



Classrooms • Windows on Classrooms • Windows on Classrooms

EDUCATIONAL PSYCHOLOGY

Fourth Edition

PAUL EGGEN

DON KAUCHAK

*Interactive
Multimedia
Edition*

EDUCATIONAL PSYCHOLOGY



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Windows on Classrooms

Fourth Edition

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Educational psychology is a growing, changing field, and we have written the fourth edition of this text to reflect this dynamic growth. In preparing this edition we have attempted to stay true to our original goals in writing the book: to introduce the field of educational psychology to you, our readers, and to show you how it applies to your personal and professional lives.

The students and professors who have used our book tell us that the connection to actual classrooms is what has made the content understandable, meaningful, relevant, and, consequently, more motivating for them. The links between educational psychology and the "real world," and the implications these links have for learning and teaching are the core of our text and are reflected in its subtitle, *Windows on Classrooms*. In the fourth edition we expand on our original goals, strengthen the application focus, and open our window even wider. We attempt to do so in three ways:

This book is dedicated to Clifton Eggen and Martin Kauchak. They gave us their best.



We have broadened the focus of the text to include a more comprehensive treatment of learning and development. The theories and their application to both classrooms and the outside world are presented in detail, yet clear and succinct ways. The same approach was used in presenting research on instruction, assessment, and learner differences. We believe this emphasis—an integrated, learner-centered focus grounded in accurate frameworks of theory and research—will result in a thorough understanding of educational psychology that you can apply in your growth as a professional.

In our attempt to provide you with coverage of educational psychology that is the most up-to-date and applied in the field, we have added three new elements to this edition. New chapters that reflect the most recent advances in theory and research

Preface

Educational psychology is a growing, changing field, and we have written the fourth edition of this text to reflect this dynamic growth. In preparing this edition we have attempted to stay true to our original goals in writing the book: to introduce the exciting field of educational psychology to you, our readers, and to show you how it applies to your personal and professional lives.

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In the fourth edition we expand on our original goals, strengthen the application focus, and open our window even wider. We attempt to do so in three ways:

- We have expanded the *use* and *integration* of written and video case studies. We present case studies in a way that is unique in the field of educational psychology. Instead of “layering” case studies onto the content of the text, our case studies—both written and video—are truly *integrated* with each topic presented. As topics are discussed, frequent references to the cases are made, which help readers understand how the content is applied in classrooms. In several instances actual dialogue from the case is inserted into the discussion of a topic. This integration capitalizes on research in important areas related to learning, such as **anchored instruction** and **situated cognition**. The number and integration of cases have been expanded in this edition.
- We have broadened the learner-centered orientation of the text. This is a book that focuses on learners and learning, and each chapter examines influences on learning and ways that learning can be increased.
- We have increased the application of prominent theories of learning, motivation, and development. The theories and their application in both classrooms and the outside world are presented in detailed, yet clear and succinct ways. The same approach was used in presenting research on instruction, assessment, and learner differences.

We believe this emphasis—**an integrated, learner-centered focus** grounded in accurate frameworks of theory and research—will result in a thorough understanding of educational psychology that you can apply in your growth as a professional.

New to This Edition

In our attempt to provide you with coverage of educational psychology that is the most up-to-date and applied in the field, we have added three new elements to this edition:

- New chapters that reflect the most recent advances in theory and research

- New, learner-focused, integrated video cases
- A new section on technology and learning

New Chapters

In our commitment to being the most up-to-date text on the market, we have added four new chapters. They are:

Chapter 9: Cognition in the Content Areas. Research suggests that learning different kinds of content presents unique challenges to both students and teachers. In this chapter we examine learning in reading, writing, math, and science, first describing how cognitive learning theories help us understand the unique aspects of learning in each of these areas, and second, examining instructional strategies that support student growth in each. We close the chapter by considering the aspects of learning that are common to the four areas.

Chapter 11: Creating Productive Learning Environments. Emphasis in this chapter is on the interdependence of effective instruction and orderly classrooms, and how this interdependence increases learning. The chapter first examines the skills all teachers must have to promote learning and then considers the role of classroom management in developing learner responsibility. The chapter also describes ways that learning environments can be adapted to accommodate diverse learner needs.

Chapter 12: Teacher-Centered Approaches to Instruction. This chapter considers instruction from a teacher-centered perspective. It begins by examining content that is most effectively taught from a teacher-centered orientation, considers planning and the importance of instructional alignment, and then describes strategies in detail. The chapter analyzes the advantages and disadvantages of lectures, lecture discussions, and direct instruction, and describes ways that classroom interaction can be adapted to meet the needs of diverse learners.

