Reading Process

Brief Edition of Reading Process and Practice

THIRD EDITION

Constance Weaver

Miami University
Oxford, Ohio

HEINEMANN
Portsmouth, NH
Contents

Preface xi

Introduction xiii
Introducing the National Reading Panel Report xiv
The Failure of the Reading First Initiative xvi
Reading as a Sociopsycholinguistic Process xviii
Teaching Phonics and Phonemic Awareness xix
Problems with Phonemic Awareness, Phonics, and Fluency in Reading First xxi

Dissecting DIBELS / The Unwarranted Demand for Fluency in DIBELS /
Reading as a Cognitive, Constructive, and “Chaotic” Process

1 Definitions of Reading: They Make a Difference 1
The Importance of a Definition 1
Characterizing Reading and Reading Instruction 4

Activity 1 / Activity 2 / Activity 3

For Further Exploration 10

2 Schemas and Transactions in the Reading Process 14
Comprehending and Learning to Read 14
The Meaning of Words and Sentences: A First Look 15
Schemas: What Are They? 17
Schemas in Reading 19
Schemas and Transactions 21
Pragmatics: Situational, Social, and Cultural Factors in Reading 24
Content

Transactions Within the Language of the Text: Grammatical Signals  27
Surface Versus Deep Structure  29
Contrasting Models of Reading and Learning to Read  32
  Comprehending Language in Reading / A Skills View of Reading and Learning to Read / A Transactional, Sociopsycholinguistic View of Reading and Learning to Read
For Further Exploration  38

Contexts and Strategies in the Reading Process  41
The Varieties of Context: An Overview  41
Context Beyond the Sentence and the Text  44
  Using Context to Determine Meaning and Acquire Vocabulary / Using Context to Identify Words
Context Within the Sentence  49
Language Cues and Reading Strategies  52
Context in Reading: Review and Preview  54
For Further Exploration  57

What Miscues Tell Us About Reading and Readers: Reciprocal Insights  61
Reading Proficiency and the Use of Context  62
  Miscues on Basic Sight Words / Constructing Meaning and Reconstructing Text / Good Versus Less Proficient Readers’ Use of Context
Why Not Word Identification?  71
  Words as Symbols / Constructing Meaning Without All the Words / Constructing Meaning and Forgetting the Words
Implications for Understanding Dialect Miscues  74
Revaluing Readers  77
Review and Beyond  80
For Further Exploration  81

Word Perception in the Reading Process  88
The Eyes and the Brain  89
Parts of Words at Work  91
  Activity 1 / Activity 2 / Activity 3 / Parts of Words in Review
How We Perceive Words 94

Activity 1 / Activity 2 / Syllables: A Perceptually Salient Unit

More on Reading by Analogy 99

The Role of Phonics Rules in the Reading Process 101

Word Parts and Word Perception in Review 104

Eye Movement and Eye Fixation Studies and the Perception of Words 105

Popular Claims by Oft-Cited Researchers / Eye Fixation Research

Proficient Reading: “Flow” Rather than “Fluency” 110

Toward a More Complete Model of the Reading Process 111

For Further Exploration 116

6 Understanding What Miscues Can Tell Us About Readers’ Strategies 120

What We Can Learn by Analyzing Miscues 121

Miscue Markings 122

Substitution / Insertion / Omission / Partial / Reversal / Correction /
Unsuccessful Attempt at Correction / Abandoning a Correct Response /
Repetition / Pause / Sounding Out / Mumble

Miscues That Reflect Good Strategies 125

Miscues That Reflect Good Prediction / Miscues Involving Pronouns and
Function Words / Miscues That Reflect Readers’ Language Patterns /
Immature Speech Pattern / Ethnic, Social, or Regional Dialect /
ESL-Related and EFL-Related Miscues / Miscues That Result from
Monitoring Comprehension / Restructurings / Regressions to Correct /
Repetitions and Pauses

Miscues That Suggest Inefficient Reading 133

Overcorrection of Miscues

Miscues That Suggest Ineffective Reading 135

The Use of Graphic Cues in Relation to Other Cues 136

Effective Use of Graphic Cues Along with Other Cues / Underuse of Graphic Cues /
Overuse of Graphic Cues and Underuse of Other Cues

Related but Different Approaches to Miscue Analysis 138

Miscue Analysis in the Goodman Tradition / Crucial Differences Between Miscue
Analysis and Running Records

For Further Exploration 144
Analyzing Miscues and Looking for Patterns 155

Miscues and the Use of Context 156

Marking and Coding Miscues on the Selection Copy 161

Coding the Miscues

Analyzing, Coding, and Interpreting the Data from Tony’s Miscues 163

Analyzing and Coding Tony’s Miscues / Interpretation of Tony’s Miscue Patterns / Another Way of Coding Tony’s Miscues

Marking Miscues for Coding 168

How to Mark Miscues on the Selection Copy

General Principles and Procedures for Coding Miscues 170

Question 1: Did the miscue reflect the speaker’s ordinary speech patterns? / Question 2: Did the miscue go with the grammar and meaning of what came before? / Question 3: Did the miscue go with the grammar and meaning of what followed? / Question 4: Did the miscue leave the essential meaning of the sentence intact? / Question 5: Was the miscue corrected? / Question 6: Was the miscue graphically similar? / Question 7: Was the sentence, as the reader finally left it, semantically acceptable within the whole original selection that was read?

