

**Professional Development**

---

# **Instructional Routine Handbook**

**With Research Alignment and Bibliography**



**Macmillan/McGraw-Hill**



The **McGraw-Hill** Companies



**Macmillan/McGraw-Hill**

Published by Macmillan/McGraw-Hill, of McGraw-Hill Education, a division of The McGraw-Hill Companies, Inc.,  
Two Penn Plaza, New York, New York 10121.

Copyright © by The McGraw-Hill Companies, Inc. All rights reserved. No part of this publication may be  
reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the  
prior written consent of The McGraw-Hill Companies, Inc., including, but not limited to, network storage or  
transmission, or broadcast for distance learning.

Printed in the United States of America

2 3 4 5 6 7 8 9 (045) 12 11 10 09

# TABLE OF CONTENTS

## SECTION I: Instructional Routines

<b>1. Phonological Awareness/ Phonemic Awareness</b> . . . . .	R5
Rhyme	
Oddity Tasks (Sound Categorization)	
Oral Blending	
Oral Segmentation	
Manipulation (Substitution, Deletion, Addition, Phoneme Reversals)	
<b>2. Phonics</b> . . . . .	R17
Blending	
Introducing Sound-Spelling Cards	
Building Words	
Reading Decodables	
Multisyllabic Words/Routine	
<b>3. Fluency</b> . . . . .	R36
Strategies	
<b>4. Vocabulary</b> . . . . .	R40
Strategies	
Define/Example/Ask Routine	
<b>5. High-Frequency Words</b> . . . . .	R45
Read/Spell/Write Routine	
Reading Pre-Decodables	
<b>6. Spelling</b> . . . . .	R50
Dictation	
<b>7. Comprehension</b> . . . . .	R53
Strategies and Skills	
<b>8. Grammar, Usage, and Mechanics</b> . .	R59
AAVE Modifications	
<b>9. Writing</b> . . . . .	R62
Conferences	
Revision Assignments	
Writing Process	
Using Rubrics and Anchor Papers	
<b>10. Research Process</b> . . . . .	R73
Big Question Board	

<b>11. Classroom Management</b> . . . . .	R76
Small Groups	
Workstation Flip Charts	
Contracts	
Rotation Chart	
How-to-Guide	
Centers	
Special Needs	
<b>12. Listening/Speaking/Viewing</b> . . . .	R81
<b>13. Assessment</b> . . . . .	R82

## SECTION 2: RESEARCH

<b>Research Alignment</b> , including Synopsis of Findings (Westat) and Technical Appendix (IESD) . . . . .	1
---	---

# INSTRUCTIONAL ROUTINES INTRODUCTION

Welcome to Macmillan/McGraw-Hill's *California Treasures* Reading-Language Arts program. This program is based on the most recent and confirmed research in reading and writing instruction. The instructional routines that follow reflect best classroom practices and full implementation of this research.

Learning and using these routines will ensure the most effective and efficient implementation of the *California Treasures* program. They are step-by-step guides to the key instructional practices embedded in the program. Many of these instructional routines can be viewed using the video clip links in the online Teacher's Edition at [www.macmillanmh.com](http://www.macmillanmh.com). (View the Grades K-2 *Visual Vocabulary Resources* clip as a model.) These clips show how master teachers use the routines with their students. We recommend periodically reviewing the routines and video clips throughout the first year of the program's implementation.

## What Are Instructional Routines?

According to the *American Heritage Dictionary of the English Language* (2000) routines are prescribed, detailed courses of action to be followed regularly; a standard procedure; a set of customary and often mechanically performed procedures or activities.

Routines are step-by-step processes that:

- begin and end with a clear signal,
- follow the same sequence of steps every time used,
- are consistent,
- require minimal teacher talk,
- are used with a brisk pace,
- often contain nonverbal and verbal teacher signals indicating a student response, and
- slowly transfer the responsibility of the task to the students.

## Why Are Instructional Routines Important?

Routines reflect best classroom practices and help students focus on the new learning task, rather than learning a new way to do something. They are effective at organizing instruction and setting clear expectations for students.

Routines help teachers scaffold instruction, minimize instructional time and teacher talk, maximize student participation, and overall make learning a new skill easier.

# PHONOLOGICAL/PHONEMIC AWARENESS

## What Is Phonological Awareness?

**Phonological awareness** involves the auditory and oral manipulation of sounds. It refers generally to the awareness of words, syllables, or phonemes (individual speech sounds). Phonological awareness tasks include the following:

- detecting rhyme,
- clapping syllables,
- counting words in sentences,
- blending/segmenting onset and rime, and
- phonemic awareness tasks.

**Phonemic awareness** is a subset of phonological awareness. It refers specifically to the awareness of individual sounds in words such as /s/ /i/ /t/ in *sit*. Phonemic awareness tasks include the following:

- phoneme isolation,
- phoneme identity,
- phoneme categorization,
- phoneme blending,
- phoneme segmentation,
- phoneme addition,
- phoneme deletion,
- phoneme substitution, and
- phoneme reversals

## Why Is Phonological Awareness Important?

An understanding of how to detect, break apart, blend, and manipulate the sounds in spoken language is needed in order for students to understand letter-sound associations. Students must understand that words are made up of speech sounds, or phonemes, in order to read and write. For example, if a student cannot orally blend a word, then sounding out a written word while reading will be difficult. Likewise, if a student cannot orally segment a word sound-by-sound, then spelling a word while writing will be difficult. Research indicates that the most critical phonemic awareness skills are blending and segmenting since they are most closely associated with early reading and writing growth (NICHD, 2001).

# RHYME ROUTINE

STEPS	EXPLANATION/SCRIPT								
<p><b>STEP 1: INTRODUCE</b></p> <p>Briefly name and explain the task and its purpose to children before starting the activity.</p>	<p>Say: Today we will be listening for words that rhyme. We will then generate, or make, a list of rhyming words.</p>								
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Model the task with several examples. Use Happy the Puppet to model for students how to identify and then generate rhyming words.</p> <p><b>Teacher Tips</b></p> <ul style="list-style-type: none"> <li>Clearly state why words rhyme. Rather than saying “words rhyme because they sound the same at the end,” which is technically incorrect, point out the part of the word that is the same (the rime, or vowel and consonant(s) that follow).</li> <li>Happy will indicate to students that they are doing a phonemic awareness, or listening-type, activity and add engagement to the exercise.</li> </ul>	<p>Say: I am going to say two words. If the two words rhyme, Happy will jump up. Listen: let, met. Do let and met rhyme?</p> <div> </div> <p>Look! Happy is jumping up and down because let and met rhyme. They rhyme because they both end in the same sounds: /et/. Listen /l/ /et/, let; /m/ /et/, met.</p> <p>What other words rhyme with let and met? To figure that out, I need to think of words that end in /et/. I know one. The word set. /s/ /et/. The word set ends in /et/, so it rhymes with let and met.</p>								
<p><b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b></p> <p>Have children practice identifying rhyming words using multiple word sets. Do the first word set with students.</p> <p>Then have children generate rhyming words.</p> <p><b>Teacher Tips (Sequence)</b></p> <ul style="list-style-type: none"> <li>Carefully scaffold the lesson by beginning with two words in a word set, progressing to three, and so on.</li> <li>Write the rhyming words generated on the board. List them according to spelling pattern. Underline the spelling pattern to show how rhyming words often (not always) contain the same spelling pattern. This will assist students as they spell words.</li> </ul>	<p>Say: Now let's try it together. I will say two words. If the words rhyme, stand up.</p> <div> <table> <tr> <td>let, lot</td><td>bet, pet</td></tr> <tr> <td>let, beg</td><td>tell, sell</td></tr> </table> </div> <p>Let's try some harder ones. I will say a group of words. Tell me which two words in the group rhyme.</p> <div> <table> <tr> <td>led, bad, red</td><td>man, met, set</td></tr> <tr> <td>let, beg, get</td><td>sent, sand, bent</td></tr> </table> </div> <p>Let's see how many rhyming words we can say for each of the following: red, let, beg, well, hen. I will write the words we say on the board.</p>	let, lot	bet, pet	let, beg	tell, sell	led, bad, red	man, met, set	let, beg, get	sent, sand, bent
let, lot	bet, pet								
let, beg	tell, sell								
led, bad, red	man, met, set								
let, beg, get	sent, sand, bent								
<p><b>CORRECTIVE FEEDBACK</b></p> <p>When children make mistakes during rhyme identification, segment each word to isolate the rime portion as in the model portion of the lesson. Then ask: <i>Do these words rhyme? Do they end with the same sounds?</i></p> <p>When children make mistakes during rhyme generation, segment the part of the word that must rhyme (e.g., <i>oat</i> in <i>boat</i>). Guide students to add consonants, consonant blends, and consonant digraph sounds to the beginning of the rime (e.g., <i>oat</i>) to form rhyming words.</p>	<p>Say: Let's check to see if set and met rhyme. I will break apart the word. Listen: set, /s/ /et/; set ends in /et/; met, /m/ /et/, met ends in /et/. Do set and met both end in /et/? Yes. Therefore, set and met rhyme.</p> <p>Say: What words rhyme with set? Set ends with the /et/ sounds. Listen: /s/ /et/. So, rhyming words will also end in /et/. Let's add some sounds to the beginning of /et/ to make rhyming words. Listen as I add the /b/ sound: /b/ /et/, bet. One word that rhymes with set is bet.</p>								

# ODDITY TASKS ROUTINE (SOUND CATEGORIZATION)

STEPS	EXPLANATION/SCRIPT								
<b>STEP 1: INTRODUCE</b>  Briefly name and explain the task and its purpose to children before starting the activity.	<i>Say: Today we will be listening for words that have something in common. In today's lesson, we will listen for words that begin with the same sound.</i>								
<b>STEP 2: MODEL (I DO)</b>  Model the task with several examples.  <b>Teacher Tips (Sequence)</b> <ul style="list-style-type: none"><li>• Begin oddity task exercises by identifying initial sounds, move on to final sounds, and progress to medial sounds.</li><li>• Early initial (beginning) sound exercises should contain words that start with continuous sounds. These are sounds that can be extended (e.g., /f/, /l/, /m/, /n/, /r/, /s/, /v/, /z/) and are easier for students to isolate. Once students are successful at identifying initial continuous sounds, progress to stop sounds, or sounds that cannot be extended (e.g., /b/, /d/, /g/).</li><li>• Early initial sound exercises should contain words that begin with a single consonant sound (e.g., lap), rather than a consonant blend (e.g., flap).</li><li>• Early final sound exercises should contain words that end with a single consonant sound (e.g., bet), rather than a consonant blend (e.g., best).</li><li>• When completing medial sound tasks, remember that long vowel sounds are easier to isolate and distinguish than short vowel sounds.</li></ul>	<i>Say: I am going to say three words. Listen carefully to the beginning sound in each word. I want you to tell me which word does NOT belong. That is, I want you to tell me which word begins with a different sound.</i>  <i>Listen carefully: set, sad, man. [Stretch the initial sound in each word as you say it, as in /ssset/.] Which word doesn't belong? Which word begins with a different sound?</i>  <i>That's right. Man begins with a different sound. Listen: /ssset/. Set begins with /s/. /sssad/. Sad begins with /s/. /mmman/. Man begins with /m/. Since set and sad begin with /s/, mad does not belong. Mad begins with a different sound, the /m/ sound.</i>								
<b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b>  Have children practice finding which word does not belong. Do the first word set with students.  <b>Teacher Tips (Sequence)</b> <ul style="list-style-type: none"><li>• Carefully scaffold the lesson by beginning with three words in a word set, progressing to four, and so on.</li></ul>	<i>Now let's try it together. I will say three words. Listen to the beginning sound in each word. Tell me which word doesn't belong.</i> <table><tr><td>let, lot, met</td><td>set, let, sad</td></tr><tr><td>red, fell, fan</td><td>nest, rest, not</td></tr></table> <i>Let's try some harder ones. I will say a bigger group of words. Tell me which word does not belong.</i> <table><tr><td>fell, fish, fan, man</td><td>met, man, net, mix</td></tr><tr><td>run, sun, set, six</td><td>van, zip, vest, vase</td></tr></table>	let, lot, met	set, let, sad	red, fell, fan	nest, rest, not	fell, fish, fan, man	met, man, net, mix	run, sun, set, six	van, zip, vest, vase
let, lot, met	set, let, sad								
red, fell, fan	nest, rest, not								
fell, fish, fan, man	met, man, net, mix								
run, sun, set, six	van, zip, vest, vase								
<b>CORRECTIVE FEEDBACK</b>  When children make a mistake, stretch the initial sound for three seconds and have children repeat the extended word (e.g., /ssset/, rather than /set/). If the word begins with a stop sound, reiterate the sound and have children repeat (e.g., /b/ /b/ /bat/, rather than /bat/).  Once the error is corrected, write the word set on the board, underline the target sound-spelling (e.g., initial sound), and emphasize how the word that doesn't belong contains a different sound-spelling in the target location.	<i>Say: Listen as I say each word. I will stretch the first sound so you can hear it well. /ssset/. Repeat. What's the first sound? /sssit/. Repeat. What's the first sound? /sssad/. Repeat. What's the first sound? /mmmad/. Repeat. What's the first sound? Which word does NOT begin with the /s/ sound?</i>  <i>Look at the words I wrote.</i> <table><tr><td><u>s</u>et</td><td>s<u>i</u>t</td><td>s<u>a</u>d</td><td><u>m</u>ad</td></tr></table> <i>Notice that set, sit, and sad all begin with the letter s. The letter s stands for the /s/ sound. The word mad does not begin with the letter s. The word mad begins with the letter m, which stands for the /m/ sound. The word mad does not belong.</i>	<u>s</u> et	s <u>i</u> t	s <u>a</u> d	<u>m</u> ad				
<u>s</u> et	s <u>i</u> t	s <u>a</u> d	<u>m</u> ad						



# ORAL BLENDING ROUTINE (ONSET AND RIME)

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: INTRODUCE</b></p> <p>Briefly name and explain the task and its purpose to children before starting the activity.</p> <p>Note: The <i>rime</i> is the vowel and everything after it in a syllable (e.g., <i>at</i> in <i>sat</i>). The <i>onset</i> is everything before the rime in the syllable. The onset can be a single consonant, a consonant blend, or a digraph (e.g., <i>s</i> in <i>sat</i>, <i>fl</i> in <i>flat</i>, <i>ch</i> in <i>chat</i>). Blending by onset and rime is easier than blending phoneme by phoneme.</p>	<p>Say: <i>Today we will be putting together the first sound(s) and end part of a word to make a whole word.</i></p>
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Model how to blend the first sound(s) (onset) and end part (rime) of a word with several examples.</p> <p><b>Teacher Tips (Sequence)</b></p> <ul style="list-style-type: none"> <li>• Begin blending words that start with a continuous sound—a sound that can be stretched, such as /f/, /l/, /m/, /n/, /r/, /s/, /v/, /z/.</li> <li>• Begin blending words that begin with a single consonant sound (e.g., <i>lip</i>), rather than a consonant blend (e.g., <i>flip</i>).</li> <li>• Once students have mastered words beginning with continuous sounds, progress to words that begin with stop sounds (e.g., /b/, /d/, /g/). Then proceed to words beginning with consonant blends (e.g., /fl/, /st/) and digraphs (/sh/, /ch/).</li> </ul>	<p>Say: <i>I am going to put sounds together to make a word. I'll say the first sound and then the end of a word. Then I will blend them together to say the word. Listen: /s/ /at/, sat. What is the word? The word is sat.</i></p>
<p><b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b></p> <p>Have children practice blending words by onset and rime. Do the first word with students.</p> <p>When students are ready, progress to more complicated words, such as those beginning with stop sounds, consonant blends, or consonant digraphs.</p> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>• Select individual students to take turns once the whole group has successfully blended several words.</li> </ul>	<p>Say: <i>Listen to the word parts. Blend, or put together, the word parts to say the whole word.</i></p> <p>/s/ /ad/    /m/ /at/    /f/ /ish/  /l/ /ip/    /r/ /un/    /n/ /est/</p> <p>Say: <i>Now let's try some harder ones. Listen to the word parts. Blend, or put together, the word parts to say the whole word.</i></p> <p>/h/ /ad/    /fl/ /at/    /w/ /ish/  /sl/ /ip/    /sp/ /un/    /ch/ /est/</p>
<p><b>CORRECTIVE FEEDBACK</b></p> <p>When children make mistakes during blending, model how to blend the onset and rime. Repeat the routine using the same word, asking students to respond without you. Go back and repeat the last two examples before proceeding with additional examples.</p> <p>Note: Some children who struggle blending onset and rime, will need to go back to the easier blending task of blending syllable-by-syllable (e.g., <i>nap-kin</i>).</p>	<p>Say: <i>Listen as I blend the sounds /s/ /at/, /sssat/, sat. The word is sat. Repeat the sounds with me: /s/ [Students repeat.] /at/ [Students repeat.] /sssat/ [Students repeat.] The word is sat. What's the word?</i></p> <p><i>Now let's go back and try some more.</i></p>


