Using EDUCATIONAL PSYCHOLOGY in Teaching

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PAUL EGGEN DON KAUCHAK

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Paul Eggen
University of North Florida

Don Kauchak
University of Utah

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To Judy and Kathy,
teachers who have changed many lives.

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About the Authors

Paul Eggen

Paul has worked in higher education for nearly 40 years. He is a consultant for public schools and colleges in his university service area and has provided support to teachers in 12 states. Paul has also worked with teachers in international schools in 23 countries in Africa, South Asia, the Middle East, Central America, South America, and Europe. He has published several articles in national journals, is the co-author or co-editor of six other books, and presents regularly at national and international conferences.

Paul is strongly committed to public education. His wife is a middle school teacher in a public school, and his two children are graduates of public schools and state universities.

Don Kauchak

Don has taught and worked in schools and in higher education in nine states for over 40 years. He has published in a number of scholarly journals, including the *Journal of Educational Research, Journal of Experimental Education, Journal of Research in Science Teaching, Teaching and Teacher Education, Phi Delta Kappan,* and *Educational Leadership.* In addition to this text, he has co-authored or co-edited six other books on education. He has also been a principal investigator on federal and state grants examining teacher development and evaluation practices, and presents regularly at the American Educational Research Association. He currently volunteer-tutors first, second, and third graders in a local elementary school. These students have taught him a lot about educational psychology.

Preface

Welcome to the eleventh edition of our text. As in all fields, educational psychology rapidly advances, and our goal in this edition is to capitalize on these advances to produce a book that meets three goals: to provide the most conceptually sound theory possible, to include up-to-date research, and to prepare a text that provides the most concrete and specific suggestions in the field for applying the content of Educational Psychology in PreK–12 classrooms. Upon the advice of Kevin Davis, our editor, to reflect the third goal and symbolize an essential thrust of our text, we have changed its name to *Using Educational Psychology in Teaching*. Many students can describe and explain the topics included in an educational psychology text, but far fewer know how, as teachers, to apply these topics to increase their students' learning.

The Most Applied Text in the Field

Applications in Classrooms

We attempt to reach our third goal above in several ways. First, we introduce each chapter with a case study in which a teacher is applying the content of the chapter to increase student learning and development.

We then integrate the case studies throughout the chapters in attempts to make the content of each meaningful for readers and further illustrate how educational psychology can be used in teaching to increase student learning.

We expand on this process by including one or more sections in each chapter titled "Using Educational Psychology in Teaching: Suggestions for Applying . . . with Your Students." In these sections we include specific suggestions for applying, for instance, Vygotsky's theory of cognitive development, social-emotional learning, culturally responsive teaching, universal design for learning, social constructivist views of learning, theories of motivation, formative assessment, and so on, in classrooms. We then illustrate each of these suggestions with concrete examples taken from the real world of PreK–12 teaching. As a further illustration, the video episodes on which the case studies integrated throughout chapters 2, 9, 11, 13, and 14 are based are included with the MyLab Education component that accompanies this text. These episodes show the actual classroom lessons and provide students with authentic, real-world insights into learning and teaching, and they will hopefully make the written case studies and chapter content more meaningful for readers.

In addition to these specific suggestions we include *Classroom Connections,* which provide additional suggestions for applying the content of each section at the elementary, middle school, and high school levels, and we include *Developmentally Appropriate Practice* sections in each chapter that offer suggestions for adapting the content for different developmental levels.

Also, in each chapter we include two, three, or four Application Exercises, placed throughout the chapter, that ask readers to apply the chapter content to the real world of teaching. A total of 47 exercises are included in the book's 15 chapters, 38 of which are based on video episodes of approximately five minutes or less, leaving 9 that are based on written case studies. Feedback for all the Application Exercises is included.

In the eText we include Video Examples, ranging from approximately 40 seconds to 2 minutes in length, that provide brief, concrete illustrations of the chapter content. The Video Examples are placed next to the topics they illustrate.