Alternative Miscue Analysis Procedures and Forms 175

Analyzing Jay’s Miscues 179

Interpretation of Jay’s Miscue Patterns

For Further Exploration 183

Developing a Reader Profile: From Assessment to Instruction 184

The Reading Interview and the First Session 185

The Reading Interview / Preparing for and Conducting the First Session / Recording the Data from the Interview

Preparing for and Conducting the Second Session 191

Preparing for the Reading / Preparing for the Retelling and Extended Discussion / Preparing to Ask Questions About a Story / Conducting the Oral Reading and Retelling/Discussion / Recording the Retelling Data / Recording the Miscues on the Selection Copy / Coding the Miscues and Analyzing Patterns

Developing a Reader Profile: Tangling with the Messiness of Reality 200

The Reading Interview / The Retelling and Discussion / Miscues, Miscue Patterns, and Reading Strategies / An Instructional Plan
Additional Forms for Recording Data  208
Other Aspects of a Reading Portfolio and Profile  211
For Further Exploration  211

9 Revaluing Readers, Retrospective Miscue Analysis, and Other Strategies for Helping Readers  212
Phonics, Words, and Reading  213
Efficient Reading and Fluency  214
Revaluing Readers  215
Erica: From Analysis to Assistance  216
Analyzing Erica’s Miscues / Helping Erica Revalue Herself as a Reader
Retrospective Miscue Analysis  221
Teachers Choosing the Miscues for Discussion / Readers Selecting Their Own Miscues for Discussion / Retrospective Miscue Analysis with Pairs or Groups
The “Think-Aloud” Strategy  226
Helping Readers Develop Needed Concepts, Vocabulary, and Strategies  227
Extra Help Through Shared Reading and Constructive Reading Strategies  228
For Further Exploration  230
Appendix to Chapter 9: Matching Instruction to Readers’ Varied Needs  231

Notes  239
References  243
Index  271

Website at www.heinemann.com
Preface

There are several reasons for this brief edition of my 2003 Reading Process and Practice, which was well-received in the profession. Practically speaking, the aim is to reduce the length and thereby the cost. But there are other reasons as well:

- To offer with an updated copyright the third edition chapters that explore the nature of the reading process; demonstrate how readers’ strategies can be assessed through a reading interview, miscue analysis, and retelling; indicate how not-so-proficient readers often differ from proficient readers in their reading strategies; consider the need to revalue many readers; and suggest ways of helping struggling readers whose miscues and retelling suggest differing patterns of needs.

- To offer a succinct and up-to-date discussion of the federal government’s Reading First initiative launched in the early 2000s; the National Reading Panel (NRP) report that the government claims is the research basis for the initiative; the widespread use of DIBELS (Dynamic Indicators of Basic Early Literacy Skills) for assessing readers and shaping instruction; and the results after three years of implementing Reading First.

- To provide an edition limited to what might be addressed in a single university class on reading, or reading and reading assessment.

The new Introduction offers—at its beginning, middle, and end—a characterization of reading as a sociopsycholinguistic process and includes references to recent research on the reading process. However, the Introduction focuses particularly on the NRP report, its inadequate operational definition of reading, and some of its results; on DIBELS, its narrowing of even the NRP’s definition and instructional emphases, and its harmful consequences; and on the government’s Reading First initiative, its lack of support from the NRP report, which it claims as its research foundation, and the failure to achieve its goal of improving students “reading achievement” (scores on standardized tests). The information in this Introduction is crucial for teachers in grades K–3, or K–6 if DIBELS is used in the intermediate grades. However, those who have never before studied the reading process may find the Introduction more appropriate after they have read Chapters 1–6.

As the more accessible books on reading as a psycholinguistic and sociolinguistic process become less well known due to the passage of time, it is also important for the profession to have such information as that in Chapters 1–6 reintroduced and newly available for teacher educators, language arts consultants, and especially teachers and teachers-to-be. The subsequent chapters on assessing reading and revaluing and assisting readers are a natural extension of the chapters on the reading process. An appendix to Chapter 9 offers a guide, “Matching Instruction to Readers’ Varied Needs,” originally published in the longer text’s Chapter 10. One particular feature that continues with this shorter edition is the Web page that includes three case studies dealing with students having different patterns and needs, at different instructional needs: first grade, fourth grade, and junior high (www.heinemann.com/weaver). For these, I am particularly indebted to Lisa Schade Eckert. The Web page also includes reproducible forms for miscue analysis.
I am indebted to all those who contributed to the original 2003 *Reading Process and Practice*, especially Lois Bridges, then my editor as well as friend, whose support knew no bounds. For this brief edition, I especially thank my current editor Lisa Luedeke, likewise a friend and trusted guide, and the rest of the Heinemann team. And most of all, I again thank Rolland Batdorff, who continues to be the wind beneath my wings.

