


SIXTH EDITION

Theoretical **Models** and **Processes** of Reading

Donna E. Alvermann
Norman J. Unrau
Robert B. Ruddell

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We dedicate this sixth edition of *Theoretical Models and Processes of Reading* to

Harold L. “Hal” Herber,

an individual whose scholarship spanned many years of reading research and who touched many lives as a teacher, teacher educator, mentor, and friend.

CONTENTS

About the Editors ix

Contributors xii

Preface xviii

SECTION ONE Perspectives on Literacy Research and Its Application 1

1. A Historical Perspective on Reading Research and Practice, Redux 3
Patricia A. Alexander and Emily Fox
2. Literacies and Their Investigation Through Theories and Models 47
Norman J. Unrau and Donna E. Alvermann
3. Synergy in Literacy Research Methodology 91
*Marla H. Mallette, Nell K. Duke, Stephanie L. Strachan, Chad H. Waldron,
and Lynne M. Watanabe*

SECTION TWO Processes of Reading and Literacy 129

Part 1. Language and Cognition in Sociocultural Contexts

4. Reading as Situated Language: A Sociocognitive Perspective 136
James Paul Gee
5. The Place of Dialogue in Children's Construction of Meaning 152
M.A.K. Halliday
6. Social Talk and Imaginative Play: Curricular Basics for Young Children's
Language and Literacy 164
Anne Haas Dyson and Celia Genishi
7. Exploring Vygotskian Perspectives in Education: The Cognitive Value
of Peer Interaction 182
Ellice A. Forman and Courtney B. Cazden
8. It's a Book! It's a Bookstore! Theories of Reading in the Worlds
of Childhood and Adolescence 204
Shirley Brice Heath
9. Emergent Biliteracy in Young Mexican Immigrant Children 228
Iliana Reyes and Patricia Azuara
10. Revisiting Is October Brown Chinese? A Cultural Modeling Activity System
for Underachieving Students 265
Carol D. Lee

Part 2. Foundations for Literacy Development

11. Sustained Acceleration of Achievement in Reading Comprehension: The New Zealand Experience 297
Mei Kuin Lai, Stuart McNaughton, Meaola Amituanai-Toloa, Rolf Turner, and Selena Hsiao
12. Phases of Word Learning: Implications for Instruction With Delayed and Disabled Readers 339
Linnea C. Ehri and Sandra McCormick
13. Developing Early Literacy Skills: Things We Know We Know and Things We Know We Don't Know 362
Christopher J. Lonigan and Timothy Shanahan
14. Advancing Early Literacy Learning for All Children: Implications of the NELP Report for Dual-Language Learners 375
Risk D. Gutiérrez, Marlene Zepeda, and Dina C. Castro
15. Fluency: Developmental and Remedial Practices—Revisited 385
Melanie R. Kuhn and Steven A. Stahl
16. A Road Map for Understanding Reading Disabilities and Other Reading Problems, Redux 412
Louise Spear-Swerling

Part 3. Comprehension Development From Words to Worlds

17. Language Pathways Into the Community of Minds 437
Katherine Nelson
18. Vocabulary Processes 458
William E. Nagy and Judith A. Scott
19. Role of the Reader's Schema in Comprehension, Learning, and Memory 476
Richard C. Anderson
20. Schema Theory Revisited 489
Mary B. McVee, KaiLonnice Dunsmore, and James R. Gavelek
21. To Err Is Human: Learning About Language Processes by Analyzing Miscues 525
Yetta M. Goodman and Kenneth S. Goodman
22. Cognitive Flexibility Theory: Advanced Knowledge Acquisition in Ill-Structured Domains 544
Rand J. Spiro, Richard L. Coulson, Paul J. Feltovich, and Daniel K. Anderson
23. Educational Neuroscience for Reading Researchers 558
George G. Hruby and Usha Goswami

Part 4. Motivation and Engagement

24. Effects of Motivational and Cognitive Variables on Reading Comprehension 589
Ana Taboada, Stephen M. Tonks, Allan Wigfield, and John T. Guthrie
25. Toward a More Anatomically Complete Model of Literacy Instruction: A Focus on African American Male Adolescents and Texts 611
Alfred W. Tatum

Part 5. Instructional Effects on Literacy Development

26. Marie M. Clay's Theoretical Perspective: A Literacy Processing Theory 636
Mary Anne Doyle
27. Instructing Comprehension-Fostering Activities in Interactive Learning Situations 657
Ann L. Brown, Annemarie Sullivan Palincsar, and Bonnie B. Armbruster

