by classroom. As students are getting their lunches, putting on their coats, and preparing to line up for lunch, Nona walks up to Mrs. Bristow, the teacher, and asserts, "It's not right to make sixth graders walk in lines to lunch and keep us from eating with our friends. I don't care what Mr. Knowles (the principal) says, it's just not fair!"

Mrs. Bristow smiles and responds, "I understand your concern, Nona, but the campus and cafeteria have been more orderly and the cafeteria has been cleaner since Mr. Knowles started the policy."

Nona nods and hangs her head briefly but then looks up and responds, "Yeah, but most problems were caused by fourth and fifth graders ... and no one warned us or asked the Student Council to solve the problem. When we have rule problems in class, you let us talk about them and vote on what is best. Why couldn't Mr. Knowles do that? We should be able to eat lunch with our best friends."

Mrs. Bristow, walking to the door and motioning for a straight line, nods her head and says, "You have a good point, Nona. Maybe there are a few trade-offs to the new policy. Maybe we should reexamine this issue at our next School Advisory Council meeting."

## Part II

### What Teachers Need to Know About Learning

# Chapter 4

## The Behavioral Science Approach to Learning

### Focus

#### Chapter Overview

Chapter 4 reviews the fundamentals of behavioral science—classical and operant conditioning—and how this approach may be used in classrooms. The authors begin the chapter by presenting essential components of the behavioral science model of learning: antecedents, behaviors, and consequences. They then review key concepts involved in classical and operant conditioning and explain the relevance of these approaches for teachers. Defining learning as “a stable change in behavior brought about by the environment,” Borich and Tombari write that teachers knowledgeable about the behavioral science approach to learning should be able to (1) focus instruction on observable learner performance, (2) ensure that learners can perform the skills that are prerequisite to that performance, (3) elicit rapidly paced, correct performance, and (4) use appropriate consequences following performance. Finally, the authors provide directions to teachers on the expert practice of positive reinforcement and use of negative consequences. They point out that behavioral scientists recommend giving students clear directions that focus only on the desired response, allowing learners to spend the majority of class time actively responding, designing materials so that learners may obtain correct answers 70 to 90 percent of the time, providing informational feedback to learners, and using intrinsic and social reinforcers. In concluding Chapter 4, Borich and Tombari note that while “American educational practice is experiencing a resurgence of interest in cognitive approaches to classroom instruction, there is much of merit in the behavioral science approach that should not be lost.”

#### Intended Outcomes

After completing Chapter 4, teachers or prospective teachers should be able to

- distinguish between classical and operant conditioning
  - explain instructional arrangements appropriate for errorless learning
  - describe the feedback, practice, and reinforcement that are required for learning
  - distinguish when learners have attained prerequisite skills required for new learning and ascertain what types of postinstructional changes teachers may expect from learners
  - distinguish between intrinsic and extrinsic reinforcement
- demonstrate an ability to design lessons incorporating behavioral concepts

#### Outline

- I. Overview of the behavioral science approach
  - A. Lindsley's vision of the twenty-first century classroom
  - B. The ABC model of learning
- II. Classical conditioning
  - A. Pavlov's experiment
    1. Unconditioned stimulus and response
    2. Conditioned stimulus and response
    3. Using classical conditioning to explain stimulus-response relationships
  - B. Relevance of classical conditioning for teachers
- III. Operant conditioning
  - A. B. F. Skinner
  - B. How operant conditioning works
    1. Reinforcement
    2. Schedules of reinforcement
      - a. Continuous
      - b. Intermittent
      - c. Ratio
      - d. Interval

3. Punishment
  4. Negative reinforcement
  5. Stimulus control
- C. Relevance of operant conditioning for teachers
- IV. Using the behavioral science approach in the classroom
- A. Focus on learner performance
  - B. Ensure the learning of prerequisite skills
    1. Task analysis
    2. Sequencing
  - C. Elicit rapidly paced, correct performance
    1. Effective presentation
      - a. Specific directions
      - b. Opportunities for learner response
      - c. Pacing of response opportunities
    2. Use of prompts
      - a. Verbal prompts
      - b. Gestural prompts
      - c. Physical prompts
      - d. Least-to-most prompting
    3. Use of reinforcement
  - D. Use appropriate consequences following performance
    1. Informational feedback: correct responses
    2. Informational feedback: incorrect answers
    3. Positive consequences following performance
    4. Negative consequences
- V. The expert practice of positive reinforcement

- A. The process of positive reinforcement
- B. Natural reinforcers: alternative to extrinsic reinforcers
  - 1. Conditioning a natural reinforcer
  - 2. Positive consequences: a final comment
- VI. The use of negative consequences
  - A. Negative consequences vs. punishers
  - B. The use of punishment
- VII. Some concluding remarks
- VIII. Summing up

#### Key Terms or Concepts

ABC model

unconditioned response (UCR)

conditioned response (CR)

operant behavior

task analysis

learning hierarchy

operant conditioning

continuous reinforcement

ratio schedule

punishment

stimulus control

errorless learning

positive reinforcement

intrinsic reinforcement

prompt

positive consequences

extinction

unconditioned stimulus (UCS)

conditioned stimulus (CS)

respondent behavior

precision teaching

reinforcement

classical conditioning

schedule of reinforcement

intermittent reinforcement

interval schedule

discrimination training

active and passive responding

informational feedback

negative reinforcement

extrinsic reinforcement

least-to-most prompting

natural reinforcers

sequencing

## Suggestions for Teaching

### Presentation

1. To introduce the chapter, have each student develop a response to the question, "What is learning?" After a few minutes, have several students share their definitions and compare their conceptions of learning with the behaviorist concept of learning ("a stable change in behavior brought about by the environment"). Contrast students' and behaviorists' definitions with conceptions from other perspectives.

2. Using the transparency in the supplemental resources section, review classical and operant conditioning. Ask students for examples in order to illustrate the differences between these two types and how they may be applied in different contexts and settings.
3. Use the transparency from the supplemental resources section to explain the reinforcement schedules used in operant conditioning, their effects on learning, and their effects after extinction.
4. Use the transparencies in the supplemental resources section to review the behavioral science approach to learning, providing an explanation of how the approach can be used in the classroom. Use examples from your own experience and solicit examples from your students.

#### In-class Applications

1. Ask students to identify examples of classical and operant conditioning that exist in their daily lives. Have students present and explain these examples to their peers in their dyad or triad groups. Next, have several students present their examples to the larger group. Clarify these examples.
2. Ask students to list examples of reinforcement in everyday life and to identify the schedule of the reinforcement. Have students share these examples with peers in their dyad or triad groups. Ask each group to present one example to the class. Clarify and discuss these examples.
3. Using the transparency from the supplemental resources section, have students create three classroom examples of positive reinforcement, negative reinforcement, and punishment. Ask students to exchange their examples with other students for identification of reinforcement techniques. In their groups, have students explain which form of reinforcement was exemplified.

#### Out-of-class Applications

1. Have students observe a classroom and identify incidents that illustrate the use of classical and/or operant conditioning.
2. Ask students to interview teachers regarding what behavioral techniques they have found to be most useful in their classrooms.

3. Place additional articles or books on reserve and ask students to read one of their choice and to summarize for the class. For example, *Behavioral Analysis in Education* (Sulzer-Azaroff, 1988) offers descriptions of how to use behavioral science techniques in the classroom.
4. Have students observe a classroom and record the instances of intrinsic and extrinsic reinforcement being used.

#### CASE STUDY 4.1

##### Ms. Brown's Art Class

*Directions:* In the scenario below involving Ms. Joan Brown and her eighth-grade art class, identify instances or processes of reinforcement, punishment, negative reinforcement, stimulus control, and other behavioral science strategies or techniques presented in Chapter 4 (e.g., prompts, opportunities for active learner response). Discuss the potential strengths, weaknesses, or tradeoffs of these strategies.

To begin her unit on printmaking, eighth-grade art teacher Joan Brown has organized a demonstration lesson on using printmaking tools. As the bell rings, Ms. Brown points to a red light hung from the ceiling near the front and says, "OK, it looks like you have noticed it's a red light day, good job." After jotting down a few names on the absence form and handing it to a student in the front row to hang on the door hook, Ms. Brown asks students to approach the display and to sit on the stools surrounding the table. Noting that students are seated, with pencil and paper, and quiet within 30 seconds, Joan places a check mark on a brightly colored posterboard titled "Pizza Party Countdown" and remarks, "Thank you, I look forward to the anchovies and onions, myself." Ms. Brown grins as students groan and comment negatively about such a mixture, but she soon raises her hand and, as the murmur quickly subsides, begins her demonstration. Pointing to a variety of tools on the table, she asks, "From our filmstrip yesterday, who can remember what these things are called?" Several hands go up, to which Ms. Brown quickly retorts, "OK, good! How about this one, John?" "That's the chisel type tool," John quips. "Yes, that's correct, but can you remember the full name, involving the letter of the alphabet?" Ms. Brown queries. "Oh, yeah, it's the V type chisel," John responds. "OK, that's right, but how about this tool, Sharon?" "That's the gouge chisel type, isn't it?" Sharon remarks. "Yes, very good, Sharon," Ms. Brown notes, while pointing to Amar. "But, Amar, what is this piece called?" "That's a burnisher," he responds. Looking at Edith but seeing

her glance away, Ms. Brown points to the registration frame and calls on Juan, “What is this, Juan?” “The guiding frame?” Juan asks. “Well, that’s generally right, Juan, but remember we said that ‘just like voting, this frame is used just prior to printing’” “Oh yeah, the registration frame,” Juan blurts out. “OK, that’s it.” Ms. Brown quickly continues her questions over six other printing materials, getting correct responses on all but the hardboard. After explaining how the hardboard differs from the lino fixed on wood base and the plank/side-grain base, and getting a correct response from a student after this description, Ms. Brown provides a demonstration of the lines produced by the various V and gouge nibs, showing students how a varied design might be produced through use of the different tools and different pressures or depths used. Students are quite attentive, though a few appear to have questions. At two junctures, Ms. Brown stands up from her demonstration and pauses. Two hands promptly shoot into the air, and Ms. Brown, after thanking students for waiting for the pause in the demonstration, recognizes and answers specific questions from Sam and Emily. Ms. Brown explains to students that two projects are due the following Friday for grading and that the third of four formal class critiques will be conducted on the second of these assignments—a block print of at least three favorite objects from the student’s life. Although several students seem concerned by the class critique, all students prepare to take notes. Soon, Ms. Brown is at the blackboard listing key criteria for the two assignments.

## Chapter 5

### Cognitive Learning I: Understanding Effective Thinking

#### Focus

#### Chapter Overview

Chapter 5 begins with an overview of the cognitive approach to the study of learning. Borich and Tombari (a) review the various metaphors that are used to describe thinking (e.g., computer, filing system, information management system), (b) present the basic elements of the cognitive approach (e.g., relevant learner characteristics, instructional manipulations, cognitive processes), and (c) contrast the differences between cognitive and behavioral approaches (e.g., types of learning examined, research methodology). The authors follow this overview with a section on the content of good thinking, as they discuss metacognition, the importance of knowledge to thinking, and cognitive strategies for improving memory, reading comprehension, and problem solving. Borich and Tombari then present basic knowledge about two cognitive models: the information processing model and the parallel distributed processing model. Finally, two views of intelligence and two theories of intelligence (Gardner's and Sternberg's) are presented.

#### Intended Outcomes

After completing Chapter 5, teachers or prospective teachers should be able to

- explain the basic elements of the cognitive approach to learning
  - compare and contrast cognitive and behavioral perspectives of learning
  - explain how prior learner knowledge and schemas affect new learning
  - distinguish between short- and long-term memory
  - distinguish among declarative, procedural, and metacognitive knowledge
  - identify various metaphors that have been used to describe the content and processes of good thinking

- apply rehearsal, elaboration, and organization strategies for improving memory to specific lesson plans in their subject areas
- recall strategies for monitoring and improving reading comprehension
- explain how the information storage capacity of learners may be enhanced
- distinguish between information processing and parallel distributed processing models of cognition
- explain the difference between the two major traditions in the study of intelligence

#### Outline

- I. Introduction
- II. The cognitive approach to the study of learning
  - A. Using metaphors to describe thinking
  - B. Basic elements of the cognitive approach
  - C. Differences between the cognitive and behavioral approaches
- III. The content of good thinking
  - A. Cognitive strategies
    1. Strategies to improve memory
    2. Strategies to improve reading comprehension
    3. Strategies for general problem solving
    4. Summary
  - B. Metacognition
    1. Development of metacognition
    2. Teaching metacognition
    3. Summary
  - C. Knowledge
    1. The effect of knowledge on learning
    2. Types of expert knowledge
    3. Characteristics of an expert's knowledge base

4. Educational implications
  5. Concluding comments
- IV. The information processing model
- A. Reception of information
  - B. Working memory
    1. Why we forget
    2. Implications for teaching
  - C. Long-term memory
    1. The form of knowledge in LTM
    2. Capacity of LTM
    3. Retrieval processes
    4. Implications for teaching
- V. The parallel distributed processing model
1. Rumelhart's view
  2. Teaching implications
- VI. Cognitive approaches to learning and intelligence
- A. Views of intelligence
    1. Intelligence as structure
    2. Intelligence as process
  - B. Gardner's theory of multiple intelligences
  - C. Sternberg's triarchic theory of intelligence
    1. Metacomponents of intelligence
    2. Performance components
    3. Knowledge acquisition components
- VII. Some final thoughts on cognitive learning theory
- VIII. Summing up

Key Terms or Concepts

automaticity

cognitive strategies

connectionist models

declarative knowledge

domain-specific knowledge

elaboration

hierarchical

information processing model

keyword method

metacognition

schema theory

rehearsal

procedural knowledge

working memory

chunking

comprehension monitoring

decay theory

displacement theory

dual-coding theory

general knowledge

immediate memory

interference theory

long-term memory

organization

parallel distributed processing model

propositional networks

retrieval processes and cues

## Suggestions for Teaching

### Presentation

1. To introduce the chapter, group students into dyads or triads and ask them to develop the key concepts of a cognitive learning approach (using their notes and/or book) and compare these concepts to the behavioral learning components. Have students present and discuss their findings.
2. Review the cognitive psychologists' conception of learning. Ask students to compare this conception with that of behaviorists as well as their own conceptions of learning.
3. Use transparencies from the *Instructor's Manual* to give a brief overview of Chapter 5. Use examples from your own experiences or research to illustrate the cognitive approach to learning.
4. Review the major strategies for improving memory, reading comprehension, and problem solving, and provide several examples that you would use for applying this knowledge to your course. For example, you might explain to students how you have included several strategies derived from cognitive theory in your present syllabus.

