To William James, who wisely said in *Talks to Teachers* (1899),

“Psychology is a science, and teaching is an art; and sciences
never generate arts directly out of themselves. An intermediary
inventive mind must make the application, by using its originality.”

and also

To all the inventive minds reading this book whose originality will
prove James right.

—A.W.

In memory of missed parents, Bill Perry and Jean and Hawley
Winne, and to family, friends, and students who continue to teach
us the joys of life and learning.

—P.H.W.
—N.E.P.
ABOUT THE AUTHORS

So you will know the authors a bit better, here is some information.

**Anita Woolfolk Hoy** was born in Fort Worth, Texas, where her mother taught child development at Texas Christian University and her father was an early worker in the computer industry. She is a Texas Longhorn—all her degrees are from the University of Texas, Austin, the last one a Ph.D. After graduating, she was a psychologist working with children in elementary and secondary schools in 15 counties of central Texas. She began her career in higher education as a professor of educational psychology at Rutgers University, and then moved to The Ohio State University in 1994. Anita’s research focuses on motivation and cognition, specifically students’ and teachers’ sense of efficacy and teachers’ beliefs about education. She is the editor of *Theory Into Practice*, a journal that brings the best ideas from research to practicing educators. With students and colleagues, she has published over 80 books, book chapters, and research articles. Anita has served as Vice-President for Division K (Teaching & Teacher Education) of the American Educational Research Association and President of Division 15 (Educational Psychology) of the American Psychological Association. Just before completing this twelfth edition of *Educational Psychology*, she collaborated with Nancy Perry, of the University of British Columbia, to write the second edition of *Child and Adolescent Development* (Pearson, 2015), a book for all those who work with and love children. Her next project is the fourth edition of *Instructional Leadership: A Research-Based Guide to Learning in School* (Pearson), written with her husband, Wayne K. Hoy, the Novice Fawcett Chair of Educational Administration at The Ohio State University.

**Philip H. Winne** received his Ph.D. from Stanford University, accepted a position at Simon Fraser University in 1975, and has happily worked there his entire career. At SFU, he is Professor and Associate Dean for Graduate Studies and Research in the Faculty of Education. His research accomplishments earned him a Tier I Canada Research Chair in Self-Regulated Learning & Learning Technologies and election as a Fellow of the American Educational Research Association, the American Psychological Association, the Association for Psychological Science, and the Canadian Psychological Association. His research interests include self-regulated learning, metacognition, motivation, study tactics and learning strategies, adaptive software for research, and promoting self-regulated learning. To pursue these topics, he leads a team developing state-of-the-art software called nStudy. As students use nStudy to study online, it collects extensive and detailed data about how they study. He has published more than 150 scholarly works and served as President of the Canadian Educational Researchers’ Association, the Canadian Association for Educational Psychology, and Division 15–Educational Psychology of the American Psychological Association. With Patricia Alexander, he co-edited the *Handbook of Educational Psychology* (second edition) as well as the field-leading journal *Educational Psychologist* (2001–2005), co-edited with Lyn Corno. He has served as Associate Editor of the *British Journal of Educational Psychology* for 16 years, and currently is a member of the editorial board of nine other leading journals in the field.

**Nancy Perry** worked as a classroom and resource teacher in school districts in British Columbia, Canada, before obtaining her Ph.D. from the University of Michigan in 1996. Today, she is Professor of Educational and Counselling Psychology, and Special Education at the University of British Columbia (UBC). There, she teaches graduate courses in two program areas—Human Development, Learning, and Culture; and Special Education—as well as teaching students in a B.Ed. cohort that focuses on self-regulated learning (SRL). She is a recipient of UBC’s Killam Teaching Prize and
holds the UBC-endowed Professorship for the Faculty of Education's Struggling Youth Initiative. Her research examines the role of tasks, instructional practices, and interpersonal relationships in promoting motivation and self-regulation in school. Related projects are profiled at her website: “Seeding Success through Motivation and Self-Regulation in Schools,” http://self-regulationinschool.research.educ.ubc.ca. In addition to these teaching and research activities, Nancy is Associate Editor for the *Journal of Learning and Instruction* and President Elect of Division 15, Educational Psychology, of the American Psychological Association. She is a Past President of the Canadian Association for Educational Psychology and has served on the Executive Boards of the Canadian Association for Studies in Education and, previously, Division 15, Educational Psychology, of APA as Member at Large.
Many of you reading this book are enrolled in an educational psychology course as part of your professional preparation for teaching, counselling, speech therapy, nursing, or psychology. The material in this text should be of interest to everyone who is concerned about education and learning, from the Kindergarten volunteer to the instructor in a community program for adults with disabilities. No background in psychology or education is necessary to understand this material. It is as free of jargon and technical language as possible, and many people have worked to make this edition clear, relevant, and interesting.