Finally, at the end of each major section of every chapter, we include Self-Check Practice and Quiz-Me exercises designed to help readers acquire a deep understanding of the content in the chapters. The exercises are all written at higher cognitive levels, they focus on classroom application, and readers can respond to the practice exercises as often as they want. Feedback is provided for all the exercises.

As authors, we continue to spend a great deal of time in PreK–12 classrooms, working directly with teachers and students, and we believe this experience helps us provide the most realistically applied textbook in educational psychology. If you want a book that is truly applied, we believe this is the book for you.

Applications in Today's World

In addition to our attempts to help readers apply the content of educational psychology in their teaching, we also provide short sections throughout the text titled *Ed Psych and You,* which ask one or more questions about personal experiences that can be explained with topics in educational psychology. For instance, we ask questions such as:

Are you bothered when something doesn't make sense? Are you more comfortable in classes where the instructor specifies the requirements, outlines the grading practices, and consistently follows through? "Yes" is the answer for most people. Why do you think this is the case?

Theories of cognitive development help answer this question.

Think about some of your friends and acquaintances. Are those who seem happiest and have the greatest sense of well-being also the most intelligent or academically successful? If not, why do you think that's the case?

These questions can be answered with research examining social-emotional development.

Do you like to play games? Do you like playing all games or only certain ones? Why do you enjoy some and not others? Is succeeding in some games more important to you than succeeding in others?

We can answer these questions with theories of motivation.

We discuss and explain questions such as these in each chapter. This feature is our attempt to remind readers that educational psychology, in addition to providing essential applications in PreK–12 classrooms, can be applied in our daily lives. It is one of the most attractive aspects of the field.

Conceptually Sound Theory and Up-to-Date Research

Educational psychology has enormous implications for the way we teach and help students learn. To capitalize on these implications and reach the first two goals we identified at the beginning of the preface, we are including much new and updated content. We outline it below.

In Every Chapter

Top 20 Principles from Psychology—The American Psychological Association has identified 20 principles that are particularly applicable for PreK–12 teaching and learning. We describe the principles in Chapter 1; at the beginning of each chapter we identify the principles that are particularly emphasized in that chapter, and we specify the location in the chapter where the principle is applied with a callout.

The National Council on Teacher Quality (NCTQ)—The NCTQ has identified six essential teaching strategies that all new teachers need to know. As with the top 20 principles from psychology, we discuss the strategies in Chapter 1, identify those that are particularly emphasized at the beginning of each chapter, embed examples of their applications in the chapters, and identify the example with a callout.

Diversity

Diversity and immigration—Our students are the most diverse in the history of our nation, and immigrant students are making up an increasing proportion of school populations. We devote Chapter 4 to the topic and we include sections in each of the other chapters that examine the implications of diversity for our work with students. Unlike some representatives of today's political world, we sincerely believe that diversity enriches us all, and we express this optimistic view throughout the text.

The theoretical framework for culturally responsive teaching—Research indicates that "Culturally Responsive Teaching" can increase achievement for all students and particularly members of cultural minorities. We significantly expand our discussion of culturally responsive teaching in Chapter 4 of this edition, and we include new content that offers a theoretical framework that supports the practice.

Discriminatory classroom management policies—Research consistently indicates that racial disparities exist in teachers' classroom management practices. We examine this research in detail in Chapter 12 and offer specific suggestions for developing equitable classroom management policies.

Are members of cultural minorities over- or underrepresented in special education? Research indicates that, in contrast with popular beliefs, members of cultural minorities are underrepresented in special education, which deprives them of services that can help them succeed and thrive. We examine this issue in detail in Chapter 5.

Learning, Development, and Motivation

Critical thinking and the Internet—Critical thinking has become a major issue in today's world of "conspiracy theories," "post truth," and "fake news." Research indicates that today's students have difficulty separating fake news from real news and conspiracy theories from facts. In our discussion of critical thinking in Chapter 8, we examine these issues in detail, and we offer suggestions for what we, as teachers, can do to help students develop the critical thinking abilities that will help them deal effectively with these issues.