### In-class Applications

1. Have students reflect on the subjects they will be teaching and identify specific content, concepts, or skills that they will likely teach. Ask students to develop a lesson plan incorporating two or three major cognitive strategies that should enhance their students' ability to remember the content, skills, or concepts.
2. Have students identify a reading assignment that they might use in their teaching. Then, using cognitive strategies from the textbook on how to improve reading comprehension, have them develop an instructional presentation and directions for students to follow that should enhance students' ability to remember and understand the reading assignment. Have students share with the larger class their different approaches and links to cognitive strategies.

3. Alternately, have students complete a task similar to Presentation 3 but focused on Chapter 6 and use the approach in reading that chapter. In a large-class session, have students share their different approaches and rationales for such, based on cognitive theory.
4. Group students into dyads or triads. Give each group a problem taken from *The Book of Think* (Burns, 1976). First, give the students 5 minutes to attempt to solve the problem on their own. Then give each group 10 minutes to solve the problem and write the metacognitive steps they used to find an answer. Have each group explain their answer to the class.

#### Out-of-class Applications

1. Have students observe several elementary school classrooms. Have students write an essay on their observations of how teachers used cognitive strategies in their teaching. Reflect on the observed lessons and identify objectives or activities that might have benefited from cognitive learning approaches.
2. Ask students to expand their lesson plans developed in class (see numbers 2 and 3 above) or create a lesson plan incorporating cognitive strategies for improving memory. Have students explain in a paragraph or two how this lesson help students build on existing knowledge and/or incorporate new information.
3. Have students reflect on the lessons they observed in Out-of-class Application 1. Ask students to classify the objectives of the lessons by the three types of knowledge: (a) declarative, (b) procedural, or (c) metacognitive. Ask students to reflect on the quality of the lesson and offer suggestions for improvement.
4. Ask students to examine a textbook in their subject or field. Have students critique a section or chapter of the textbook on its use of cognitive learning strategies. For example, were advance organizers used? Does the text use strategies to ensure information is encoded in the long-term memory? Was a logical system of organization used? What activities could be added that would enhance memory and comprehension?
5. Using strategies presented in the chapter and tailoring the lesson to the grade level at which they will teach, have students design a lesson that teaches metacognitive strategies to their students.

## CASE STUDY 5.1

## Ms. Gold's Fifth-Grade Class

*Directions:* In the vignette below, identify potential reasons for low student performance on Ms. Gold's unit test. Offer advice on how to improve this lesson by using cognitive learning strategies and support each suggestion with a theoretical rationale.

Ms. Gold is a first-year teacher in a fifth-grade classroom. Over the past two weeks, students in her class have been learning about Columbus and his discovery of America. Ms. Gold has approached the subject by using the social studies textbook and various filmstrips. Students have read the text aloud in class and, for homework, answered the questions at the end of each section. The class was very excited about the filmstrips, and they answered the worksheets that Ms. Gold created for homework. Ms. Gold was pleased that students performed well on the questions, but she was puzzled when the majority of her students performed poorly on the exam at the end of the unit. Their written answers lacked depth, detail, and originality. Students fared somewhat better on the multiple-choice answers. The next day, after reviewing the test, Ms. Gold asked students why they did not perform well. Most students answered that they did not remember or understand the material.

## Chapter 6

### Making Learners Active Thinkers

#### Focus

#### Chapter Overview

Chapter 6 focuses on several teaching practices that enable learners to become active during learning, construct knowledge and meaning for themselves, and control their own learning. Borich and Tombari begin the chapter by contrasting two mathematics lessons, one that more closely approximates a behavioral science approach and one that uses a more cognitive approach to learning. After defining constructivism—the term that cognitive psychologists use to represent current cognitive models of learning and thinking—the authors detail its common characteristics: (a) organizing learning around important ideas, (b) acknowledging the importance of prior knowledge, (c) challenging the adequacy of prior knowledge, (d) providing for ambiguity and uncertainty, (e) teaching learners how to learn, (f) viewing learning as a joint cognitive venture, and (g) using assessments during lessons. The final section of the chapter focuses on four cognitive instructional approaches that promote good thinking: (a) discovery learning, (b) cognitive apprenticeship, (c) cooperative learning, and (d) direct explanation teaching. Basic features and an example lesson from each of these approaches are presented.

#### Intended Outcomes

After completing Chapter 6, teachers or prospective teachers should be able to

- explain a major difference between cognitive and behavioral models of learning
  - define constructivism
  - apply the major components of constructivism to lesson plans
  - explain the importance of embedding tests within lessons
  - compare and contrast cognitive teaching models with those of behavioral approaches

- develop lesson plans that incorporate discovery learning, cognitive apprenticeship, cooperative learning, or direct explanation teaching

## Outline

- I. Introduction
- II. Constructivism: putting learners in the driver's seat
  - A. Definitions and common characteristics of constructivism
  - B. Organize learning around important ideas
  - C. Acknowledge the importance of prior knowledge
    1. Organizing prior knowledge
    2. Recognizing learner opinions, beliefs, and ideas
    3. Anticipating misconceptions
  - D. Challenge the adequacy of prior knowledge
  - E. Provide for ambiguity and uncertainty
  - F. Teach learners how to learn
  - G. View learning as a joint cognitive venture
    1. Conceptual growth
    2. Social support
    3. Cognitive modeling
    4. Shared expertise
  - H. Assess during lessons
- III. Classroom instruction that promotes good thinking
  - A. Discovery learning
    1. Basic features
    2. An example
    3. Goals for discovery learning lessons

B. Cognitive apprenticeship

1. Basic features
2. Example: reciprocal teaching

C. Cooperative learning

1. Basic features
2. An example

D. Direct explanation teaching

1. Basic features
2. An example

IV. Summary: Designing constructivist learning environments

V. Summing up

Key Terms or Concepts

advance organizer

authentic problems

coaching

competitive learning

constructivism

direct explanation teaching

heterogeneous groups

individualistic learning

intentional learners

joint cognitive venture

positive interdependence

reflection

situated learning

articulation

categorization  
cognitive apprenticeship  
conceptual conflict  
cooperative learning  
discovery learning  
individual accountability  
interpersonal skills  
organization  
reciprocal teaching  
scaffolding

## Suggestions for Teaching

### Presentation

1. Using the overheads from the *Instructor's Manual*, present the major concepts from the chapter, providing numerous examples of the major instructional approaches. Structure your lesson so as clearly to model a constructivist approach to learning, and have students analyze the lesson for key components of this approach.
2. Begin the class with an advance organizer, but quickly involve students in a cooperative learning lesson that requires students to develop a lesson plan based on the key concepts from the chapter. For example, divide the class into four sections, with various groups within each section assigned to develop one of the four instructional approaches for the lesson (discovery learning, cognitive apprenticeship, cooperative learning, direct explanation teaching) focused on in the chapter. Select one or two groups from each section to present their lessons, clarifying the constructivist components used.
3. Alternatively, ask students to develop a lesson plan that presents the major points from the chapter by creatively combining at least three instructional approaches from the chapter. Again, select one or two groups from each section to present their lessons, either clarifying the components used or having students identify such.

4. Use a modified form of reciprocal teaching to engage students in a discussion about the key concepts from the chapter. That is, use predicting, questioning, summarizing, and clarifying in a sequential order to present the chapter. For example, ask students to make predictions, based on the subheadings from the chapter, about what key ideas or concepts they are most likely to retain or apply from the chapter, about the group's prior knowledge of topics from the chapter, and prior experiences that students may have had with the instructional approaches introduced. Then, during the questioning stage, ask students to bring out main points about important concepts from the chapter, and ask questions that clarify these points or that seek examples to enhance understanding or meaningfulness. At this stage also remember to encourage students to ask questions if they need clarification. To clarify key points fully, have students find and reread key sections or illustrations. Finally, ask designated discussion leaders to summarize key sections of the text and other students to elaborate on these summaries. To ensure student understanding fully, actively monitor the meanings students are deriving from the text and the ongoing dialogue.

#### In-class Applications

1. Show students video clips of several lessons and have them analyze these clips for exemplars and nonexemplars of constructivist approaches to instruction.
2. After a presentation of each of the major concepts and instructional approaches from the chapter, have students work in their dyad or triad pairs to develop model lessons that use these concepts and approaches (e.g., an advance organizer for a unit they will teach, a discovery learning lesson, a reciprocal teaching lesson, a lesson that features a cooperative learning activity).
3. Divide students into their dyad or triad groups and have them develop a direct explanation teaching lesson that illustrates the major components of this approach. For example, using Chapter 6 content or another key skill identified by the group, students should develop a dialogue that features (a) up-front demonstration and explanation of the lesson goal, (b) mental modeling of authentic problem solving, (c) guided practice, and (d) provision of metacognitive information.

4. Have individuals identify what they feel are the three or four most important instructional strategies from the chapter. Then, have students identify a lesson they might teach and incorporate these three or four strategies in the lesson. Have students share their lesson plans with the larger class, asking the larger class to identify the strategies used.

#### Out-of-class Applications

1. Have students observe several classrooms at their prospective grade levels or content areas, looking for the use of constructivist strategies. Ask students to imagine teaching the same lesson and adapting the lesson to a more constructivist approach.
2. Place supplemental readings on cooperative learning, reciprocal teaching, and discovery learning on reserve at the library. Have students explore these materials and design a series of lesson plans around one or more of these approaches.
3. Have students review prospective curriculums for conceptual conflicts they might present to their students. Ask them to write up scenarios that illustrate the use of conceptual conflicts in teaching.
4. Ask students to develop a curriculum unit that involves the identification of important ideas, principles, generalizations, and beliefs that they want their learners to construct at the end of the unit. Then, have students address the following questions in their unit: (a) How might the topic already look to the learner? (b) What is the best way to represent or introduce these new ideas to the learners so they can connect them with what they already know and challenge the adequacy of their existing knowledge?
5. Use Case Study 6.1 to generate applications of key concepts from the chapter to lesson plans developed by small groups. Ask students to take these ideas and refine them by writing specific case studies that contrast behavioral and constructivist approaches to instruction.

## CASE STUDY 6.1

## Constructing a Case Using Constructivist and Behavioral Approaches

*Directions:* In the spirit of constructivism, and to distinguish this approach from its behavioral counterpart, have students work in their dyad or triad groups to develop two classroom scenarios: one that illustrates a constructivist instructional approach and one that illustrates a more behavioral approach. During class, ask students to delineate the major components that would be required to illustrate these two scenarios and rough out the application of these components to a lesson plan using content from a specific subject area. In class, ask students to share their ideas for the two scenarios with another group and then the larger class. Outside of class, ask students to refine their case studies for extra credit and send a copy to DeWayne A. Mason, School of Education, University of California, Riverside, CA 92521. The best of these cases will be used in future editions of this book and the *Instructor's Manual*.

# Chapter 7

## Motivation and Classroom Learning

### Focus

#### Chapter Overview

Chapter 7 investigates how various motivational theories may be used by classroom teachers to develop learners' motivation. After defining intrinsic motivation, Borich and Tombari present two major approaches to motivation and classroom learning: (1) person-as-machine behavioral theories (instinct theory, drive theory, and deficiency/growth theory) and (2) person-as-rational-thinker cognitive theories (attribution theory, self-efficacy theory, and self-determination theory). The authors argue that cognitive theories of attributions, self-efficacy, and self-determination are most useful to classroom teachers, since these theories provide practical recommendations for increasing the internal motivation of students. In line with this argument, the authors provide numerous programs and instructional strategies that teachers may use to enhance students' motivation. The chapter concludes with a presentation of project-based learning, an instructional approach that uses attribution, self-efficacy, and self-determination theory to nurture intrinsic motivation. Borich and Tombari explain how project-based learning uses cognitive motivational theories to build intrinsic motivation in learners, explaining the unique role that task selection, teachers, and learners must play in such project-based programs.