Chapter 13: Learner-Centered Approaches to Instruction. Using APA's Learner-Centered Psychological Principles as a foundation, this chapter describes a number of different learner-centered instructional strategies. Guided discovery, inquiry, discussions, cooperative learning, and individualization are analyzed in terms of their ability to promote learning.

Insights-into-Learning Video Cases

The success of the third edition's **integrated** cases—*classroom case studies that exist in both video and written form*—has prompted us to create a new generation of integrated video cases that truly “get into learners’ heads.” By examining learners’ thinking in both classroom learning activities and follow-up interviews, these videos provide **insights into learning** by illustrating learners’ thinking and demonstrating the complexities of learning and the sophistication of teaching that promotes that learning. The three, hour-long videos include the actual lesson, an interview with four students, and an interview with the teacher. The focus in each case is on learning and learners’ thinking.

The written transcripts of these lessons introduce Constructivism in Chapter 7, Complex Cognitive Processes in Chapter 8, and Learner-Centered Approaches to Instruction in Chapter 13. For the first time in the history of the field, a text includes both video and written classroom episodes that are truly learner-centered.

New Section on Technology and Learning

This new section in Chapter 13 describes how technology can be used to promote students' learning. Different applications of technology, including simulations, spreadsheets, databases, problem solving, and drill and practice are described and analyzed.

Increased Emphases

To reflect recent developments in educational psychology, emphasis on the following topics has been increased in this edition:

- Learner-centered instruction
- Authentic assessment, including performance assessment, portfolios, and grading rubrics
- Constructivism, including situated cognition, sociocultural learning, and cognitive apprenticeship
- Cognitive views of learning
- Bilingualism and English-as-a-second-language
- Self-regulated learning
- Character education and moral development
- Language and learning
- Learner diversity including language, culture and SES
- Inclusion

Features of This Text

Integrated Video Case Studies

To truly *integrate* topics presented in the text with real-world applications, seven classroom case studies—the three new *Insights-into-Learning* cases that introduce topics in Chapters 7, 8, and 13, plus the end-of-chapter cases in Chapters 2, 7, 8, and 13—exist in both written and video formats. These cases illustrate actual classroom life—real learners and real teachers involved in learning and teaching in authentic classroom contexts. No other text has this feature.

Additional Case Studies

In addition to the *integrated video case studies* described above, the text includes more than 50 additional written cases—all taken from actual classroom experiences—that illustrate the content of the chapters. Each chapter begins with a case study that provides a concrete anchor for the chapter. The case study is then woven into the chapter to illustrate the topics being discussed.

Each chapter, except Chapter 9, also ends with a case. This feature, called *Windows on Classrooms*, shows how you might apply your understanding of the chapter content. The end-of-chapter case is followed by a series of “Questions for Discussion and Analysis” that encourage you to observe and assess the learning and teaching in the case and to reflect on your own knowledge and beliefs as your understanding of learning and teaching develops. The topics within each chapter are also liberally illustrated with shorter cases taken from classrooms.

CHAPTER OUTLINE

COGNITIVE VIEWS OF LEARNING

INFORMATION PROCESSING

Models/Aids to Understanding

Sensory Memory

Working Memory

Long-Term Memory

Representing Knowledge in Long-Term Memory

Cognitive Processes

Meaningful Encoding: Making Connections

Term Memory

Metacognition: Knowledge and Control of Cognitive Processes

Impact of Diversity on Information Processing

Putting Information Processing into Perspective

CONSTRUCTIVISM

Emerging Role of Constructivism in Education

Different Views of Constructivism

Characteristics of Constructivism

Putting Constructivism into Perspective

David Shelton has been preparing a unit on the solar system for his ninth-grade earth science class. From his filing cabinet, he retrieved a color transparency showing the sun throwing off globes of gases into space. He assembled a large model of the solar system to illustrate the planets in their orbital planes and their relative distances from the sun. Finally, he prepared a large matrix, made from a roll of chart paper, and taped it to the back wall of the room.

David began his unit on Monday by saying, "We're getting ready to study the solar system for the next several days, so I've prepared some things to help us get started. Take a look at the chart I made," he said, pointing to the back of the room.

"This chart is going to help us learn about the solar system. . . . But first, we need information to fill in the chart. . . . So, I want you to work in your groups to gather the



Windows on Classrooms

At the beginning of the chapter, you saw how David Shelton planned and conducted his lesson in an effort to make the information meaningful for his students and help them construct their own understanding of the topic he was teaching. Then you saw how Jenny Newhall attempted to apply the characteristics of constructivism with her fourth graders.