Technology, learning, and development—Technology is ubiquitous, and the impact of technology/social media/smartphones on learning and development is widely discussed in the research literature. We provide detailed discussions of both the positive and negative influences of technology on learning and development, and particularly social-emotional development, throughout the text.

The cognitive neuroscience of learning and development—Neuroscience is expanding our understanding of learning and development, and this understanding has important implications for our teaching. We examine these implications in detail, and provide

suggestions for what we, as teachers, can do to capitalize on our increasing understanding of neuroscience to improve learning for all students.

Executive functioning—Executive functioning is essential for both learning and daily living. It is so important that strategies for measuring it are included on tests of intelligence and school readiness. We include a detailed description of this important process in our discussion of cognitive views of learning in Chapter 7, and we offer suggestions teachers can use to help students develop their executive functioning abilities.

Universal design for learning (UDL)—UDL designs instructional materials and activities to make content accessible to all learners. UDL is the process designed to ensure that inclusion is successful for learners with exceptionalities. We examine UDL in detail in our discussion of learners with exceptionalities in Chapter 5.

Should students be taught to code?—A move to teach middle and high school students to *code*—learn to use the language programmers employ to design apps, websites, and software—is now sweeping through our nation's schools. The goal is to, in the language of Timothy Cook, CEO of Apple, help solve a "huge deficit in the skills that we need today." This initiative is controversial. We examine the initiative, its implications for learning and teaching, and the controversies involved in Chapter 8.

Grit: Sustained commitment to achieving long-term goals—Grit is an essential motivation concept associated with growth mindsets, mastery goals, high levels of perseverance, delay of gratification, and an absence of pleasure seeking. It has come into widespread prominence as the result of work by psychologist Angela Duckworth. We significantly expand our discussion of this important concept in our study of motivation, and we offer suggestions for developing "grit" in students.

Social-Emotional Learning and Development

Social-emotional development—Social-emotional development is receiving a great deal of research attention, and some experts believe it's even more important than cognitive development. We devote a major section to this topic in our discussion of personal, social, and moral development in Chapter 3, and we refer to the topic at various locations throughout the chapters.

LGBTQ students—Research consistently indicates that LGBTQ students have a myriad of problems in both school and life outside of school. And their issues have been exacerbated by the political controversies surrounding transgender youth. We examine the issues involved and what teachers can do to promote the social-emotional development of these young people and help them overcome the many challenges they now face.

School shootings—In the wake of an increase in school shootings and particularly the massacre at Marjory Stoneman Douglas high school in Parkland, Florida, teachers and students across our country have been traumatized, and the trauma is impacting teaching, learning, and students' social-emotional development. We examine the issue, its implications for learning and teaching, and the political controversies surrounding the idea that teachers be armed.

Sexual assault and sexual harassment in schools—Sexual harassment has a long history, but the "Me Too" movement, which gained prominence in late 2017, gave it widespread publicity. Sexual harassment and sexual assault are more common than would be expected in schools. We discuss this issue and what can be done to prevent both in our discussion of gender and gender issues in Chapter 4.

The opioid crisis—The opioid crisis is ravaging our country, it's impacting our schools, and it has important implications for teachers and schools. We examine this topic in detail together with the implications it has for learning, teaching, and social-emotional development.

Instruction and Assessment

Backward design—Backward design is a prominent approach to planning for instruction. We use this conceptual framework in our discussion of instructional planning in Chapter 13 and classroom assessment in Chapter 14, and we offer specific suggestions for ways teachers can capitalize on this planning approach to increase learning in their students.

Case studies linked to standards—Learning standards are now a part of teachers' lives, and many new teachers are uncertain about how to plan and implement instruction designed to help students meet the standards. In a further commitment to our emphasis on application, we link many of our case studies throughout the text to standards, and we provide a detailed discussion of instruction grounded in standards.