#### Intended Outcomes

After completing Chapter 7, teachers or prospective teachers should be able to

- define intrinsic motivation
- distinguish between “person-as-machine” behavioral motivational theories and “person-as-rational-thinker” cognitive motivational theories

- distinguish among instinct theory, drive theory, deficiency/growth theory, attribution theory, self-efficacy theory, and self-determination theory
- explain steps to improve self-efficacy in students
- understand what information students use for attributions of success or failure, self-efficacy, and self-determination
- develop strategies to encourage motivation in students
- apply project-based learning to their curriculum field

## Outline

- I. Introduction
  - A. How to motivate learners
  - B. Intrinsic motivation
  - C. Overview of the chapter
- II. Person-as-machine: biobehavioral motivational theories
  - A. Instinct theory
  - B. Drive theory
  - C. Deficiency/growth needs theory
- III. Person-as-rational-thinker: cognitive motivational theories
  - A. Attribution theory
    1. Attributions and motivated behavior
    2. Antecedents of causal attributions
      - a. Situational cues
      - b. Causal schemata
      - c. Self-perceptions
    3. Teachers' influence on attributions
      - a. Monitor your attributional messages

- b. Focus on learning strategies
- c. Refrain from grouping that exclusively promotes ability
- d. Promote cooperation over competition
- e. Teach realistic goal setting

4. Summary

B. Self-efficacy theory

1. Antecedents of self-efficacy judgments

- a. Past experiences of success or failure
- b. Encouragement or persuasion from the teacher
- c. Psychological cues
- d. Modeling effects

2. Self-efficacy in the classroom

3. Enhancing self-efficacy

- a. Goal setting
- b. Information processing
- c. Modeling
- d. Summary

C. Self-determination theory

- 1. Human needs
- 2. Enhancing self-determination
- 3. Summary

IV. Project-based learning

A. Review of attribution, self-efficacy, and self-determination theory

B. The role of tasks

- 1. Present a challenge
- 2. Allow for learner choice and control
- 3. Be doable

4. Require collaboration
  5. Result in a concrete product
- C. The role of the learner
- D. The role of the teacher
1. Avoid statements that imply innate ability is required
  2. Focus learners' attention on process and product
  3. Make encouraging statements to learners

## V. Summary

### Key Terms or Concepts

antecedents

drive theory

attribution theory

situational cues

self-efficacy theory

acquired drives

self-determination theory

locus of causality

congruent communication

deficiency/growth needs theory

instinct theory

intrinsic motivation

causal schemata

primary drives

internal versus external orientation

project-based learning

extrinsic reinforcers

## Suggestions for Teaching

### Presentation

1. Using the overheads from the transparency section, present the chapter's key points. Clarify by adding examples from your own experiences or soliciting examples from students.
2. Divide the class into six groups, assigning each group one of the following theories: instinct, drive, deficiency/growth, attribution, self-efficacy, or self-determination. Have each group identify the theory's key characteristics and give a five-minute presentation using one or two overhead transparencies that they construct themselves. Clarify and elaborate as necessary.
3. Focus the lecture/discussion on a review of attribution, self-efficacy, and self-determination theories. Solicit from students examples of how these theories might be applied to specific classroom activities they might use in their instruction. Ask for volunteers to provide role-playing scenarios exemplifying communication that would generally enhance attributions.
4. Role play three lessons with different approaches aimed at motivating students: one that demonstrates how an instructor might organize a review of the chapter using behavioral theories, another one that uses more cognitive approaches, and another that integrates in the lesson key components of "person-as-machine" behavioral theories (activities that are designed around extrinsic rewards, intermittent reinforcers, and the like), as well as components of "person-as-rational thinker" theories. In your cognitive lesson, try to attribute learner interest and achievement to internal rather than external factors, focus on process as well as accomplishments, promote cooperation over competition, communicate realistic goal setting, and provide a project that is organized around a central question or problem that requires students to produce a product or outcome that answers a question or resolves a problem successfully.

### In-class Applications

1. After the group presentations of assigned individual theories in number 2 above, have each develop a case study or example that illustrates the assigned theory.

2. In a small-group discussion format, ask students to decide in which situation or with which type of learners a particular motivational theory is likely to be most effective. Have groups present their arguments and provide theoretical or experiential rationales.
3. Have students develop a lesson plan in their subject area that uses motivational strategies. Ask each student to identify what theory and strategies were used.
4. Ask students to develop a lesson plan in their subject areas using project-based learning. Have students present their lessons and explain the strategies used. If possible, ask students to implement their plans and report on the lessons' effectiveness in capitalizing on students' intrinsic motivation.

#### Out-of-class Applications

1. Have students observe a classroom and take notes on the motivational strategies used by the teacher. Ask them to reflect on how the motivation of the class may have been improved by incorporating additional strategies.
2. Place readings by Maslow, Hull, Freud, Weiner, and Deci on reserve at the library. Have students write a paper on one of these theorists, further elucidating the applicable theory.
3. Have students develop a curriculum unit utilizing project-based learning. Units should last four to five days or more and follow the guidelines for a project-based task.
4. Have students interview five to six teachers at their respective grade levels about which strategies are useful for particular content and types of students. Have students report on what they learned.

#### CASE STUDY 7.1

Mr. Andrews's Social Studies Class

*Directions:* Ask students to review the following vignette and to identify ways to improve Mr. Andrews's situation. Ask them to explain some potential reasons for students' lack of motivation. What are some strategies Mr. Andrews could use to motivate the class? For example, how might Mr. Andrews use project-based learning?

Mr. Andrews teaches sixth-grade social studies in an affluent, predominantly Anglo suburban middle school. Recently,

Mr. Andrews's classes completed a unit on recycling. They read

a few books about pollution, wrote a short paper on toxic waste, and brought in cans for the school recycling project.

Mr. Andrews was surprised, however, when he discovered

that students failed to see the importance of recycling: They had little or no interest in the readings and put minimal effort

into their papers. Redoubling his efforts, he brought in movies and suggested that students attend the annual beach clean-

up. He was disappointed when none of his students volunteered to help with the annual beach cleanup. Mr. Andrews

decided that since students had thoroughly studied the sub-

ject of recycling and environmentalism, they probably just did not care.

## Part III

### What Teachers Need to Know About Instruction and Classroom Management

## Chapter 8

### Group Process in the Classroom

#### Focus

#### Chapter Overview

In Chapter 8, Borich and Tombari approach the classroom as social psychologists, examining group processes within the learning context. The authors begin the chapter by defining groups, discussing their unique attributes, and describing how groups may affect learner achievement, motivation, self-concept, and emotions. Approaching groups from a developmental perspective, the authors then delineate four stages of group formation: forming, storming, norming, and performing. Finally, Borich and Tombari discuss fundamental properties for developing a positive classroom group and climate—leadership, expectations, norms, cohesiveness, and problem solving—providing specific instructional strategies that would promote such properties.

#### Intended Outcomes

After completing Chapter 8, teachers or prospective teachers should be able to

- explain group processes and their properties
  - explain how group processes can affect achievement, motivation, self-concept, and emotions
  - describe the five types of social power and identify those that are most effective in the classroom
  - illustrate how to avoid creating negative self-fulfilling prophecies
  - describe the fundamental ingredients of a positive, productive classroom climate
- explain how to resolve classroom conflicts using group dynamics

#### Outline

##### I. Introduction

- II. Group processes
  - A. What is a group?
  - B. Relationships
  - C. Common goals
  - D. Social structure
  - E. Summary
- III. Effects groups have on their members
  - A. Group effects on learner achievement
  - B. Group effects on motivation
  - C. Group effects on the self-concept
  - D. Group effects on emotions
  - E. Summary
- IV. Group formation: a developmental perspective
  - A. Stages of group development
    - 1. Stage 1: forming
    - 2. Stage 2: storming
    - 3. Stage 3: norming
    - 4. Stage 4: performing
  - B. Summary
- V. Leadership
  - A. Expert power
  - B. Referent power
  - C. Legitimate power
  - D. Reward power
  - E. Coercive power
- VI. Expectations
- VII. Norms

- A. What are norms?
- B. Significance of classroom norms
- C. How norms develop
- D. How teachers can influence classroom norms

VIII. Cohesiveness

- A. How cohesiveness affects academic performance and group problem solving
- B. Promoting group cohesiveness

IX. Problem solving

- A. Some examples of group conflict
- B. Conflict arising out of group dynamics
  - 1. Goal conflicts
  - 2. Interpersonal conflicts
  - 3. Procedural conflicts

X. Summary: the larger context of classroom management

Key Terms or Concepts

group

centering behavior

social structure

social needs

expectancy effects

norm diffusion

group conflict

referent power

reward power

group cohesiveness

coercive power

stages of group formation

distancing behavior

norm crystallization

expert power

legitimate power

self-fulfilling prophecy

## Suggestions for Teaching

### Presentation

1. Use the overheads in the transparency section to review the chapter's key points. Provide examples and clarify concepts using your own experiences and examples from students.
2. Engage students in a discussion about the key points from the chapter. Develop 10 to 15 key questions derived from the reading; probe students about what they found interesting, surprising, and particularly useful; and ask them the key questions you developed. Clarify as necessary with further explanation and specific examples.
3. Have students get into dyad or triad groups and assign each group a section from the chapter. Have each group create an overhead of what they found to be the most useful points from their assigned section. Then, have each group present their key points and offer rationales and practical implications to back up their points.

### In-class Applications

1. After reviewing the five types of social power, have students develop, individually or in their dyad or triad groups, an example of how they would strive to generate each type of social power in their teaching. For example, "To develop a perception from my students that I possess expert power on my unit on metrics, I will read an extensive set of books and articles on this topic from the school and public libraries, I will bring a sample of these books to class, and I will develop an elaborate bulletin board involving key quotes about

the importance of metrics and pictures that illustrate important transformations from standard to metric units.”

Or, to use a second example, “I will develop referent power by spending time early on getting to know my students and relating to them daily by greeting them at the door, asking them questions about topics of interest to them, and so on. In particular, I will use an activity on the first day of class that asks students to write down their names on 3"×5" index cards, what they like to be called (e.g., nickname, abbreviated name), and three unique things about them that will help me to remember them as individuals. I will model this same task and share with them some personally funny but unique things about me that will gain their interest and respect.”

2. Group students into triads. Ask students to identify the norms that operate in the context of university or college-level classes. List these on the board and discuss the variation or lack thereof that exists and why these particular norms might exist. Have students explain how these norms have been established explicitly or through tacit understandings. Question students about whether alternative norms might be more appropriate.
3. Have dyad or triad groups develop an application based on Borich and Tombari’s “Applying Your Knowledge: Influencing Group Norms,” specifying, for example, five strategies that would tend to develop positive group norms in a classroom.
4. Have individuals or groups develop a classroom scenario of a “problem” class based on their own experiences. Write the scenario and read it to the class as a whole. Have the class identify the problem and suggest group process strategies to help manage the class.

#### Out-of-class Applications

1. Observe a classroom or playground during the first week of school and identify specific instances in which norms are being created. Are these norms spoken or unspoken? Evaluate the development of norms for one or more classes.
2. Identify community figures, symbols, or signs that have social power. What types of social power are being used (e.g., a police officer uses legitimate power, a stop sign ...). Further, have students develop ideas for symbols or posters that might be used in their classroom to communicate subtly different types of social

power (e.g., posting a framed Bachelor's Degree, Master's Degree, or teaching credential certificate prominently behind the teacher's desk; mounting a poster of specific rewards for good academic work or work habits; hanging a poster of the "Top 10 Reasons for Teaching"; and so on).

3. Have students monitor two or more classrooms for expectation communication. Have students write a brief summary that compares and contrasts how these teachers communicated expectations in their classrooms.
4. Have students interview experienced teachers about how they establish positive norms in their classes. In particular, have students query these teachers about how they establish expectations for class goals, procedures, and handling interpersonal conflicts. Alternatively, have students develop one or two scenarios of problems that they are worried about in their classes, and have them question experienced teachers about how they would solve such, or apply Borich and Tombari's process (Figure 8.6) to the development of a solution.
5. Have students develop a case study similar to that used in 8.1 below. Ask them to include at least three positive and three negative examples or instances that either explicitly use the concepts presented in the chapter (e.g., social power strategies, expectation communication, problem solving) or that lend themselves to such, though omitted by the teacher.

#### CASE STUDY 8.1

Ms. Warren's Economics Class

**Directions:** Using the scenario below, identify the apparent norms of the group, social structure, and types of social power being used. Explain how Ms. Warren might have prevented or improved this class climate with group processes.