Let's look now at another teacher as she conducts a lesson with a group of high school students studying the novel *The Scarlet Letter*. As you read the case study, consider the extent to which the teacher applied the information you have studied in this chapter in her lesson.



Video Case

Sue Southam, an English teacher at Highland High School, is discussing Nathaniel Hawthorne's *The Scarlet Letter*. This novel, set in Boston in the 1600s, describes a tragic and illicit love affair between the heroine (Hester Prynne) and a minister (Arthur Dimmesdale). The novel gets its title from the letter A meaning "adulterer," that the Puritan community makes Hester wear as punishment for her adultery. The class has been discussing the book for several days; the focus

"Okay, anything else, any other clues?"

"The baby . . . it points at Reverend Dimmesdale."

"Good observation. That is a good clue and one of my favorite scenes from the novel," Sue adds.

After several more comments, Sue pauses and says, "Class, I'd like to read a passage to you from the text describing Dimmesdale. Listen carefully, and then I'd like you to do something with it."

After reading the paragraph, Sue continues, "In your logs, jot

his hands as if he's mopping his brow.

"What else?" Sue encourages. "Wire-framed glasses," Tanara contributes.

"With brown, melancholy eyes," Jeremy adds.

After the class discusses additional characteristics, Sue shifts gears by asking, "What do these characteristics tell us about Dimmesdale as a person? . . . Anyone? . . . Sonya?"

"I think he's worried about getting caught."

"Kasha?"

"I think he feels bad about what has happened to Hester. He is guilty," Kasha adds.

After a few additional comments, Sue says, "Let's see whether we can find out more about the Dimmesdale character through his actions. I'd like you to read carefully while I read the speech by Reverend Dimmesdale which he confronts Hester Prynne in front of the congregation and exhorts her to identify her secret lover and partner in crime. Think about both Dimmesdale's and Hester's thoughts while I'm reading."

Questions for Discussion and Analysis

Analyze Sue's lesson in the context of the information in this chapter. In doing your analysis, you may want to consider the following questions. Be specific and take information directly from the case study.

1. To what extent did Sue apply the information-processing model in her teaching? Explain, using the concepts of *attention*, *perception*, *working memory*, *encoding*, and *long-term memory*, together with information taken directly from the case study.
2. To what extent did Sue help make the information meaningful for the students? Explain, using the concepts of *elaboration*, *organization*, and *activity*, together with information taken from the case study.
3. To what extent did Sue apply the characteristics of constructivism in her lesson? Explain, using information taken directly from the case study.
4. Provide an overall assessment of the lesson. Provide evidence taken from the case study in making your assessment. What could Sue have done to make the lesson more effective? Be specific in your suggestions.

Summary

Cognitive Views of Learning

Behaviorism and cognitive learning theories differ fundamentally in that behaviorism treats learners as passively responding to the environment, whereas cognitive theories assume that learners are mentally active and construct their own understanding of the topics they study.

Cognitive theories acknowledge the role of environmental influence but emphasize internal, mental processes in attempting to understand learning. Behavioral theories contend that mental processes are not necessary to explain learning; rather, one looks to stimuli and reinforcers in the environment. Cognitive theories were developed, in part, because behaviorism was unable to adequately explain both research results and everyday events, especially complex phenomena such as language learning and problem solving.

Information Processing

Information processing is a cognitive view of learning that compares human thinking to the way computers process information. Information stores—sensory memory, working memory, and long-term memory—hold information; cognitive processes, such as attention, perception, rehearsal, and encoding, move the information from one store to another.

Information received by sensory memory is moved to working memory through the processes of attention and perception. Working memory, with its limited capacity, can easily be overloaded and become a bottleneck to subsequent processing. The capacity of working memory can, in effect, be increased through chunking and making aspects of processing automatic.

Chapters begin and end with a case study. **Chapter opening cases** are referred to throughout the chapter to bring concepts into sharper focus for the learner. Chapter-ending cases, **Windows on Classrooms**, give learners a second look at chapter content in context. **Questions for Discussion and Analysis** that follow each case guide analysis and reflection.

Each chapter contains at least three **Classroom Connections**, which review practical strategies for improving the learning of diverse student populations. Aimed at helping you see the application of teaching in real classrooms, with real learners, they provide practical suggestions for implementing the content by making connections to classroom learning.

tise (Airasian & Walsh, 1997). Teachers need to use a variety of approaches, both learner-centered and teacher-centered to help students learn as much as possible. Chapters 12 and 13, which focus on teacher- and learner-centered instruction, analyze the strengths and weaknesses of different strategies.