Since the first edition of *Educational Psychology* appeared, there have been many exciting developments in the field. The sixth Canadian edition continues to emphasize the educational implications and applications of research on child development, cognitive science, learning, motivation, teaching, and assessment. Theory and practice are not separated in the text, but are considered together. The book is written to show how information and ideas drawn from research in educational psychology can be applied to solve the everyday problems of teaching. To help you explore the connections between research and practice, you will find in these pages a wealth of examples, lesson segments, case studies, guidelines, and even practical tips from experienced teachers. As you read this book, we believe you will see the immense value and usefulness of educational psychology. The field offers unique and crucial knowledge to any who dare to teach and to all who love to learn.

**NEW CONTENT IN THE SIXTH CANADIAN EDITION**

Across the book, there is increased coverage of a number of important topics. The key content revisions are described below:

**Chapter 1: Learning, Teaching, and Educational Psychology**

- A new section is introduced called **Differentiated Instruction**, which includes:
  - A **Stop & Think** box, which describes the scenario where a teacher gives a practice test and finds that the lesson plans he/she prepared are not fitted to the students
  - A new section called **Why Do We Need Differentiated Instruction?**, which sets up the factors that lead to diversity in classrooms
  - The section called **Elements of Differentiation** sets up differentiation in curriculum and instruction.

**Chapter 2: Cognitive Development**

- The section called **Adolescent Development and the Brain** discusses how the teenage brain is not fully developed and how teachers can help students navigate risks and decision making. New research is used to discuss how sleep patterns of teenagers can affect their performance.
- The section called **Putting It All Together: How the Brain Works** uses new research to discuss how our cultural differences affect our brains and information processing.
- A new section called **Neuroscience, Learning, and Teaching** incorporates the following:
  - **Instruction and Brain Development** describes current research, which demonstrates how teaching instruction affects brain activity.
  - A **Stop & Think** box questions how teachers can be aware of neuroscience.
• Point/Counterpoint box: **Brain-Based Education** debates the question “Are there clear educational implications from the neuroscience research on the brain?” using up-to-date research from 1999–2013.

• **Lessons for Teachers: General Principles** is a list of implications drawn from four researchers about neuroscience and teaching.

• New research from Kurt Fischer (2009), under the subhead **Information Processing and Neo-Piagetian Views of Cognitive Development**, explains that while different skills are developed separately, there are predictable levels of development and no development stage occurs in isolation.

• New sections called **Technical Tools in a Digital Age** and **Psychological Tools** make a case for tools that allow for higher mental processing, like the calculator, and recent research expands on developing a cultural toolkit.

**Chapter 3: Self and Social and Moral Development**

• The section called **The Adolescent Years** has been expanded to discuss early development, popularity, and feeling normal.

• A new Guidelines box appears: **Supporting Positive Body Images**.

• A **Society and Media** section discusses how heavily students use technology and social media to connect with friends and how this is distracting in a classroom.

• An **Identity and Technology** section explores how identity develops when parents are constantly connected to others (e.g., to their parents via cellphones) and how people can maintain multiple identities online.

**Chapter 4: Learner Differences and Learning Needs**

• The section called **Possible Biases in the Application of Labels** explains the likely causes of over- and underrepresentations.

• **Multiple Intelligences: Lessons for Teachers** showcases Gardner’s two lessons for teachers.

• The **Neuroscience and Learning Challenges** section discusses current research on how injury or disease can lead to learning disabilities.

• The section called **Characteristics of Students With Hyperactivity and Attention Disorders** is updated with the latest research.

**Chapter 5: Language Development, Language Diversity, and Immigrant Education**

• Content on language development and learning has been consolidated and expanded in a new chapter, including discussions of diversity in language development and bilingualism, dialects in the classroom, teaching immigrant students, and the special challenges in teaching English Language Learners who have learning disabilities or special gifts.

**Chapter 6: Culture and Diversity**

• Research is updated in the **Poverty and School Achievement** section to reflect current statistics on poverty and single-parent homes.

• New Guidelines box: **Teaching Students Who Live in Poverty**.

• The section called **Ethnicity and Race Differences in Teaching and Learning** offers updated 2013 Statistics Canada data on diversity in Canada.