SECTION THREE Models of Reading and Writing Processes 691

Part 1. Cognitive-Processing Models

28. Toward a Theory of Automatic Information Processing in Reading, Revisited 698
S. Jay Samuels
29. Toward an Interactive Model of Reading 719
David E. Rumelhart
30. A Theory of Reading: From Eye Fixations to Comprehension 748
Marcel Adam Just and Patricia A. Carpenter
31. Modeling the Connections Between Word Recognition and Reading 783
Marilyn Jager Adams
32. Revisiting the Construction–Integration Model of Text Comprehension and Its Implications for Instruction 807
Walter Kintsch
33. Understanding the Relative Contributions of Lower-Level Word Processes, Higher-Level Processes, and Working Memory to Reading Comprehension Performance in Proficient Adult Readers 840
Brenda Hannon

Part 2. A Dual Coding Model

34. A Dual Coding Theoretical Model of Reading 886
Mark Sadoski and Allan Paivio

Part 3. A Transactional Model

35. The Transactional Theory of Reading and Writing 923
Louise M. Rosenblatt

Part 4. Integrated Reading and Writing Models

36. Reading–Writing Connections: Discourse-Oriented Research 957
Giovanni Parodi

37. Enacting Rhetorical Literacies: The Expository Reading and Writing Curriculum in Theory and Practice 978
Mira-Lisa Katz, Nancy Brynolson, and John R. Edlund

Part 5. A Sociocognitive Model

38. Reading as a Motivated Meaning-Construction Process: The Reader, the Text, and the Teacher 1015
Robert B. Ruddell and Norman J. Unrau

SECTION FOUR Literacy's New Horizons: An Emerging Agenda for Tomorrow's Research and Practice 1069

39. Adolescent Literacy Instruction and the Discourse of “Every Teacher a Teacher of Reading” 1072
Donna E. Alvermann and Elizabeth Birr Moje

40. Literacy Research in the 21st Century: From Paradigms to Pragmatism and Practicality 1104
Deborah R. Dillon, David G. O'Brien, and Elizabeth E. Heilman

41. National Reports in Literacy: Building a Scientific Base for Practice and Policy 1133
P. David Pearson and Elfrieda H. Hiebert

42. New Literacies: A Dual-Level Theory of the Changing Nature of Literacy, Instruction, and Assessment 1150
Donald J. Leu, Charles K. Kinzer, Julie Coiro, Jill Castek, and Laurie A. Henry

43. The Social Practice of Multimodal Reading: A New Literacy Studies–Multimodal Perspective on Reading 1182
Jennifer Rowsell, Gunther Kress, Kate Pahl, and Brian Street

44. Imagined Readers and Hospitable Texts: Global Youths Connect Online 1208
Glynda Hull, Amy Stornaiuolo, and Laura Sterponi

45. 21st-Century Skills: Cultural, Linguistic, and Motivational Perspectives 1241
Robert Rueda

Author Index 1269

Subject Index 1302

ABOUT THE EDITORS



Donna E. Alvermann is an appointed Distinguished Research Professor in the Department of Language and Literacy Education at The University of Georgia, Athens. She was formerly a classroom teacher in Texas and New York. Her research focuses on young people's literacy practices in classrooms, out-of-school settings (e.g., libraries), and digital environments.

The author of over 150 articles in journals such as *American Educational Research Journal*, *Reading Research Quarterly*, and *Journal of Literacy Research*, Donna codirected the National Reading Research Center, funded by the U.S. Department of Education, from 1992 to 1997. Her coauthored/edited books include *Content Area Reading and Literacy: Succeeding in Today's Diverse Classrooms* (7th ed., Pearson, 2013); *Reconceptualizing the Literacies in Adolescents' Lives* (3rd ed., Routledge, 2012); *Adolescents' Online Literacies: Connecting Classrooms, Digital Media, and Popular Culture* (Peter Lang, 2010); *Adolescents and Literacies in a Digital World* (Peter Lang, 2004); and *Bring It to Class: Unpacking Pop Culture in Literacy Learning* (Teachers College Press, 2010). She also coedited the International Reading Association's premier research journal, *Reading Research Quarterly* (2003–2007), and served as president of the National Reading Conference (now the Literacy Research Association).