Classroom Connections

Applying Constructivism in Your Classroom

1. Develop learning activities around realistic problems.
 - In a unit on percent increase and decrease, a math teacher has students go to malls and find examples of clothes that have been marked down. He also brings in newspaper ads. The class discusses the examples and calculates the amount saved in each case.
 - An elementary social studies teacher has students describe their favorite forms of recreation and the way they're dressed while they participate in these. She also asks students who have moved to this area from other parts of the country to do the same for their previous locations. She then asks them to explain differences and guides a discussion of how climate and geography relate to lifestyle.
2. Teach new ideas in the context of current understandings.
 - A third-grade teacher beginning a unit on crustaceans, insects, and arachnids asks students to tell her as many things as they can think of about crabs, lobsters, and "bugs." She then presents examples of each and has the students compare the characteristics.
3. Create a "learning community" environment in your classroom.
 - An English teacher has students describe what they know about writing persuasively. She then has them describe what they might want to know about this form of writing. She follows this discussion with examples of effective and ineffective persuasive essays.
 - An English teacher discussing *The Scarlet Letter* has the students share their individual perceptions of the characters, the events, and how those impressions were formed.
 - A science teacher discussing heat and expansion has the students articulate their understanding of a series of demonstrations that illustrate the relationship. Where there are disagreements in understanding, she encourages her students to explain and defend their understanding to each other.

Theory into Perspective

Teachers are faced with a variety of theories that attempt to describe learning. Assessing the appropriateness of these theories for specific learning situations can be a daunting task. *Theory into Perspective* sections at the end of each major learning theory analyzes the strengths and weaknesses of these theories and their value in different learning contexts.

Classroom Connections

As in earlier editions, we have included sections throughout each chapter that offer suggestions for applying the content to specific learning and teaching situations. *Classroom Connections* describe and illustrate successful teaching practices in classrooms, from all grade levels and content areas, to provide a variety of effective applications.

Learner Diversity

To respond to the increasingly diverse student populations that we as teachers will encounter, it is critical that we capitalize on the richness that this diversity can bring to the learning and teaching environment. To reflect this emphasis, learner diversity is a theme for this text. Each chapter contains a section on diversity, with its own set of *Classroom Connections*, and Chapter 4 is devoted to this topic.

Adaptive Instruction: Dealing with Diversity in Students' Thinking

Jody Curtis is a third-grade teacher in an ethnically diverse school. Of her 27 students, more than a third are non-native English speakers. They come from a variety of backgrounds and have widely varying experiences.

Jody is beginning a unit on reptiles. She prepared by gathering colored pictures from magazines and other sources. She knew that her class had studied amphibians in the second grade, and she planned to build on their knowledge by comparing reptiles to amphibians.

As she showed each picture, she called on different students to describe and discuss what they observed. Disagreements began to emerge almost immediately.

"They're sort of worms, except they have eyes," Sarina suggested. "They wiggle when they move."

"No, they got bones," Miguel countered.

"Yeah, I saw a skeleton once," Bryan added. "It looked funny, but it had bones."

When the discussion turned to reproduction, there was more disagreement.

"They lay eggs in a nest like birds," Monica said.

"Uh huh," Janille agreed. "In the water."

"No, they have babies like dogs and cats," Manuel retorted, arguing that the young were born alive.

They even disagreed about basic features.

"They're yucky and slimy," Sarina asserted.

"Gross," Lucia added. "All slippery and gross."

"What makes you say that?" Jody wondered aloud.

Many teachers also send packets of students' work home, requiring that parents sign and return them. This maintains the link between home and school and gives parents an ongoing record of their children's learning.

As it continues to expand, technology will provide another channel for improving communication. A voice mail system, for example, can result in improved quality and quantity of teacher-parent communication (Cameron & Lee, 1997).



Classroom Connections

Capitalizing on Diversity in Your Classroom

1. Maintain high but attainable expectations for all your students.
 - A second-grade teacher begins as many of her learning activities as possible with a concrete object, picture, written passage, or demonstration. To capitalize on equitable distribution and open-ended questions, she begins the activity by asking a number of the students to make observations of what they see.
 - A literature teacher begins her discussion of assigned readings by asking students to tell one fact about the story or one impression they had of it.
 - A sixth-grade teacher responds to incorrect answers or silence from her students by rephrasing her initial question; if they still don't answer, she asks them to describe what is displayed before them.
2. Establish communication links between school and home during the first few days of school.
 - A kindergarten teacher makes a personal telephone call to the parents of each of her students during the first week of school. She tells the parents how happy she is to have their

children in her class, encourages them to contact her at any time, and gives them her home phone number.