# ORAL BLENDING ROUTINE (PHONEME BY PHONEME)

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: INTRODUCE</b></p> <p>Briefly name and explain the task and its purpose to children before starting the activity.</p> <p>Note: A <i>phoneme</i> is an individual sound, such as /s/.</p>	<p>Say: <i>Today we will be blending, or putting together, sounds to make words.</i></p>
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Say each sound in the word. Model how to blend the sounds to make the whole word. Repeat with several examples.</p> <p><b>Teacher Tips (Sequence)</b></p> <ul style="list-style-type: none"> <li>• Begin blending two-letter VC words, such as <i>am</i> and <i>it</i>.</li> <li>• Progress to CVC words. When blending CVC words, use words that start with a continuous sound—a sound that can be stretched, such as /f/, /l/, /m/, /n/, /r/, /s/, /v/, /z/.</li> <li>• Begin blending CVC words that start with a single consonant sound (e.g., <i>lip</i>), rather than a consonant blend (e.g., <i>flip</i>).</li> <li>• Once students have mastered words beginning with continuous sounds, progress to words that begin with stop sounds (e.g., /b/, /d/, /g/). Then proceed to words beginning with consonant blends (e.g., /fl/, /st/).</li> <li>• Blending phoneme by phoneme should progress from 2-phoneme words (beginning of K), to 3-phoneme words (mid-K), and then to 4- and 5-phoneme words (Grades 1-2).</li> </ul>	<p>Say: <i>I am going to put sounds together to make a word. I'll say each sound in the word. Then I will blend the sounds together to say the word. Listen: /s/ /a/ /t/, /sssaat/, sat. The word is sat.</i></p>
<p><b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b></p> <p>Have children practice blending words phoneme by phoneme, or sound-by-sound. Do the first word with students.</p> <p>When students are ready, progress to more complicated words, such as those beginning with stop sounds, consonant blends, or consonant digraphs.</p> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>• Select individual students to take turns once the whole group has successfully blended several words.</li> </ul>	<p>Say: <i>Listen to the sounds. Blend, or put together, the sounds to say the whole word.</i></p> <p>/s/ /a/ /d/      /m/ /a/ /t/      /f/ /i/ /sh/          /l/ /i/ /p/      /r/ /u/ /n/      /n/ /e/ /t/</p> <p>Say: <i>Now let's try some harder ones. Listen to the word parts. Blend, or put together, the word parts to say the whole word.</i></p> <p>/h/ /a/ /d/      /f/ /l/ /a/ /t/      /w/ /i/ /sh/          /s/ /l/ /i/ /p/      /s/ /p/ /u/ /n/      /f/ /l/ /i/ /p/ /s/</p>
<p><b>CORRECTIVE FEEDBACK</b></p> <p>When children make mistakes during blending, stretch (or sing) the sounds together. Move your hands from right to left as you move from sound to sound to emphasize the changing sounds. Repeat the routine using the same word, asking students to respond without you. Go back and repeat the last two examples before proceeding with additional examples.</p>	<p>Say: <i>Listen as I blend the sounds /s/ /a/ /t/, /sssaat/, sat. The word is sat. Repeat the sounds with me: /s/ [Students repeat.] /a/ [Students repeat.] /t/ [Students repeat.] /sssaat/ [Students repeat.] The word is sat. What's the word?</i></p> <p><i>Now let's go back and try some more.</i></p>

# ORAL SEGMENTATION ROUTINE (ONSET AND RIME)

STEPS	EXPLANATION/SCRIPT												
<p><b>STEP 1: INTRODUCE</b></p> <p>Briefly name and explain the task and its purpose to children before starting the activity.</p> <p>Note: The <i>rime</i> is the vowel and everything after it in a syllable (e.g., <i>at</i> in <i>sat</i>). The onset is everything before the rime in the syllable. The onset can be a single consonant, a consonant blend, or a digraph (e.g., <i>s</i> in <i>sat</i>, <i>fl</i> in <i>flat</i>, <i>ch</i> in <i>chat</i>). Segmenting by onset and rime is easier than segmenting phoneme by phoneme.</p>	<p>Say: <i>Today we will be segmenting, or taking apart, the sounds in a word we hear. We will say the first sound and then the rest of the word.</i></p>												
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Model how to segment the first sound(s) (onset) and end part (rime) of a word with several examples.</p> <p><b>Teacher Tips (Sequence)</b></p> <ul style="list-style-type: none"> <li>• Begin segmenting words that start with a continuous sound—a sound that can be stretched, such as /f/, /l/, /m/, /n/, /r/, /s/, /v/, /z/.</li> <li>• Begin segmenting words that begin with a single consonant sound (e.g., <i>lip</i>), rather than a consonant blend (e.g., <i>flip</i>).</li> <li>• Once students have mastered words beginning with continuous sounds, progress to words that begin with stop sounds (e.g., /b/, /d/, /g/). Then proceed to words beginning with consonant blends (e.g., /fl/, /st/) and digraphs (/sh/, /ch/).</li> </ul>	<p>Say: <i>I am going to segment, or take apart, a word. I'll say the first sound and then the end of a word. Listen: sat. The first sound in sat is /s/. What is the first sound? /s/ The end part of sat is /at/. What is the end part? /at/ Listen sat, /s/ /at/.</i></p>												
<p><b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b></p> <p>Have children practice segmenting words by onset and rime. Do the first word with students.</p> <p>When students are ready, progress to more complicated words, such as those beginning with stop sounds, consonant blends, or consonant digraphs.</p> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>• Select individual students to take turns once the whole group has successfully blended several words.</li> </ul>	<p>Say: <i>Listen to the word parts. Segment, or take apart, the word. Say the first sound, then the rest of the word.</i></p> <table> <tr> <td>sad (/s/ /ad/)</td> <td>mat (/m/ /at/)</td> </tr> <tr> <td>fish (/f/ /ish/)</td> <td>lip (/l/ /ip/)</td> </tr> <tr> <td>run (/r/ /un/)</td> <td>nest (/n/ /est/)</td> </tr> </table> <p>Say: <i>Now let's try some harder ones. Say the first sounds if the word begins with a blend.</i></p> <table> <tr> <td>had (/h/ /ad/)</td> <td>flat (/fl/ /at/)</td> </tr> <tr> <td>wish (/w/ /ish/)</td> <td>slip (/sl/ /ip/)</td> </tr> <tr> <td>spun (/sp/ /un/)</td> <td>chest (/ch/ /est/)</td> </tr> </table>	sad (/s/ /ad/)	mat (/m/ /at/)	fish (/f/ /ish/)	lip (/l/ /ip/)	run (/r/ /un/)	nest (/n/ /est/)	had (/h/ /ad/)	flat (/fl/ /at/)	wish (/w/ /ish/)	slip (/sl/ /ip/)	spun (/sp/ /un/)	chest (/ch/ /est/)
sad (/s/ /ad/)	mat (/m/ /at/)												
fish (/f/ /ish/)	lip (/l/ /ip/)												
run (/r/ /un/)	nest (/n/ /est/)												
had (/h/ /ad/)	flat (/fl/ /at/)												
wish (/w/ /ish/)	slip (/sl/ /ip/)												
spun (/sp/ /un/)	chest (/ch/ /est/)												
<p><b>CORRECTIVE FEEDBACK</b></p> <p>When children make mistakes during segmenting, model how to segment the onset and rime. Repeat the routine using the same word, asking students to respond without you. Go back and repeat the last two examples before proceeding with additional examples.</p> <p>Note: Some children who struggle segmenting onset and rime, will need to go back to the easier segmentation task of segmenting syllable-by-syllable (e.g., <i>cupcake</i>, <i>cup-cake</i>).</p>	<p>Say: <i>Listen as I segment the sounds in sat: /s/ /at/. The first sound in sat is /s/. Repeat the sound with me: /s/ [Students repeat.] The rest of the word is /at/. Repeat. [Students repeat.] /at/. The sounds in sat are /s/ /at/. What are the sounds?</i></p> <p><i>Now let's go back and try some more.</i></p>												

# ORAL SEGMENTATION ROUTINE (PHONEME BY PHONEME)

STEPS	EXPLANATION/SCRIPT												
<p><b>STEP 1: INTRODUCE</b></p> <p>Briefly name and explain the task and its purpose to children before starting the activity.</p> <p>Note: Use the <b>Sound Boxes</b> to help students see and feel each sound in the word. Other tactile approaches that will help students include modeling how to stretch the sounds (like a rubber band) before students segment the word and moving your hands from right to left as you move from sound to sound.</p>	<p>Say: <i>Today we will be segmenting, or taking apart, a word sound-by-sound.</i></p>												
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Model how to segment the sounds in a word. Repeat with several examples.</p> <p><b>Teacher Tips (Sequence)</b></p> <ul style="list-style-type: none"> <li>• Begin segmenting two-letter VC words, such as <i>am</i> and <i>it</i>.</li> <li>• Progress to CVC words. When segmenting CVC words, use words that start with a continuous sound—a sound that can be stretched, such as /f/, /l/, /m/, /n/, /r/, /s/, /v/, /z/.</li> <li>• Begin segmenting CVC words that start with a single consonant sound (e.g., <i>lip</i>), rather than a consonant blend (e.g., <i>flip</i>).</li> <li>• Once students have mastered words beginning with continuous sounds, progress to words that begin with stop sounds (e.g., /b/, /d/, /g/). Then proceed to words beginning with consonant blends (e.g., /fl/, /st/).</li> <li>• Segmenting phoneme by phoneme should progress from 2-phoneme words (beginning of K), to 3-phoneme words (mid-K), and then to 4- and 5-phoneme words (Grades 1-2).</li> </ul>	<p>Say: <i>I am going to say a word, then I will say it sound by sound. As I say each sound, I will place one counter in each box. Listen: sat. [Stretch each sound three seconds so students can hear each discrete sound.] Now I will say sat sound by sound.</i></p> <p>/s/ [Place counter in first box.]</p> <p>/a/ [Place counter in second box.]</p> <p>/t/ [Place counter in third box.]</p> <p><i>The word sat has three sounds: /s/ /a/ /t/. [Point to each box as you say the sound.]</i></p> 												
<p><b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b></p> <p>Have children practice segmenting words phoneme by phoneme, or sound-by-sound. Do the first word with students.</p> <p>When students are ready, progress to more complicated words, such as those beginning with stop sounds, consonant blends, or consonant digraphs.</p> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>• Select individual students to take turns once the whole group has successfully blended several words.</li> </ul>	<p>Say: <i>Listen to the sounds. Segment, or break apart, the word sound-by-sound.</i></p> <table border="0"> <tr> <td>sad (/s/ /a/ /d/)</td> <td>mat (/m/ /a/ /t/)</td> </tr> <tr> <td>fish (/f/ /i/ /sh/)</td> <td>lip (/l/ /i/ /p/)</td> </tr> <tr> <td>run (/r/ /u/ /n/)</td> <td>net (/n/ /e/ /t/)</td> </tr> </table> <p>Say: <i>Now let's try some harder ones. Segment, or take apart, the word sound-by-sound.</i></p> <table border="0"> <tr> <td>had (/h/ /a/ /d/)</td> <td>flat (/f/ /l/ /a/ /t/)</td> </tr> <tr> <td>wish (/w/ /i/ /sh/)</td> <td>slip (/s/ /l/ /i/ /p/)</td> </tr> <tr> <td>spun (/s/ /p/ /u/ /n/)</td> <td>flips (/f/ /l/ /i/ /p/ /s/)</td> </tr> </table>	sad (/s/ /a/ /d/)	mat (/m/ /a/ /t/)	fish (/f/ /i/ /sh/)	lip (/l/ /i/ /p/)	run (/r/ /u/ /n/)	net (/n/ /e/ /t/)	had (/h/ /a/ /d/)	flat (/f/ /l/ /a/ /t/)	wish (/w/ /i/ /sh/)	slip (/s/ /l/ /i/ /p/)	spun (/s/ /p/ /u/ /n/)	flips (/f/ /l/ /i/ /p/ /s/)
sad (/s/ /a/ /d/)	mat (/m/ /a/ /t/)												
fish (/f/ /i/ /sh/)	lip (/l/ /i/ /p/)												
run (/r/ /u/ /n/)	net (/n/ /e/ /t/)												
had (/h/ /a/ /d/)	flat (/f/ /l/ /a/ /t/)												
wish (/w/ /i/ /sh/)	slip (/s/ /l/ /i/ /p/)												
spun (/s/ /p/ /u/ /n/)	flips (/f/ /l/ /i/ /p/ /s/)												

## CORRECTIVE FEEDBACK

When children make mistakes during segmenting, stretch the word using the rubber band technique. Have students repeat. Then use the Sound Boxes to model how to place one counter on each box as you stretch the word and move from sound to sound. Repeat the routine using the same word, asking students to respond without you. Go back and repeat the last two examples before proceeding with additional examples.

Say: *Listen and watch as I stretch the sounds in sat, /ssaaat/. [Pretend to stretch a rubber band as you stretch, or sing together, the sounds in the word.]*

*Now I will move one counter onto each box as I say each sound. [Model for students.] Now it is your turn. [Students repeat by stretching the word and placing one counter onto each box to represent each sound.] How many sounds are in the word sat? What are the sounds?*

*Now let's go back and try some more.*

## CONNECT TO SPELLING

Use segmentation and the Sound Boxes as an effective way to transition to spelling words. (Sound Box reproducibles are available in the *Teacher Resource Book*. In addition, students can use the sound boxes on the back of the *Sound-Spelling Workboards*.)

After students have segmented the word, have them replace each counter with a letter (or letters) to spell the word. This breaking apart and then putting together words with print will accelerate students' understanding of how words work.