Currently a member of the Intermediate and Adolescent Literacy Advisory Group of the Alliance for Excellent Education in Washington, DC, Donna has been the recipient of the Literacy Research Association's Oscar S. Causey Award for Outstanding Contributions to Reading Research, the Literacy Research Association's Albert J. Kingston Award for Distinguished Service, and the ALER Laureate Award. Elected to the Reading Hall of Fame in 1999, she was also awarded the International Reading Association's highest honor, the William S. Gray Citation of Merit, in 2006. From 2008 to 2010, Donna was the U.S. advisor to the international ADORE Project, funded by the European Commission/EU, that researched teacher education involving adolescent readers in Germany, Belgium, Estonia, Finland, Hungary, Italy, Norway, Poland, Romania, and Switzerland.

In her spare time, Donna listens to bluegrass and folk, takes long road trips with Jack, and plays with Jazz, her 3-year-old golden retriever.



Norman J. Unrau is a professor emeritus of California State University, Los Angeles, where he served in the Division of Curriculum and Instruction and taught courses on literacy, cognition, and learning in the credential and M.A. programs. He also served as the coordinator of the M.A. in Education program with a focus on middle and high school curriculum and instruction. He continues to teach graduate students,

engage in research, and serve on California State University committees to promote academic literacy in schools.

Norm completed his master's degree at Columbia University's Teachers College. After teaching high school English and social studies for nearly 25 years, he completed his doctorate in education at the University of California, Berkeley. His work at Berkeley focused on cognition in reading and writing. Norm has served as editor of the International Reading Association's *Journal of Adolescent & Adult Literacy* and is the author of *Content Area Reading and Writing: Fostering Literacies in Middle and High School Cultures* (2nd ed., Pearson, 2008) and *Thoughtful Teachers, Thoughtful Learners: Helping Students Think Critically* (2nd ed., Pippin, 2008). He served as coeditor of the fifth edition (2004) of *Theoretical Models and Process of Reading* with Bob Ruddell. Norm has also published articles on reading, writing, critical thinking, assessment, motivation, and graduate programs in education that have appeared in the *Journal of Adolescent & Adult Literacy*, *The Journal of Educational Research*, *Reading Psychology*, *Teacher Education Quarterly*, *Issues in Teacher Education*, and other professional journals.

When not teaching, reading, or writing, Norm enjoys playing tennis and the saxophone, traveling with his wife, Cherene, who teaches piano, and biking by the ocean with his daughter, Amy.



Robert B. Ruddell is a professor emeritus in the Language, Literacy, and Culture faculty group at the University of California, Berkeley. He began his teaching career at age 18 in a one-room schoolhouse in a coal mining community in the Appalachian Mountains of his home state of West Virginia. His work with the primary-grade students in that school was the genesis of his interest in understanding the nature of the reading process. (While in that school, he dismissed school early one day each month to visit the homes and families of each of his 32 students; he is still in contact with six of them.)

Bob received a combined M.A. degree from West Virginia University and George Peabody College for Teachers. After completing his doctorate at Indiana University, he taught credential and graduate courses in reading and language development and directed the Advanced Reading and Language Leadership Program at the University of California, Berkeley. Over the years, he has worked closely with his doctoral students, advising and directing the research and dissertations of 86 of these Ed.D. and Ph.D. students. Bob has successfully mixed consultation in public schools with his university teaching and research, working with teachers in both inner city and rural schools. He has lectured and conducted workshops for teachers in each of the 50 states, as well as in England, Sweden, Germany, Australia, Canada, and the Ivory Coast.

Bob is the recipient of the International Reading Association's William S. Gray Citation of Merit, which recognizes lifetime achievement and leadership contributions to the field of reading and literacy development. He also received the

Oscar S. Causey Research Award from the National Reading Conference, recognizing his research on effective and influential literacy teachers. He received the Marcus Foster Memorial Reading Award from the California Reading Association for his teaching and research and was the recipient of the Indiana University Citation Award presented to former graduate students who have made outstanding contributions to literacy. He has served as the president of the Reading Hall of Fame and on the IRA Board of Directors.

Bob is the author of the fifth edition of the widely used literacy methods text *How to Teach Reading to Elementary and Middle School Students: Practical Ideas From Highly Effective Teachers* (Pearson, 2009). Along with his coeditorship of the present edition of *Theoretical Models and Processes of Reading* (TMPR6), he also was coeditor with M.R. Ruddell and Harry Singer of TMPR4 (1994) and with Norman Unrau of TMPR5 (2004). Bob coedited the earlier volumes, TMPR (1970), TMPR2 (1976), and TMPR3 (1985), with Harry Singer.

Bob's articles have appeared in *The Reading Teacher* and *Language Arts*, as well as in a variety of research journals and yearbooks. He was senior editor of the Pathfinder reading program series (Allyn & Bacon, 1978). His research and teaching interests focus on the study of comprehension and critical thinking, word identification strategies, reading motivation, and ways in which highly effective and influential teachers develop these skills in their students.