Ms. Warren teaches economics in an urban high school. Ms. Warren calls her fifth-period class the "Grunges" and "Jocks," frequently referring to them in this way to her colleagues in the teachers' lounge. According to Ms. Warren, the Grunges dress in clothes associated with gang members, while the Jocks dress more like "regular kids" who participate in after-school sports programs. Ms. Warren has been having problems with behavior in this class since the first day of school; the students do not get along. Today is no exception, as students are having trouble focusing on the worksheet assigned by Ms. Warren.

“What you lookin’ at?” quips John.

“Why would I want to look at your stupid face?” retorts Jose, glaring at John. “Just shut up already!”

Intervening, Ms. Warren asserts, “Boys, get back to work. You’re disrupting the other children!” Sighing and shaking her head she lectures: “You two are always fighting. I have a difficult time teaching because of these interruptions.”

“Make *him* shut up—I wasn’t doin’ nothin’,” John exclaims. “You’re always pickin’ on me.”

“Enough!” shouts Ms. Warren. “Both of you—out of here now. You know where to go.”

Grumbling, the boys stalk out of the room, slamming the door behind them. Sighing again, Ms. Warren returns her attention to her remaining students.

Her economics class is divided into ability groups. Ms. Warren had predicted at the beginning of the year that some students would be difficult; their levels of English, she believed, simply weren’t advanced enough for the class. She had wanted to try group projects, but as she thought, the class makeup wouldn’t allow for it. Ms. Warren spent most of her time breaking up arguments and sending students to detention—at least one or two of her lower two groups were always in detention hall.

## Chapter 9

### Positive Approaches to Conduct Management

#### Focus

#### Chapter Overview

In Chapter 9, Borich and Tombari present a conception of classroom management based on Soar and Soar's (1983) idea that different degrees of warmth and control may occur simultaneously, developing four profiles of classroom climate: cold and controlling, warm and controlling, warm and permissive, and cold and permissive. The authors then present three traditions of classroom control. First, they articulate the humanistic approach based on the writings of such scholars as Ginott (1972) and Glasser (1986), a tradition that entails cooperation through congruent communication and cooperation through individual and group problem solving. Second, they focus on a behavioral approach based on the writings of Jones (1987), Canter (1989), and the like, a tradition that entails application of behavioristic principles to classrooms (e.g., reinforcement, focusing on antecedents, punishment). Third, they present the classroom management approach based on recent research by such scholars as Kounin (1970), Doyle (1986), and Emmer, Evertson, Clements, and Worsham (1994), a tradition that underscores the role of prevention in classroom management.

To conclude the chapter, Borich and Tombari discuss the importance of using an integrated approach to classroom management, focusing on the importance of setting up the classroom workplace, articulating rules for running the workplace, engaging students in learning, maintaining engagement, developing culturally responsive management, and maintaining low-profile classroom management through strategic anticipation, deflection, and reaction.

#### Intended Outcomes

After completing Chapter 9, teachers or prospective teachers should be able to

- recall humanist, applied behavioral, and classroom management approaches to classroom management, and explain their primary focus, strengths, and weaknesses
  - cite examples of positive and negative reinforcement, and explain under what circumstances each tends to be most effective
  - identify strategies and behaviors associated with effective classroom managers
  - develop a set of rules and routines for the classroom
  - apply low-profile classroom control techniques
- explain what is meant by “culturally responsive classroom management”

#### Outline

- I. Introduction
- II. Classroom management or classroom control
  - A. A conception of classroom management as warmth and control
  - B. Four types of classroom climate
    1. Cold and controlling
    2. Warm and controlling
    3. Warm and permissive
    4. Cold and permissive
- III. Systems of classroom management
  - A. Three approaches to effective classroom management
  - B. Six criteria for an effective classroom management plan
- IV. The humanistic tradition in classroom management
  - A. Cooperation through congruent communication
    1. Express “sane” messages
    2. Accept rather than deny feelings

3. Avoid using labels
4. Use praise cautiously
5. Elicit cooperation
6. Communicate anger

B. Cooperative learning

V. Applied behavior analysis in classroom management

1. Changing behavior
2. Reinforcement
  - a. Negative reinforcement
  - b. Intermittent reinforcement
3. Antecedents
4. Using applied behavior analysis to improve classroom behavior
  - a. Identify both the inappropriate and appropriate behaviors
  - b. Identify the antecedents to both inappropriate and appropriate behaviors and make the appropriate changes
  - c. Identify the goal of the inappropriate behavior and discontinue actions on your part (or those of peers) that reinforce it
  - d. Set up procedures to reinforce the behavior you want to replace the inappropriate behavior
  - e. Use punishment as a last resort

VI. The classroom management tradition

- A. Research on effective managers of classrooms
- B. Three classes of effective teaching behaviors
  1. Do extensive planning and organization in advance to minimize disruption
  2. Teach rules and routines as methodically as academic content
  3. Inform students of consequences for and enforce breaking of the rules

VII. An integrated approach to classroom management

- A. Setting up the classroom workplace
- B. Rules for running the workplace
- C. Engaging students in the learning process
- D. Maintaining work engagement
- E. Low-profile classroom management
  - 1. Anticipation
  - 2. Deflection
  - 3. Reaction
- F. Culturally responsive classroom management

#### VIII. Summing up

#### Key Terms or Concepts

applied behavior analysis

classroom management tradition

congruent communication

positive reinforcement

intermittent reinforcement

consequences

rules and routines

surface behaviors

lead management

extinction

behavioral setting

deflection

behaviorism

humanistic tradition

behavior modification

negative reinforcement

antecedents

behavioral setting

engaged learning time

low-profile classroom control

experimental analysis of behavior

natural reinforcers

anticipation

reaction

## Suggestions for Teaching

### Presentation

1. Have students read the scenario of Mrs. Gates's classroom experience in the text. List the behavioral problems Mrs. Gates encountered. Ask students for reasons why Mrs. Gates had a difficult time with classroom control. List preventative measures she might have taken and refer to these as you review the chapter.
2. Use the overheads in the transparency section of the *Instructor's Manual* to review the chapter's key points. Provide examples and clarify concepts using your own experiences and examples from students. In addition, point out examples and suggestions identified in the scenario featuring Mrs. Gates.
3. Ask students to identify teacher characteristics that relate to classroom management. Place this list on the board and classify each characteristic as "cold" or "warm," and list the degree of control implied. Using Borich and Tombari's table, classify each characteristic as belonging to teacher type A, B, C, or D.
4. Review positive and negative reinforcement, providing vivid examples that illustrate each. Solicit examples from students on appropriate uses of each and describe specific examples and contexts.

### In-class Applications

1. Group the class into three groups and assign one of Borich and Tombari's classroom management traditions to each group (humanistic, behavioral, classroom management). Ask each group to analyze Mrs. Gates's class according to their approach and offer recommendations. Have each group present their analysis and recommendations to the class as a whole.
2. In their groups, have students identify rules and routines, or lack thereof, that occur in this educational psychology class as well as a contrasting class they have had in the recent past. Discuss the advantages, disadvantages, and clarity of each rule and routine.
3. Have students form groups and develop two sets of rules and routines for a hypothetical classroom at a particular grade level: one set that defines the general rules and routines that will be used in the class during the year and a second set that establishes rules and procedures for an atypical activity (e.g., a field trip to a science museum, an assembly, a class party) on a particular day.
4. Present a video on an elementary or secondary lesson that illustrates the use and nonuse of various strategies for managing a classroom. Have students analyze the video for exemplars or nonexemplars of the traditions presented in the chapter and discuss alternative approaches that might have been more effective.

### Out-of-class Applications

1. Have students observe two teachers: an experienced teacher and a novice teacher. Have students examine the classroom processes for type of climate, primary classroom management approach, and rules and procedures, writing up their results in the form of a report.
2. Ask students to interview a teacher or to reflect on their own teaching regarding the first week of school. Have students develop questions based on key points in the chapter. For example, does the teacher engage the class in special procedures? What is the teacher's reasoning behind these procedures? Have students write up their results in a report, adding what they would do differently as a result of reading this chapter.
3. Using the grade level and subject of their choice, have students develop a lesson using one of the following cooperative learning strategies: STAD, TGT, Jigsaw, or TAI.

4. Ask students to identify an example (from the literature or personal experience) of how differences in cultures can contribute to disruptive classroom behaviors.

# Chapter 10

## Instructional Management

### Focus

#### Chapter Overview

In Chapter 10, Borich and Tombari focus on managing instruction. The authors begin the chapter with a scenario involving a teacher teaching a unit on photosynthesis, and they use this case to show how expert teaching includes expertise in planning for instruction and in delivering instruction—two key aspects of instructional management. More specifically, they explain the importance of identifying important and meaningful goals that engage learners, and they introduce Ralph Tyler's (1974) five factors to consider when developing goals: subject matter, societal concerns, student interests and needs, the school and community's educational philosophy, and instructional theory and research. Next, they discuss giving goals a direction through the development of objectives, using Gagné's classification of outcomes and Bloom's taxonomy. Finally, the authors discuss delivering instruction, delineating four events of instruction: structuring, modeling, coaching, and fading. Structuring involves focusing and holding attention, modeling is reviewed using Bandura's social learning theory, coaching involves the establishment of accountability and the use of feedback and motivation, and fading consists of removing external supports and providing independent practice.

#### Intended Outcomes

After completing Chapter 10, teachers or prospective teachers should be able to

- explain Bandura's social learning theory and its classroom application
  - identify goals and objectives that are most likely to motivate learners
  - describe and apply Gagné's classification of learning outcomes in lesson plans
  - apply Bloom's taxonomy to the creation of learning objectives
  - write objectives at various levels of complexity

- explain how structuring, modeling, coaching, and fading may be used in classroom instruction
- identify guidelines for effective demonstrations
- identify guidelines for promoting effective practice

## Outline

- I. Introduction
- II. Instructional management
- III. Goal: giving instruction a purpose
  - A. The relevance of educational goals
  - B. Tyler's goal development approach
- IV. Objective: Giving goals a direction
  - A. Gagné's classification of learning outcomes
  - B. Bloom's analysis of learning outcomes
    1. Knowledge
    2. Comprehension
    3. Application
    4. Analysis
    5. Synthesis
    6. Evaluation
- V. Delivering instruction
- VI. The events of instruction
  - A. The expert practice of structuring
    1. Focusing attention
      - a. Psychophysical appeal
      - b. Emotional appeal
      - c. Discrepancy appeal

- d. Commanding stimuli appeal
    - 2. Holding attention
  - B. The expert practice of modeling
    - 1. How one learns from models
      - a. Attention
      - b. Retention
      - c. Production
      - d. Motivation
    - 2. Guidelines for effective demonstrations
      - a. Focus learner's attention
      - b. Stress demonstration's value
      - c. Speak in conversational language
      - d. Use simple and obvious steps
      - e. Help learners remember demonstration
  - C. The expert practice of coaching
    - 1. Establishing accountability
    - 2. Providing opportunities for practice
      - a. Prompts
      - b. Questions
      - c. Interactive and technology-driven methods of practice
      - d. Technology in practice
    - 3. Motivating learners
  - D. The expert practice of fading
    - 1. Prompt fading
    - 2. Reinforcer fading
    - 3. Provide independent practice that promotes transfer

VII. Summing up

Key Terms or Concepts

anticipatory set

discrepancy appeal

objectives

instructional management

direct instruction

self-directed instruction

modeling

fading

guided practice

transfer of learning

affective domain

accountability

commanding stimuli appeal

goals

instructional events

psychophysical appeal

indirect instruction

structuring

coaching

independent practice

prompts

cognitive domain

psychomotor domain

prompt dependency

## Suggestions for Teaching

### Presentation

1. Ask students to differentiate between goals and lesson objectives. Have students provide examples and uses of each. Discuss how Gagné and Bloom may be used in identifying goals and objectives.
2. Ask students to form groups and identify what they consider to be components of good lesson objectives. In addition, ask each group to identify sources of lesson objectives.
3. Using the overheads from the *Instructor's Manual*, review the salient topics of the chapter. Clarify and elaborate concepts through students' or your own examples.
4. Discuss the use of different instructional approaches for different learning outcomes. For example, clarify how instruction that presents information may differ from instruction that clarifies concepts or problem-solving processes.
5. Provide students with an opportunity to experience the uses of technology for practice. Bring to class a computer with a CD-ROM, a videodisc player, and a modem hookup, and give a brief demonstration of the uses of software, videodisc, on-line communication, and CD-ROM technology. Discuss advantages and disadvantages of technology use in the classroom.

### In-class Applications

1. Group students according to grade or subject levels. Ask students to identify skills required to carry out a particular simple assignment (such as drawing a circle, cutting and pasting, making change) and use Gagné's task analysis: (a) Choose a task or assignment to analyze, (b) identify the component tasks involved (e.g., reading, outlining, summarizing), (c) identify steps of each part and their hierarchy, and (d) identify prerequisites required for each step.
2. Ask each group to create and teach a mini-lesson on a concept in their subject area or grade level. Have each group develop a lesson plan for their mini-lesson, utilizing Gagné's hierarchy of learning, Bloom's taxonomy, and key events of instruction. Ask students to identify (a) their goal, (b) their objectives, and (c) their approach to the instructional events.