Say: *What is the first sound in the word sat? /s/. What letter do we write for the /s/ sound? s. Write that letter in the first box.*

*What is the next sound in the word sat? /a/. What letter do we write for the /a/ sound? a. Write that letter in the second box.*

*What is the last sound in the word sat? /t/. What letter do we write for the /t/ sound? t. Write that letter in the last box.*

*What word did we spell? That's right: sat. When you write a word, you must think about each sound in the word and attach a spelling to that sound.*

# PHONEMIC MANIPULATION ROUTINE (SUBSTITUTION)

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: INTRODUCE</b></p> <p>Briefly name and explain the task and its purpose to children before starting the activity.</p>	<p>Say: <i>Today we will be substituting, or replacing, a sound in a word.</i></p>
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Model the task with several examples.</p> <p><b>Teacher Tips (Sequence)</b></p> <ul style="list-style-type: none"> <li>• Use the following instructional sequence: initial sounds, final sounds, medial sounds, second letter in an initial blend, first letter in a final blend.</li> <li>• Use letter cards to demonstrate how substituting a sound results in the replacement of a letter (or spelling). A new word is made.</li> </ul>	<p>Say: <i>I am going to say a word. Then I will substitute, or replace, the first sound in the word with /s/.</i></p> <p>Listen: <i>mat. I will replace the first sound in mat with /s/. The new word is sat.</i></p> <p>Watch as I do this with letter cards. This is the word <i>mat</i>. [Show the letter cards <i>m, a, t</i> in a pocket chart.] <i>The first sound in mat is /m/. The first letter is m, the letter we write for the /m/ sound. I will substitute the /m/ sound with /s/. Therefore, I will take away the letter m, which stands for the /m/ sound, and replace it with the letter s, which stands for the /s/ sound. The new word I made is sat.</i></p>
<p><b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b></p> <p>Have children practice substituting sounds. Say the word. Then state the replacement sound and the position in which it should be substituted. Do the first word with students.</p> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>• Have students use their <i>Sound-Spelling Workboards</i>. They should write the word, then erase the letter or letters that stand for the sound that needs to be replaced. Finally, they complete the new word by writing the missing letter or letters for the target replacement sound.</li> </ul>	<p>Say: <i>Now let's try it together. I will say a word. I want you to replace the first sound in the word with /s/.</i></p> <p><i>mad (sad)      fell (sell)      hit (sit)</i>  <i>rock (sock)      fun (sun)      bend (send)</i></p> <div> </div>
<p><b>CORRECTIVE FEEDBACK</b></p> <p>When children make mistakes during segmentation, use letter cards to form the word. Have students repeat with their own set of letter cards. Then model how to find the target sound and spelling, remove it, and replace it with the new sound and spelling. Have students repeat. Then have students chorally blend the new word formed.</p>	<p>Say: <i>Let's try this one together. The word is mat. I will replace the first sound in mat with /s/ to make a new word.</i></p> <p>[Make the word <i>mat</i> in the pocket chart.] <i>I have made the word mat with letter cards in the pocket chart. The word mat is spelled m, a, t. Make the word mat using your letter cards.</i></p> <p><i>The first sound in mat is /m/. What is the first sound? /m/. This is the sound I need to substitute with /s/.</i></p> <p><i>The letter m stands for the /m/ sound. What letter stands for the /m/ sound? m. That is the letter-sound that I must remove. Let's take away the letter m.</i></p> <p><i>I will replace the letter m with the letter that stands for the /s/ sound. The letter s stands for the /s/ sound. What letter stands for the /s/ sound? s. Place that letter at the beginning of the word, where the letter m once was.</i></p> <p><i>Now, watch as I blend the sounds to read the new word I formed: /ssaaat/, sat. The new word is sat.</i></p>



# PHONEMIC MANIPULATION ROUTINE (DELETION)

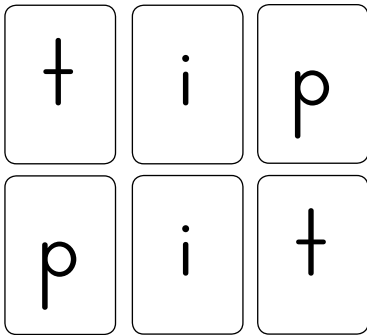
STEPS	EXPLANATION/SCRIPT						
<b>STEP 1: INTRODUCE</b>  Briefly name and explain the task and its purpose to children before starting the activity.	Say: <i>Today we will be deleting, or removing, a sound in a word.</i>						
<b>STEP 2: MODEL (I DO)</b>  Model the task with several examples.  <b>Teacher Tips (Sequence)</b> <ul style="list-style-type: none"><li>• Use the following instructional sequence: initial sounds, final sounds, second letter in an initial blend, first letter in a final blend.</li><li>• Use letter cards to demonstrate how deleting a sound results a new word.</li></ul>	Say: <i>I am going to say a word. Then I will delete, or remove, the first sound.</i>  Listen: <i>mat. I will delete the first sound in mat. The new word is at.</i>  Watch as I do this with letter cards. This is the word <i>mat</i> . [Show the letter cards <i>m, a, t</i> in a pocket chart.] <i>The first sound in mat is /m/. The first letter is m, the letter we write for the /m/ sound. I will delete, or remove, the /m/ sound. Therefore, I will take away the letter m, which stands for the /m/ sound. What’s left are the letters a, t. They spell the word at.</i>						
<b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b>  Have children practice deleting sounds. Say the word. Then state the position of the sound to be deleted. Do the first word with students.  <b>Teacher Tip</b> <ul style="list-style-type: none"><li>• Have students use their <i>Sound-Spelling Workboards</i>. They should write the word, then erase the letter or letters that stand for the sound that needs to be deleted. Finally, they read the new word formed.</li></ul>	Say: <i>Now let’s try it together. I will say a word. I want you to delete the first sound to make a new word.</i>  <table><tr><td>fat (at)</td><td>sit (it)</td><td>send (end)</td></tr><tr><td>cup (up)</td><td>gate (ate)</td><td>boats (oats)</td></tr></table> <div><div>f</div><div>a</div><div>t</div><div>a</div><div>t</div></div>	fat (at)	sit (it)	send (end)	cup (up)	gate (ate)	boats (oats)
fat (at)	sit (it)	send (end)					
cup (up)	gate (ate)	boats (oats)					
<b>CORRECTIVE FEEDBACK</b>  When children make mistakes during phoneme deletion, use letter cards to form the word. Have students repeat with their own set of letter cards. Then model how to find the target sound and spelling, remove it, and read the new word formed. Have students repeat.	Say: <i>Let’s try this one together. The word is fox. I will delete the first sound in fox to make a new word.</i>  [Make the word <i>fox</i> in the pocket chart.] <i>I have made the word fox with letter cards in the pocket chart. The word fox is spelled f, o, x. Make the word fox using your letter cards.</i>  <i>The first sound in fox is /f/. What is the first sound? /f/. This is the sound I need to delete, or remove.</i>  <i>The letter f stands for the /f/ sound. What letter stands for the /f/ sound? f. That is the letter-sound that I must delete, or remove. Let’s take away the letter f.</i>  <i>Now, watch as I blend the sounds to read the new word I formed: /oks/, ox. The new word is ox.</i>						

# PHONEMIC MANIPULATION ROUTINE (ADDITION)

STEPS	EXPLANATION/SCRIPT
<b>STEP 1: INTRODUCE</b>  Briefly name and explain the task and its purpose to children before starting the activity.	<i>Say: Today we will be adding a sound to a word to make a new word.</i>
<b>STEP 2: MODEL (I DO)</b>  Model the task with several examples.  <b>Teacher Tip</b> <ul style="list-style-type: none"><li>Use letter cards to demonstrate how adding a sound results in a new word.</li></ul>	<i>Say: I am going to say a word. Then I will add the sound /s/ at the beginning.</i>  <i>Listen: at. I will add the sound /s/. The new word is sat.</i>  <i>Watch as I do this with letter cards. This is the word at. [Show the letter cards a, t in a pocket chart.] The sound I need to add at the beginning is /s/. The letter s stands for the /s/ sound. Watch as I add the letter s, then blend the new word I made: /ssaat/, sat. The new word I made is sat.</i>
<b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b>  Have children practice adding sounds. Say the word. Then state the position in which the sound should be added. Do the first word with students.  <b>Teacher Tip</b> <ul style="list-style-type: none"><li>Have students use their <i>Sound-Spelling Workboards</i>. They should write the word, then write the letter or letters that stand for the sound that needs to be added in the correct position.</li></ul>	<i>Say: Now let's try it together. I will say a word. I want you to add the /s/ sound to the beginning.</i>  <div><div>it (sit)and (sand)end (send)</div><div>elf (self)pin (spin)nap (snap)</div></div> <div><div><div>i</div><div>t</div></div><div><div>s</div><div>i</div><div>t</div></div></div>
<b>CORRECTIVE FEEDBACK</b>  When children make mistakes during phoneme addition, use letter cards to form the word. Have students repeat with their own set of letter cards. Then model how to determine the letter for the added sound and write it in the correct position. Have students repeat. Then have students chorally blend the new word formed.	<i>Say: Let's try this one together. The word is pot. I will add the sound /s/ to the beginning of pot to make a new word.</i>  <i>[Make the word pot in the pocket chart.] I have made the word pot with letter cards in the pocket chart. The word pot is spelled p, o, t. Make the word pot using your letter cards.</i>  <i>I need to add the sound /s/ to the beginning of pot. The /s/ sound is spelled with the letter s. Therefore, I will add the letter s. What letter will I add? s.</i>  <i>Let's write the letter s at the beginning of the word pot.</i>  <i>Now, watch as I blend the sounds to read the new word I formed: /ssspot/, spot. The new word is spot.</i>



# PHONEMIC MANIPULATION ROUTINE (PHONEME REVERSALS)

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: INTRODUCE</b></p> <p>Briefly name and explain the task and its purpose to children before starting the activity.</p>	<p>Say: <i>Today we will reverse, or flip, the sounds in a word to make a new word.</i></p>
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Model the task with several examples.</p> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>Use letter cards to demonstrate how reversing the sounds in a word results in a new word written in opposite order (written backwards).</li> </ul> <p>Note: In some of the phoneme reversal activities, the new word formed is spelled differently when the sounds are reversed (e.g., let/tell; team/meat)</p>	<p>Say: <i>I am going to say a word. Then I will reverse the sounds in the word. That means I will say the sounds in reverse, or backwards, order.</i></p> <p>Listen: <i>top. When I reverse the sounds in top, I start at the end of the word rather than the beginning. The new word I make is pot.</i></p> <p>Watch as I do this with letter cards. This is the word <i>top</i>. [Show the letter cards <i>t, o, p</i> in a pocket chart.] <i>I will sound out the word backwards to reverse the sounds. [Model blending the word backwards. Then reverse the order of the letters and blend the word formed.]</i></p>
<p><b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b></p> <p>Have children practice reversing sounds in words. Do the first word with students.</p> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>Have students use their <i>Sound-Spelling Workboards</i>. They should write the word, then say it backwards to read the new word formed.</li> </ul>	<p>Say: <i>Now let's try it together. I will say a word. I want you to reverse the sounds. That means you will say the word backwards.</i></p> <p><i>tip (pit)      net (ten)      pop (pop)</i>  <i>nap (pan)      team (meat)      tell (let)</i></p> 
<p><b>CORRECTIVE FEEDBACK</b></p> <p>When children make mistakes during phoneme reversals, use letter cards to form the word. Have students repeat with their own set of letter cards. Then model how to blend the word in reverse, or backwards, order.</p>	<p>Say: <i>Let's try this one together. The word is tip. I will reverse the sounds in the word. That means I will say the word backwards.</i></p> <p>[Make the word <i>tip</i> in the pocket chart.] <i>I have made the word tip with letter cards in the pocket chart. The word tip is spelled t, i, p. Make the word tip using your letter cards.</i></p> <p>Now I will sound out the word in reverse order. I will start at the letter <i>p</i> and read backwards. Watch and listen: /piiit/. The word is pit. Now you try.</p>

## What Is Phonics?

Phonics is the understanding that there is a relationship between sounds (phonemes) and their spellings (graphemes).

## Why Is Phonics Instruction Important?


Phonics instruction helps beginning readers understand the relationship between letters and sounds. It teaches students to use these relationships to read and write. Research has shown that direct systematic phonics instruction is appropriate and beneficial for advancing students' skills from kindergarten on (NICHD, 2001).

## What Is a Strong Phonics Instructional Sequence?

When teaching phonics, the sequence of skills can have a significant impact on students' progress. Refer to the following guidelines:

- Teach short-vowel sounds (in VC and CVC words) before long-vowel sounds (in CVVC words).
- Teach consonants and short vowels in combination so that words can be generated as early as possible.
- Be sure the majority of the consonants taught early on are continuous consonants, such as *f, l, m, n, r,* and *s*. These consonant sounds can be stretched, or sustained, without distortion and make it easier to blend words.
- Use a sequence in which the most words can be generated. For example, teach high-utility letters such as *m, s,* and *t* before lower-utility letters such as *x* or *z*.
- Progress from simple to more complex sound-spellings. For example, single consonants should be taught before consonant blends and digraphs. Likewise, short vowels should be taught before long vowels, variant vowels, and diphthongs.
- Separate visually and auditorially confusing letters and sounds (e.g., *e/i, b/d*) in the instructional sequence.

# SOUND-BY-SOUND BLENDING ROUTINE

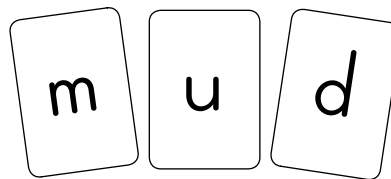
STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: INTRODUCE</b></p> <p>Briefly name and explain the task and its purpose to children before starting the activity.</p> <p><b>Teacher Tips</b></p> <ul style="list-style-type: none"> <li>• Blending is an instructional priority during initial phonic reading instruction.</li> <li>• Instruction and practice in blending must be explicit and reintroduced when new word types are introduced, such as longer words.</li> </ul>	<p><i>Say: Today we will practice blending sounds to make words. When I tap under a letter or spelling, you will say the sound. When I sweep my hand under two or more letters or spellings, you will blend the sounds together. When I slide my hand under the whole word, you will say the word. The more practice we have sounding out words with the letters and spellings we have learned, the better readers we will be.</i></p>
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Model the task with up to five examples. Use the signal techniques, such as tapping and sweeping with your finger. In addition, pay careful attention to the pace of instruction, for example, note when to pause and wait for children's response.</p> <p><b>Teacher Tips (Sequence)</b></p> <ul style="list-style-type: none"> <li>• Begin modeling using VC words such as <i>an</i> and <i>at</i>. Make sure children have been taught all the individual sound-spellings in the word prior to blending.</li> <li>• Continue with CVC words that begin with continuous sounds. Continuous sounds are sounds that can be stretched or prolonged, such as those made by the letters <i>f, l, m, n, r, s, v</i>, and <i>z</i>.</li> <li>• Then move on to CVC words that begin with stop sounds, or sounds that cannot be stretched. Since these sounds cannot be prolonged, tell children to pronounce the consonant and vowel quickly together.</li> <li>• Continue with the following sequence; CVCC (mask); CCVC (flat); CVCe (made); CVVC (road); CCVVC (float); CVVCC (roast), and then on to multisyllabic words.</li> <li>• When blending multisyllabic words, blend syllable by syllable.</li> <li>• Blending instruction should be related to spelling instruction. This will accelerate children's mastery of the sound-spellings and assist them in using the spellings in their writing.</li> </ul>	<p><i>Say: I will model for you how to blend words. Watch and listen.</i></p> <p>Then use the level of modeling appropriate for your children. (See below.)</p> <p><b>Level 1: Teacher Model</b></p> <p>Model only the first few times you do this routine.</p> <p><b>Level 2: Oral Sounding Out</b></p> <p>Use this level for many weeks or even months, until children become skilled at blending words. You will need to continue this level for children needing Strategic Intervention during Small Group Time.</p> <p><b>Level 3: Internal Sounding Out</b></p> <p>Begin to transition children to internal sounding out, or "sounding out in one's head," after months of practice doing it orally. It is important to show children how to internalize this strategy. Be sure to provide ample time for children to blend the word in their heads before saying it. Reinforce this level of blending during the reading of decodable text.</p> <p><b>Level 4: Whole Word Reading</b></p> <p>This is the goal of blending. Many children will naturally begin doing this as their blending skills improve because it is more efficient. You may have to remind children that they don't need to work through every word sound-by-sound if they have seen the word many times before. Therefore, they should visually scan the word and see if they recognize it prior to beginning the blending of it.</p> <p><b>See next page for EXAMPLE teacher scripts for each level.</b> </p>

## Level 1: Teacher Model

1. Write *m* on the board, or display the card in the pocket chart. Say: *I will sound out this word to show you how to do it. When I tap under a letter, I will say its sound. Then you will repeat it.* Point to the letter *m*, tapping under it, as you say the sound /m/. Then say: *Sound?* Tap under *m*. Have children chorally say the sound /m/.
2. Write *a* on the board to form *ma*. Point to the letter, tapping under it, as you say the sound /a/. Then say: *Sound?* Tap under *a*. Have children chorally say the sound /a/.
3. Point just to the left of *ma*. Sweep under *m* and *a* and blend the sounds /mmaaa/. As you blend the sounds, stretch each sound for 1 to 1½ seconds so children can hear each individual sound. Then say: *Blend?* Have children chorally blend the sounds as you sweep your finger under the letters.
4. Write *t* on the board to form *mat*. Point to the letter, tapping under it, as you say the sound /t/. Then say: *Sound?* Tap under *t*. Have children chorally say the sound /t/.
5. Point just to the left of *mat*. Sweep under *m*, *a*, *t* and blend the sounds /mmaaat/. Then say: *Blend?* Have children chorally blend the sounds as you sweep your finger under the letters.
6. Point just to the left of *mat*. Say: *Word?* Slide your hand quickly under the word. *Mat*.