Bob and his wife, Sandra, enjoy traveling throughout the United States and internationally. They especially enjoy visits from their three grandchildren: Rebecca, Grace, and Madeline. Bob delights in conversations with his former students, and he relaxes with suspense and mystery novels and a good round of golf.

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PREFACE

Welcome, once again, to the world of reading and literacy research. We invite you to join us in the exciting investigation and discovery of reading theory, models, and processes. The reading process constitutes what Edmund Burke Huey, a pioneer in reading theory, called “the most intricate workings of the human mind, as well as . . . the most remarkable specific performance that civilization has learned in all its history” (1908/1968, p. 6). In this sixth edition of *Theoretical Models and Processes of Reading* (TM_{PR}6), over half of the chapters have never appeared in any earlier edition. Eight of these new chapters were specially commissioned for this volume. Twenty percent of the chapters that have appeared earlier have been revised and/or updated by their authors to reflect current research and instructional developments in the field.

The following are our goals for this preface:

- To explain the overall purposes that guided the development of TM_{PR}6
- To share a brief background of the past editions of TM_{PR} (1970, 1976, 1985, 1994, and 2004) that led to the current sixth edition
- To describe the criteria used in the selection of chapters for the current volume and to offer a brief summary of the sixth edition’s content
- To acknowledge those who assisted us in TM_{PR}6’s development

Purposes for This Volume

In searching the research literature for current trends in theoretical models and processes of reading, we were careful to negotiate a balance between this newer material and chapters from earlier editions that have retained their relevancy well into the 21st century. We did so with the following purposes in mind:

- To provide an updated volume of carefully selected pieces that offer insight into reading and literacy research
- To offer an expanded range of research designs and their applications to both basic and applied research
- To be inclusive of reading processes and literacy practices studied through cognitive, sociocultural, critical, transactional, and poststructural theorizing
- To develop the ability to understand and critique a comprehensive body of research literature spanning more than five decades
- To make connections among a wide range of literacy theories and their associated models
- To apply the knowledge base assembled here in generating new research studies and models that inform instructional decision making

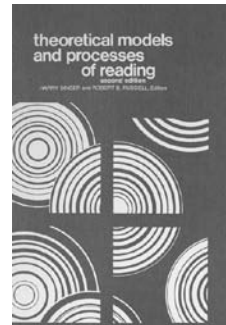
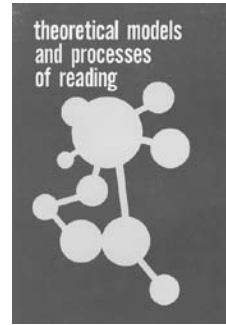
A Brief Background on *TMPR*

The first edition of *TMPR* emerged from a 1969 symposium presented at the 14th annual convention of the International Reading Association in Kansas City, Missouri. Robert Ruddell of the University of California, Berkeley, and Harry Singer of the University of California, Riverside, discussed the idea that a book might evolve from invited speakers' informative research presentations at the convention. The idea of honoring Professor Jack Holmes of the University of California, Berkeley, was at the center of the volume's creation. Holmes, who passed away in 1969, had been Singer's doctoral advisor and mentor and Ruddell's former senior colleague at Berkeley.

In 1970, the collection of papers, which were edited by Singer and Ruddell, became the first edition of *TMPR*. The first part contained six papers and reactions that came directly from the symposium and dealt with linguistic, perceptual, and cognitive components of the reading process. Contributors to that part included S. Jay Samuels, Joanna Williams, George Spache, Russell Stauffer, Roy Kress, and Albert Kingston. The second part of the first edition included nine selected articles that developed theoretical models of the reading process, including Jack Holmes's substrata-factor theory, Kenneth Goodman's psycholinguistic guessing game, Richard Venezky and Robert Calfee's reading competency model, and Eleanor Gibson's classic article on learning to read. Graduate students in reading programs throughout the United States were quick to use that first 348-page volume.