Connie Weaver
June 2009
INTRODUCTION

Contrasting Perspectives on Reading and What Good Readers Do

What is reading, anyway? What is the essence of the reading process itself?

The chapters in this book are designed to help you develop your own research-based definition of reading, but here is one of my attempts to characterize the essentials of the process of reading—the basics, if you will, even though we know no two readers read exactly the same, nor does a single reader, even on different occasions, even with the same text:

Reading is a process very much determined by what the reader's brain and emotions and beliefs bring to the reading: the knowledge/information (or misinformation, absence of information), strategies for processing text, moods, fears and joys—all of it.

The strategies one uses vary according to one's purpose, including whether one is reading for oneself only (still the purposes vary) or for somebody else, such as reading to answer comprehension questions, reading to perform for listeners (including the teacher and classmates), and much more. Of course these social factors may generate confidence, fear, anger, defiance, and/or other emotions—it just depends.

In sum, reading is both a psycholinguistic process (involving the mind actively processing the text) and a sociolinguistic one (with multiple social factors that can affect how one reads, how much one gleans from the reading, and more). Even word identification itself can be affected by these factors, because reading is as much or more a brain-to-text process as a text-to-brain process.

This characterization of the reading process is developed throughout this book, not only with references to research but through examples and do-it-yourself activities. Research into the nature of readers' miscues and eye movement research—often combined now as Eye Movement and Miscue Analysis—provide crucial evidence for this view.

What is a “miscue”?

As applied to reading, a miscue is whatever the reader says aloud, or thinks silently, instead of what is written linearly on the page. It is an observed response that differs from the expected response cued by the text. Miscues are “windows on the reading process” (Goodman, 1973).

Since the mid-sixties when Kenneth Goodman first drew upon readers' miscues in formulating a theory of the reading process (1965, 1967, and later references), an analysis of readers' miscues has proved so fruitful that it has formed the basis for over a hundred research studies.

This introduction puts into context and critiques the federal government's implicit definition of reading from the early 2000s, as embodied in the Reading First legislation [part of No Child Left Behind]; the alleged research base as described in the National Reading Panel (NRP) report; and its subsequently narrowed manifestation in a set of assessment measures, DIBELS (Dynamic Indicators of Basic Early Literacy Skills), being used to assess children and to shape—and severely limit—reading instruction across the nation. Within this critique and contrasting with it is a brief section, with contrasting models, on reading as a psycholinguistic and sociolinguistic process—brief because that is the focus of the entire book.
Whether you read this introduction first or after reading the chapters of the book—which could enhance your understanding of the evidence and arguments here—this critique of Reading First and discussion of its unintended and unfortunate consequences, along with its disappointing results, can serve as an introduction to what’s been occurring in our nation’s schools. While citing the government-sponsored research report on Reading First’s ultimate lack of success, this introduction also offers research-based explanations for its failure.

INTRODUCING THE NATIONAL READING PANEL REPORT

Of course there are varying answers to the question “What is reading?” But one sanctioned by the federal government is the definition inherent in the research review undertaken by the government-commissioned NRP (2000b). By deciding to investigate separately the effects of teaching five separate skills, the panel operationally defined reading as mastering a set of skills: phonemic awareness, phonics, fluency, vocabulary, and comprehension. The panel did not investigate the effects of whole programs, comparing one approach with others in real classrooms. Nor did the panel even investigate research on differing views of what is involved in the reading process or the research on emergent literacy—the processes of learning to read and write (Braunger & Lewis [2006] is a useful starting point).

Phonics and Phonemic Awareness: Brief Definitions

What is phonics, anyway, and what is phonemic awareness? Phonics can be defined as relationships between letters and sounds, whether simple letter-sound correspondences or letter-sound patterns involving more than one letter and more than one sound, like the str- pattern and the -ing pattern in string, and the sounds they represent.

Basically, phonemic awareness means awareness of the separable sounds in words, such as the three sounds (phonemes) in pet: /p-e-t/. In car, there are also three phonemes—that is, three separable sounds though most of us normally hear only two sounds, the /k/ sound and /ar/ together as a unit. The word string has five separable sounds, not six: /s-t-r-i-ŋ/. In current research, the term phonemic awareness is often used to mean not just awareness of the separable sounds in a word but the ability to manipulate the sounds. An example is being able to hear the word pet spoken by an experimenter, mentally remove the first sound, and say "-et" in response.