## Level 2: Oral Sounding Out

1. Write *m* on the board, or display the card in the pocket chart. Point to the letter, tapping under it. Then say: *Sound?* Have children chorally say the sound /m/.
2. Write *u* on the board to form *mu*. Point to the letter, tapping under it. Then say: *Sound?* Have children chorally say the sound /u/.
3. Point just to the left of *mu*. Sweep under *m* and *u*. Then say: *Blend?* Have children chorally blend the sounds /mmuuu/ as you sweep your finger under the letters.
4. Write *d* on the board to form *mud*. Point to the letter, tapping under it. Then say: *Sound?* Have children chorally say the sound /d/.
5. Point just to the left of *mud*. Sweep under *m*, *u*, *d*. Then say: *Blend?* Have children chorally blend the sounds /mmuud/ as you sweep your finger under the letters.
6. Point just to the left of *mud*. Say: *Word?* Slide your hand quickly under the word. *Mud*.



## Level 3: Internal Sounding Out

- Tell children that today they will try to sound out words silently. They will say each sound “in their heads” as you point to it, then blend the sounds without speaking them. (For the first few times you use this level, you will need to model it. For example, say: *Watch my mouth. I’ll say the sounds in this word to myself, then I’ll say the word.* Move your lips as you say each sound, then blend the word.)
1. Write *r* on the board, or display the letter card in the pocket chart. Point to the letter, tapping under it. Say: *Sound?* Remind children not to say it out loud.
  2. Write *oa* on the board to form *roa*. Point to the spelling, tapping under it. Then say: *Sound?*
  3. Point just to the left of *roa*. Say: *Blend.* Sweep under *r* and *oa*. Have children silently blend the sounds as you sweep your finger under the letters.
  4. Write *d* on the board to form *road*. Point to the letter, tapping under it. Then say: *Sound?*
  5. Point just to the left of *road*. Say: *Blend.* Sweep under *r*, *oa*, *d*. Have children silently blend the sounds.
  6. Point just to the left of *road*. Say: *Word?* Slide your hand quickly under the word. *Road*.

## Level 4: Whole Word Reading

1. Write *soil* on the board, or display the spelling cards *s*, *oi*, and *l* in the pocket chart. Tell children that you want them to quickly and silently blend the sounds to read the word.
2. Say: *When I point to the word, I want you to sound it out “in your head” without making any noise. When I signal, say the word out loud the fast way.* Point to the word, tapping under it. Pause 3 seconds to give children time to read it. Then say: *Word?*
3. Provide corrective feedback, as needed.

The soil is wet.

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 3: PROVIDE GUIDED PRACTICE (WE DO)</b></p> <p>Continue to use effective signaling, corrective feedback/monitoring, and pacing procedures during this level. Guided practice using choral whole-group responses should continue until children demonstrate knowledge of the skill. Throughout the task, provide corrective feedback/monitoring using the correction procedure below, as needed.</p> <p><b>Teacher Tips</b></p> <ul style="list-style-type: none"> <li>• This part of the lesson should be brief and take between 5-10 minutes maximum.</li> <li>• It will be necessary to review the meanings of any unfamiliar words in the blending lines for English Learners and those with limited vocabularies. This should consist of a quick, child-friendly definition.</li> </ul>	<p>Provide practice blending words using the above signaling procedure, with students chorally responding. The blending word lists are located on the Teacher Chart and/or transparency.</p> <p>For most of the word lists:</p> <ul style="list-style-type: none"> <li>• Lines 1-2 contain decodable words found in the upcoming selections.</li> <li>• Line 3 contains minimal contrasts.</li> <li>• Lines 4-5 contain mixed lists with cumulative review words.</li> <li>• Lines 6-7 contain sentences.</li> </ul> <p>Say: <i>Your turn</i>. Point to each word as children chorally read it. Provide the appropriate corrective feedback noted below, as needed.</p> <p>For the sentences, read one word at a time. If the word can be sounded out using the phonics skills previously learned, say: <i>Sound out</i>. If the word is a high-frequency word formally taught, say: <i>Word?</i></p>
<p><b>STEP 4: USE CORRECTION PROCEDURE</b></p> <p>When children make mistakes during blending, we need to look at the prerequisite skills required to blend words, such as (1) the phonemic awareness skills needed to orally blend sounds, and (2) mastery of the individual sound-spellings that comprise the word. The correction procedures enable you to go back and determine where the blending breakdown occurred.</p> <div> </div>	<p><b>To correct students who make a Sound Error:</b></p> <ul style="list-style-type: none"> <li>• Model the sound that children missed, then have them repeat the sound. Take note of those sounds children consistently miss and provide needs-based reteach lessons during Small Group Time.</li> <li>• Say: <i>My turn</i>. Tap under the letter and say: <i>Sound? / __/</i>. Then face the children and say: <i>Say it with me: / __/</i>. Now it's your turn. <i>Sound?</i></li> <li>• Then return to the beginning of the word. Say: <i>Let's start over</i>.</li> </ul> <p><b>To correct students who make a Blending Error:</b></p> <ul style="list-style-type: none"> <li>• Model blending, using the appropriate signaling procedures. Say: <i>My turn</i>.</li> <li>• Then lead students in blending the sounds. You will respond with the children to offer support. Say: <i>Do it with me</i>.</li> <li>• Test students on each blending step. Say: <i>Your turn. Blend</i>.</li> <li>• Then return to the beginning of the word. Say: <i>Let's start over</i>.</li> <li>• When completed, back up two words and repeat the word reading steps, re-present the missed word, then continue on</li> </ul> <p><b>Vowel-First Blending</b></p> <ul style="list-style-type: none"> <li>• If students struggle reading CVC Words, use vowel-first blending.</li> <li>• Point to the vowel, say its sound, and have children repeat. Then blend the word from the beginning.</li> </ul>

STEPS	EXPLANATION / SCRIPT
<p><b>STEP 5: PROVIDE INDEPENDENT PRACTICE (YOU DO)</b></p> <p>Random individual turns allow you an opportunity to quickly assess each child's skill level and provide additional practice opportunities for those children needing more practice before moving on in the lesson.</p>	<p>When it appears that the group is consistently answering all items correctly, provide individual turns as a check. Call on several students for one word each. Call on students in an unpredictable order. Call more frequently on students who made errors.</p>
<p><b>STEP 6: REREAD FOR FLUENCY</b></p> <p>As a final reading opportunity, have children quickly and chorally read the word lists and sentences. Children should read a word every two seconds. This will help to develop fluency with the words and spelling patterns before children read the Decodable Reader.</p>	<p><i>Say: Let's read these words and sentences one more time quickly to "show what we know." I will point to each word as you read it aloud together. Then, we'll be ready to read our story for today.</i></p>



**BLENDING AT-A-GLANCE****STEPS****1 Introduce**

- ✓Name and explain purpose of task.

**2 Model (I Do)**

- ✓Use explicit modeling.
- ✓Use appropriate signaling, pacing, and corrective feedback/monitoring techniques.
- ✓Use Level 1–4, based on children’s needs and abilities.

**3 Provide Guided Practice (We Do)**

- ✓Use the blending lines on the Teacher Chart.
- ✓Keep this portion of lesson brief, 5–10 minutes.

**4 Use Correction Procedure**

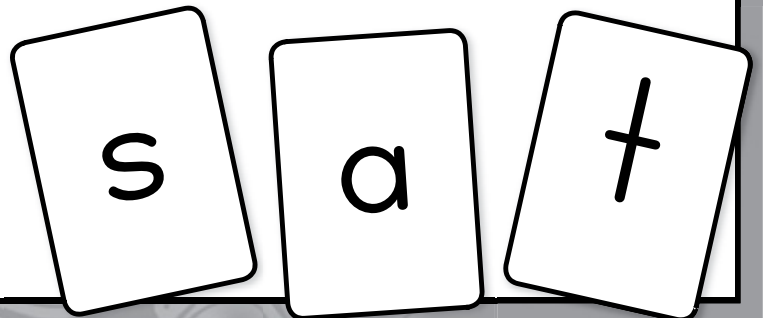
- ✓Address Sound Errors and Blending Errors, as needed.

**5 Provide Independent Practice (You Do)**


- ✓QuickCheck on individual children’s skills.

**6 Reread for Fluency**

- ✓Quickly and chorally reread blending lines on Teacher Chart as warm-up and preparation for the reading of the Decodable Story.



# INTRODUCING SOUND-SPELLING CARDS

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: INTRODUCE</b></p> <p>Briefly name and explain the task and its purpose to children before starting the activity.</p>	<p>Say: <i>Today we will learn a new sound and spelling.</i></p>
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Teach the target sound. Show the <b>Sound-Spelling Card</b>. State its name and say the sound the card represents. Then attach the sound to the name of the object, action, or animal shown.</p> <p>Point out the spelling or spellings focused on in the lesson. Write the spelling(s) as you say the sound. Use the handwriting models provided.</p> <p><b>Teacher Tips</b></p> <ul style="list-style-type: none"> <li>• You may wish to cover up sound-spellings not yet taught with a self-sticking note.</li> <li>• Play the <b>Sound Pronunciation CD</b> to correctly model the sound's pronunciation and teach the action rhyme.</li> <li>• Use the miniature Sound-Spelling Cards on the <b>Sound-Spelling Workboards</b> during small group time.</li> <li>• Focus on articulation using the mouth movement photos on the back of the <b>small Sound-Spelling Cards</b>. Instructions for how to describe the sound's pronunciation are included on the back of the card.</li> <li>• For a daily warm-up, point to each card and ask children to say the sound.</li> <li>• If uncommon spellings are encountered and noticed during reading, you may wish to put them on self-sticking notes and add to the appropriate Sound-Spelling Card.</li> <li>• Point out any color coding or hints on the cards. These include the following: <ul style="list-style-type: none"> <li>✓ Cards with dotted borders represent sounds that transfer from Spanish to English.</li> <li>✓ Cards with solid borders represent sounds that do not transfer from Spanish to English.</li> <li>✓ Vowels are in red.</li> <li>✓ A red box before a spelling (e.g., _dge) represents that the spelling follows a short vowel sound.</li> <li>✓ A line in or after the spelling (e.g., a_e, gi_) signals that a consonant is missing.</li> </ul> </li> </ul>	<p>Say: <i>This is the Ss Sound-Spelling Card. The sound is /s/. The /s/ sound is spelled with the letter s. Say it with me: /s/. This is the sound at the beginning of the word sun. Listen: /sss/ /un/, sun. Watch as I write the letter s. I will say the sound /s/ as I write the letter several times.</i></p> 



STEPS	EXPLANATION/SCRIPT
<p><b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b></p> <p>Have students practice connecting the sound and spelling through writing.</p>	<p>Say: Now do it with me. Say /s/ as I write the letter.</p> <p><i>This time, write the letter s five times as you say the /s/ sound.</i></p>
<p><b>STEP 4: BUILD FLUENCY</b></p> <p>Review the sound-spellings taught to this point in the year using the Word Building Cards. This should be done on a daily basis. Maintain a set of cards representing the sound-spellings taught. Display one card at a time as students chorally say the sound. Go through all the cards at a moderate pace. Then mix the cards and repeat at a faster pace. This will help students gain automaticity with the sound-spellings and should take no more than 2-3 minutes.</p> <p>Remove cards after many weeks or months, once you feel most students have gained mastery of the sound-spellings.</p>	<p>Say: Let's review the spellings we have learned so far. Look at the spelling on the Word Building Card. Say the sound. [Go through all the cards.]</p> <p><i>Now it's time for the speed challenge. Let's see how quickly we can say the sounds. [Mix the cards and go through them at a rapid pace.]</i></p> <p><i>Remember, knowing these sound-spelling quickly and accurately will help us sound out words as we read.</i></p>

## SOUND SPELLING CARDS AT-A-GLANCE

### Steps

#### 1 Introduce

- ✓ Name and explain purpose of task.

#### 2 Model (I Do)

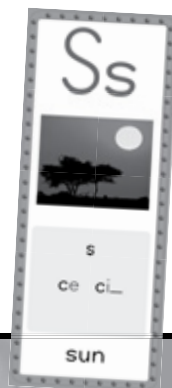
- ✓ Display the large Sound-Spelling Card and tell children the name of the picture. Have students repeat.
- ✓ Say the sound the letter (or spelling) represents and connect it to the picture name. Have students repeat as you point to the letter.
- ✓ Write the letter as you say the sound.
- ✓ Point out any color coding or other hints on the cards.

#### 3 Provide Guided Practice (We Do)

- ✓ Have students say the sound as you write the letter (or spelling).
- ✓ Have students write the letter (or spelling) five times as they say the sound.

#### 4 Build Fluency

- ✓ Display Word Building Cards containing the new sound-spelling and all previously-taught sound-spellings. Have students chorally say the sound as you display each spelling. Mix and repeat at a faster pace.