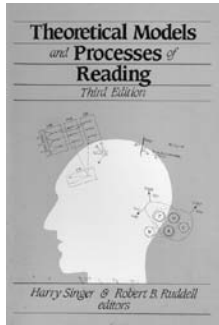
The second edition (1976) was approximately 75% new and doubled in length to 768 pages. Several new ideas grew from conversations between Singer and Ruddell as they planned the new edition. For example, the editors decided to include focusing questions at the beginning of each section as well as research articles that would illustrate various research traditions. The second edition was dedicated to researchers who had contributed to an understanding of the reading process. That 1976 edition had four sections:

- "Introduction," which highlighted pioneers in reading research and the nature of the reading process
- "Processes of Reading," which contained subsections on language, visual processing, perception, word recognition, cognition, affect, and cultural interaction
- "Models," which included pieces based on psycholinguistics (Ruddell and Goodman), information processing (including Gough and Anderson), developmental differences (Holmes and Singer), and affect (Mathewson)
- "Teaching and Research Issues," with pieces by Harry Singer, Richard Venezky and colleagues, George Miller, and Irene Athey, which focused

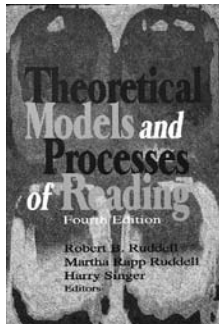


on teaching, modeling, text comprehension, and developmental processes, respectively

The third edition of *TMPR* was published in 1985, again edited by Singer and Ruddell, and dedicated to professors, researchers, and graduate students who formulate theories of reading and literacy, test hypotheses, and generate new knowledge in the field. With 70% new selections, the four main sections of this 976-page volume are “Historical Changes in Reading,” “Processes of Reading,” “Models of Reading,” and “Teaching and Research Issues.” Examination of the third edition’s content reveals the impact of theory and research from literacy’s allied disciplines, ranging from cognitive psychology with emphasis on schema theory and metacognition to sociolinguistics emphasizing greater concern for cultural and ethnic diversity in literacy learning. New to that volume, each part in the “Processes of Reading” section included at least one research exemplar article to complement each major theory piece.



Following a growing trend, the fourth edition, edited by Ruddell, Ruddell, and Singer, expanded to 1,296 pages, but like the previous editions, most of the content provided new frameworks and insights, with more than 80% of the selected articles having not appeared in any earlier volumes. Like earlier editions, this edition retained four themed sections: “Historical Changes in Reading: Researchers and Their Research,” “Processes of Reading and Literacy,” “Models of Reading and Literacy Processes,” and “New Paradigms: Theory, Research, and Curriculum.” The selections in these four sections made evident the explosion of knowledge in our field during the prior decade with new and revised theoretical perspectives, new paradigms, the use of multiple research stances, and new research findings.



The fifth edition, edited by Ruddell and Unrau, was by far the largest in the history of *TMPR*’s publication and reflected the aspirations of its editors to extend the coverage and depth of *TMPR*. It consisted of 56 chapters within 1,728 pages. Retaining the four main themes of the fourth edition, the fifth included a supplementary CD that contained several *TMPR* classics and more recent pieces that we could not include in that already expansive edition. During the book’s editing, we strove to assemble an expanded collection of classical and up-to-date chapters to inform readers about not only the history of research in reading but also the spectrum of challenges that educators were encountering and engaging in their research.

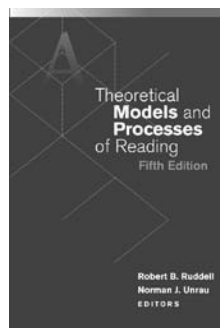
When beginning work on the fifth edition, we developed a set of questions that we used to generate feedback and suggestions from professors and instructors around the world who taught with *TMPR4* and earlier editions. Many of those suggestions were incorporated into *TMPR5*, such as coverage of second-

language learning, critical literacy, and delayed or struggling readers. Results from that survey also informed the design of the Questions for Reflection to encourage the integration of research, theory, and practice.

New to that fifth edition's first section were a conversation between Richard Allington and Anne McGill-Franzen, who identified key trends and influences in literacy instruction; an exploration by Patricia Alexander and Emily Fox of five eras of literacy research and practice over the past 50 years; and a chapter by Sheila Valencia and Karen Wixson that developed a base of understanding about policy, standards, assessment, and instruction that reflected educators' interests in the nationwide standards and accountability movement. New to the second section, which focused on reading and literacy processes, were chapters that brought greater emphasis to the roles of sociocognition and literacy development by an array of authors, including James Gee, Anne Haas Dyson, Robert Jiménez, Patton Tabors, and Catherine Snow. An entirely new Part 6 was added to the Section Two, "Instructional Effects on Literacy Development," and included work by Robert Ruddell, Rachel Brown and her colleagues, Judith Langer, and Jill Fitzgerald.