3. Using the mini-lessons created in number 2, have each group present their lessons. Have the other groups identify key instructional events: structuring, modeling, coaching, and fading.

#### Out-of-class Applications

1. Have students observe a classroom lesson. If possible, ask the teacher for a copy of the lesson plan, or ask the teacher about the goals and objectives of the lesson. Analyze whether the goals and objectives were clearly stated and whether the instruction was clearly directed toward these goals and objectives. Assess the level of Bloom's taxonomy on which the lesson was focused and whether it appeared to be challenging and appropriate for the students and subject matter. Write up a critique and turn it in with a description of the lesson.
2. Visit a computer store and inquire about educational software. If possible, test it out and describe the level of learning outcomes according to Bloom's taxonomy. Report back to class whether or not you would recommend this software for practice use.
3. Have students develop a lesson plan using at least two domains as well as goals, lesson objectives, materials, and key instructional events.

#### CASE STUDY 10.1

##### Application and Synthesis on Instructional Management

*Directions:* Individually or in a dyad or triad group, develop a case study similar to those seen in previous lessons, illustrating at least 10 key concepts from the chapter. In your case, make at least five of the illustrations positive and at least five problematic in some way. Send your case to DeWayne A. Mason, University of California, Riverside, School of Education, Riverside, CA 92521. It may be used in future editions of this book.

## Part IV

### What Teachers Need to Know About Assessment

## Chapter 11

### Assessing for Learning: Ability and Standardized Assessment

#### Focus

#### Chapter Overview

In Chapter 11, Borich and Tombari examine the practice of assessing learning ability by means of standardized IQ or ability tests; describe how these tests are constructed, administered, and interpreted; and address three important questions: (1) How much does classroom learning depend on the skills measured by standardized IQ tests? (2) Are IQ tests fair to learners from diverse cultures and backgrounds? and (3) Do such tests provide information useful for instructional purposes? The authors discuss alternatives to assessing learning ability, focusing especially on the cognitive approach. Finally, Borich and Tombari discuss the controversial topic of tracking or grouping students by ability.

#### Intended Outcomes

After completing Chapter 11, teachers or prospective teachers should be able to

- define intelligence
  - describe two views or definitions of ability
  - identify assumptions underlying the psychometric approach
  - explain differences between individual and group ability tests
  - explain differences between general and multiple ability tests
  - describe differences between qualitative and quantitative item analysis
  - define the index of item difficulty and index of item discrimination
  - explain how tests are standardized
  - explain the difference between percentile ranks, grade equivalent scores, age equivalent scores, and standard scores

- define correlation, reliability, and validity
- identify acceptable ranges of reliability and validity
- identify different types of test bias
- explain why instructional validity is an important characteristic of a test
- recall research findings on tracking

## Outline

- I. Introduction
- II. Assessing ability to learn
  - A. What is an ability?
  - B. Assumptions of the psychometric approach
  - C. Developing ability tests: initial considerations
    1. Theories of learning ability
    2. Method of administration
  - D. Item writing and selection
    1. Qualitative item analysis
    2. Quantitative item analysis
  - E. Standardization and norms
    1. Types of norms
    2. The normal distribution
    3. Reliability and validity
      - a. The correlation coefficient
      - b. Strength or  $r$
      - c. Direction
    4. Correlation and reliability
    5. Correlation and validity
- III. The relevance of standardized ability tests

- A. How much does school learning depend on measured ability?
  - B. Are ability tests fair to learners from diverse cultures and ethnic backgrounds?
    - 1. Bias in group differences
    - 2. Sample bias
    - 3. Examiner and language bias
    - 4. Predictive validity bias
    - 5. Bias in test use
  - C. Do ability tests provide information useful for instructional decision making?
    - 1. Argument 1: instructional validity
    - 2. Argument 2: behavioral definition
    - 3. Argument 3: sampling specificity
  - D. Summary comments about present-day ability tests
- IV. Alternative ways of assessing learning ability
- A. Getting along without IQ tests
  - B. Assessing learning ability: the cognitive approach
    - 1. Memory stores
    - 2. Memory processes
    - 3. Executive processes
  - C. Some final comments on the assessment of learning ability
    - 1. Learning is a process
    - 2. Learning ability can be improved
    - 3. Learning occurs in a social context
- V. Tracking: Grouping learners by ability

- A. Advocates of heterogeneous grouping
- B. Advocates of homogeneous grouping
- C. Tracking: what the research says
- D. How representative are the tracked groups?
- E. Has tracking improved overall school achievement?
- F. Has tracking narrowed or widened the achievement gap between high and low ability learners?
- G. Do high achievers benefit from tracking?
- H. Will untracking increase overall school achievement?

#### VI. Summing up

#### Key Terms or Concepts

principle of indirect measurement

redundancy principle

psychometric approach

general ability tests

group ability tests

item analysis

index of item difficulty

index of item discrimination

standardization

norm group

standard deviation

heterogeneous grouping

homogeneous grouping

predictive validity

social competence

sampling specificity

standard scores

percentile rank

grade equivalent scores

individual ability tests

norms

age equivalent scores

reliability

validity

correlation

normal distribution

normal curve

test-retest reliability

instructional validity

operational definition

tracking

## Suggestions for Teaching

### Presentation

1. Using transparencies from the *Instructor's Manual*, present a review of key points from the chapter.  
Supplement this review with more specific points, questions, or illustrations to clarify the concepts and points discussed.
2. After dividing the class into three large groups, have students get into their dyad or triad groups and develop a student presentation of key points from the following three sections of the chapter: (1) assessing ability to learn, (2) the relevance of standardized ability, and (3) grouping learners by ability. Give students 30 minutes to develop their presentations (a series of four or five overheads, a set of lecture notes with key concepts, etc.).

Select one dyad or triad group from each large group to present to the class, clarifying as necessary during or after their presentation. Have students turn in their presentations for participation credit.

3. Organize a debate on the issue of IQ testing or tracking. Find proponents for and against the use of IQ tests or tracking (e.g., most every school includes those for and against tracking and, similarly, many schools of education have faculty who disagree on IQ test use). Invite these individuals to participate in a class debate, and have students prepare questions that might be used as a follow-up to the presentations.
4. Use a questioning approach to seek out students' knowledge, experiences, and viewpoints about the various concepts from the chapter. Ask students how the various concepts discussed might apply to them as teachers (i.e., push them to wrestle with the implications from the chapter).

#### In-class Applications

1. After a review of the key points of the chapter, have students use Activity 11.1 to check their understanding of several key terms. Have students check their work with their partners or in the larger group and discuss any terms that were problematic to students.
2. Ask students to reflect on their experiences with ability grouping. Then, hold a class discussion or debate on the pros and cons of ability grouping. End the discussion or debate with a review of the key research findings on ability grouping.
3. Ask students to get into their dyad or triad groups. Have them use the book and develop a workshop for prospective teachers or administrators on the key points that should be considered in adopting and administering a standardized ability test. Include key points about reading norming tables.

#### Out-of-class Applications

1. Place several common standardized tests on reserve at the library and have students review these tests according to several criteria discussed in Chapter 11. For example, students could be asked to look at the four different types of tests reviewed in the chapter (general ability tests that are individually administered, general ability tests that are group administered, multiple ability tests that are individually administered, multiple ability tests that are group administered); check them for reliability and validity estimates; review the

information related to types of norms used; check discussion of protections against biases; and so forth. Have students write up a report on their findings.

2. Have students interview a teacher, counselor, and principal about the issue of standardized testing and ability grouping. Ask them to develop five questions from the readings or class discussion, interview these three educators, and write a synopsis of these educators' responses.
3. Place a few key readings on reserve at the library on the issue of tracking (e.g., the October 1992 issue of *Educational Leadership* on "Untracking for Equity"; Slavin's "Ability Grouping and Student Achievement in Elementary Schools" in the 1987 issue of *Review of Educational Research*; or Kulik and Kulik's "Effects of Accelerated Instruction on Students" in the 1984 issue of *Review of Educational Research*). Have students read these articles and write a short essay that summarizes their findings and reactions.
4. Place a few key readings on reserve at the library on the issue of testing or assessment (e.g., the October 1985 issue of *Educational Leadership* includes several good articles on standardized testing). Have students read several articles and react to them in a short essay summarizing their findings and responses.
5. As an alternative assignment for an exam or extra credit, have students read a book of their choice and write a book review on issues related to standardized testing or ability grouping. For example, they might read *Keeping Track: How Schools Structure Inequality* (Oakes, 1985), *Lower Track Classrooms: A Curricular and Cultural Perspective* (Page, 1992), or *Crossing the Tracks: How Untracking Can Save America's Schools* (Wheelock, 1992). Similarly, students might examine Robert Sternberg's (1985) *Beyond Intelligence: A Triarchic Theory of Human Intelligence*.

#### ACTIVITY 11.1

##### Concept Check

*Directions:* Fill in the blanks below with Chapter 11 terms that best complete the sentence.

1. A score that indicates where a student's score stands relative to others of the same age or grade is called a

.....

2. The ability to learn academic subjects, deal with abstractions, solve problems, withstand stress and distraction, be motivated, and display physical grace might be termed \_\_\_\_\_ .
3. The degree to which a test item measures the same ability measured by every other item is called \_\_\_\_\_ .
4. The statistic that indicates the degree to which two sets of scores are related is called a/an \_\_\_\_\_ .
5. The term used to indicate whether a test actually measures what it claims to measure is \_\_\_\_\_ .
6. The statistical standards that allow the comparison of a learner's score with those of a defined reference group are \_\_\_\_\_ .
7. The assumption that psychological attributes or traits can be measured by systematically observing and recording its effects is called \_\_\_\_\_ .
8. When a test's norms do not include a representative proportion of a certain cultural group, it may be criticized for \_\_\_\_\_ .
9. A measure of the degree to which a test produces consistent scores over time is called \_\_\_\_\_ .
10. The administration of tests to all persons in a defined group in the same way under the same conditions is part of test \_\_\_\_\_ .
11. The ability of a test to improve instruction and learning by diagnosing specific learning deficits and providing guidance for planning effective instruction is called \_\_\_\_\_ .
12. Placing students into a class so that they are roughly randomly assigned is called \_\_\_\_\_ grouping.

## Chapter 12

### Assessing for Learning:

### Objective and Essay Tests

#### Focus

#### Chapter Overview

In Chapter 12, Borich and Tombari focus on how teachers may assess student learning by using restricted-response items. The authors open the chapter with a vignette involving a principal-teacher conference, a scenario that illustrates the importance of, and issues involved in, student assessment. The authors then present a general overview of classroom evaluation activities that touch on the areas of fairness, validity, and test design considerations. In the major portion of the chapter, Borich and Tombari describe restricted-response items that are objective (true-false, matching, multiple-choice, completion) and capable of being completed with essay questions. In this section, the authors focus on the advantages and disadvantages of objective-item formats, how to score essays, and some unresolved problems related to content validity and reliability. Finally, the authors discuss ideas for reporting learners' progress and teachers' overall grading system, focusing especially on the purpose of grades, the bases of grades, and the importance of sharing grading procedures with parents and students.

#### Intended Outcomes

After completing Chapter 12, teachers or prospective teachers should be able to

- discriminate among fair and unfair testing and grading patterns
  - explain the importance of content validity in testing
  - discuss the pros and cons of restricted-response and flexible-response test formats
  - develop a test blueprint based on a set of goals and objectives
  - develop a variety of restricted and flexible response items appropriate for a unit test
  - explain the importance of linking goals and objectives, instruction, and evaluation

- develop a scoring key or model answer corresponding to an essay test question
- analyze the pros and cons of criterion-referenced and norm-referenced grading systems

## Outline

- I. Introduction
- II. Classroom evaluation activities: an overview
  - A. Fairness in assessment
  - B. Validity in assessment
  - C. Ensuring content validity
  - D. Building content-valid restricted-response tests
  - E. The test blueprint
  - F. Matching test questions and objectives
  - G. Summary
- III. Choosing test item formats: general considerations
- IV. Objective test items
  - A. True-false items
  - B. Matching items
    1. Homogeneity
    2. Order of lists
    3. Easy guessing
    4. Poor directions
    5. Multiple correct responses
  - C. Multiple-choice items
    1. Stem clue
    2. Grammatical clue
    3. Redundant words/unequal length
    4. All of the above/none of the above

- D. Higher-level multiple-choice questions
  - 1. Use justification to assess reasons behind an answer
  - 2. Use pictorial, graphical, or tabular stimuli
  - 3. Use analogies to show relationships between terms
  - 4. Require application of principles or procedures
- E. Completion items
- F. Advantages and disadvantages of objective-item formats
- G. Using restricted essay questions
- H. Scoring essays
  - 1. Write good essay items
  - 2. Use several restricted-response items
  - 3. Use a predetermined scoring scheme
- I. Some unresolved problems
  - 1. Content validity
  - 2. Reliability versus validity
- V. Reporting learner progress: your grading system
  - A. The purpose of a grade
  - B. On what should a grade be based?
  - C. Making public your decisions about grading
- VI. Summing up

#### Key Terms or Concepts

test fairness

test validity

authentic assessment

response alternatives

restricted-response tests

flexible-response tests

content validity

normal curve

test blueprint

stem

norm-referenced grading

extended response essay

criterion-referenced grading

grade weighting

restricted-response essay

negatively skewed distribution

## Suggestions for Teaching

### Presentation

1. Using the overheads from the *Instructor's Manual*, conduct a lecture over the key terms, concepts, and recommendations from the chapter.
2. Group students into five groups. Assign each group the topic of true-false, matching, multiple-choice, completion, or essay tests. Ask each group to (a) create three test items for this course, (b) identify the advantages of using this format, and (c) identify the disadvantages of using this format. Have each group present their items, advantages, and disadvantages to the class on overheads.
3. Conduct a discussion on fair grading practices. Draw from your and your students' experiences with grading. Review the purpose of a grade and discuss if students feel this concept is in use in the schools.