# BUILDING WORDS

STEPS	EXPLANATION/SCRIPT												
<b>STEP 1: INTRODUCE</b>  Briefly name and explain the task and its purpose to children before starting the activity.	<i>Say: Today we will be building, or making, words using the letters and spellings we have learned.</i>												
<b>STEP 2: MODEL (I DO)</b>  Place Word Building Cards in a pocket chart to form the first word you are building. Model blending the phonemes.  <b>Teacher Tips</b> <ul style="list-style-type: none"><li>• Build words using the target sound-spelling.</li><li>• Incorporate review sound-spellings into the exercise to build fluency.</li><li>• Use minimal contrasts to help students fully analyze words and notice the unique differences between words (e.g., lip/flip, pan/pen, tap/tape, bat/boat).</li></ul>	<i>Say: Look at the word I have made in the pocket chart. It is spelled f-e-d. Let’s blend the sounds together and read the word: /fffeed/, fed.</i>												
<b>STEP 3: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b>  Continue changing one (or more) letters in the word. Have students chorally blend the new word formed. Do a set of at least ten words.  <b>Teacher Tips</b> <ul style="list-style-type: none"><li>• For variety, ask students to change a sound in a word. For example, say “Change the first sound in <i>sat</i> to /m/. What new word will you make?”</li><li>• Start by changing initial sound-spellings. Progress to changing final sound-spellings. Then change the medial vowel spellings.</li></ul>	<i>Say: Change f to r. What is the new word we made? Let’s blend all the sounds together and read the word: /rrreed/, red.</i>  <i>Change r to l. What is the new word we made? Let’s blend all the sounds together and read the word: /llleed/, led.</i>  <i>Change d to g. What is the new word we made? Let’s blend all the sounds together and read the word: /llleeg/, leg.</i>  Continue with the words <i>beg, bet, bat, mat, met, men, pen, pan, pat, pet</i> .												
<b>CORRECTIVE FEEDBACK</b>  When children make mistakes during word building, model blending the new word formed.	<table><tr><td>f</td><td>e</td><td>d</td></tr><tr><td>r</td><td>e</td><td>d</td></tr><tr><td>l</td><td>e</td><td>d</td></tr><tr><td>l</td><td>e</td><td>g</td></tr></table>	f	e	d	r	e	d	l	e	d	l	e	g
f	e	d											
r	e	d											
l	e	d											
l	e	g											

# READING DECODABLES

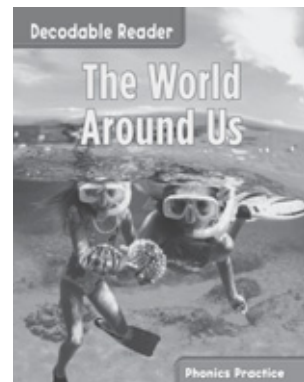
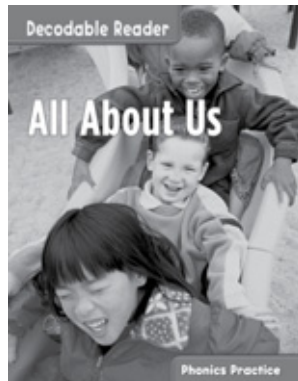
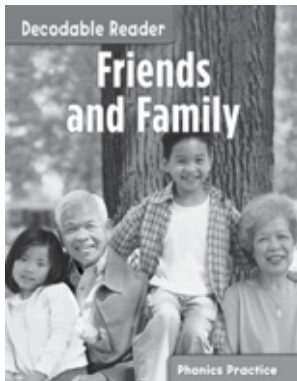
## What Are Decodable Readers?

Decodable readers are books in which a high percentage of the words (75% or more of the words) are comprised of previously-taught sound-spelling relationships.


## Why Are Decodable Readers Important?

Decodable Readers provide an opportunity for students to apply their skills of word reading to connected text. Decodable texts help students develop word automaticity and build fluency. The ability to read words automatically frees up students so they can focus on understanding the meaning of the text, the ultimate goal of reading. Research has shown that the use of decodable text in early reading accelerates students' knowledge and use of phonics patterns, improves their spelling, and positively affects their motivation to read (Blevins, 2000).

The Decodable Readers in Kindergarten represent the culmination of students' reading skills up to that point in the year. The Decodable Readers in Grades 1 and 2 contain one fiction and one nonfiction selection each week. The nonfiction reader is connected to key science and history/social science content standards. In Grades 3-6, Decodable Passages are available in the Teacher's Resource Book for those students needing additional, targeted decoding practice.



# DECODABLE READER ROUTINE

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: REVIEW HIGH-FREQUENCY WORDS</b></p> <ul style="list-style-type: none"> <li>• Display the <b>High-Frequency Word Cards</b> for the high-frequency words found in the text.</li> <li>• Review the words with children using the <b>Read/Spell/Write</b> Routine.</li> </ul>	<p>Place the following Word Building Cards in a pocket chart: <i>one, two, they, her, does</i>. Then review each one using the Read/Spell/Write Routine.</p> <p><b>Read</b> Point to and say the word <i>one</i>. <i>This is the word one. It is a number word. I have one book.</i> [Point to the word one.] <i>What is the word?</i></p> <p><b>Spell</b> <i>The word one is spelled o-n-e. Spell the word one with me: o-n-e.</i></p> <p><b>Write</b> <i>Let's write the word one. Say each letter as you write it.</i> [Wait for students to write the word.] <i>What is the word?</i></p> <p>[Continue with the remaining words.]</p>
<p><b>STEP 2: PREVIEW AND PREDICT</b></p> <ul style="list-style-type: none"> <li>• Read the title aloud. Ask students to discuss what they see on the cover. For English Learners, describe the cover using academic language prior to asking them about the cover's contents.</li> <li>• Then ask what they think will happen in the story. Use the questions and prompts provided in the lesson.</li> </ul> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>• This portion of the lesson should be quick and take no more than 2 minutes.</li> </ul>	<p>Point to the book's title and have students sound out each word as you run your finger under it. Then ask:</p> <ul style="list-style-type: none"> <li>• <i>Where are the children?</i></li> <li>• <i>Why do you think the children are at a chicken coop, or chicken home?</i></li> <li>• <i>Does the hen look happy? How do you know?</i></li> </ul> 
<p><b>STEP 3: FIRST READ (READ TOGETHER)</b></p> <ul style="list-style-type: none"> <li>• Turn to the first page of the book.</li> <li>• Have students point to each word, sounding out decodable words and saying the high-frequency words quickly. Students should chorally read the story the first time through.</li> <li>• If students have difficulty, provide corrective feedback page by page as needed.</li> </ul>	<p>Say: <i>Turn to page 2. Put your finger on the first word. Let's sound out each word together. Ready? Begin.</i></p> <p><b>Corrective Feedback Models</b></p> <p><b>Choral Reading</b></p> <p>If a student does not read a word correctly:</p> <ul style="list-style-type: none"> <li>• Model how to sound out the word, using the blending routine.</li> <li>• Repeat the routine with the same word, asking students to blend the sounds together with you.</li> <li>• Go back to the beginning of the sentence and read each word with students.</li> </ul> <p><b>Partner Reading</b></p> <p>Provide sentence starters to help partners provide feedback.</p> <ul style="list-style-type: none"> <li>• <i>The word is ____.</i></li> </ul> <p>(If a decodable word, have the partner model how to blend the sounds.)</p> <ul style="list-style-type: none"> <li>• <i>Let's say the word together, ____.</i></li> <li>• <i>Now let's read the sentence again.</i></li> </ul>

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 4: CHECK COMPREHENSION</b></p> <ul style="list-style-type: none"> <li>• Ask questions that focus on overall comprehension and prompt students to revisit the text. At least one of the questions should involve partner talk.</li> <li>• Prompt students to answer in complete sentences.</li> <li>• Have students find sentences in the story to support answers.</li> <li>• Call on students to discuss any difficult words in the selection.</li> </ul>	<p>Ask the following questions:</p> <ul style="list-style-type: none"> <li>• <i>Why did Meg and Ben want eggs?</i></li> <li>• <i>Why didn't Ben get eggs? Find the sentence in the story that tells why.</i></li> <li>• <i>Point to the name of the animal that has eggs.</i></li> <li>• <i>Discuss with a partner why Mom didn't make eggs.</i></li> </ul>
<p><b>STEP 5: SECOND READ (BUILD FLUENCY)</b></p> <ul style="list-style-type: none"> <li>• Have students reread the book. Use this time to differentiate instruction and practice.</li> <li>• Chorally reread the book with On-Level and Approaching Level students.</li> <li>• If Approaching Level students struggle sounding out words, provide "with you" blending models. Then review blending using the words on the word list at the end of the story (book) during Small Group time. Conclude by guiding students through a rereading of the book during the small group session.</li> <li>• Have Beyond Level students read the text to a partner. Partners should read alternating pages. The reader should point to each word as the listener follows in his or her book. Students then switch roles. Have partners retell the story to each other.</li> <li>• On Day 2 of the Decodable Reader lesson, use this time to teach an accelerated skill minilesson, such as the one provided in the Teacher's Edition.</li> </ul>	<p>Say: <i>Great job working through the story. Now let's reread the story to make sure we can decode all the words.</i></p>
<p><b>STEP 6: CUMULATIVE REVIEW</b></p> <p>As time allows throughout the week (and always on DAY 5), have students reread this week's decodable stories and as many previous stories as possible.</p>	



## READING DECODABLES AT-A-GLANCE

### Steps

#### 1 Review High-Frequency Words

- ✓ Display the High-Frequency Word Cards for the high-frequency words found in the text.
- ✓ Review the words with children using the **Read/Spell/Write** Routine.

#### 2 Model (I Do)

- ✓ Read the title aloud. Ask students to discuss what they see on the cover. For English Learners, describe the cover using academic language prior to asking them about the cover's contents.
- ✓ Then ask what they think will happen in the story. Use the questions and prompts provided in the lesson.

#### 3 First Read (We Do)

- ✓ Turn to the first page of the book.
- ✓ Have students point to each word, sounding out decodable words and saying the high-frequency words quickly. Students should chorally read the story the first time through.
- ✓ If students have difficulty, provide corrective feedback page by page as needed.



**Steps****4 Check Comprehension**

- ✓ Ask questions that focus on overall comprehension and prompt students to revisit the text. At least one of the questions should involve partner talk.
- ✓ Ask students to answer in complete sentences.
- ✓ Have students find sentences in the story to support answers.
- ✓ Call on students to discuss any difficult words in the selection.

**5 Second Read (You Do)**

- ✓ Have students reread the book. Use this time to differentiate instruction and practice.

**6 Cumulative Review**

- ✓ Have students reread this week's and previous weeks' stories to build fluency.



# MULTISYLLABIC WORDS

## What Is a Syllable?

A syllable is a unit of pronunciation. Each syllable contains only one vowel sound. Finding the vowels (or vowel spellings) in a word is an important first step in breaking a word into syllables. Each syllable may have more than one vowel letter, but only one vowel sound, as in *boat*.

## Why Is Syllabication Important?

To decode multisyllabic words, students must be able to divide words into recognizable chunks. Students need practice in dividing words into syllables to decode longer, unfamiliar words.

## Basic Syllable Patterns

There are six basic syllable patterns that comprise most of the syllables in English words (Moats). Use the routine that follows to teach students how to read multisyllabic words with the following syllable patterns.

1. **Closed Syllables** These syllables end in a consonant. The vowel is "closed in" by the consonants and the sound is usually short. (rab/bit)
2. **Open Syllables** These syllables end in a vowel. The vowel sound is usually long; the vowel is open and free to say its name. (ti/ger)
3. **Consonant + le Syllables** When a word ends in *le*, the consonant that precedes it plus the letters *le* form the final syllable. (han/dle)
4. **Vowel Team/Digraph Syllables** When a vowel digraph appears in a word, the vowels act as a team and must remain in the same syllable. (crea/ture)
5. **r-Controlled Vowel Syllables** When a vowel is followed by the letter *r*, the vowel and the letter *r* act as a team and must remain in the same syllable. (tur/tle)
6. **Final e (Silent e) Syllables** When a word ends in *e*, often the vowel before it and the letter *e* act as a team to form the vowel sound and must therefore remain in the same syllable. (be/have)

# MULTISYLLABIC WORDS ROUTINE

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: EXPLAIN/MODEL</b></p> <ul style="list-style-type: none"> <li>• Define syllable.</li> <li>• Introduce the new syllable pattern.</li> <li>• Model using a sample word.</li> </ul>	<p>Remind students that every syllable in a word has one vowel sound. Write the word <i>simple</i> on the board. Point out that when a word ends in <i>-le</i>, the consonant before it plus the letters <i>-le</i> form the last syllable. This is called a <i>Consonant + le Syllable</i>.</p> <p>Underline the syllable <i>ple</i> in the word <i>simple</i>. Model how to pronounce the syllable and use it to read the whole word.</p> <p>Say: <i>I know that -le and the consonant before it form the last syllable in a word. Therefore, the last syllable in s-i-m-p-l-e is ple. That is pronounced /pəl/. This leaves s-i-m, which is pronounced /sim/. When I put the two word parts together, I get the word simple.</i></p>
<p><b>STEP 2: GUIDED PRACTICE/PRACTICE (WE DO/YOU DO)</b></p> <ul style="list-style-type: none"> <li>• Have students practice reading common syllables and simple words using the syllable patterns.</li> <li>• Review previously-taught syllable types.</li> </ul> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>• Closed and Open Syllables are the most common in English words. Teach these syllable types first.</li> </ul>	<p>Write the Consonant + le syllables below on the board. Model how to pronounce each one. Then model how to read the sample words listed.</p> <ul style="list-style-type: none"> <li>• <b>ble</b> as in <i>table</i></li> <li>• <b>cle</b> as in <i>uncle</i></li> <li>• <b>dle</b> as in <i>riddle</i></li> <li>• <b>fle</b> as in <i>ruffle</i></li> <li>• <b>gle</b> as in <i>giggle</i></li> <li>• <b>ple</b> as in <i>dimple</i></li> <li>• <b>tle</b> as in <i>little</i></li> <li>• <b>zle</b> as in <i>puzzle</i></li> </ul> <p>Remind students that there are six common syllable types in English. Briefly review the following previously-taught syllable types:</p> <ul style="list-style-type: none"> <li>• <b>Open Syllables</b> end in a vowel and have a long vowel sound, such as <i>ta</i> in <i>table</i>.</li> <li>• <b>Closed Syllables</b> end in a consonant and have a short vowel sound, such as <i>lit</i> in <i>little</i>.</li> </ul>

STEPS	EXPLANATION/SCRIPT																								
<p><b>STEP 3: TRANSITION TO LONGER WORDS</b></p> <ul style="list-style-type: none"><li>Write syllables and words containing the syllables on the board. Help students blend them.</li></ul> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"><li>This careful scaffolding allows students to readily recognize common word parts in longer, unfamiliar words and makes the reading of multisyllabic words easier for students.</li></ul>	<p>Write the word parts below on the board. Have students chorally read the word or syllable in the first column. Ask students whether it is an <i>Open Syllable</i> or a <i>Closed Syllable</i>. Help students use this information to correctly pronounce the syllable.</p> <p>Then ask students to underline the <i>Consonant + le</i> syllable in the longer word in the second column. Model how to read the word.</p> <p>When finished, have students chorally read the words. Point to each word in random order at varying speeds.</p> <table><tr><td>can</td><td>candle</td><td>fa</td><td>fable</td></tr><tr><td>sad</td><td>saddle</td><td>no</td><td>noble</td></tr><tr><td>jug</td><td>juggle</td><td>bri</td><td>bridle</td></tr><tr><td>wig</td><td>wiggle</td><td>sta</td><td>stable</td></tr><tr><td>mid</td><td>middle</td><td>ma</td><td>maple</td></tr><tr><td>man</td><td>mantle</td><td>ca</td><td>cable</td></tr></table>	can	candle	fa	fable	sad	saddle	no	noble	jug	juggle	bri	bridle	wig	wiggle	sta	stable	mid	middle	ma	maple	man	mantle	ca	cable
can	candle	fa	fable																						
sad	saddle	no	noble																						
jug	juggle	bri	bridle																						
wig	wiggle	sta	stable																						
mid	middle	ma	maple																						
man	mantle	ca	cable																						
<p><b>STEP 4: BUILD WORDS</b></p> <ul style="list-style-type: none"><li>Have students build words containing the new syllable type using Word Building Cards. This “playing” with word parts is an essential part of students internalizing how multisyllabic words work and understanding the function and placement of various syllables.</li></ul>	<p>Use Word Building Cards <i>ble, tle, ple, bub, ta, rum, rat, cat, set, ap, dim</i>. Have students use the words parts to build as many multisyllabic words with <i>Consonant + le</i> as possible. These and other words can be formed: <i>bubble, table, rumble, rattle, cattle, settle, apple, dimple</i>.</p>																								
<p><b>STEP 5: APPLY DECODING STRATEGY</b></p> <ul style="list-style-type: none"><li>Have students use the Reading Big Words strategy to decode longer, more complex multisyllabic words containing the target syllable patterns.</li></ul>	<p>Guide students to use the Reading Big Words strategy to decode the following words: <i>befuddle, timetable, scramble, belittle, unstable</i>.</p> <p>Write each word on the board. Remind students to look for <i>Consonant + le</i> syllables in Step 3 of the decoding strategy procedure.</p>																								
<p><b>STEP 6: BUILD FLUENCY</b></p> <ul style="list-style-type: none"><li>Use Speed Drills throughout the week to help students build fluency recognizing the target syllable patterns.</li><li>Conduct daily syllable fluency drills using the Word Build Cards. These cards contain the 322 most common syllables in English. Students will work on approximately 10 syllables per week.</li></ul>	<p>Distribute copies of the Consonant + le Speed Drill in the <i>Teacher’s Resource Book</i>. Use the Speed Drill routine listed to help students become fluent reading words with these syllables.</p> <p>Use Word Building Cards 21-30. Display one card at a time. Have students chorally read the common syllable. Repeat at varying speeds and in random order. Have students work with partners during independent work time to write as many words as they can containing these syllables. Add these words lists to the Big Question Board.</p>																								