Section Three contained a dozen models representing a wide range of reading and writing theories. Many models were brought forward from earlier editions of *TMPR*, such as those by Jay Samuels, David Rumelhart, Marilyn Adams, and Louise Rosenblatt. Others were new additions, including the chapters by Marcel Just and Patricia Carpenter and by Walter Kintsch. Mark Sadoski and Allan Paivio's dual coding model was updated, as was the sociocognitive-processing model by Robert Ruddell and Norman Unrau, and a radically revised model for understanding cognition and affect in writing by John Hayes replaced an earlier cognitive process model of writing.

Section Four contained five new chapters with each focusing on a different segment of literacy's future horizon. A chapter by Deborah Dillon and her colleagues called for a move toward a more pragmatic stance with more concentration on pressing problems in literacy that were calling for solutions and that would promote growth in the field rather than preoccupation with narrow paradigm conflicts and political agendas. A chapter from the then newly published RAND Reading Study Group's report on strategies to develop a research program on reading comprehension was included, along with a chapter envisioning a theory of new literacies written by Donald Leu and his colleagues. With assessment on the minds of educators worldwide, Lorrie Shepard's chapter on the role that assessment plays in learning cultures was added because it provided a historical framework for assessment practices and urged educators to examine the purposes of assessment and its relation to learning outcomes. Concluding this section, Claude Goldenberg reviewed research on literacy learning for children from low-income families and presented implications for research and instruction designed to enhance their literacy development.



The scope of *TMPR5* was perhaps broader and more comprehensive than any of its earlier companion volumes. It identified a range of essential factors critical to our continued progress in helping individuals read more proficiently and in helping educators understand reading processes more deeply. The new edition of *TMPR* continues in the pursuit of that progress. As we move into the sixth edition of *TMPR*, it is interesting to note that the International Reading Association has recorded sales of over 54,000 volumes of the first five editions.

Selection Criteria and Content of the Sixth Edition

As has been the case with earlier editions of *TMPR*, the editors gathered an abundance of information from a wide range of sources and discussed at great length how this new edition should be structured and what content should fill that structure. We looked for new publications that reflect developments during the past decade and are likely to have significant and enduring effects on the literacy field. While shortening this new edition, we also strived to extend its reach into domains of research and instruction that affect practitioners, graduate students, literacy teacher educators, and researchers. We discovered new pieces that presented new findings and perspectives, and we commissioned several new chapters to address those areas in which we could not find appropriate scholarship.

Guidelines we used to help in the selection of chapter content included the following:

- The chapters for each of the four sections must demonstrate the finest scholarship in the field.
- Selection of pieces for Sections One (“Perspectives on Literacy Research and Its Application”) and Four (“Literacy’s New Horizons: An Emerging Agenda for Tomorrow’s Research and Practice”) must reflect a historical perspective that reveals key changes in the literacy field, be well conceptualized, and identify important emerging trends in research and practice.
- Selections for Sections Two (“Processes of Reading and Literacy”) and Three (“Models of Reading and Writing Processes”) must offer a balance between theoretical and research pieces, exemplify a well-reasoned rationale grounded in theory, demonstrate varied methodologies, and provide implications for future research and practice.
- Research pieces need to provide a clear theory-based rationale that is connected to a well-constructed research design, present well-formulated conclusions and implications that advance the literacy field, and be accessible to graduate students and professionals alike.

TMPR6, like its predecessors, seeks to represent earlier and current scholarship that is among the best in the field. It builds on the classics of earlier editions in two important ways. First, the sixth edition’s content is largely reflective of a user survey that showed what the literacy field deemed necessary to retain from earlier editions of *TMPR* as well as several perceived gaps that needed closing.

Looking to the field to inform their selection of content for this edition, the editors took into account the results of 640 completed surveys distributed and analyzed by the International Reading Association. Survey respondents included faculty and graduate students in literacy education departments across the United States. The editors also initiated small focus groups at several annual meetings of key literacy organizations to determine new topics that professionals in the field wished to see represented in the new edition. Finally, the editors used data compiled from the surveys and focus groups to assist them in making decisions about the content that would be included in the sixth edition. This decision-making process was aimed at negotiating a balance between their sense of new trends in the field and earlier classics that have retained relevancy well into the 21st century.

The titles of the four sections remain intact from earlier editions. Within each section, there is a rich blend of newly commissioned chapters, reprints of recently published articles, and updates to chapters that have been brought forward to preserve the historical value of *TMPR* over the past five decades.

