

**W O R D**  
**S T U D Y**

**in the INCLUSIVE  
SECONDARY CLASSROOM**

**SUPPORTING  
STRUGGLING READERS  
& STUDENTS WITH  
DISABILITIES**

**Melinda M. Leko**

# Contents

**Acknowledgements** v

**Introduction** i

## **PART I: THE WHATS, HOWS AND WHYS OF READING FOR STRUGGLING READERS AND STUDENTS WITH DISABILITIES**

**1. The Reading Process** 9

Relationships Between Readers, Contexts and Texts 10

Reading Instruction: Five Areas of Reading 11

Word Study 17

Reading Instruction for Adolescents 17

**2. Reading Difficulties** 19

Why Do Some Students Struggle with Reading? 20

Problems in the Five Areas of Reading 26

**3. American English:  
A System Governed by Rules Except for the Exceptions** 29

What Are Words Made Of? 30

Continual Evolution of Language 36

## **PART II: THE NUTS AND BOLTS OF WORD STUDY**

**4. Getting Started** 41

Instructional Principles 41

Small-Group Instruction	45
Assessment	47
<b>5. Word Study Methods and Strategies</b>	<b>57</b>
Methods for Decoding Unknown Words	58
Spelling Instruction	71
<b>PART III: WORD STUDY IN SECONDARY CLASSROOMS</b>	
<b>6. Word Study at Work in the Content Area Classroom</b>	<b>79</b>
Mathematics	79
Science	81
English and Humanities and Social Sciences	83
But What Does It All Mean?	85
<b>7. Bringing It All Together</b>	<b>93</b>
Planning	93
Instruction	95
Tips and Tricks	101
<b>Conclusion</b>	<b>105</b>
<b>Appendix: Additional Resources</b>	<b>109</b>
<b>References</b>	<b>113</b>
<b>About the Author</b>	<b>120</b>

## The Reading Process

When implementing word study instruction, it is helpful to have a basic understanding of the reading process and how the elements of word study (i.e. decoding, spelling and vocabulary) are interrelated. With such an understanding teachers can maximise instructional effectiveness by more accurately identifying student decoding and spelling errors and then crafting instruction that directly addresses those errors. Furthermore, by understanding the relationship between decoding, spelling and vocabulary, teachers can increase word study instructional efficiency so that lessons in decoding can also address spelling and/or vocabulary knowledge and vice versa. This information is also critical when implementing and interpreting assessment data to pinpoint student strengths and weaknesses in reading (more on assessment in Chapter 4).

Reading is a complex skill. The goal of reading is comprehension of text, but to achieve this goal is no small feat! Proficient reading is dependent on several automated mental processes operating concurrently (Adams, 1990; Ehri & Snowling, 2004). First, readers must visually process the symbols on the printed page. As readers' eyes focus on the sequences of letters, several knowledge bases and cognitive processes are stimulated (Ehri & Snowling, 2004). Readers draw on lexical knowledge, or knowledge about specific words and their spellings. Readers also draw on knowledge about the writing system and its conventions. Finally, readers rely on phonological knowledge, or knowledge of sound patterns (O'Connor, 2007).

As readers recognise the various combinations of letters as specific words, they draw on their syntactic knowledge of grammatical relations and their semantic knowledge of word meanings (Ehri & Snowling, 2004). As successive words are put together, readers process them in the form of sentences. When reading sentences, readers must update their memory of previous text and integrate new information, all the while focusing attention on comprehension processes (Ehri & Snowling, 2004; Honig, Diamond & Gutlohn, 2000).

## RELATIONSHIPS BETWEEN READERS, CONTEXTS AND TEXTS

The reading process and whether it occurs successfully is dependent on several relationships between readers, contexts and texts. In essence, individual traits of readers, the contexts in which they read and the actual texts they read interact to either facilitate or hinder the reading process. Of particular importance is readers' incoming background knowledge, motivation and attention for reading a particular text.

### Background Knowledge

The reading process is easier when readers have background knowledge on the text they are reading. For example, read the following two passages:

1. But there's really a lot more to sail trim than just the sheet – there's halyard tension, outhaul tension, traveler adjustment, boom vang tension, and so on. Sometimes it's better if the top of the sail twists relative to the bottom, to spill wind on a blustery day; do this by pulling the traveler in and easing the sheet to let the boom lift in hard puffs of wind. But on a calm day the sail should have little twist, which means increasing sheet tension and adjusting in-or-out position with the traveler.
2. There's no ground impact when you swim, and so you protect the joints from stress and strain. In fact, the Arthritis Foundation strongly recommends swimming and water activities for this reason, so much so that they sponsor water classes all over the country. There's nothing like it during the hot days of summer, whether it's at the beach or in the pool. It's relaxing, the movements are smooth and rhythmic, and it's a great workout.

For many people, the first passage is more difficult to read. It comes from an article about learning the basics of sailing (Discover Boating, 2015). Unless you are an experienced sailor, your limited background knowledge of the topic, including pertinent vocabulary, makes comprehending the passage difficult. Lack of background knowledge about sailing means readers cannot readily create visual images of what is being communicated.