# READING BIG WORD STRATEGY

STEPS	EXPLANATION/SCRIPT										
<p><b>STEP 1:</b> Look for word parts (prefixes) at the beginning of the word.</p>	<ul style="list-style-type: none"> <li>Write the word <i>unexpected</i> on the board. Do not pronounce the word.</li> <li>Have students read aloud Step 1 of the Decoding Strategy: <i>Look for word parts (prefixes) at the beginning of the word.</i></li> </ul> <p>Say: <i>Let's look at this word. It is spelled r-e-b-u-i-l-d-i-n-g. This is a long word. To help me read it, I will look for parts of the word that I know. I begin by looking at the beginning. In this word I see the prefix re. A <b>prefix</b> is a word part that always appears at the beginning of a word. It changes the meaning of the word. The prefix re means "again." Let's underline the prefix re. I have seen this prefix in many words, such as remake and recook.</i></p>										
<p><b>STEP 2:</b> Look for word parts (suffixes) at the end of the word.</p>	<p>Say: <i>Then I look at the end of the word. There are many common word parts that appear at the end of a word. These are called suffixes. A <b>suffix</b> can change the meaning of a word and often its part of speech. For example, it can change a noun, such as boat, into a verb, such as boating. I see the common suffix -ing at the end of this word.</i></p>										
<p><b>STEP 3:</b> In the base word, look for familiar spelling patterns. Think about the six syllable-spelling patterns you have learned.</p>	<p>Say: <i>All that's left in this word are the letters b-u-i-l-d. These letters form the word build. That's a word I already know how to read.</i></p>										
<p><b>STEP 4:</b> Sound out and blend together the word parts.</p>	<p>Say: <i>Let's put the word parts together: re-build-ing.</i></p>										
<p><b>STEP 5:</b> Say the word parts fast. Adjust your pronunciation as needed. Ask yourself: "Is it a real word?" "Does it make sense in the sentence?"</p>	<p>Say: <i>Now let's say the word parts quickly: rebuilding. That's a word I have heard before. I know they were rebuilding the homes destroyed by the earthquake. Using the word parts I can also figure out what the word means. Since re means "again" I can figure out that rebuilding means "to build again."</i></p> <div> <p><b>Decoding Strategy</b></p> <p><b>Decoding Strategy Chart</b></p> <table> <tr> <td><b>Step 1</b></td><td>Look for word parts (prefixes) at the beginning of the word.</td></tr> <tr> <td><b>Step 2</b></td><td>Look for word parts (suffixes) at the end of the word.</td></tr> <tr> <td><b>Step 3</b></td><td>In the base word, look for familiar spelling patterns. Think about the six syllable-spelling patterns you have learned.</td></tr> <tr> <td><b>Step 4</b></td><td>Sound out and blend together the word parts.</td></tr> <tr> <td><b>Step 5</b></td><td>Say the word parts fast. Adjust your pronunciation as needed. Ask yourself: "Is this a word I have heard before?" Then read the word in the sentence and ask: "Does it make sense in this sentence?"</td></tr> </table> </div>	<b>Step 1</b>	Look for word parts (prefixes) at the beginning of the word.	<b>Step 2</b>	Look for word parts (suffixes) at the end of the word.	<b>Step 3</b>	In the base word, look for familiar spelling patterns. Think about the six syllable-spelling patterns you have learned.	<b>Step 4</b>	Sound out and blend together the word parts.	<b>Step 5</b>	Say the word parts fast. Adjust your pronunciation as needed. Ask yourself: "Is this a word I have heard before?" Then read the word in the sentence and ask: "Does it make sense in this sentence?"
<b>Step 1</b>	Look for word parts (prefixes) at the beginning of the word.										
<b>Step 2</b>	Look for word parts (suffixes) at the end of the word.										
<b>Step 3</b>	In the base word, look for familiar spelling patterns. Think about the six syllable-spelling patterns you have learned.										
<b>Step 4</b>	Sound out and blend together the word parts.										
<b>Step 5</b>	Say the word parts fast. Adjust your pronunciation as needed. Ask yourself: "Is this a word I have heard before?" Then read the word in the sentence and ask: "Does it make sense in this sentence?"										

# FLUENCY STRATEGIES

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: INTRODUCE</b></p> <p><b>What Is Fluency?</b> Fluency is the ability to read text <i>quickly, accurately, and with proper expression</i> (also called prosody). Prosodic language features include appropriate phrasing, intonation, and rhythm. These three elements are identified within a text by particular punctuation. Connected text fluency progresses in stages after a student is automatically able to recognize letter names, sounds, and words. Students excel in fluency when they are successfully able to decode print accurately and effortlessly and can make it sound as if they are talking when they read aloud.</p> <p><b>Why Is It Important?</b> The hallmark of a fluent reader is one who decodes and comprehends simultaneously. A fluent reader frees up his or her mental energies from basic decoding and focuses on new vocabulary and comprehension of a text.</p> <p>Fluency instruction and practice occurs on a daily basis in the Teacher's Edition.</p>	<p><i>Say: Today we are going to work on becoming better readers. Good readers know how to read quickly and smoothly. As they read aloud, they read as if they are talking. If they read dialogue, they read it the way the character would have said it, expressing the character's emotions. While reading aloud their listeners understand what the author is trying to express.</i></p> <p><i>How do they do that? Well, when we speak, we want to get certain messages across. We do this by stressing certain words, speaking in certain tones, or even by making particular facial expressions. Good readers do the same. Only they do so by carefully grouping and emphasizing words and phrases through observation of certain punctuation.</i></p> <p><i>We'll go through examples together.</i></p>
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Model fluency by reading aloud using appropriate speed, accuracy, and prosody.</p> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>Audio recordings of a text may also be used for modeling. (Audio recordings are offered through the Macmillan/McGraw-Hill <i>California Treasures</i> Listening Libraries and Fluency Solutions Audio CDs. The passages in the Fluency Solutions Audio CDs are recorded at two speeds—a slower practice speed and a faster fluent speed.)</li> </ul>	<p>First, select a passage from a text, such as the Student Book. Then select an aspect of fluency to model, such as intonation.</p> <p><i>Say: When we read aloud with natural expression, we show which words go together by pausing, raising and lowering our voices, and emphasizing certain words and sounds. Today, I am going to read a passage from your Student Book. Listen to me read. Notice how fast or slow I am speaking, note any time I stop, make facial expressions or raise or lower my voice. For example, if I read a question I will raise my voice at the end. If I read an exclamation, I will say it in an excited way. If I see a comma, I will pause slightly.</i></p> <p>READ the passage. Ask students the following:</p> <p><i>Did I read any sentences in a special way? If so, what did I do? How?</i></p> <p><i>Was I clear? Did you understand what I was reading?</i></p> <p><i>Did the passage make sense to you? Could you tell when something was about to happen next?</i></p> <p>READ the passage a second time, only have students follow along in their text.</p> <p><i>This time, open your books to page _____ and follow along as I read.</i></p> <p>(NOTE: If using an audio recording, supply a copy of the text. Ask students to read aloud with the audio recording using a quiet voice.)</p>

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 3: PROVIDE GUIDED PRACTICE (WE DO)</b></p> <p>Both echo and choral reading are good ways to help students practice correct fluency skills.</p> <p><b>Teacher Tip</b></p> <ul style="list-style-type: none"> <li>As you listen to your students read, offer immediate feedback on errors made. Do so by: 1) Pointing out the error; 2) Modeling how to correct it or tell them the word; 3) Ask the reader(s) to start reading from the beginning of the sentence. Since we can store in our working memories what we read for only about 8-10 seconds, it is essential that students start over at the beginning of a sentence when they make an error and/or stop to figure out a word for a lengthy period of time.</li> </ul>	<p>Select a short passage to read with students.</p> <p><b>A. Echo Reading</b>  <i>Say: Today, we are going to practice echo reading. I am going to read a short passage to you. I will then go back and read a sentence or two at a time, and you will repeat aloud after me. Listen carefully to the way in which I read each sentence. You will use the same speed and expression.</i></p> <p>(For beginning readers, read only one or two sentences at a time, and have students repeat after you. For grades 2-3, use a passage of approximately 100 words. For grades 4 and above, use a passage of approximately 150-200 words.)</p> <p>Model a sentence or two and have the students repeat after you, using the same intonation, phrasing, and pace.</p> <p>Be sure to provide corrective feedback.</p> <p>Select a short text to read with your students. Provide them with a copy of the text.</p> <p><b>B. Choral Reading</b>  <i>Say: Today, we are going to practice choral reading. Read along with me as I read aloud. Once again, try to use the proper phrasing, speed, and intonation.</i></p> <p>Use a soft voice so you can hear students read, but are also guiding them. Go around the room and notice those students who are struggling. Provide corrective feedback.</p>
<p><b>STEP 4: PROVIDE GROUP PRACTICE (YOU DO)</b></p> <p>Partner reading is a good way for fluent readers to practice and model their skills, while at the same time, helping their peers improve their reading skills.</p> <p><b>Teacher Tips</b></p> <ul style="list-style-type: none"> <li>Provide sentence starters to help students offer appropriate feedback during partner reading.</li> </ul> <p>Examples include:</p> <ol style="list-style-type: none"> <li>"That word is _____."</li> <li>"Let's say the word together, _____. Now let's go back and return to the beginning of the sentence."</li> </ol> <ul style="list-style-type: none"> <li>The fluency passages in the Student Practice Books contain Partner Fluency Feedback forms for students to complete when partner reading. You may wish to use these as models to make generic forms for partners to use with any book.</li> </ul>	<p>After determining the general level of fluency among your students, pair a more fluent reader with a less fluent one. Make sure that the range in skill levels is not too extreme; otherwise the more-skilled partner may become frustrated and the partnering will be less productive.</p> <p>Provide text to your students.</p> <p><i>Say: Today, we are going to work in pairs. You will take turns reading the passage aloud to your partner.</i></p> <p><b>**The more fluent readers should read first, since they are modeling proper fluency skills. However, in order not to single out the less fluent readers, it may help to assign the more fluent readers a color, such as red. Inform the class that the "red" readers will go first, followed by the "blue" readers.</b></p> <p><i>After each turn, both of you are going to talk about and each write down the answers to these questions for me:</i></p> <ol style="list-style-type: none"> <li>Were you able to read the words quickly and smoothly?</li> <li>Did you find it easy to follow the punctuation marks?</li> <li>Did you know when to stop, slow down, begin or raise your voice?</li> <li>Did you understand what you read?</li> <li>Were there any words you did not recognize?</li> <li>Did your reader understand what you read?</li> <li>Can you guess what will happen next in the story?</li> </ol> <p><i>It is important that you help each other recognize what you find difficult and what you find easy about reading.</i></p>



STEPS	EXPLANATION/SCRIPT
<p><b>STEP 5: BUILDING and ASSESSING</b></p> <p><i>Remember this:</i> Studies have shown that 75% of students with comprehension difficulties have underlying fluency issues (Duke, 2001).</p> <p>Research links standardized achievement test scores and fluency rate—the number of words read correctly per minute (Fuchs, L.S., Fuchs, D., Hosp, M., Jenkins, J. and Joseph R., 2001).</p> <p><b>Teacher Tips</b></p> <p>Fluency should be assessed at least three times throughout the year.</p> <p>According to Hasbrouck and Tindal, 2006, here are the recommended fluency gains:</p> <p><b>GRADE FLUENCY GROWTH</b></p> <p>Second half of grade 1: two words per week  Grade 2: one to two words per week  Grades 3-6: one word per week</p> <p>The <i>Oral Fluency Scale</i> identifies four levels of fluency behaviors. The <b>goal</b> is to move students to the highest level of fluency, Level 4.</p> <p><b>LEVEL 1:</b> Student reads word-by-word; reads very slowly and choppy.</p> <p><b>LEVEL 2:</b> Student reads mainly two-word phrases and at times word-by-word; groups words awkwardly, paying little attention to punctuation or meaning.</p> <p><b>LEVEL 3:</b> Student reads in two-to-four word phrases; uses punctuation and groups words so the text can be interpreted; reads at an appropriate speed most of the time.</p> <p><b>LEVEL 4:</b> Students read in meaningful phrases; may occasionally repeat words; reads with expression at appropriate speed.</p> <p>To determine <i>appropriate</i> text levels for students, examine the following:</p> <p><b>Q:</b> Can the student recognize above 95% of words without assistance and at the same time have complete comprehension of the text while reading orally?</p> <p><b>A.</b> If so, this student is at an <i>independent</i> reading level.</p> <p><b>Q:</b> Does word recognition exceed 90%? Can a student read text with guidance from the teacher, while still being given the opportunity to practice strategies which foster reading growth?</p> <p><b>A.</b> If so, this student is at an <i>instructional</i> reading level.</p> <p><b>Q:</b> Is word recognition less than 90%? Is the text too difficult for a student to read without strong teacher support?</p> <p><b>A.</b> If so, this student is at <i>frustration</i> reading level.</p>	<p>Early phonics and decoding skills as well as the ability to recognize words automatically are the keystones to developing early fluency. At Kindergarten and early Grade 1, offer opportunities for students to practice the following skills with an emphasis on accuracy and building speed. Here are some activities:</p> <p><b>Letter Naming</b></p> <p>Say: <i>Today, we are going to see how quickly you can identify the names of each letter.</i></p> <p>Display letter cards, or use the Sound-Spelling Cards displayed in the classroom.</p> <p><i>Name the letter I am pointing to.</i></p> <p>First point to the letters in order, then in random order. As students have more time to practice letter identification, increase the speed with which you point to the letters.</p> <p>Note: Letter fluency drills occur in the Teacher's Edition lessons daily.</p> <p><b>Phoneme Identification</b></p> <p>Say: <i>Today, we are going to identify the sounds of letters.</i></p> <p>Display upper and lowercase letters.</p> <p>Point to a letter.</p> <p><i>Name the letter and the sound it makes.</i></p> <p>Repeat, pointing to the letters more quickly each time.</p> <p><b>Word Automaticity</b></p> <p>Say: <i>Today, we'll see how quickly you can identify these words.</i></p> <p>Display a column of 6-8 groups of words.</p> <p><i>As I point to each word, chorally read them aloud.</i></p> <p>Note: Daily word automaticity practice appears in the Teacher's Edition using the Teaching Chart and phonics transparencies.</p>