Data-driven instruction—Data-driven instruction is a teaching approach that relies on information about student performance to inform teaching and learning. It emphasizes clear objectives, baseline data, frequent assessment, and instruction grounded in assessment data. We examine data-driven instruction in our discussion of assessment in Chapter 14.

Personalized learning—Personalized learning refers to instruction in which the pace of learning and the instructional approach are optimized for the needs of each learner**.** Commonly linked to technology, this approach to learning has both strong proponents and equally strong critics. The approach has important implications for teaching, and we examine both the implications and the controversies in our discussion of instruction in Chapter 13.

Formative assessment—Formative assessment is the process of gathering information about student learning with the goal of informing next steps in teaching. It is one of the most powerful learning tools we have. We significantly expand the discussion of this process and its counterpart, summative assessment, in our discussion of classroom assessment in Chapter 14.

ESSA—The Every Student Succeeds Act (ESSA) is the most recent federal effort to improve education in our country. Accountability remains its central component, but the definition of achievement goes beyond standardized test results to include other measures of student learning, such as motivation and self-regulation. We describe the act in our discussion of standardized testing in Chapter 15, together with its implications for teaching and learning in our nation's schools.

The backlash against high-stakes testing—High-stakes testing and particularly value-added modeling are highly controversial. We discuss these controversies, and the implications they have for teaching and learning, in detail in our examination of standardized testing in Chapter 15.

edTPa—edTPa (Educational Teacher Performance Assessment) is a high-stakes preservice assessment process designed to answer the question, "Is a new teacher ready for the job?" As its use becomes more widespread, it will have increasingly important implications for teacher preparation. We examine this assessment process in our discussion of accountability in Chapter 15.

This new content adds to our detailed descriptions of traditional theories combined with the latest research. Our goal is to make the content in this text as comprehensive and up-to-date as any in the field. Combined with our emphasis on application, we believe this is a text that can help prepare teachers who are truly professionals.

Supplementary Materials

This edition of *Using Educational Psychology in Teaching* provides a comprehensive and integrated collection of supplements to assist students and professors in maximizing learning and instruction. The following resources are available for instructors to download from www.pearsonhighered.com/educator. Enter the author, title of the text, or the ISBN number, then select this text, and click on the "Resources" tab. Download the supplement you need. If you require assistance in downloading any resources, contact your Pearson representative.

Instructor's Resource Manual

The Instructor's Resource Manual includes chapter overviews and outcomes, lists of available PowerPoint® slides, presentation outlines, teaching suggestions for each chapter, and questions for discussion and analysis along with feedback.

PowerPoint® Slides

The PowerPoint® slides highlight key concepts and summarize text content. The slides also include questions and problems designed to stimulate discussion, encourage students to elaborate and deepen their understanding of the topics in each chapter, and apply the content of the chapter to both the real world of teaching and their daily lives. The slides are further designed to help instructors structure the content of each chapter to make it as meaningful as possible for students.

Test Bank

The Test Bank provides a comprehensive and flexible assessment package. The Test Bank for this edition has been revised and expanded to make it more applicable to students. To provide complete coverage of the content in each chapter, all multiple-choice and essay items are grouped under the chapters' main headings and are balanced between knowledge/recall items and those that require analysis and application.

TestGen®

TestGen is a powerful test generator available exclusively from Pearson Education publishers. You install TestGen on your personal computer (Windows or Macintosh) and create your own tests for classroom testing and for other specialized delivery options, such as over a local area network or on the web. A test bank, which is also called a Test Item File (TIF), typically contains a large set of test items, organized by chapter and ready for your use in creating a test, based on the associated textbook material. Assessments may be created for both print and testing online.

The tests can be downloaded in the following formats:
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Sakai Test Bank (zip)

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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 e-mail addresses are: peggen@unf.edu and don.kauchak@gmail.com.

Good luck and best wishes.