Nevertheless, the NRP report became the basis for the federal government’s Reading First initiative, enshrined in the No Child Left Behind Act of 2001. It was official. Reading First operationally defined reading as using a set of separate skills to process text and promoted the concept that reading instruction should consist of teaching those skills separately. Chapter 2 here (pp. 33–36) discusses the skills model of reading, representing it visually in Figure 2.5 (p. 34). Somewhat similar to this, the skills model of reading instruction demanded by Reading First might be visualized as shown in Figure I.1.

![Diagram of reading instruction model](image-url)
In practice, much more attention is typically given to instruction in phonemic awareness and phonics and the development of fluency (rapid reading of the exact words on the page) than to vocabulary development or the use of strategies for comprehension. This is suggested in Figure Intro. 1 with shorter lines representing later-starting instruction in vocabulary and comprehension. Though the NRP did not officially define reading, the panel’s operational definition could fairly be represented as using a series of skills from part-to-whole, as seen in Figure I. 2.

Many of the researchers on the NRP hold such a concept of reading itself; indeed, they were handpicked by a government representative precisely because they subscribed to the view that reading occurs from part to whole and linearly, from left to right and down the page in English. (However, there was a dissenting voice—see the minority report by Joanne Yatvin [2000]; and see also Yatvin [2002].)

The NRP’s Operational Definition of Reading

At the beginning of the NRP report, the panelists admitted that “reading was defined to include behaviors such as the following: reading real words in isolation or in context, reading pseudowords that can be pronounced but have no meaning, reading text aloud or silently, and comprehending text that is read silently or orally” (NRP, 2000c, p. 5).

Not only did the NRP researchers investigate just separate reading skills, but they limited their investigation to just empirical research that had a limited research design with a control group and an “experimental” group, usually pitting traditional instruction in this-or-that separate skill with some different, more concentrated and intensive instruction, over a short period of time. Then the Reading First legislation claimed that such research was the only kind that the government would consider “scientific,” ignoring the many other kinds of empirical (on site, data-based) research, including experimental research comparing whole approaches—because even though it’s experimental, it’s too complex. Never mind that such research typically includes quantitative (numerical) data as well as qualitative (observation, interviews, reading samples, etc.). No, the federal government would only consider the more limited experimental research on teaching reading skills separately.

If that were what necessarily produces the best readers, perhaps few would object—but it isn’t (see, for example, Reconsidering a Balanced Approach to Reading [Weaver, 1998c]). This empirical and experimental research suggests that “whole language” classrooms are especially good environments for children to develop whole literacy—reading, writing, and visual literacy, too. Of course, this small body of research is not definitive, either, but it suggests the importance of further empirical research on reading and literacy instruction comparing total classroom approaches and environments.

It’s relevant to consider the inadequacy of the NRP research base to justify the still narrower government-anointed skills approach to reading in the first place, as embodied in DIBELS.
The Reading First initiative was flawed from the beginning, as its approach to reading instruction did not even honestly reflect the limited skills research examined by the NRP. Its report provides flimsy evidence at best for the teaching of these five skills in isolation, and nonevidence at worst.

Here, from Yatvin, Weaver, and Garan (2003) are some crucial points about the NRP data and the teaching of phonemic awareness and phonics:

- "The National Reading Panel did not find that phonemic awareness and/or phonics must be taught first, before children begin to read and write. There is, in fact, no evidence—in the NRP report or elsewhere—that children must develop phonemic awareness or phonics [knowledge] before they begin to read print" (p. 29; italics in original).
- "The NRP did not find that phonemic awareness and/or phonics should be taught in isolation (p. 30). It found that phonemic awareness was best taught along with phonics, not prior to it" (NRP, 2000b, pp. 2–6; see also NRP 2000c, p. 8).
- "The NRP did not find that the benefits for teaching phonemic awareness and phonics are lasting…. With regard to teaching phonics systematically, the slight advantage for scores on comprehension disappeared after first grade, when the comprehension passages on standardized tests became longer than one sentence" (Yatvin, Weaver, & Garan, p. 30).
- "The NRP did not find evidence to conclude that teaching phonics in isolation is better than teaching it systematically in context" (Yatvin, Weaver, & Garan, pp. 29–30).

Indeed, the detailed NRP report’s section on phonics notes (NRP, 2000b, pp. 2–128): “It is important to emphasize that systematic phonics instruction should be integrated with other reading instruction to create a balanced reading program.”

Yet the alleged “summary” of the actual report makes inaccurate claims about the report’s conclusions. And a Department of Education–sponsored booklet, Put Reading First (2002), falsely claims that children must become aware of how the sounds in words work before they learn to read print.

This claim from the widely disseminated Put Reading First is absolutely not true. The NRP report does not support such a claim, and neither does any other research. With help, children can, for example, learn familiar and repetitive phrases and texts, start to read more and more of the individual words, and start learning major letter-sound correlations from some of the words. Guidance is essential, but direct teaching of separate skills is not.