STEPS	EXPLANATION/SCRIPT
<p>Beginning in the middle of the first grade, have students do a one minute fluency assessment to check on their reading progress.</p> <p>Follow along in a copy of the text as the student reads aloud from an unrehearsed passage.</p> <p>Record errors such as omissions, substitutions, misreadings, insertion of words or word parts, and hesitations of more than three seconds.</p> <p>DON'T CONSIDER SELF-CORRECTIONS or REPETITIONS AS ERRORS.</p> <p>To calculate the number of words read correctly in one minute, subtract the number of errors from the total number of words read.</p> <p>REMEMBER:</p> <p>Assessing below-level students more frequently will help determine whether instructional interventions are having a positive effect. Use results to monitor growth.</p> <p>To assist you, Macmillan/McGraw-Hill <i>California Treasures</i> program offers Fluency Assessments in the <b>Diagnostic Assessment</b> handbook.</p>	<p><b>Sentence Fluency</b></p> <p><i>Say: Today, let's see how well we can read sentences while paying attention to punctuation. When we do this, we are able to recognize phrases, clauses, pauses, and know when to change emphasis and tone.</i></p> <p>First, model simple three-word sentences.</p> <p>Read them aloud, each time stressing a different word.</p> <p>Example: <u>H</u>e is sick. He <u>i</u>s sick. He is <u>s</u>ick.</p> <p>Ask the students: <i>How did the meaning of each sentence change? What caused the change?</i></p> <p>Next, model the same sentence using different punctuation.</p> <p>Example: <i>Chris runs. Chris runs! Chris runs?</i></p> <p>Ask the students: <i>How did the meaning of each sentence change this time? What caused the change?</i></p> <p>Lastly, display several sentences on the board such as: <i>My frisky dog, whose name is Happy, ran away with my toy.</i> <i>Susanna and Jose are going to the movies.</i> <i>When will dinner be ready?</i> <i>Watch out!</i></p> <p>Read each sentence a few times.</p> <p>First, do not pay attention to punctuation or chunking phrases.</p> <p>Ask the students: <i>Do these sentences sound funny? Why?</i></p> <p>Next, read the sentence using proper fluency (observing punctuation, emphasis, and tone).</p> <p>Ask the students: <i>What was different about the second time I read these sentences? What specifically changed?</i></p>



# VOCABULARY

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: INTRODUCE</b></p> <p><b>What Is Vocabulary Instruction?</b> Vocabulary is the knowledge of words and their meanings. <i>Vocabulary development</i> focuses on words beyond basic sight words (e.g., <i>I, you, he, she, it, we, they</i>). It involves words that are rich in meaning (e.g., academic language, multiple-meaning words).</p> <p><i>Oral vocabulary</i> is the set of words for which students know the meanings when they are spoken or read aloud to them. Emergent readers have a much larger oral vocabulary than they do print vocabulary. Developing students' oral vocabulary will help them to better comprehend text read to them. Oral vocabulary also helps readers make sense of words they see in print.</p> <p><b>Why Is It Important?</b> Comprehension of text depends on understanding the words in a selection, and competent writing requires extensive and specific word knowledge. Students learn the meanings of many words indirectly as they listen to spoken language and read, but expanding students' vocabulary must include direct instruction in specific word meaning. A student's lack of word knowledge significantly impedes his or her reading growth. Many students come to school with limited vocabularies. Accelerating the vocabularies of these students is a primary goal of early instruction.</p> <p><b>What Words Are Taught in the Program?</b> The words that have the most impact on students' reading achievement are academic, or Tier 2, words. These words appear in a lot of texts and are the ones that students are least likely to know. See below for more information on the levels, or tiers, of vocabulary words.</p> <p><b>Tier 1</b> words are those commonly used in speech, such as <i>mom, table, and book</i>. Little instructional time needs to spent on these words, unless the student is an English learner.</p> <p><b>Tier 2</b> words are those words found in many sources and have wide applicability, such as <i>compare, enormous, and vital</i>. A lack of knowledge of these words can severely hinder comprehension of text. A significant amount of instructional time should focus on these words.</p> <p><b>Tier 3</b> words are those content-specific words that do not appear in many sources and can be taught at point of use, such as <i>lava, bipartisan, and Louisiana Purchase</i>.</p>	<p>Say: <i>Today we will learn new vocabulary words. I will say a vocabulary word, define it, and use it in a sentence. Then, I will ask you to use the word in a sentence. The more we practice using the new words, the better readers and writers we will be.</i></p>

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Model the task by introducing and using several new vocabulary words.</p> <p><b>Teacher Tips</b></p> <ul style="list-style-type: none"> <li>● Introduce vocabulary words before students read the selection or while reading the text aloud to students.</li> <li>● If you read aloud, pause to give a brief explanation for each word that you have chosen to teach. Then fully introduce the meaning of the words after reading the story.</li> <li>● Begin modeling by saying the word. Write the word on the board. Use the <b>Syllable Scoop technique</b> to pronounce the word and emphasize syllable patterns. For example, draw a small loop under each syllable in <i>cooperate</i> as you pronounce it.</li> </ul> <p><u>Co op er ate</u></p> <ul style="list-style-type: none"> <li>● Teach the word using the <b>Define/Example/Ask</b> routine.</li> <li>● <b>Define</b> the word in simple, student-friendly language.</li> <li>● Provide an <b>example</b> of the word used in a meaningful sentence, relevant to students' lives.</li> <li>● <b>Ask</b> students a question that requires them to apply the word, either by giving an example or explanation or by identifying a synonym or antonym for the word.</li> </ul>	<p>Say: <i>I am going to say the vocabulary word so you can hear the correct pronunciation. Then I am going to define it, use it in a sentence, and ask you a question about it.</i></p> <p><b>Define/Example/Ask sample</b></p> <p><i>Cooperate</i> [Write the word on the board. Pronounce the word, using the Syllable Scoop technique. Have students repeat the word and correct any articulation difficulties. ]</p> <p><b>Define</b> <i>To cooperate is to work together to get something done.</i></p> <p><b>Example</b> <i>I cooperate with my sister to clean our room.</i></p> <p><b>Ask</b> <i>How do you and your family cooperate to get jobs done? Be sure to include the vocabulary word in your response.</i></p>
<p><b>STEP 3: PROVIDE GUIDED PRACTICE (WE DO)</b></p> <p>Throughout the week, provide daily opportunities for students to use and apply the words. Daily activities are included in the Teacher's Edition. These include sentence starters, yes/no questions, and other vocabulary-building strategies developed by Beck and McKeown. See two examples below.</p> <p><b>Example 1: Connect to Words</b> Read aloud the following sentence prompts, one at a time. Engage students in a discussion. Use the discussion to evaluate each student's depth of word meaning.</p> <ol style="list-style-type: none"> <li>1. Which would be harder to <i>adapt</i> to: a new way of getting to school or a new teacher? Why?</li> <li>2. What are the qualities of a good <i>mentor</i>?</li> <li>3. What does it take to <i>succeed</i> at a sport?</li> <li>4. I will <i>succeed</i> in school this year because _____.</li> <li>5. A <i>mentor</i> can help me by _____.</li> <li>6. When you <i>adapt</i> to a new place, you must _____.</li> </ol>	<p>Provide students with the opportunity to practice understanding the new vocabulary word within various contexts.</p> <p>Say: <i>I am going to describe some things. If what I describe is an example of people cooperating, say cooperate. If it is not, do not say anything.</i></p> <ul style="list-style-type: none"> <li>● <i>Two children setting the table for dinner</i></li> <li>● <i>Two children grabbing the same book</i></li> <li>● <i>Two children putting crayons back in the box</i></li> <li>● <i>Two children arguing about cleaning the pet cage</i></li> </ul> <p>After you have introduced several words, provide additional opportunities for the class to apply and differentiate between new words.</p>

## STEPS

**Example 2: Word Squares** Ask students to create Word Squares for each word in their Writer's Notebooks.

- In the first square, students write the word.
- In the second square, students write their own definitions of the word and any related words, such as synonyms. Remind students that **synonyms** are words that mean the same or nearly the same. **Related words** include words with the same base, such as *succeed*, *success*, *successful*; *adapt*, *adaptation*.
- In the third square, students draw a simple illustration that will help them remember the word. They might also want to write a mnemonic that will help them remember the word. (example: *My pa rates high for separate*.)
- In the fourth square, students write nonexamples, including antonyms for the word. Remind students that **antonyms** are words that mean the opposite. (example: *succeed/fail*)

### Additional Oral Vocabulary Resources

Macmillan/McGraw-Hill *California Treasures* Big Books offer additional vocabulary development. After reading the Big Book, teach the vocabulary words listed on the inside back cover.

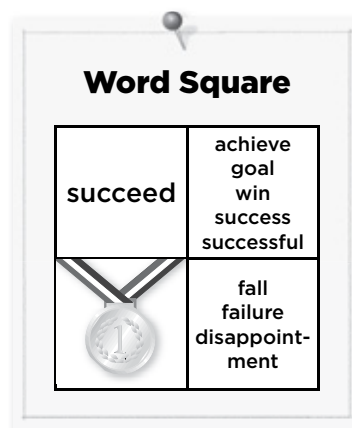
Macmillan/McGraw-Hill *California Treasures* Oral Vocabulary Cards for Grades K-3 are another source of instruction for developing students' oral vocabulary. Fully introduce the meanings of selected oral vocabulary words, one at a time. Use the examples of the vocabulary routines found on the back of the oral vocabulary cards. You can also teach the underlined words identified in each story. These are used as part of the Intensive Vocabulary Intervention materials. Weekly pre- and post-tests are available in the *Teacher's Resource Book*.

Macmillan/McGraw-Hill *California Treasures* Interactive Read-Aloud Anthology offers additional opportunities to teach new vocabulary words. Teach vocabulary words from the selections. You can choose from the words listed in the Expand Vocabulary feature at the beginning of each read aloud. You may also want to select other vocabulary words from the read aloud.

Use "Talk About It" Weekly Openers to develop oral vocabulary and help build background knowledge for the concept of the week and aid in students' comprehension of texts read throughout the week. Use the words generated by discussion of the photograph as a way of introducing selected oral vocabulary.

Macmillan/McGraw-Hill *California Treasures* Intervention Kit Vocabulary Teacher's Edition contains a list of "Words Worth Teaching," developed by Andrew Biemiller. Included are instructional suggestions for incorporating these words into your weekly instruction to assist those students with limited vocabularies.

## EXPLANATION/SCRIPT



# VOCABULARY

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 4: PROVIDE INDEPENDENT PRACTICE (YOU DO)</b></p> <p>Individual turns allow you an opportunity to assess each student's skill level and provide additional practice for those students who need it.</p> <p>Near the end of each week, students should write sentences in their Writer's Notebooks using the words.</p>	<p>When it appears that the class is consistently differentiating between new words, provide individual turns as a check. Call on several students to use the word in a sentence. Call on students in an unpredictable order.</p>

## DEFINE/EXAMPLE/ASK ROUTINE

### STEPS

#### STEP 1: DEFINE

Tell students that throughout the year you will be introducing them to new words that will appear in many texts they read. Knowing these words will help them become better readers. When introducing these words, you will use the same **Define/Example/Ask** routine. Describe the routine to students.

**Define** You will tell them the meaning of the word using student-friendly language—words they already know.

### EXPLANATION/SCRIPT

Say: *The word enormous means “very big.”*

#### STEP 2: EXAMPLE

You will give them an example of how the word is used, using their own common experiences.

Say: *Our school has an enormous gym. It is bigger than any other room in the school.*

#### STEP 3: ASK

You will ask them a question that helps them connect the word to words they already know and use the word in speaking.

Say: *What have you seen that is enormous? What words mean the same, or nearly the same, as enormous? What words mean the opposite of enormous?*

enormous

# HIGH-FREQUENCY WORDS

**What Are High-Frequency Words?** High-frequency words are the most common words in the English language. The high-frequency words taught in *California Treasures* are derived from established word lists, such as the *Dolch Basic Sight Vocabulary* list of the top 220 words (no nouns), the Fry top 100 words, and the *American Heritage Word Frequency Book* top 150 words in printed school English. Some of the high-frequency words in English must be taught as sight words because they do not follow regular sound-spelling patterns, such as *said*, *come*, and *who*.

**Why Are High-Frequency Words Important?** Because these words are so common in English school text, mastery of these words is necessary to fluent reading. Many of these words trip up struggling readers (such as words that begin with *th* and *wh*) and can impede comprehension when incorrectly identified during reading.

**What Is the Best Way to Teach High-Frequency Words?** In order to really “know” a word, the word’s sound, meaning, and spelling patterns (all activated in separate parts of the brain) must be internalized. The most effective instructional strategy to facilitate this is the **Read/Spell/Write** Routine.

**What About Students in the Upper Grades?** Some students in grades 3 and beyond still need instruction and practice to gain fluency with the top high-frequency words. Weekly Approaching Level lessons can be found in the Teacher’s Edition. Each week a small set of high-frequency words are taught and reviewed. High-Frequency Speed Drills and Fluency Phrase Charts are available in the *Intervention Kit Fluency Teacher’s Edition*.

**What About Flash Cards?** Flash cards can be an effective way to increase students’ automaticity in recognizing high-frequency words. One effective strategy is to write the word on the front of the card and co-create (or provide) a meaningful sentence or phrase using the word on the back of the card. In this way, students gain fluency with the word in isolation and in context. This is especially beneficial for English learners as they begin to recognize how these words are used in English sentences.