### In-class Applications

1. Group students according to subject matter and/or grade level. Have them identify a major topic in their field, create a test blueprint, and develop sample test items. Have students present their ideas.

2. Using past class assignments, give students copies of anonymous tests. Be sure to use short-essay, matching, multiple-choice, true-false, and completion examples. Group students in dyads or triads and ask students to evaluate the tests. Ask each group to explain their assessments.

#### Out-of-class Applications

1. Ask students to collect copies of test items from their classrooms or courses. Have students analyze these test items and determine if they are sound or unsound. Students may write a short essay or present their data and analysis to the class.
2. Ask students to develop restricted-response test items that represent their fields and grade levels. Have students write a short synopsis explaining the key criteria used in constructing each item.
3. Ask students to develop flexible-response test items that represent their fields and grade levels. Have students write a short synopsis explaining the grading rubric for three or more test items constructed.
4. Have students read additional articles and/or books on developing test items. Ask students to write up a summary of their reading and distribute it to others in the class for later reference and use.

## Chapter 13

### Assessing for Learning: Performance Assessment

#### Focus

#### Chapter Overview

Chapter 13 focuses on how teachers can use performance assessment in their evaluation of student learning. Borich and Tombari begin the chapter by explaining the several benefits of performance assessment (e.g., it may be used to measure performance objectives directly, it can assess processes as well as products, it can be embedded in lessons). The authors then discuss national and statewide efforts aimed at developing standardized performance assessments, how reliability and community accountability may be addressed, and initial research results from implementations of performance assessments. The authors provide a four-step method that might be used for developing performance tests, providing ample details about (1) deciding what to test, (2) designing the assessment context, (3) specifying the scoring rubrics, and (4) specifying testing constraints. Finally, Borich and Tombari touch on portfolio assessment and how performance assessments may be integrated in a grading system.

#### Intended Outcomes

After completing Chapter 13, teachers or prospective teachers should be able to

- explain advantages of performance testing
  - demonstrate application of a rubric to their area of teaching
  - explain how reliability of performance tests may be established and maintained
  - explain how community accountability of a performance test may be established
  - recall current research results on the effects of performance assessment on teachers and tasks and situations outside the performance and classroom
- construct a performance assessment that requires various types of accomplishments from learners and use of various scoring approaches

Outline

- I. Introduction
- II. Performance testing
  - A. Performance tests: direct measures of competence
  - B. Performance tests can assess processes and products
  - C. Performance tests can be embedded in lessons
  - D. Performance tests can assess affective and social skills
- III. Standardized performance tests
  - A. A test worth studying for
  - B. A test worth teaching to
  - C. Scoring the ESPET
  - D. Protecting scoring reliability
  - E. Community accountability
- IV. What research suggests about performance tests
  - A. Do performance tests measure generalizable thinking skills?
  - B. Can performance tests be scored reliably?
  - C. Summary
- V. Developing performance tests for your learners
  - A. Deciding what to test
    - 1. Performance objectives in the cognitive domain
    - 2. Performance objectives in the affective and social domains
  - B. Designing the assessment context
  - C. Specifying the scoring rubrics
    - 1. Developing rubrics
    - 2. Choosing a scoring system
      - a. Checklists
      - b. Rating scales

- c. Holistic scoring
  - d. Combined scoring systems
  - e. Comparing the three scoring systems
3. Assigning point values
- D. Specify testing constraints
  - E. Portfolio assessment
- VI. Performance tests and report card grades
- VII. Final comments
- VIII. Summing up

#### Key Terms or Concepts

authentic assessment

complex cognitive processes

rubrics

multimodal assessment

observable performance

performance testing

primary trait scoring

holistic scoring

testing constraints

portfolio assessment

#### Suggestions for Teaching

##### Presentation

1. Using overheads from the transparency section of the *Instructor's Manual*, provide a review of the key points from the chapter. Supplement the lecture with multiple examples to assist students in their understanding of this alternative approach to assessment.

2. Develop a set of 10 to 20 questions and use these to stimulate a review of key points from the chapter. Strive to involve all students in the recitation or discussion that follows, and to provide variety, use numerous small-group activities that apply the concepts from the chapter. (See the in-class applications below.)
3. Identify teachers and principals who have developed numerous performance assessments and invite them as guest presenters. Ask them to present the pros and cons of performance assessment from their points of view, specific examples of assessments they have found to be particularly successful or problematic, and key points they would recommend for prospective teachers about to develop their own assessments of student learning.
4. Ask students to get into their dyad or triad small groups. Have them develop performance objectives for this chapter and ideas for authentic performance tests they would use to measure student learning. Finally, have the small groups design a potential context in which they would assess the performance and a specific scoring rubric. After students have completed this activity and before collecting the results, ask several students to share their results with the class. Probe students for some of the pros and cons of each approach, context, and rubric presented.

#### In-class Applications

1. After a lecture reviewing key points of the chapter, have students identify three performance objectives, one each in the areas of knowledge, skills, and attitudes, that they might teach in their class when they become teachers. Then, have students create a potential performance assessment that could be used to assess student learning of these three objectives. Have students share their work with their partner/partners and ask for volunteers to present their work to the larger group. Use the examples presented to discuss some of the finer points in measuring products and processes with performance assessments.
2. Use in-class application number 1 above to then develop a rubric that might be used for scoring the performance assessment. Ask students to develop a checklist, rating scale, or holistic scoring method that seems to be appropriate for the assessment. Pass out several overheads for use as models in a large-group presentation.
3. Organize a pre- and post-lecture grading of an essay by students in your class. Have each student assign a grade of 1 to 10 points on the essay and determine the reliability. After students have done the reading,

provide them a rubric for grading the essay, and have them grade it again. Show students the lack of reliability on the pre-assessment and how the variation in grades declines through use of a rubric.

4. Have students work with their dyad or triad partner to develop several potential projects that could serve as portfolio assignments. Have them categorize these by whether the activity would be teacher or student directed, providing a rationale for such.

#### Out-of-class Applications

1. Ask students to visit a teacher at a nearby school that uses performance assessment. Have students ask the teacher about his or her approach to measuring learner performance. Collect several performance assessment examples for sharing with group members in class.
2. As an alternative performance assessment, ask students to develop a curriculum unit over some major topic or theme that illustrates the concepts of Chapter 13. As part of the unit, have students complete a full set of performance objectives in the cognitive and affective domains, performance assessments that will evaluate student learning, and appropriate rubrics for reliable scoring of these assessments.
3. Place several readings on reserve at the library for investigation by students. For example, *Educational Leadership* (Brandt, 1989, 1991, 1992, 1993) has devoted several issues to the topics of “Redirecting Assessment,” “The Quest for Higher Standards,” “Using Performance Assessment,” and “Authentic Learning.” Ask students to inquire into these readings and write an essay that synthesizes a topic (e.g., national standards, portfolios, authentic instruction).
4. Ask students to interview four or more teachers in their subject areas and at their respective grade levels about how they grade students and balance the various types of assessments. Have them write up the range of practices and react to this variation with some of the insights they gleaned from these conversations.

## Part V

### What Teachers Need to Know About Learner Diversity

# Chapter 14

## Teaching Exceptional and At-Risk Learners

### Focus

#### Chapter Overview

Part V focuses on what teachers need to know about learner diversity. In Chapter 14 Borich and Tombari discuss the teaching of exceptional and at-risk learners, focusing on gifted and talented students as well as students with learning disabilities, mental retardation, behavioral disorders, and sensory and communication disorders. After a brief look at the history of mainstreaming and the regular education initiative, the authors present the major components of Public Law 94-142 and information about recent legislative amendments to educating the handicapped. They then discuss principles of normalization that should be applied to all learners regardless of disability (e.g., regular class participation, skill enhancement, image enhancement). Finally, Borich and Tombari more specifically discuss students with mental retardation, learning disabilities, behavioral disorders, communication disabilities, and special talents and/or giftedness, clarifying definitions that are typically used to identify these students and providing guidelines or strategies for supporting them in the classroom.

#### Intended Outcomes

After completing Chapter 14, teachers or prospective teachers should be able to

- explain the regular education initiative and the rationale supporting this initiative
  - define least restrictive environment and explain how this concept should apply to learners with handicaps
  - explain how principles of normalization may be applied to learners with disabilities
  - describe difficulties exceptional learners face in adapting to regular classrooms
  - identify characteristics associated with exceptional and at-risk learners

- recall instructional activities and experiences that will enhance educational opportunities for exceptional and at-risk learners
- differentiate between “medical or pathological models” and alternative noncategorical approaches to providing services to learners with handicapping conditions
- identify generally accepted definitions of mental retardation, learning disabilities, behavior disorders, communication disabilities, and gifted and talented

## Outline

- I. Introduction
- II. The system of special education
  - A. The regular education initiative (REI)
    1. Advocacy for REI
    2. Criticisms of REI
  - B. A brief history of mainstreaming
    1. Role of *Brown v. Board of Education* (1954)
    2. Elementary and Secondary Act of 1965
    3. Role of federal legislation and court decisions
    4. PL 94-142, The Education for All Handicapped Children Act (1975)
  - C. Major components of PL 94-142
    1. Right to a free appropriate public education
    2. Nondiscriminatory evaluation procedures
    3. Procedural due process
    4. An individual education plan (IEP) for each learner
  - D. Legislation since PL 94-142
    1. PL 99-457, Education of the Handicapped Act Amendments of 1986
    2. PL 101-336, The Americans with Disabilities Act of 1990
    3. Education of the Handicapped Act Amendments of 1990

- III. The principle of normalization
  - A. Regular school participation
  - B. Regular class participation
  - C. Skill enhancement
  - D. Image enhancement
  - E. Autonomy and empowerment
  - F. Special class versus regular class placement
- IV. Understanding exceptional learners
  - A. How should we refer to learners with disabilities?
- V. Students with mental retardation
  - A. The definition of mental retardation
  - B. The causes of mental retardation
  - C. Issues in the educational classification of learners with mental retardation
  - D. Learning needs of students with mental retardation
- VI. Students with learning disabilities
  - A. Assessing learning disabilities
    - 1. Standardized achievement tests
    - 2. The assessment process
  - B. The IQ-achievement discrepancy
  - C. Summary
- VII. Students with behavioral disorders
  - A. Attention deficit hyperactivity disorder
  - B. Recognizing ADHD
    - 1. Inability to sustain attention
    - 2. Impulsivity
    - 3. Hyperactivity
    - 4. Deficits in rule-governed behavior

- C. Prevalence and risk potential for ADHD
- VIII. Communication disabilities
  - A. Speech disabilities
  - B. Language disabilities
  - C. Visual and learning disabilities
- IX. Guidelines for Better Special Education
- X. Gifted and talented learners
  - A. Defining giftedness
    - 1. Intelligence
    - 2. Achievement
    - 3. Creativity
    - 4. Task persistence
  - B. Present trends in gifted education
  - C. Instructional strategies for gifted and talented learners
- XI. Summing up

#### Key Terms or Concepts

mainstreaming

regular education initiative

IQ-achievement discrepancy

adaptive behavior

Public Law 94-142

Public Law 101-336

learning disability

visual disability

intelligence

language disabilities

overselective attention

individualized education plan (IEP)

attention deficit hyperactivity disorder (ADHD)

mental retardation

task persistence

least restrictive environment

attention deficit

communication disability

gifted and talented

accelerated curriculum

normalization

impulsivity

hyperactivity

speech disabilities

hearing disability

## Suggestions for Teaching

### Presentation

1. Conduct a debate on the issue of full inclusion of exceptional learners in regular classes. Invite guest speakers who have expertise in practice and those who have knowledge of research in special education areas, and have them focus on basic issues such as, "Should schools mainstream a larger number of students with learning disabilities and mild retardation?" "Should schools provide all gifted and talented programming in regular classrooms?" "Can regular education programs and schools best adapt instruction and curriculum to the needs of learners with moderate to severe disabilities?" And, "What does recent research tell us about the effects of mainstreaming on students?"