The second passage, which discusses the benefits of swimming (Weil, 2015), is probably a more familiar topic for many readers. Greater background knowledge results in readers having more familiarity

with vocabulary and concepts relevant to the topic. It also means readers have more mental “hooks” upon which to hang new information. Readers familiar with swimming can recall times when they have gone swimming and can more easily relate to the author’s argument that swimming is easy on the body’s joints.

Whenever I think of the power of background knowledge, I am reminded of the years I taught in Florida. I vividly remember my native Floridian students having difficulty comprehending a text about living in the snowy north. Phrases like “snow plough” and “salting the roads” were completely unknown to students who grew up in a state that can be best described as having two seasons: hot and very hot!

### **Purpose, Motivation and Attention**

Readers read different texts for different purposes. Some texts are meant to promote leisure and enjoyment. Other texts are informational or persuasive. The purpose for reading a particular text can impact readers’ motivation and attention. For example, the latest mystery novel by my favourite fiction author is something I want to read. I am motivated to read the novel, and it keeps my attention. I can read it quickly and understand it easily. Purpose, motivation and attention interact in positive ways to promote the reading process.

On the other hand, having to read an article about how to install new mandatory software updates on my laptop is not something I want to read. It is something I am forced to read if I want a properly functioning computer. As a tech-laggard, I lack background knowledge and familiarity with technical terms like DMG file, disk image, installer PKG files and patches. When trying to read this text my attention is likely to wander, and I may have to read it several times before fully comprehending it. In this situation, purpose, motivation and attention interact to make the reading process more difficult.

### **READING INSTRUCTION: FIVE AREAS OF READING**

For many students, learning to read is a smooth process and occurs successfully without significant interventions. But this is not the case for a concerning percentage of students. Data from the National Assessment of Educational Progress provides information on the reading achievement of grades 4, 8, and 12 students in the US (NAEP; US Department of Education, 2015). Approximately 71% of English language learners, 42% of Black students, 34% of Hispanic students and 63% of students with disabilities read below basic level in 8th grade (NAEP;

US Department of Education, 2015). These statistics bring up issues of equity, and, as I discuss in Chapter 2, differences in students' linguistic, racial, cultural and economic backgrounds play a large role in students' reading achievement and experiences with reading instruction throughout school. Incorporating word study instruction in secondary classrooms is one way to help decrease the achievement gap between distinct groups of students and explicitly provide support to students who struggle in reading for any number of reasons.

In response to mounting concerns about students' poor achievement in reading, researchers and policymakers invested considerable time and resources to answer the question: what is effective reading instruction? The answer is that effective reading instruction is comprised of systematic and explicit instruction in five areas: phonemic awareness, phonics, fluency, vocabulary and comprehension (National Reading Panel [NRP], 2000). Proficiency in each of these areas is necessary for students to be successful readers, and each area of reading is related to the others. So although this book focuses specifically on the areas of reading that comprise word study, it is helpful to be familiar with the other areas of reading and how they influence student's acquisition of word study skills and strategies.

### Phonemic Awareness

*Phonemic awareness* "is the ability to notice, think about, and work with the individual sounds in spoken words" (Armbruster et al., 2003, p. 2). The individual sounds in words are formally referred to as *phonemes*. An example of instruction in phonemic awareness might involve asking a student to identify the initial sound in the word *cat*.

Phonemic awareness is an important foundational reading skill. It paves the way for students to successfully pair letter sounds with printed letters. Phonemic awareness helps students understand that there are predictable and systematic relationships between printed letters and letter sounds – a concept called the "alphabetic principle".

An important fact to keep in mind is that phonemic awareness is a completely auditory skill. Phonemic awareness is the manipulation of sounds, not printed letters. It is all based on what is said and heard. Close your eyes and say the sounds in the word *cat*. See? Phonemic awareness activities can be done in the dark.

Phonemic awareness is made up of several skills that increase in complexity. Figure 1.1 illustrates the progression of phonemic awareness skills with examples.



**“If books are food for the mind, then this one needs salt, ketchup, mustard, and a side of fries!”**

**Figure 1.1. Phonemic Awareness Skills**

Discriminating & Identifying	Blending	Segmenting	Deleting & Adding	Substituting
<ul style="list-style-type: none"> <li>● What is the first sound in <i>boat</i>?</li> <li>● What sound is the same in <i>map</i>, <i>mud</i> and <i>milk</i>?</li> </ul>	<ul style="list-style-type: none"> <li>● What word does /k/ /i/ /t/ make?</li> </ul>	<ul style="list-style-type: none"> <li>● What are the sounds in <i>step</i>?</li> </ul>	<ul style="list-style-type: none"> <li>● What word do you get when you add /s/ to the word <i>top</i>?</li> </ul>	<ul style="list-style-type: none"> <li>● The word is <i>bet</i>. Change the /t/ to a /d/. What is the new word?</li> </ul>



Simple to Complex