In Section One, “Perspectives on Literacy Research and Its Application,” Patricia Alexander and Emily Fox have updated their earlier chapter on historical perspective in reading research and practice while simultaneously offering a rationale for where they see the field headed. A new chapter by Norman Unrau and Donna Alvermann traces the evolving contexts for models of reading and writing, especially in relation to what counts as a model in an ever widening field of theoretical stances. Just as theories have entered the field from disciplines such as psychology, sociology, and anthropology, so also have new methodologies for studying a broader array of reading and writing practices. Capturing this latter trend is a new chapter by Marla Mallette, Nell Duke, Stephanie Strachan, Chad Waldron, and Lynne Watanabe in which they explore the synergy that exists among several well-known research methodologies.

Section Two, “Processes of Reading and Literacy,” contains 13 new chapters (including commissioned pieces and reprints), plus updates for another three chapters (Melanie Kuhn and Steven Stahl; Louise Spear-Swerling; and Ann Brown, Annemarie Sullivan Palincsar, and Bonnie Armbruster) that were brought forward from earlier editions of *TMPR*. In a newly commissioned chapter, Anne Haas Dyson and Celia Genishi report on their research on social talk and imaginative play in the development of young children’s language and literacy. Another newly commissioned piece for the sixth edition is Shirley Brice Heath’s chapter that builds on her earlier work *Ways With Words*. Iliana Reyes and Patricia Azuara’s chapter on emergent biliteracy in young Mexican immigrant children is a reprint of their article by the same name. Another reprint, this one by Carol Lee, uses a Vygotskian lens to explore a group of underachieving urban adolescents’ growth in literacy and language. On a somewhat similar topic, Mei Kuin Lai, Stuart McNaughton, Meaola Amituanai-Toloa, Rolf Turner, and Selena Hsiao examine the sustained acceleration of students’ achievement in reading comprehension, but this time within a New Zealand context. Two reprints from a special issue of *Educational Researcher* on early literacy learners address the field’s

concern that more research is needed on young learners' literacy skill development (Christopher Lonigan and Timothy Shanahan) and dual-language learning (Kris Gutiérrez, Marlene Zepeda, and Dina Castro). In two updated chapters on fluency (Melanie Kuhn and Steven Stahl) and reading disabilities (Louise Spear-Swerling), the authors add insights and practices that have appeared in the literature since their earlier reviews of the literature.

Part 3 of Section Two contains a reprint from Katherine Nelson's work on communities of mind as well as a reprint of Mary McVee, KaiLonnie Dunsmore, and James Gavelek's effort to align key concepts of schema theory with sociocultural theory. This part concludes with a newly commissioned chapter by George Hruby and Usha Goswami on the implications of educational neuroscience for reading researchers. Although one might argue that the processes associated with motivation and engagement in Part 4 could be integrated into earlier parts of Section Two, we chose to highlight the importance of these processes by adding two new chapters that extend the work of the National Reading Research Center. Both are reprints, with the first of the two (Ana Taboada, Stephen Tonks, Allan Wigfield, and John Guthrie) providing evidence that a reader's desire to comprehend a printed text stimulates metacognitive processing, background knowledge activation, and the use of relevant cognitive-based strategies. The second reprint, a chapter by Alfred Tatum, focuses on the role of enabling texts—that is, texts which engage youths in certain sociocultural, political, spiritual, and economic issues that they find relevant to their lives. Part 5, which concludes Section Two, addresses the requests of several focus group members who asked for theoretically grounded research on students' literacy development in instructional contexts. In a newly commissioned chapter (Mary Anne Doyle), the author explores the theoretical basis for Marie Clay's Reading Recovery approach to early literacy intervention. Finally, a postscript by Annemarie Sullivan Palincsar to her coauthored chapter with Ann Brown and Bonnie Armbruster addresses the adaptations that have been made to reciprocal teaching since its inception.

Section Three, "Models of Reading and Writing Processes," contains a wide range of models that represent markedly different reading and writing theories. A number of these are retained from earlier editions of *TMPR* and are derived from cognitive-processing theories; others draw from transactional, sociocultural, and sociocognitive theories. Of the six chapters in Part 1 of Section Three on cognitive-processing models, one is an update by Walter Kintsch on his construction–integration model of text comprehension. His influence on Brenda Hannon's model of reading comprehension performance in proficient adult readers is evident in a new reprint that concludes the part. In Part 2 of this section, Mark Sadoski and Allan Paivio update their dual coding theory of reading, and in Part 3, we have retained Louise Rosenblatt's chapter on the transactional theory of reading and writing. Part 4 on integrating reading and writing models contains two new chapters: one is a reprint of Giovanni Parodi's article on reading–writing connections in discourse-oriented research, and the other is a commissioned piece by Mira-Lisa Katz, Nancy Brynson, and John Edlund that

focuses on the reading and writing of expository text—a curriculum that guides students' ability to enact rhetorical literacies and also promotes college access and success. In Part 5, Robert Ruddell and Norman Unrau integrate two of their chapters from earlier editions of *TMPR* to show how the classroom teacher figures prominently into their sociocognitive model of reading as a meaning-construction process involving reader, text, and teacher.