2. Review major concepts of the chapter in a lecture, using overheads from the *Instructor's Manual* as needed to reinforce key points. Add insights into the major issues that are presently being discussed in the literature on special education (e.g., the debate about full-inclusion models of special education).
3. Engage students in a review of the chapter by forming small groups and assigning them sections of the chapter (e.g., history and legislation, learning disabilities, mental retardation, gifted and talented), asking them to develop three or four overheads with essential points, and having at least one group from each assigned section present their overheads to the class. Reinforce and elaborate on key points, identify and explore key omissions, and provide important examples as necessary.
4. Invite a school district official and a support team to class to present their approach to identifying learners who may have disabilities, supporting regular teachers in adapting instructional strategies with these learners, assessing these learners, placement of those who qualify for services, and planning educational objectives for and instructing learners with disabilities. Similarly, invite an official who can explain how the GATE program works in a school district. Have students develop questions from the chapter that might pertain to such presentations and follow the presentations with those questions that have yet to be answered.

#### In-class Applications

1. Have students read recent articles on concerns educators have about incorporating learners with disabilities in regular classes. For example, see "Swimming Against the Mainstream" (Idstein, 1993) or "There Are Others in the Mainstream" (Idstein, Gizzi, Ferrero, & Miller, 1994). Engage students in a discussion about the issues identified in these articles (e.g., lengthy documentation and assessment procedures, parent communication, placement, and the like), stressing that PL 94-142 provides general guidelines and requirements but that specific implementations will likely vary from district to district and school to school. Moreover, stress that successful implementations will depend in large part on a sound knowledge and protection of the rights of learners with disabilities, instructional adaptation strategies, and timely and accurate assessment and communication.

2. Using the guidelines provided in the text, have students develop a lesson plan in their subject area that applies the strategies for teaching gifted and talented students. Have students share their lesson plans, pointing out how various components of the lesson correspond to the strategies.
3. Have students get into their dyad and triad groups and discuss the pros and cons of labeling students as “special education” students. Have students share their ideas in a large-group discussion. Summarize pros and cons.

#### Out-of-class Applications

1. Have students identify an issue from the chapter (e.g., the regular education initiative versus maintenance of separate special education programs; assessment of gifted students; pullout versus enrichment programs for gifted and talented students; legal rights of learners with handicaps versus trade-offs for learners without handicaps; etc.). Then have students write a report that fully explores the issue. Reports should include a general definition of the issue from each perspective, a description of specific points supporting each viewpoint, and a final section articulating the student’s personal viewpoint or conclusions after reviewing arguments from both sides of the issue.
2. Have students visit a variety of special education settings (an off-campus center, on-campus self-contained program, resource room, and a regular class with resource person assistance). Ask them to visit with the teachers who work in these settings about the pros and cons of mainstreaming as well as about other questions they have about working with learners with disabilities. Have students write up their reactions to the different environments and teachers’ responses to their questions for reporting to their small group or the larger class.
3. Have students interview a special education coordinator or supervisor (alternatively, a special education teacher) and investigate the details of writing an IEP on students similar to those who will be found in the students’ classes (i.e., a fourth-grade teacher might explore IEPs for fourth-grade students with learning disabilities or mild retardation). Have students write a report that details the major goals and objectives of the IEP in one academic area, how the current skill levels were assessed, and the services to be provided in order to achieve the goals and objectives.

4. Have students visit a Local Support Team meeting to view how this process works. Ask students to write a report that describes the functions of various members of the team, the specific processes used, and members' perspectives about the major advantages of the team (e.g., to identify or assess students better, adapt instruction more appropriately, communicate with parents more thoroughly, provide better documentation of the case, etc.).
5. Have students observe a regular education classroom that includes learners with disabilities. Ask them to take notes on how these learners are involved in the lesson, how they respond to various aspects of the lesson (directions, teacher presentation, seatwork), how the teacher adapts the lesson to meet their educational needs, and how other students in the class respond to these learners. Have students prepare a report on their observations and share this report with their small-group members.

# Chapter 15

## Multicultural and Gender-Fair Instruction

### Focus

#### Chapter Overview

In Chapter 15, Borich and Tombari present information about teaching culturally and gender-diverse learners. The authors begin the chapter by discussing how school systems have yet to fully respond to important minority culture issues, such as developing and hiring minority teachers, developing curriculum that represents and respects minority cultures, and eliminating the disproportionate tracking of minorities. They then present the “cultural compatibility” hypothesis that minority achievement is diminished because American classroom social structures are incongruent with those that many minority learners bring to school. Furthermore, they detail four “psychocultural variables” (social organization, sociolinguistics, learning styles, and cognitive styles) that are important for understanding how schooling may be made more compatible with the home environments of certain minority groups. They also present four caveats and three key relationships that should be kept in mind when considering culturally responsive teaching. Finally, they discuss how schools have often perpetuated sex-role stereotypes and how gender-free education can be promoted.

#### Intended Outcomes

After completing Chapter 15, teachers or prospective teachers should be able to

- define minority group
  - explain the “cultural compatibility” view of schooling
  - explain how learning and thinking differ among diverse learners
  - distinguish between different learning and cognitive styles

- explain the importance of using motivational, instructional, and classroom management strategies that are compatible with the learning styles of diverse students
- apply different learning-style approaches to lesson plan development
- define “culturally responsive teaching” and apply this concept to lesson plan development
- identify prevalent sex-role stereotypes related to curriculum, grouping, and classroom management and explain why and how teachers should avoid them

#### Outline

- I. Introduction
- II. Cultural differences and schooling
  - A. Minority learners and teachers
  - B. Minority learners and textbooks
  - C. Minority learners and the language of the classroom
  - D. Minority learners and tracking
  - E. Minority learners and school achievement
- III. Cultural compatibility and minority learner achievement
  - A. Education and schooling
  - B. Social organization
  - C. Sociolinguistics
    1. Wait time
    2. Rhythm
    3. Participation structure
  - D. Learning styles
  - E. Cognitive styles
    1. Field dependence versus field independence
    2. Educational implications
    3. Cognitive style and culture

- F. Summary and conclusions
  - 1. Beware of perpetuating stereotypes
  - 2. Focus on within-group differences
  - 3. Focus on “expert practice”
- IV. Culturally responsive teaching
  - A. Culture and teaching: what teachers need to know and understand
- V. Gender differences and schooling
  - A. How schools perpetuate sex-role stereotypes
    - 1. Curriculum bias
    - 2. Academic differentiation
    - 3. Classroom management practices
    - 4. School staffing patterns
  - B. Promoting gender-fair schooling
- VI. Summary

Key Terms or Concepts

wait time 1 and 2

cultural compatibility

psychocultural variables

sociolinguistics

sex-role stereotypes

gender-fair instruction

education

participation structure

minority group

field dependent

field independent

learning style

cognitive style

culturally responsive teaching

schooling

social organization

## Suggestions for Teaching

### Presentation

1. Present a key-points review of the chapter using the transparencies from the *Instructor's Manual*, clarifying with examples from your own experiences or by soliciting examples from students' experiences.
2. Use a question and answer approach to review the chapter. Develop about 15 questions covering the major points in the chapter, and use these to focus the class session. For example, "What do the authors say about the role of textbooks in addressing cultural diversity in teaching?" "What do the authors say about minority achievement in schools? And, to what do they primarily attribute minority achievement?" "What is sociolinguistics? And, what are some examples of sociolinguistic variables that might facilitate or frustrate minority learners in classrooms?" Probe student answers to clarify the major points, striving to involve students in developing the answers rather than presenting them yourself. Spice up the class, if necessary, by using two or three implication questions for small-group activities (e.g., develop five implications from the material on learning styles for your level of teaching or subject area; develop five implications from the material on cognitive styles ...; develop five practices that you will more carefully consider now that you are aware of how many teachers perpetuate sex-role stereotypes).
3. Actively engage students in presenting key points of the chapter by having them get into their small groups and dividing the class into four sections. Assign these sections the following four areas of the text for group development of "key points" overheads: (1) cultural differences and schooling, (2) cultural compatibility and minority learner achievement, (3) culturally responsive teaching, and (4) gender differences and schooling. Pass out four or five overhead transparencies and an overhead marker to each small group, have them

cooperatively identify and represent the major points, and choose one or two groups from each section (area) to present and another group or two to react to the presentation. Clarify and elaborate as needed after each presentation and reaction.

4. Identify two or three teachers (or administrators) from local schools who have a reputation for meeting the educational needs of minority learners. Invite these educators to present a lecture or panel discussion on a topic related to the chapter (e.g., “Teaching the Minority Learner: Translating Research into Practice” or “Tips for Teaching Minority Students: What Expert Teachers Say”). Include one teacher from elementary, middle school, and high school, and encourage them to bring specific examples of developed curriculum, instructional strategies, and evaluation methods that have been successful.
5. Present a debate between or among (a) two or three teachers, professors, or administrators who believe strongly in the need to alter curriculum, instruction, and classroom management to meet the supposed differential educational needs of minority students and (b) those who believe that such alterations may perpetuate stereotypes, ignore within-group differences and multicultural classroom realities, and take away the focus on “expert practice” (see parallel textbook sections).

#### In-class Applications

1. Have students get into their small groups and cooperatively develop a list of “Implications for Teaching” based on the ideas presented in the section, “Cultural Compatibility and Minority Learner Achievement.” Alternatively, have students provide examples of how they will address these implications in a particular lesson in their prospective subject areas. Ask students to share their lists in a whole-class setting.
2. Ask students to develop a rough lesson plan in their subject area that incorporates implications for teaching from the section on learning styles (i.e., ask them to organize a learning activity incorporating several teaching functions that will have a high likelihood of meeting the learning needs of a diverse group of students). Provide a brief example of a lesson plan with various teaching functions, if necessary, to facilitate student understanding. Have several students present their examples to the whole class, pointing out the key strategies that will facilitate diverse learning styles.

3. Ask students to get into their dyad or triad groups and develop a list of recommendations for teachers based on the field dependence and field independence information from the chapter. Alternatively, and similar to number 2 above, have them organize a group lesson plan that incorporates what was gleaned from this information. Have several groups present their list or lesson plan, pointing out the key strategies that would facilitate learning for both field-dependent and field-independent learners.
4. Individually, have students reflect on their own learning and cognitive styles. Ask them to write down specific classroom activities or approaches that they have found to be especially effective in facilitating or frustrating their learning. Then, hold a discussion with students about the extent to which teachers can or should practically address these different styles.
5. Have students reflect on each of the examples listed under “how schools perpetuate sex-role stereotypes.” Ask them to identify those that correspond to their experiences in the classroom and to think of any additional ways that teachers or schools might communicate stereotypes. Have students share with the whole class those sex-role stereotype experiences that have been most vivid in their schooling. Ask students if they can remember any teachers who were quite attuned to sex-role stereotypes and who made students aware of such and directly countered such with their teaching techniques.

#### Out-of-class Applications

1. Using key implications for teaching students from diverse cultures, have students develop a coding sheet for observing classrooms, focusing on the areas of cognitive styles or gender bias. Use Observation Form 15.1 as a model for this activity.
2. Have students visit a diverse classroom at their prospective grade level or subject area. Ask them to take notes on the strategies used to meet the needs of diverse learners in the classroom and reflect about others that might have enhanced the lesson. Or, ask students to use Observation Form 15.1 during their observation.
3. Give students the alternative assessment option of writing a paper on the issue of whether the teaching strategies used in diverse classrooms (with two or three cultures) should actually differ from those used in classrooms with a single culture or in multicultural classrooms (with six or eight cultures or more). That is, have students explore further the cautions about stereotyping, within-group differences, expert practice, and

multicultural classrooms, caveats presented in brief form by Borich and Tombari. Require that students write an essay that explores the issue from both perspectives, that includes references from scholars on both sides of the issue, and that concludes with their own perspective or reaction to the argument.

4. Have students interview several minority adults about their schooling experiences, focusing on their views about how schooling met their needs or might have been more responsive. Ask students to design an interview schedule that addresses concerns that Borich and Tombari express about present school experiences, and use this schedule as a springboard for the interview. Request that students write up their results for extra credit or as an alternative assessment activity.

#### Observation Form 15.1: Learning Style Inventory

*Directions:* Complete the following inventory to indicate whether a variety of learning style approaches were used by a teacher during a lesson or series of lessons. Provide pertinent information below each area (Y=Yes, N=No, NA=not applicable).