Paul Eggen

Don Kauchak

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Using Educational Psychology in Teaching

Chapter 1

Educational Psychology: Understanding Learning and Teaching

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Learning Outcomes

After you've completed your study of this chapter you should be able to:

1.1 Describe expert teaching and explain how expert teaching influences student learning.

1.2 Describe the types of professional knowledge that expert teachers possess.

1.3 Describe different types of research and explain how research contributes to teachers' professional knowledge.

1.4 Identify factors that influence teaching in today's classrooms.

You've just opened your book, and you're probably wondering what this class will be like and how it will make you a better teacher. To introduce you to the content of this text, we begin by looking at three brief classroom lessons—one from elementary, another from middle school, and a third from high school—taken from the real world of teaching.

Sophia Perez, a first-grade teacher, is working with her 18 students to help meet the following standard:

> **Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop). (Common Core State Standards Initiative, 2018a).**

She has the children sitting on a carpet at the front of the room as she displays the following on her document camera:

> **Owen runs around the corner to find his ball. Olivia and Emma run after him. After getting his ball, he walks back to where they are playing. They walk back right behind him.**

She has the students read the short paragraph aloud in unison and then points to the underlined portions. "What is the difference between these two?" she asks, pointing at *Owen runs* and then *Olivia and Emma run.*

With guidance from Sophia, the students conclude that *Owen* refers to one person, and *Olivia and Emma* refer to two people, and *runs* is used with one person, and *run* is used with two people. She does the same with *he walks* and *they walk*.

She then displays the following sentence:

> **Kelly skips rope, and sometimes we skip together.**

She continues by asking, "Now, why did we use 'skips' here, but 'skip' here?" She points to the sentence in each case, and she guides the students to conclude that "skips" was used because Kelly was one person, whereas "skip" was used because "we" represents more than one person.

For practice, she then gives the students three additional sentences and has them determine if the sentences are written correctly.

Now, let's look at Keith Jackson, a middle school math teacher.

Keith is working with his 26 students on decimals and percents, to help meet the following standard.

> **Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent (Common Core State Standards Initiative, 2018b).**

He begins the lesson by showing his class a 12-ounce soft drink can from a machine, a 20-ounce bottle, and a six-pack with price tags on them.

To help his students meet the standard, he organizes them in pairs and assigns the task of using their understanding of decimals and percents to determine which is the best buy.

As the students work, Keith moves around the room, asking questions and guiding their efforts, and when the groups conclude that the six-pack is the best buy, he asks, "So, how do you know?"

"The cost per ounce is the lowest for them," Savannah responds, pointing to the six-pack.

Now, let's turn to Kelsey Walsh, a high school social studies teacher with 32 students in her class.

Kelsey is beginning a unit on assessing conclusions with evidence as she focuses on the following standard:

> **Assess the extent to which the reasoning and evidence in a text support the author's claims (Common Core State Standards Initiative, 2018c).**

"Our goal," Kelsey begins, pointing to the standard, "is to be able to determine how well writers and speakers support the claims they make with evidence. This will help us learn to think critically about what we hear and read, and ultimately, it will make us more informed citizens and will help us avoid problems on the Internet, such as fake news or getting scammed."

She then displays the following for the students:

> **Because our broadcasting companies are for-profit organizations dependent on advertisers, their news broadcasts are superficial and meaningless. For instance, the NBC nightly news, scheduled for a half hour, only has, on average, about 20 minutes of actual news, with the rest advertising. The total broadcast is only 28 minutes long. A recent newscast covered four major topics, the last three of which took a total of about 7 minutes.**

"Now," Kelsey continues after giving the students time to read the display, "what's the author's claim here?"

With her guidance, they decide that the author is claiming that news broadcasts are shallow and superficial and perhaps even meaningless.

Kelsey then asks them what the author provides as evidence supporting the claim, and the students note that the author provides the number of minutes of actual news and the number of topics in a typical half-hour newscast.

After additional discussion, the class agrees that newscasts are at least somewhat superficial.