Now for the zinger: the results of the final report for the Reading First Impact Study, an investigation undertaken for the government in compliance with the evaluation requirement for Reading First. Clearly, children can learn to read when exposed to such a program, and we do know that students in poorer districts and schools who had very little reading instruction before Reading First did benefit from the greater instructional time. Still, the results overall showed no advantage for those taught reading skills as separate strands. Here are key results from the Executive summary of the final Impact Study (National Center for Education Evaluation and Regional Assistance, 2009). Using for the primary assessment (grades 1 through 3) the Reading Comprehension subtest of the Stanford Achievement Test–10, these researchers also administered to grade 1 a test of decoding (which typically means using knowledge of letter-sound patterns to sound out or otherwise identify words).
Reading First produced positive and statistically significant impacts on

- “amount of instructional time spent on the five essential components of reading instruction promoted by the program (phonemic awareness, phonics, vocabulary, fluency, and comprehension) in grades one and two;”
- “multiple practices that are promoted by the program,” including professional development in the government approach to reading instruction, “support from full-time reading coaches, amount of reading instruction, and supports available for struggling readers;”
- decoding among first-grade students in one school year;

BUT—“There was no consistent pattern of effects over time in the impact estimates for reading instruction in grade one or in reading comprehension in any grade.”

So even with more instructional time teaching those five skills, even with teacher training and support from literacy coaches, even with additional supports available for struggling readers, the program did not succeed in increasing students’ ability to comprehend.

Since the major aim of Reading First was to improve students’ “reading achievement” (read this as “scores on standardized tests”), this is a massive failure, after a total of $6 billion dollars of tax money was spent to fund it between its launch and 2008. Furthermore, there have been flagrant and atrocious conflicts of interest and corruption in deciding who would determine what commercial programs could be used and what Reading First proposals had to commit to, in order to be accepted—and more (Office of Inspector General—United States Department of Education, 2006, 2007; also see Manzo 2005a & 2005b).

Of course those who understood reading as more complex than processing from part to whole did not anticipate that the government’s limited program would show improvement in comprehension other than on standardized tests at grade 1. The NRP report itself did not give reason to expect that, either.

Surely it is time to refocus on the nature of the reading process and the processes of learning to read, as the solid and most crucial basis for making instructional decisions.
**Reading as a Sociopsycholinguistic Process**

The reading process is definitely not one of applying skills like those of the Reading First initiative separately and sequentially. It is a process of orchestrating various skills into effective strategies for processing text: strategies like predicting (thinking ahead) and confirming or correcting. It is not a strictly linear process, either, even when a reader reads a text out loud linearly, one word and one sentence after another, word perfectly. No, it is a nonlinear process, as eye fixations amply demonstrate (Chapter 5), and—when effective—it is strategy-driven, yet in fine detail unpredictable from moment to moment, for any reader reading any text at any given time.

For convenience, Figure I. 3 shows a visual model of reading as a psycholinguistic and sociolinguistic process. This model makes reference to the influence of the various social and situational contexts that may influence one’s reading of a text; one’s purposes for reading at any given time; as well as one’s prior knowledge, beliefs, and emotions that are brought to the

---

**Figure I. 3** Reading as a sociopsycholinguistic process
reading event. It indicates that reading is a strategy-driven process, with skills orchestrated together strategically in the drive to construct meaning from text. And it hints at the notion that reading is an event, a process of comprehending that necessarily precedes comprehension (recall and all that). In such a transactional view of the process:

- reading and comprehending are clearly not the result of reading linearly
- the text is not in total control

The whole is more than the mere sum of individual parts. This view of reading is particularly supported by miscue analysis, which yields insights into the reading process through oral reading, and eye movement research, which yields insights from silent as well as oral reading. In actual practice, both procedures typically involve an interview with the reader, a follow-up retelling session, and an analysis of the reader’s miscues. All of this data offers powerful evidence of how a reader goes about reading and what patterns tend to characterize effective and ineffective readers.

It is beyond the scope of this shorter version of *Reading Process and Practice* to emphasize ways of fostering reading and literacy that are a natural outgrowth of such an understanding of reading. However, the following section and Figure I. 4, taken from the 2003 edition, suggest how phonemic awareness and phonics are typically taught in a comprehensive literacy approach.

**TEACHING PHONICS AND PHONEMIC AWARENESS**

How are phonics and phonemic awareness taught in comprehensive literacy classrooms? Phonics skills are not taught first. Figure I. 4 suggests a common progression from whole texts to words and word parts, with phonics and phonemic awareness taught in the course of reading and writing interesting texts. During a shared reading experience, for example, phonics and phonemic awareness are taught when the teacher and children have read and reread a familiar predictable text together, until the children have virtually memorized it.