##### **Physical Environment**

- Y N NA 1. A variety of seating arrangements are used (e.g., traditional desks in rows, tables facilitating small groups, learning activity spaces, leisure time lofts or bean bag alternatives, etc.):
- Y N NA 2. A variety of noise levels are allowed (e.g., silent, moderately quiet, active environments):

##### **Social Environment**

- Y N NA 1. Students are asked to work in a variety of social situations (e.g., alone, in pairs, in small groups, in a large group):
- Y N NA 2. Students are engaged in a variety of formats (e.g., highly competitive, competitive small groups, class competitions versus other classes, cooperative groups that focus on individual continuous progress, independent work):

##### **Emotional Environment**

- Y N NA 1. The teacher provides students a variety of emotional support approaches during instruction and practice activities (e.g.,

the teacher provides close, friendly, and helpful monitoring and assistance; the teacher facilitates independent work and self-monitoring, self-reliant activities):

- Y N NA 2. The teacher provides students a variety of emotional support approaches during feedback or formative evaluation activities (e.g., peer feedback, self-check feedback, textbook or answer key feedback, teacher feedback):

**Instructional Environment**

- Y N NA 1. The teacher provides students a variety of instructional approaches (e.g., lecture, discussion, inquiry or problem solving, small-group activities; visual, verbal, tactile, kinesthetic modalities; etc.):

- Y N NA 2. The teacher provides students a variety of evaluation approaches (e.g., essay, short answer, recall, performance or authentic assessments, etc.):

## Chapter 16

### Family Systems and Home–School Partnerships

#### Focus

#### Chapter Overview

In Chapter 16, Borich and Tombari focus on building home–school linkages using a systems-ecological perspective. After introducing the systems-ecological viewpoint, the authors present research on the present use and effects of family–school linkages as well as four barriers that often stifle such connections (different priorities, a tradition of separation, a tradition of blame, and changing demographics). They then discuss five principles for developing strong family–school partnerships (e.g., view families from a systems-ecological perspective, acknowledge the changes in the American family, recognize the unique needs of mothers and fathers) and present suggestions on a variety of linking mechanisms (e.g., parent and group conferences, phone calls and written communications, and homework and teaching skills classes). In sum, the authors point out that parents are “an underutilized resource for improving learner achievement” and that serious efforts to establish a variety of family–school ties will bolster classroom instruction and learner achievement.

#### Intended Outcomes

After completing Chapter 16, teachers or prospective teachers should be able to

- explain the systems-ecological perspective and how it can be applied to family–school partnerships
  - identify four outcomes of research on collaboration between home and school
  - recall strategies for involving parents in school and classroom activities
  - illustrate barriers to family–school linkages

- explain how teachers can encourage greater involvement of parents who are linguistically and culturally different
- identify strategies for planning, holding, and evaluating parent conferences
- identify teacher–parent communication strategies aimed at addressing recent changes in American parental lifestyles
- apply active listening and “I message” communication techniques

## Outline

- I. Introduction
- II. A systems-ecological perspective
  - A. Extent of family–school linkages
  - B. Effects of family–school linkages
    1. Academic effects on learners
    2. Other positive effects
    3. Effects on parents and teachers
  - C. Barriers to family–school linkages
    1. Different priorities
    2. A tradition of separation
    3. A tradition of blame
    4. Changing demographics
- III. Building home–school linkages
  - A. Principles of family–school partnership
    1. View the family from a systems-ecological perspective
    2. Acknowledge the changes in the American family
    3. View parent participation from an “Empowerment Model”
    4. Recognize the unique needs of mothers and fathers
    5. Understand the variety of possible school–family linkages

- IV. The parent conference
  - A. Planning
    - 1. Goals
    - 2. Agenda
    - 3. Materials
    - 4. Setting
  - B. Conducting the parent conference
    - 1. Plain talk
    - 2. Listening
    - 3. Use “I” messages
  - C. Evaluating the parent conference
- V. Other parent involvement techniques
  - A. The group conference
  - B. Written communications
  - C. Phone calls
  - D. Teaching skill classes
  - E. Homework
  - F. Language classes
  - G. Summary
- VI. Summing up

Key Terms or Concepts

linking mechanisms

systems-ecological perspective

ecosystem

microsystem

exosystem

macrosystem

mesosystems

empowerment model

deficit model

active listening

proactive conferencing

## Suggestions for Teaching

### Presentation

1. Research local school districts to find a school that has an outstanding home–school partnership program. Ask the principal and a few teachers to present their comprehensive program to your students, focusing on the various components and approaches used by the school and teachers. Have the principal and teachers share their views on the importance of high expectations for involving parents, ongoing involvement, and clear communications. Alternatively, have the school give a brief presentation on their comprehensive components and then share details of their parent-conference strategies to ensure high attendance, proactive and positive communication, focused agendas, and so on.
2. Use overheads from the transparency section of the *Instructor's Manual* to review the major points from the chapter, providing personal examples or illustrations to elaborate and clarify key concepts. Supplement this lecture with a role-playing activity on the use of active listening and “I” messages. Use a colleague or student volunteer from class who is willing to develop a script with you.
3. Have students get into their small groups and develop a “model” home–school partnership program based on the key ideas from Chapter 16. Explain to students that their model program should include a comprehensive approach with several components and several dimensions within each component. After students have completed an overhead of their model programs, have them present to the whole class. After all programs have been presented, engage students in a discussion of ideas or principles for gaining parental, district, and teacher support for such a program.

4. Using a question and answer format, review the key points of the chapter. Offer your own personal experiences and draw out student experiences to confirm or disconfirm what the authors present in the chapter. Ask students to complete Activity 16.1 from the *Instructor's Manual* to check their knowledge of key concepts or terms or one of the other in-class application activities.

#### In-class Applications

1. Use Activity 16.1 to check students' knowledge of key concepts or terms. Have students check their answers with their dyad or triad partners, and discuss any problematic questions in the larger group.
2. Have students complete Activity 16.2 individually or in small groups. Then have several students volunteer their answers for the whole class. Discuss trade-offs and contextual variations that might apply.
3. Ask students to conduct a discussion in their small groups about the four categories of parent involvement. Have them reflect about some of the strengths of each category, the specific opportunities within them, and the opportunities that might have the most potential for enhancing student learning and school climate. Ask them to identify priority parental involvement activities for schoolwide implementation and justify their priorities.
4. Using the suggestions presented in the textbook, have students develop an appropriate and an inappropriate (but typical) homework assignment in their prospective subjects and at their prospective levels. Have students explain why each assignment would be appropriate or inappropriate, respectively. Have several students share their examples.

#### Out-of-class Applications

1. Have students (or small groups of students) interview principals or teachers about their parent involvement program. Ask them to construct key questions from the chapter to identify whether the schools are using a comprehensive approach to developing home–school relationships. Have students write up and report their results.
2. Put articles on developing home–school linkages on reserve at the library (e.g., the October 1989 issue of *Educational Leadership* on “Strengthening Partnerships with Parents and Community” includes several good

articles; or see the January 1992/93 issue of *The Elementary School Journal*, Volume 93). Have students read and report on the contents of one or two of these articles.

3. Ask students to develop a role-playing script in which they use active listening and “I” message statements with the parents of a student with whom they are having problems.
4. Have students rewrite the vignette in Activity 16.2, incorporating key principles or guidelines from the text.

### ACTIVITY 16.1

#### Concept Check

*Directions:* In the blanks below, place the term that best completes the sentence.

1. When a teacher monitors his or her understanding by stating a review of the key points that a speaker has tried to convey, he or she is using a communication technique or skill called \_\_\_\_\_ .
2. The system that includes all those settings in which a child lives or spends significant portions of his or her time is called the \_\_\_\_\_ .
3. The view that portrays parents as passive, uncaring, incompetent, or unskilled in helping their child in their schooling, or that parents are unable to become involved in their child’s education because they work long hours away from home, is often regarded as a \_\_\_\_\_ explanation for why culturally different parents have not become involved in their children’s education.
4. Relationships such as that between home and school or the society and school, connections that Bronfenbrenner considers to be as influential for the development of the child as events occurring within specific systems themselves, are called \_\_\_\_\_ .
5. When schools provide numerous opportunities to involve parents as information receivers, learners, teachers, and decision makers, they are striving to form \_\_\_\_\_  
\_\_\_\_\_ .
6. When Bronfenbrenner refers to the larger culture or society in which schools operate, he might use the term \_\_\_\_\_ .

7. The view that children develop through progressive, mutual accommodation, with family, school, and peer group as the most influential, with parents' workplace, parents' friends, the school board, and PTA as indirectly influential, and with the larger culture or society as yet another level of indirect influence is called \_\_\_\_\_ .

8. An important conference skill that communicates your feelings without blaming a parent (or child) by describing what you feel is problematic, your feelings when the problematic behavior occurs, and a rationale for the feeling is called \_\_\_\_\_ .

## ACTIVITY 16.2

### Enhancing Communication

in a Parent-Teacher Conference

*Directions:* Read and analyze the parent-teacher conference vignette below, identifying strengths and areas for enhancement. Rewrite the vignette to incorporate important principles or communication techniques discussed in the chapter.

**Mr. Ortiz:** (greeting Mr. and Mrs. Sands at the door to his classroom) “Good afternoon. Come on in. I was beginning to think I sent home the wrong time. Would you like some coffee or tea?”

**Mrs. Sands:** (walking with her husband toward the petite student chairs positioned in front of the large desk near the front of the room) “Thanks, but we’re not coffee drinkers. We just had a coke at the restaurant, and we got delayed.”

**Mr. Ortiz:** (sitting down and facing Mr. and Mrs. Sands across an expansive metal desk) “OK, let me get Jessica’s folder and portfolio, and we’ll get this underway.” (Mr. Ortiz opens and searches his side drawer, eventually pulling out a manila folder and a large brown envelope made of cardboard.) “OK, as you know from the note sent home, the first quarter conference is to review Jessica’s academic achievement and classroom behavior. I’m really glad both of you could come in today. Overall, Jessica’s off to a good academic start this year, but I have some concerns about her behavior and progress in math.”

**Mr. Sands:** “No problem, I attend most of Jessica’s conferences with Judy, but sometimes I’m on the road.”

**Mr. Ortiz:** (smiling and opening the folder toward Mr. and Mrs. Sands) “You can see that Jessica has failed to master each of the four formative and summative tests thus far, and her average is 68 percent. She scored at the 44th percentile on the fall CTBS test, and frankly I’m troubled by her problems mastering the CRT performance objectives.” (pointing to the homework marks in the folder) “I think she could do better if she would only complete her math homework each night; she’s only turned in six of her 18 home assignments.”

**Mrs. Sands:** “I’ve been wondering if she’s been completing her homework. I tell her it has to be done before TV. But she says it’s done. I wonder if she just forgets to bring it back to school.”

**Mr. Ortiz:** “I don’t think so. Her performance just doesn’t show me understanding or retention of the material. I give reinforcement work each night to make sure the students get enough practice. I think her lack of distributed practice simply keeps her from mastering the performance objectives. And each of her authentic assessments in math has shown problems with basic skill mastery as well. At some point we may want to consider a contingency contract or closer home supervision.” (pointing to the top of the folder) “Still, Jessica’s reading is coming along well, she has passed each of her weekly reading tests with Bs, she spends a lot of her free time reading, and she shows good comprehension and word attack skills. She’s also doing really well on her weekly spelling tests.”

**Mr. Sands:** “Yeah, she really likes to read, and we spend a lot of time reading together.”

**Mrs. Sands:** “I get to work with her on her spelling words when I’m in town.”

**Mr. Ortiz:** (turning the folder to the second page) “You’ll notice that Jessica excels at art and physical education, and that her attendance has been perfect, but the art teacher is concerned about Jessica’s behavior in class, and I’m having the same problems. Jessica is just really assertive, to the point of being overly aggressive at times.”

**Mr. Sands:** (moving forward in his seat) “What exactly is she doing?”

**Mr. Ortiz:** “Well, she often blurts out answers or interjects comments when other students have the floor. She just needs to control her enthusiasm and become more sensitive to others. When I correct her, she often throws a little tantrum or clams up and refuses to participate. Have you seen anything like this at home?”

**Mrs. Sands:** (shifting in her seat) “No, we haven’t had any problems like that at home, but we’re pretty open and outspoken in our discussions there. We encourage our children to assert themselves—to speak up when they have a point—but it sounds like she’s going too far. How long ...”

**Mr. Ortiz:** “Well, the art teacher has had minor disobedience problems since the first class, and it’s been escalating lately; I’ve only had problems for the last three or four weeks.”

**Mrs. Sands:** “Have you tried to call us?”

**Mr. Ortiz:** “I’ve tried a couple of times but haven’t been able to reach you.”

**Mr. Sands:** (shifting in his chair and shaking his head) “I just find it hard to believe that Jessica would disrupt the class, she’s never had this kind of problem before, in this school or in Jefferson City. Maybe it is ...”

**Mr. Ortiz:** (leaning forward in his chair) “Well, she’s definitely creating problems. I even called in the counselor to watch her last week, and she said that a behavioral contract might be helpful.” (noticing a parent approaching his classroom door) “Anyway, Mrs. Jones is here for her conference, so let me ask you if you have any questions that I might answer and if you’d like to meet again in a few weeks to focus on some approaches we might take toward the behavior and math problems?”

**Mr. Sands:** “I still can’t believe that Jessica isn’t doing her homework and that she would behave that way. But we probably ought to get together soon if the problems continue. I’m out of town next week, but I’ll be back the last week in November.”

**Mr. Ortiz:** “That sounds good, how about Monday after school, 3:45 p.m.?”

**Mrs. Sands:** (rising from her chair) “That’ll be fine. In the meantime, we’ll talk to Jessica. Give us a call if she continues to create major problems.”

**Mr. Ortiz:** (rising from his chair and extending his hand for a handshake with Mr. Sands) “Sounds good. Thanks for coming in today.”