3. Maintain communication links throughout the year.
 - A fourth-grade teacher sends home a "class communicator" each month. It briefly describes the topics the students will be studying and gives suggestions parents might follow in helping their children. The students are required to write personal notes to their parents on the communicator, describing their efforts and progress.
 - A teacher calls a parent during the first week of school to report that her daughter didn't turn in her first two homework papers. "I want to catch these things early," she says on the phone. "Monica is a capable student, and I want her to get off to a good start."
4. Communicate in straightforward language. Avoid technical terms and educational jargon.
 - A second-grade teacher goes over a letter to parents with her students. She has them explain to her what each part of the letter says, and she then asks the students to read and explain the letter to their parents.

11.56 In addition to initial classroom meetings, how might teachers communicate to parents that they care about their children?

and I felt it. It was dry, the skeptical looks on turned to Lucia, trying to

to what you said?" urged, holding it up by its and it was all wet and remainder of the sci-

of the lesson. First, students' y had very different precon-

8.14 What factor in Piaget's descriptions of development best explains why the students came to the lesson with strong preconceptions about reptiles? What other factor from Piaget's work is critical in helping a student change preconceptions if they're invalid? Explain.

Complex Cognitive Processes 307

Every chapter contains a section that examines issues relevant to diversity. And at least one Classroom Connections feature in every chapter offers learners practical suggestions and applications for implementing strategies that foster the learning of all students.

Margin Questions

Research indicates that learning is advanced when students are actively involved in the learning process. To place you in an active learning role, we use margin questions that ask you to do one or more of three things: explain a specific aspect of the content on the basis of theory and/or research, relate the immediate topic to one you've studied in an earlier chapter, or relate a topic to a real life experience. In this regard, the margin questions are intended to help you reflect on the content, further apply your understanding of educational psychology to classrooms, integrate topics, and make the content more personal by applying it to your everyday experiences.

The extensive use of **concrete examples** and margin questions that engage you in your own learning help you process and understand material more deeply.

You likely saw that they came together at the bottom. Your blowing between the two pieces of paper and seeing them come together is a representation of Bernoulli's Principle. It is a single, concrete representation, illustrating the second element of the model in Figure 9.7.

You probably can't construct a valid understanding of the principle based on this single representation, however, so additional ones are necessary (Brenner, et al., 1997; Spiro, Feltovich, Jacobson, & Coulson, 1992). For instance, take one of the papers, hold it as shown in the following sketch, and blow vigorously over the top. This is a second, concrete representation. In this case, the paper rose up as you blew.



The two representations we just examined are concrete examples of Bernoulli's Principle. While concrete representations are desirable beginning points—and should be used if available—other alternatives exist. Models, sketches, mathematical formulas, and even verbal descriptions can serve as representations.

Effective Interaction. We saw earlier that involvement in an activity won't necessarily produce learning; neither will representations of content. But, as we saw in Chapter 7, learning is facilitated by social interaction. Unfortunately, typical science instruction is often teacher-centered, lacking adequate opportunities for teacher and student dialogue. Social interaction promotes meaningful science learning in at least five ways:

- When combined with high-quality representations it allows teachers to assess learners' current understandings.
- It helps create cognitive conflict.
- It promotes a community of learners.
- It allows teachers to provide scaffolding for learners.
- It helps learners develop an understanding of the nature of science.

Think again about the two pieces of paper and, before reading further, write a brief description that explains why the papers came together at the bottom. Include a sketch with your explanation. The explanation and sketch will reflect your current understanding about Bernoulli's Principle.

If your explanation is typical, you suggested that as you blew, the air curled around the papers at the bottom and pushed the pieces of paper together, as shown in the following sketch.

9.41 Using our discussion of cognitive learning theory as a basis, explain why more than one representation is necessary in order for learners to construct understanding of the topics they study.

9.42 What label would Nussbaum and Novick (1982) use to describe you blowing between the two pieces of paper? What is the purpose in having learners perform an activity such as this?

Cognition in the Content Areas 387

Important Concepts

Important concepts in this book are identified in the body of the text with bold-faced type followed by an *italicized definition*. This allows you to identify these in context as you read and study the text. These important concepts also appear at the end of each chapter, identified by page number.