---

![Diagram](image)

**Figure I. 4** Phonemic awareness and phonics in a comprehensive literacy approach (modified from *Reading Process and Practice* [2003], p. 343; some other activities might be included)
First, however, the teacher will have guided the children in using and understanding such reading strategies as drawing inferences and predicting from the title and cover and from the pictures throughout the text. Thus, strategies are taught or reinforced before skills. If needed, the teacher will already have focused on certain concepts of print with that text, so the children will easily read from left to right and return down left. The teacher is also likely to have called the children’s attention to particular words in the text—eventually, perhaps, by inviting individual children to use a pointer to show where a particular word is located in the text, or to frame the word with two fingers or two narrow sticky notes. Perhaps the predictable text rhymes, and after the first readings of the text, the teacher has covered up the second word of the rhyming pairs with sticky notes, inviting the children to predict the rhyme words. In short, the teacher and children will read and work with a text over several days, and—with emergent readers—might then attend to phonics.

**Why Teach Just Phonemic Awareness and Phonics, When We Can Teach All of the Following Together?**

- Reading for meaning
- Strategies for understanding and reading texts
- Recognition of some interesting words and some high-utility words
- Phonics: letter-sound patterns, onsets and rimes
- Decoding new print words by using context and the parts of known words (such as onsets and rimes)
- Phonemic awareness

For an extended example, See Chapter 14 of *Reading Process and Practice* online at www.heinemann.com

This model is meant to suggest that

- Phonemic awareness is not taught separately from phonics, and phonics patterns are mostly extracted from the words of the simple texts that children are reading and writing—with scaffolding and other guidance, of course. Such patterns consist mostly of initial consonants and blends, and final “rimes”—the rhyming part of rhyming words, rather than single or double vowel letters by themselves. Word lists with the same phonic element might be constructed by starting with a word in the text. In general, though, phonics patterns begin with the text and are related back to the text.

- The simple texts include those with patterned language, such as songs, poems, and some stories, but also include other natural-sounding texts, including ones the children have composed together, with the teacher writing them down.

Fluency is understood to be a product of learning to read, yet even the most proficient readers are not necessarily or always fluent, as studies of readers’ miscues and eye movements make crystal clear. During silent reading especially, proficient readers—those who are both effective and efficient at constructing meaning—pause to think and connect ideas to what they already know or believe, reread to correct meaning-disruptive miscues or to clarify, and engage in other nonfluent behaviors. Some proficient readers can read aloud word perfectly, or nearly so, but often they do not then comprehend what they’re reading; they are just performing for others.

Drawing upon eye movement studies, Flurkey (2006, 2008) describes proficient reading as “flow” rather than “fluency.” Proficient readers’ attention to this or that during reading ebb and flows in the drive to construct meaning.
Throughout this book, you will find reasons to question the wisdom of a heavy emphasis on phonics, or letter-sound relationships, in reading instruction. A phonics approach to reading, or intensive phonics taught in isolation and prior to reading simple texts, does not honor the complexity of the human mind—yes, even the young child’s mind—or the complexity of the reading process. Strauss, Goodman, and Paulson (2009), for example, discuss an emerging perspective in neuroscience that both parallels and supports a more complex view of the reading process, with the brain directing the eyes where to look rather than being simply the recipient of sensory input from a text.

That understanding is by no means universal, though, and meanwhile the inability to do phonemic awareness tasks well and difficulty with phonics tasks have become gatekeepers, holding students back from learning to read. “Fluency first” has also become a gatekeeper, for students may be held back from reading interesting texts until they can become fluent—that is, read with accuracy and speed short texts having simple words but commonly a stilted, unnatural flow and little or no predictability.

What follows is a discussion first of DIBELS, a set of procedures that some states were coerced into including among their assessment measures as a requirement for having their Reading First proposals approved. This is followed by more on the inappropriateness of demanding that readers become fluent before they are considered competent, much less proficient.

Dissecting DIBELS

What is DIBELS? An educational disaster. Middle-of-the-road reading researcher David Pearson writes, “DIBELS is the worst thing to happen to the teaching of reading since the development of flash cards” (2006, back cover). What is it literally? The acronym stands for the Dynamic Indicators of Basic Early Literacy Skills, a set of procedures and measures for assessing the acquisition of early literacy skills from kindergarten through sixth grade. They are designed to be short (one minute) fluency measures used to regularly monitor the development of early literacy and early reading skills (https://dibels.uoregon.edu/dibelsinfo.php). The DIBELS tests themselves can be downloaded from https://dibels.uoregon.edu/measures.

DIBELS totally misrepresents the basic purpose of reading, to comprehend; what readers need to do when reading, in order to comprehend; and what emergent readers need to do in learning to read for meaning. And yet the DIBELS website indicates that it is currently processing “reading” scores for large numbers of children.