Section Four, “Literacy’s New Horizons: An Emerging Agenda for Tomorrow’s Research and Practice,” contains four new chapters, two chapter updates, and one reprint. A new chapter by Donna Alvermann and Elizabeth Birr Moje deconstructs the discourse of “every teacher a teacher of reading” to point out the need for a model of adolescent literacy instruction that takes into account the complexities of 21st-century teaching and learning in subject matter classrooms. An updated chapter from an earlier edition of *TMPR* by Deborah Dillon, David O’Brien, and Elizabeth Heilman reexamines how literacy scholars’ preoccupation with paradigmatic debates resulted in fewer practical advances in the field of literacy education than might have been the case had pragmatism been adopted as a viable alternative. In a reprint of an article focused on the National Early Literacy Panel’s recommendations for teaching young children how to read, David Pearson and Elfrieda Hiebert critique what they describe as a “basic-skills conspiracy of good intentions” (p. 1145). In an updated chapter on information technologies and the changing nature of literacy, Donald Leu, Charles Kinzer, Julie Coiro, Jill Castek, and Laurie Henry reinforce their earlier work in *TMPR5* that literacy today is deictic, multiple, multimodal, and multifaceted. In a newly commissioned chapter, Jennifer Rowsell, Gunther Kress, Kate Pahl, and Brian Street offer for the first time an integrated perspective on new literacies and a social semiotic approach to multimodality. In the remaining two commissioned chapters, the authors suggest an agenda for future research. For example, Glynda Hull, Amy Stornaiuolo, and Laura Sterponi provide a new taxonomy of textual strategies—one that specifically invites participation in online communication through designfulness, overture, reciprocity, and resonance. Finally, Robert Rueda takes into account the new and multiple literacies needed in an interconnected global economy in which information-driven work environments depend on an individual’s ability to adapt quickly and creatively while simultaneously attending to factors that influence a reader’s motivation to read and write.

Acknowledgments

As we conclude our work on the sixth edition, we would like to recognize and express our appreciation to a number of people who have helped us complete this multiyear project. We first want to thank a very long list of literacy researchers and theory builders who have contributed to this edition. Second, we want to express our appreciation to the many professors, graduate students, and literacy specialists who responded to our survey, participated in focus groups, and provided us with feedback that helped us shape this volume’s content. They enabled us to see the past and the future more clearly. Third, we must acknowledge the extensive

and impressive help we received from our graduate research assistants who enabled us to include graduate student perspectives throughout the process of creating this edition. Our gratitude goes to Gurupreet Kahlsa, a doctoral student at the University of Southern Alabama, who worked closely with Norman Unrau, and to Andrew Huddleston and Jairus Joaquin, both of whom were graduate students at The University of Georgia and worked closely with Donna Alvermann. Their thoughtful input will be long remembered.

We also wish to thank our families for their care and encouragement during this four-year endeavor: To Jack and Jazz, who excel in the world of humans and golden retrievers when it comes to patience and loyalty in dealing with Donna's projects. To Norm's wife, Cherene, to her listening ear, and to her understanding as we moved step by step through the creation of this work go boundless appreciation. To Bob's wife, Sandra, who has provided her support, understanding, and love throughout the completion of this important research volume, go special thoughts, gratitude, and respect.

Our appreciation also goes out to many individuals at IRA headquarters, past and present. When we began this endeavor, Anne Fullerton helped us take many of the critical first steps involved in creating this book, including facilitation with surveys and focus groups, setting up early meetings at conventions, and creating a road map to this project's completion. We were then fortunate to work with Shannon Fortner, who directed IRA's collaboration on the project seamlessly, answered our stream of questions in a timely and fully comprehensible manner, and exercised her editorial skills as the book moved toward production. We also valued the contributions of the Publications Division and many of its individual members, including Susanne Viscarra, Tori Bachman, Christina Lambert, and Cindy Held.

Finally, we want to thank the International Reading Association's Board of Directors and other IRA personnel for their support, which enabled the production of this sixth edition of *Theoretical Models and Processes of Reading*.

Donna E. Alvermann
Norman J. Unrau
Robert B. Ruddell

REFERENCE

Huey, E.B. (1968). *The psychology and pedagogy of reading*. Cambridge, MA: MIT Press. (Original work published 1908)