Figures, Tables, and Outlines

Learning is more efficient when information is organized so that connections and relationships are apparent, rather than presented in isolated segments. Figures, tables, and outlines are used frequently to summarize important information and give you additional examples of each chapter's topics.

Chapter Endings

We know that learning is enhanced by summaries and reviews of important topics. For this reason we close each chapter with a *Summary* that succinctly describes significant ideas in the chapter. The summary for each chapter is organized using the major headings and is intended to further help you integrate the ideas you've studied in earlier chapters.

End of Text

A *Reference* list provides bibliographic information for all the sources we cite. Detailed *Name* and *Subject Indexes* allow quick access to specific topics.

Text Supplements

To further aid your learning and development as a teacher, several supplements have been provided for you and your instructor's use. To maximize the opportunities for learning, the entire package—text, videocases, and supplements—are thoroughly integrated. In our attempt to provide you and your instructor with the most complete educational psychology package that exists, we have written our own supplements, making every effort to ensure that all the components complement each other.

Student Study Guide

Organized by chapter, the *Student Study Guide* includes chapter outlines, chapter overviews, chapter objectives, and application exercises. These exercises put you in an active role as you apply concepts to authentic classroom situations. Feedback is provided for the application exercises.

Each chapter also includes a self-help quiz, using the same format as the items in the test bank that accompanies the text, answers to the self-help quiz, and suggested responses to the margin questions in the chapters.

In addition to the chapter-by-chapter materials, the *Student Study Guide* includes suggestions and guidelines to enable you to better understand the value of reading and using case studies in your coursework.

Website for Students

New to this edition is a website which provides you with an interactive study guide and tutorial. Hot links to a number of key educational psychology sites on the Web can facilitate your research efforts and thus support a more thorough understanding of course concepts. Use www.prenhall.com/eggen to access the website.

Transparencies

A transparency package is available for your instructor's use. As with the figures and tables that appear throughout the text, the transparencies help organize the information you're studying to deepen and broaden your understanding. Electronic versions of the transparencies are also available on the CD-ROM for Instructors.

Video Tapes

In Chapter 1, we discuss the work of experts who suggest that teachers should think critically, practically, and artistically. They believe that teachers should meticulously examine research, their own work, and the work of other teachers. To help you develop your critical thinking, you will have the opportunity to study videotaped segments that focus on cognitive development, classroom management, cooperative learning, metacognition, whole language, and diversity. Some episodes represent "slices of classroom life" that can serve as focal points for analysis and discussion. Questions such as "What are the major strengths and weaknesses of this lesson?" and "How could this have

been taught more effectively?" encourage reflection. This process of analysis will help cultivate your ability to critically examine your own work, complementing the written and video *Windows on Classrooms* that we've already described.

Test Bank

Research consistently indicates that learning is enhanced when teachers have high expectations for their students and when they ask them to think critically and analytically about the content they are learning. In line with these findings, many of the test items you'll encounter on quizzes will be case studies that require you to analyze information taken from classrooms and to make decisions based on evidence. Instead of memorizing strings of words, you'll apply what you have learned to new situations. This is a challenging and rewarding experience and, with practice, your ability to think critically and analytically will improve.

The self-help quizzes in the Student Study Guide will help you develop your analytical skills with practice items similar to those you'll encounter on quizzes and tests.

A printed test bank and computerized versions in Windows® or Macintosh software are available to your professor.

Instructor's Manual

In addition to the supplements we've already described, your instructor will be offered suggestions for learning activities, groupwork, and out-of-class assignments. While you won't encounter the content of the Instructor's Manual directly, it is an integral part of this overall package.

CD-ROM for Instructors

A flexible and user-friendly CD-ROM is also available to your instructor. All features of the printed supplements can be accessed on the CD-ROM and printed out. In addition, for professors who teach using an LDS screen or some other electronic display, all print materials including the transparencies will be accessible for editing and creating customized presentations.

All of the components in this text and the supplements are designed to be consistent with what we know about learning and motivation. We believe they reflect a realistic view of learning and teaching today and as we move into the new millennium. We wish you the best of luck in your study. We hope that you find it both exciting and meaningful.

Acknowledgments

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Finally, we would sincerely appreciate any comments or questions about anything that appears in the book or any of its supplements. Please feel free to contact either of us at any time. Our email addresses are: peggen@gw.unf.edu and kauchak@gse.utah.edu.

Good luck.

Paul Eggen
Don Kauchak

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