Because these one-minute tests are required as measures of reading for children in some or all of the early grades in DIBELS schools, reading is operationally defined as scores on one-minute tests of speed and accuracy in

- initial sounds fluency (kindergarten only)
- phoneme segmentation fluency, nonsense word fluency, and oral reading fluency (grade 1)
- oral reading fluency (grades 2 and 3; now also available for grades 4–6)

There is an “ORF Retell Fluency” measure that accompanies the oral reading fluency, and a recommended “word use fluency.” The scoring of these tasks trivializes both tasks.

The underlying assumptions, from a DIBELS-related website labeled “Accuracy and Fluency” (http://reading.uoregon.edu/flu/flu_what.php), led Flurkey (2006) to explain succinctly that “Rapid, automatic, accurate word recognition is thought to be a necessary skill so that readers can then use their attention to comprehend” (p. 42). But the researchers that DIBELS draws upon are, quite simply, incorrect—as this book shows—in thinking that accuracy and speed must come before readers should even try to comprehend texts. In fact, neither complete accuracy nor speed...
are necessary for comprehending, as Flurkey demonstrates, and as his (and others’) research amply demonstrates—see the large body of miscue studies and the growing body of eye movement research.

But if DIBELS is such a disaster, why is that? To repeat: It operationally and unproductively defines reading as scores on one-minute tests of speed and accuracy. Indeed, speed is valued over accuracy, for these young children just learning to read.

Pearson (2006) makes a crucial point: in statistical “psychometric” research, good tests are considered to be ones that show variability among children, with scores ranging from low to middle to high: the famous and infamous “bell curve.” Pearson notes that for many of the skills, most students would reach a “performance ceiling” either in the first grade or the second—which means that almost all the scores would cluster at the high end of the scale. So in order for the tests to differentiate children and thus meet expectations for this kind of test, something other than accuracy had to be measured. This turned out to be speed.

So what factors are our young children tested on, in the name of reading? The charts from Kenneth Goodman’s “A Critical Review of DIBELS” (2006a) explain somewhat more clearly than the assessment manual itself.

The Unwarranted Demand for Fluency in DIBELS
As indicated, the creators of DIBELS believe that fluency in word recognition is necessary for comprehension. Therefore, DIBELS tests what the creators believe to be prerequisite skills: phonemic awareness, phonics, then fluency. In fact, though, all the measures are fluency measures, and speed is actually valued above accuracy.

In Rereading Fluency: Process, Practice, and Policy (2007), authors Altwerger, Jordan, and Shelton examine the assumptions behind the drive for fluency embodied in DIBELS and the Reading First initiative. They draw upon miscue and eye movement research, as well as test data on DIBELS.

In the foreword to Altwerger, Jordan, and Shelton’s important book on literacy, Richard Allington (2007) mentions other lines of research demonstrating that fluency is not the hallmark of good readers (pp. vii–viii):

- Both slowing down and rereading increase comprehension when the reader is having difficulty (Walczyk & Griffith-Ross, 2007; Pressley, 2006; Buly & Valencia, 2002). Also, “children can often read with great speed and accuracy and yet recall few of the ideas in the text they read” (Pressley, 2006, p. 209).

Of course this is true for adults as well: fluency does not increase comprehension.

- State-approved “commercial core reading” programs combined with DIBELS do not necessarily produce satisfactory results. In a large-scale analysis within thirty-seven school districts, McGill-Franzen and others (2006) found disappointing—but not surprising—results. On the average, a third of the third-grade students did not achieve the minimum benchmark on the state reading assessment.

It should be noted that none of the limited number of reading programs approved by the federal government for Reading First instruction had been subjected to classroom research as to their effectiveness. Says Allington (2007): “So much for the ‘science’ of fluency assessment and core reading program requirements” (p. viii, but quotation marks mine). The developers of DIBELS have ignored all such research on the lack of correlation between fluency and comprehension.
The testing descends to the absolutely absurd with the measures of oral reading fluency and the optional test, “Retelling Fluency”: 

- For “Oral Reading Fluency,” required for most children from mid-first grade through third grade, only words correctly identified count toward a score. Because this is a one-minute test, students who try to sound out a word or make sense of what they are reading are penalized. Children get the best score if they skip any word they can’t immediately identify and continue reading just the words they can instantly identify.

- For the “Retelling Fluency” test that accompanies “Oral Reading Fluency,” which is supposed to assess comprehension, what counts in scoring is the number of words the child says before pausing for five consecutive seconds or “gets off track” (however that might be interpreted). It doesn’t matter whether the retelling is a good one, because meaning doesn’t count (unless the reteller “gets off track,” which could be very subjectively interpreted by the teacher). So fast talkers are rewarded, while slower, more deliberate thinkers will get lower scores—perhaps much lower.

- For the test of “Word Use Fluency,” recommended for kindergarten through grade 3 (and seemingly designed to assess vocabulary), what counts is how many words the child uses in using the word (Allington, p. 32)!

Again, the insistence on speed does give a greater range of scores to make the test look good to psychometricians, but at what cost to children?