**Chapter 7: Behavioural Views of Learning**

• New table appears titled **A Simple Structured Observation Guide for Functional Behavioural Analysis Using the ABC Frame**.
Chapter 8: Cognitive Views of Learning

- A new section called **Attention and Multitasking** appears.
- New content in the section called **Working Memory** focuses on the research of Alan Baddeley and colleagues, who developed the model of working memory.
- New table appears called **Three Kinds of Cognitive Load**.
- New Guidelines box: **Organizing Learning**.
- New section appears called **Individual Differences and Long-Term Memory**.

Chapter 9: Complex Cognitive Process

- **Lessons for Teachers: Developing Metacognition** explores research with younger, secondary, and university students.
- The **Reaching Every Student** section is reframed from Students with Learning Disabilities to Learning Strategies for Struggling Students. The writing strategy called DEFENDS has been replaced with up-to-date research and a new strategy called LINCS Vocabulary Strategy.
- New table: **What Is a Critical Thinker?**
- **Argumentation** section discusses how the skills of argumentation take time and instruction to learn.

Chapter 10: The Learning Sciences and Constructivism

- New section appears called **Embodied Cognition**.
- Point/Counterpoint box added: **Are Inquiry and Problem-Based Learning Effective Teaching Approaches?**
- The section called **Preparing Students for Cooperative Learning** now reflects data from 2009.
- Several new sections discuss the impact of technology. See Learning Environments and Technology, Virtual Learning Environments, Developmentally Appropriate Computer Activities for Young Children, and Computers and Older Students.
- Seven new terms introduced: cloud computing, virtual learning environments (VLEs), learning management system (LMS), personal learning environment (PLE), personal learning network (PLN), immersive virtual learning environment (IVLE), and massive multi-player online games (MMOGs).

Chapter 11: Social Cognitive Views of Learning and Motivation

- **Stop & Think** box: **Elements of Observational Learning** explains who a teacher’s role model is.
- New sections appear devoted to the topics of **Attention, Retention, Production, and Motivation and Reinforcement**.
- New section is introduced called **Development of Self-Regulation**.
- The **Emotional Self-Regulation** section is now based on the Collaborative for Academic, Social, and Emotional Learning (CASEL), five core social and emotional skills and competencies.

Chapter 12: Motivation in Learning and Teaching

- New table: **Building a Concept of Motivation to Learn**.
- New table: **Strategies That Support and Undermine Motivation in the Classroom**.

Chapter 13: Creating Learning Environments

- The **Bullying and Cyberbullying** section is updated throughout with current research and new examples based on real events that have happened in the past few years.
- New section called **Victims**.
Chapter 14: Teaching Every Student

- Section on Teachers’ Knowledge has been expanded with recent research and discusses whether a teacher’s expertise in a subject influences student performance.
- New section appears called Recent Research on Teaching.
- The Cognitive Domain section describes the first major revision of the Bloom’s taxonomy (2001).
- New sections have been added: Fitting Teaching to Your Goals, Adaptive Teaching, and Mentoring Students as a Way of Differentiating Teaching.
- New guidelines box: Teachers as Mentors.

Chapter 15: Classroom Assessment, Grading, and Testing

- New Guidelines box: Writing Objective Test Items.
- Section on Evaluating Essays has been rewritten based on new research by Gronlund and Waugh (2009).
- New section called Standardized Testing covers the following:
  - Types of Scores for Commercially Developed Tests
  - Accountability and High-Stakes Testing
  - Reaching Every Student: Helping Students With Disabilities Prepare for High-Stakes Tests
  - Lessons for Teachers: Quality Assessment
- New Guidelines box: Conferences and Explaining Test Results.
- New Table has been added called Inappropriate Uses for High-Stakes Test Results.

A Crystal-Clear Picture of the Field and Where It Is Headed

The sixth Canadian edition maintains the lucid writing style for which the book is renowned. The text provides accurate, up-to-date coverage of the foundational areas within educational psychology: learning, development, motivation, teaching, and assessment, combined with intelligent examination of emerging trends in the field and society that affect student learning, such as student diversity, inclusion of students with special learning needs, education and neuroscience, and technology.

Important New Content in Learning and Development

Some of the most significant changes in the new edition involve a reorganization and expansion of the learning and development content.

- The new edition includes expanded coverage of cognitive science, self-regulated learning, and argumentation as well as a new chapter devoted to language development, language diversity, and immigrant education (Chapter 5).
- You will find significantly increased coverage of the brain and neuroscience in Chapter 2 and integrated into five chapters—Chapters 3, 6, 7, 8, and 12.
- Increased coverage of technology can be found in Chapters 3, 4, 10, and 13.

Supplements

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—PHIL WINNE AND NANCY PERRY
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