Goodman (2006a) explains that DIBELS penalizes many of our best readers:

Those who are more cautious, more perfectionist, more thoughtful, more curious, more talkative, or just slow are likely to suffer in a timed test. (p. 14)
Children who already are coming to understand that reading is supposed to make sense are likely to be underscored. (p. 15)

With the widespread use of DIBELS not only to assess students but to limit reading instruction and additional child support to simply working on different measures of fluency (translate “accuracy and speed”), is it any wonder that the Reading First initiative has not had noticeable effects on students’ ability to comprehend texts?

Pearson calls DIBELS the worst thing to happen to the teaching of reading in decades. Goodman calls it pedagogy of the absurd. And, for thousands of our children, it amounts to child abuse, convincing them that they can never become readers.

As individuals, communities, and a nation, we cannot afford for our children’s reading education to be mired in practices promoted by those with narrow concepts of reading and reading research, erroneous concepts of how proficient readers read for meaning and how emergent readers learn to read more naturally, and ineffective practices for the teaching of reading.

Reading as a Cognitive, Constructive, and “Chaotic” Process

Though the program for reading instruction approved and implemented in “Reading First” classrooms during the early 2000s implicitly defines reading as identifying words rapidly and accurately, there is hardly any peer-reviewed research supporting the notion that this assists reading for meaning, and there is a mounting body of research demonstrating that reading instruction promoted by DIBELS assessment does not do what it claims it does. “There are questions regarding whether such an assessment can reliably predict children’s ability to read and comprehend non-test reading material—authentic texts” (Shelton, Altwerger, & Jordan, 2009, p. 138, and the numerous references they cite).
Time and again, researchers—including the researchers dominating the NRP—have not found that rapid, accurate word identification—called “fluency”—improves reading scores beyond first grade. This was found also in the government’s own assessment of the success of Reading First. Furthermore, there is a mounting body of evidence that doing well on the DIBELS one-minute tests of reading fluency does not reward or recognize those who normally read for meaning, and indeed penalizes them for stopping to think about what they are reading; while on the other hand, these assessment measures do not uncover the needs of children who read rapidly and accurately but comprehend little as they read.

Underlying these problems is the unproductive, indeed faulty, concept of how readers read. Most theories of how readers process text or comprehend it, including—or especially—the government-approved one, have little if any basis in reality: that is, they are not based upon the best empirical evidence we have of how good readers read. By “good readers,” I mean those we call proficient: readers who are both effective in constructing meaning from text and efficient in doing so. And, a crucial point: even beginning readers can be good readers.

An examination and analysis of the patterns of readers’ miscues not only gives rise to but reflects a theoretical understanding of the reading process; theory is derived from and modified according to real-world observations of how readers read. Such research has expanded in the 2000s to include eye movement and eye fixation research, typically combined with miscue analysis to offer a more complete and accurate picture of reading itself. We cannot get inside readers’ heads, but from such hard evidence, we can infer that reading is indeed a cognitive process during which the brain makes instantaneous and multiple decisions in the attempt to construct meaning. We say “construct” meaning because no reader, however proficient, “gets” exactly the same meaning that was in the author’s head when he or she was composing the text. Reading is a constructive, psycholinguistic, and sociolinguistic process.

As the following pages demonstrate, the process of reading for meaning has bottom-line commonalities. Among these, perhaps oddly, is that at any given moment, one cannot reliably predict what a reader will do next. Eric Paulson (2005) has drawn an analogy between eye movements and the weather, both of which can be described in terms of chaos theory in physics, he argues, but neither of which is exactly predictable. And he writes: “When looked at through the lens of chaos theory, reading is clearly not a process of plodding along the text at some regular, predetermined rate but is instead a process that ebbs and flows” (p. 355).

We set our purposes (or not), begin to read, perhaps question what we are reading, maybe return and reread, sometimes read ahead, go back again, maybe skim or skip some, occasionally decide not to finish reading whatever it is, maybe go ahead and read at least the headings (of an informational selection) and the conclusion, or the final chapter or page (if a novel or short story)—all the while using strategies that are universal among proficient readers, but uniquely applied.

Metaphorically, during any reading event, reading ebbs and flows, like waves. We might think of waves crashing upon the beach as meaning achieved (and perhaps examined critically), the end product of reading a stretch of text. But with such achievement, the reader is simultaneously and near simultaneously processing other parts or aspects of text and the ideas in ways that are unpredictable at the micro level. This is akin to what we often see on a beach: different waves, and different aspects of the reading process, forming, swelling, cresting, crashing, and ebbing. While one part of the reading process and event crashes and ebbs—with something processed into short- or even long-term memory, perhaps—other facets of the process are just beginning again, increasing, coming to a head, collapsing into memory (or not), and receding from the reader’s immediate attention. Yes, while I often speak of the reading process, as if this cognitive and constructive process were totally uniform, during any given reading event, whoever the reader and whatever the text and reading circumstances, the moment-to-moment reading process is unique.

Let the reading begin!