**Example:** of

**Front of Card:** of

**Back of Card:** We ate a slice of pizza. (Students add drawing of a slice of pizza.)

# READ/SPELL/WRITE ROUTINE

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: READ</b></p> <p>Tell students that throughout the year you will be introducing them to high-frequency words that will appear in many texts they read. These words either do not follow regular sound-spelling patterns or contain sound-spellings they have yet to learn. Therefore, you will be teaching them how to memorize these words by sight. Knowing these words will help them become better readers. When introducing these words, you will use the same <b>Read/Spell/Write</b> routine. Describe the routine to students.</p> <p>You will read aloud the word and they will repeat.</p>	<p>Write the word <i>said</i> on the board. Say: <i>This is the word said. What is the word?</i> [Students chorally repeat.]</p>
<p><b>STEP 2: SPELL</b></p> <p>Spell aloud the word. Have children repeat.</p> <p>Briefly point out any spelling patterns students have learned to help them distinguish this word from any other similar word and to ensure that students fully analyze the word.</p>	<p>Say: <i>The word said is spelled s-a-i-d. Spell it with me: s-a-i-d.</i></p> <p><i>What's the first sound you hear in said?</i> [Students answer /s/.]</p> <p><i>What letter have we learned for the /s/ sound?</i> [Students answer s.] <i>What letter do you see at the beginning of the word said?</i> [Students answer s.]</p> <p>Repeat with the ending sound and letter.</p>
<p><b>STEP 3: WRITE</b></p> <p>Have students write the word multiple times as they spell it aloud.</p>	<p>Say: <i>Watch as I write the word said. I will say each letter as I write the word.</i> [Model on the board.]</p> <p><i>Now it is your turn. Write the word said five times. Spell it aloud as you write it.</i></p> <div> <p>said</p> </div>



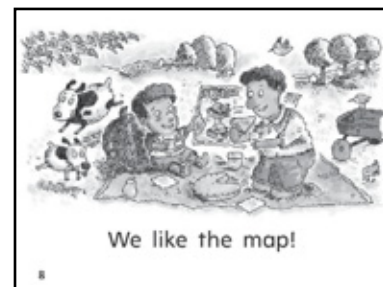
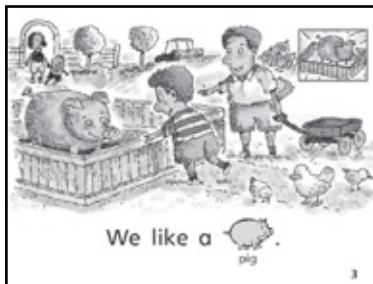
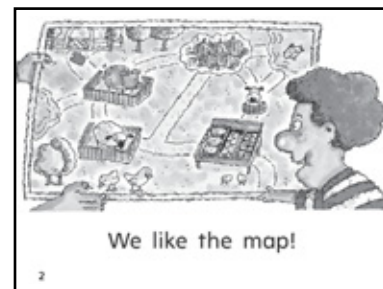
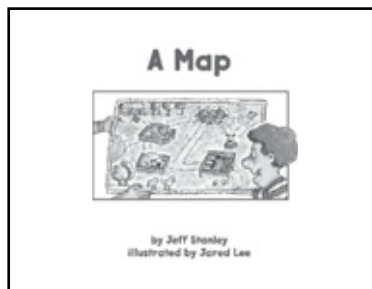
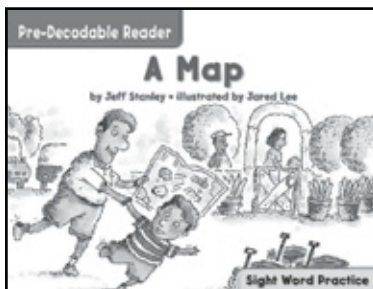
# READING PRE-DECODABLES

## What Are Predecodable Readers?

Predecodable Readers include connected text comprised of high-frequency words that students have learned. These readers may include rebus or picture clues for words that students are not yet able to decode. These readers appear in the first few units of Kindergarten. They are ideal for practicing high-frequency words in connected text, teaching students how books work, and giving students a sense of what reading is. They can also be highly motivating for early readers.

## Why Are Predecodable Readers Important?

Predecodable Readers are used to develop word automaticity with taught high-frequency words and to practice fluency. They are also excellent instructional tools for practicing book handling and developing concepts of print.



# READING PRE-DECODABLES ROUTINE

## STEPS

## EXPLANATION/SCRIPT

### STEP 1: REVIEW HIGH-FREQUENCY WORDS

- Display the High-Frequency Word Cards for the high-frequency words found in the text.
- Review the words with children using the Read/Spell/Write Routine.

#### Model Concepts of Print

- Demonstrate book handling and model how the text runs from left to right and top to bottom on a page. Emphasize the difference between the words and illustrations on a page.

Place the following High-Frequency Word Cards in a pocket chart: *a, I, like, the*. Then review each one using the **Read/Spell/Write** Routine.

**Read** Point to and say the word *like*. *This is the word like. I like to read.* [Point to the word like.] *What is the word?*

**Spell** *The word like is spelled l-i-k-e. Spell the word like with me: l-i-k-e.*

**Write** *Let's write the word like. Say each letter as you write it.* [Wait for students to write the word.] *What is the word?*

[Continue with the remaining words.]

### STEP 2: PREVIEW AND PREDICT

- Read the title aloud. Ask students to discuss what they see on the cover. For English Learners, describe the cover using academic language prior to asking them about the cover's contents.
- Then ask what they think will happen in the story. Use the questions and prompts provided in the lesson.

#### Review the Rebuses

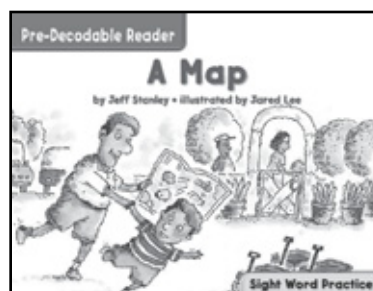
- If rebuses are used in the book, review the illustrations with students.

#### Teacher Tip

- This portion of the lesson should be quick and take no more than 2 minutes.

Point to the book's title and have students chorally read each word as you run your finger under it. Then ask:

- *What is the father holding?*
- *What might he use a map for?*



### STEP 3: FIRST READ (READ TOGETHER)

- Turn to the first page of the book.
- Have students point to each word and say the high-frequency words quickly. Students should chorally read the story the first time through.
- If students have difficulty, provide corrective feedback page by page as needed.

Say: *Turn to page 2. Put your finger on the first word. Let's read each word together. Ready? Begin.*

#### Corrective Feedback Models

##### Choral Reading

If a student does not read a word correctly:

- Model how to read the word, using the Read/Spell/Write routine.
- Go back to the beginning of the sentence and read each word with students.

##### Partner Reading

Provide sentence starters to help partners provide feedback.

- *The word is \_\_\_\_.*
- *Let's say the word together, \_\_\_\_.*
- *Now let's read the sentence again.*

**STEP 4: CHECK COMPREHENSION**

- Ask questions that focus on overall comprehension and prompt students to revisit the text. At least one of the questions should involve partner talk.
- Ask students to answer in complete sentences.
- Have students find sentences in the story to support answers.
- Call on students to discuss any difficult words in the selection.

Ask the following questions:

- *Point to the map on page 2?*
- *Choose two places on the map. How are they the same?*
- *How are they different?*
- *Discuss with a partner why the map helped the boy and his dad.*

**STEP 5: SECOND READ (BUILD FLUENCY)**

- Have students reread the book with a partner. One partner reads the book in its entirety as the listener follows along by pointing to each word read. The partners then switch roles.
- Circulate, listen in, and provide corrective feedback as needed.

*Say: Great job working through the story. Now let's reread the story with partner to make sure we can read all the words.*

**STEP 6: CUMULATIVE REVIEW**

As time allows throughout the week (and always on DAY 5), have students reread this week's pre-decodable stories and as many previous stories as possible.

# SPELLING

STEPS	EXPLANATION/SCRIPT																
<p><b>STEP 1: INTRODUCE</b></p> <p><b>What Is Spelling Instruction?</b> Spelling skills act as a link between students’ oral vocabulary and their writing ability. In this program, the phonics and spelling skills are linked to accelerate students’ mastery of the phonics patterns in reading and writing.</p> <p><b>Why Is It important?</b> Students who master spelling skills become better readers, since the level of understanding of word structure required by spelling is deeper than the understanding fostered by word reading instruction alone.</p> <p>In Grades 1-2, students transition from phonics to spelling lessons through the use of dictation. This guided practice technique provides the scaffolding needed for students to see how to take what they are learning in reading words and use it when writing words. See the following pages for a brief dictation routine.</p>	<p>Say: <i>Today we will practice spelling. I will begin by saying aloud a spelling word. Then I will use the spelling word in a sentence, and finally, I will repeat the spelling word. I want you to say the word softly, making each sound in the word. Then you will write the spelling word. The better we become at spelling, the better readers and writers we will be.</i></p>																
<p><b>STEP 2: MODEL (for Grades 1-2) (I DO)</b></p> <p>Grouping words into particular categories helps students recognize similar spelling patterns among words.</p> <p><b>Teacher Tips</b></p> <p>Spelling can be taught in various ways. One technique is by searching for word patterns, as you will be modeling for the students. A good way to practice spelling with all students is by using the LOOK – SAY- COVER - WRITE – CHECK method, developed and adapted by the North Coast Learning Institute.</p> <p>Have students LOOK at the word. (It can be in color, broken up phonetically, or associated with a picture).</p> <p>SAY it aloud.</p> <p>COVER it.</p> <p>WRITE it, without looking.</p> <p>CHECK to see if it is correct. (Students can work in groups to check one another.)</p>	<p>Say: <i>I will model for you how to remember and organize our spelling words. Each word belongs to a group of similar words. Watch and listen.</i></p> <ul style="list-style-type: none"><li>● Form categories by writing the spelling patterns on an index card.</li><li>● Hold up a spelling word card.</li><li>● Read the word. Blend the sounds together with students.</li><li>● Spell the word and identify the spelling pattern.</li><li>● Place the word card in the proper column.</li><li>● Repeat with other spelling words.</li></ul>																
<p><b>STEP 3: PROVIDE GUIDED PRACTICE (WE DO)</b></p> <p>Closed Sorts, or teacher-directed sorts, are sorts in which you define the categories and model the sorting.</p>	<p>Display a set of word cards. Set categories for sorting by identifying key words for each category. Model for students how to sort a word for each category.</p> <p>With students, read the words in each column. Here is an example.</p> <table><tr><td><b>ch</b></td><td><b>sh</b></td><td><b>th</b></td><td><b>wh</b></td></tr><tr><td>chest</td><td>sheep</td><td>think</td><td>while</td></tr><tr><td>chase</td><td>shape</td><td></td><td>whale</td></tr><tr><td>chill</td><td></td><td></td><td></td></tr></table> <p>Say: <i>Now, complete the sort with me.</i></p> <p>Hold up a word card. Read and spell the word for the class. Have students chorally repeat. Then have the students sort each word card by its spelling.</p>	<b>ch</b>	<b>sh</b>	<b>th</b>	<b>wh</b>	chest	sheep	think	while	chase	shape		whale	chill			
<b>ch</b>	<b>sh</b>	<b>th</b>	<b>wh</b>														
chest	sheep	think	while														
chase	shape		whale														
chill																	

## STEP 4: PROVIDE PARTNER PRACTICE (YOU DO: PARTNERS)

Another type of sorting is *open sorts*, or *student-centered sorts*. These are sorts in which the students create their own categories. Periodically, ask students to sort words in any way they choose to check their attention to spelling patterns. For example, if students continue to sort by only first letter—ignoring, for example, common vowel spelling patterns—then they need more instruction and practice in identifying spelling patterns and sorting words. Phonics pattern speed drills, such as those in the *Teacher's Resource Book* and *Intervention Kit Fluency Teacher's Edition* will be useful.

### Teacher Tip

It is good to model for students another example of sorting such as the one below:

me	green	heat	pretty	Oddballs
he	queen	eat	baby	four
we	need	leaf	pony	fold
she				

Pair up your students.

*Say: Now it's your turn. I am going to give you a set of spelling cards. Review them with your partner. Decide how you will sort your words.*

*After you have sorted your words, be ready to take turns explaining to the class why you chose that particular organization.*

## STEP 5: PROVIDE INDEPENDENT PRACTICE (YOU DO: ON YOUR OWN)

Again, another important aspect of understanding spelling is to understand the meaning of a word within its context.

### Teacher Tip

Activities can include: 1. Matching Definitions to Spelling Words; 2. Creating Analogies; 3. Identifying Synonyms; 4. Identifying Antonyms; 5. Completing Cloze Sentences; 6. Using Words in Sentences.

Pair up your students. Provide them with spelling lists.

*Say: One student in each pair will begin by reading a word in the spelling list aloud.*

*The two partners will then try to come up with as many sentences for each word that they can think of within the allotted time.*

**Alternative 1. Word Hunts** help students make connections between spelling words and reading words. A word hunt is best done after students have had time studying a set of spelling patterns.

1. Select a reading text for the word hunt (word hunts can be done with text students are writing).
2. Write the key words that include the spelling patterns.
3. Model how to locate words that fit the categories.

**Alternative 2. Word Study Notebooks:** Students can keep a word study notebook as they study various spelling patterns. In the notebook, students can record all the various types of sorts they complete. The word study notebook can be divided into sections representing the different spelling patterns students will study.

**Alternative 3. Word Study Games:** Almost any card game can be adapted for word study.

1. "Go Fish" Card Game: Use the spelling Word Cards. Students must match cards with similar spelling patterns. The student with the most pairs wins.
2. Board Game: For each space on the board write a word with a spelling pattern students have studied. The first player draws from a stack of spelling Word Cards. The player reads the word and moves to the first square containing a word with the same spelling pattern.

**Alternative 4. Name that Sound:** Select a story that you have recently read aloud to the class. As you read, have students listen for words that contain the consonant or vowel sound you choose. After a minute, pause and ask students to say the words they heard that contained that sound.

## DICTATION ROUTINE AT-A-GLANCE

### Steps

#### 1 State the Target Word

- ✓ Pronounce the word and have students chorally repeat.
- ✓ Use the word in a simple context sentence.

#### 2 Orally Segment the Word

- ✓ Students say the word sound-by-sound. (For multisyllabic words, students say/clap the word syllable-by-syllable.)
- ✓ Students use the Sound Boxes, as needed.

#### 3 Connect Each Sound to a Spelling

- ✓ Ask: *What is the first sound? What letter (or letters) do we write for that sound?*

(For multisyllabic words, students spell one syllable at a time.)

- ✓ Continue with each sound and spelling in the word.
- ✓ Refer to the Sound-Spelling Cards, as needed.

For *maximum support*, tell the correct spelling for the sound and explain why.

For *intermediate support*, guide students to find the correct spelling and explain why.

For *minimal support*, students say the spelling and write it.

#### 4 Check Spelling

- ✓ Students read the word. They ask: *Does it look right?*
- ✓ Write the correct spelling on the board for students to self-correct their work. Provide corrective feedback, such as referring to the hints on the Sound-Spelling Cards and associating the word to a known word with the same spelling pattern.



# COMPREHENSION

<p><b>INTRODUCE READING STRATEGIES</b></p> <p>Tell students that a reading strategy is a technique or process consciously used by a reader to understand a text.</p> <p><b>THINK ALOUDS</b> Modeling strategic thinking is a way to encourage and teach students to think aloud on their own as they attempt to understand text.</p> <p>Suggestions for Think Alouds are provided for each main selection in the <b>Teacher's Edition</b>.</p>	<p><i>Say: Skilled readers use strategies every time they read. The strategies a reader uses depend on the text demands. Strategies can be used before, during, and after reading. I am going to teach you strategies to help you better understand texts you read in class and on your own. I will model how you can use these strategies and how they can help you understand text.</i></p>
<p><b>SUMMARIZE</b></p> <p><b>Teaching Tips</b></p> <ul style="list-style-type: none"> <li>• Define summary.</li> <li>• Explain how to summarize.</li> <li>• Explain how summarizing aids comprehension.</li> <li>• Provide a check for the students to make sure they are using the strategy appropriately.</li> </ul>	<p>Think Aloud: A summary is a short statement of the most important ideas in a passage or text. To summarize a passage or selection, identify the most important ideas and restate them in your own words.</p> <p><i>If you can summarize a part of a text, then you understand what it's mostly about and can then continue reading.</i></p>
<p><b>VISUALIZE</b></p> <p><b>Teaching Tips</b></p> <ul style="list-style-type: none"> <li>• Define visualizing.</li> <li>• Explain how to visualize when reading.</li> <li>• Explain how visualizing aids comprehension.</li> </ul>	<p>Think Aloud: When you visualize, you make a mental picture as you read or listen. To visualize, think of details you already know to picture events, characters, and settings. If you are having a hard time understanding something in the text, stop and try to picture it to help you understand what you're reading.</p>
<p><b>GENERATE QUESTIONS</b></p> <p><b>Teaching Tips</b></p> <ul style="list-style-type: none"> <li>• Point out that good readers generate questions to help them understand a text.</li> <li>• Model the strategy by giving examples of good questions.</li> <li>• Explain how generating questions aids comprehension.</li> </ul>	<p>Think Aloud: Good readers ask questions about a text before, during, and after reading. Then they look for answers. Ask questions as you read, such as, Do I understand what is taking place in this part of the text? What does this word or phrase mean? Why has the author included this information? Ask Who? What? Why? Where? And What if?</p> <p><i>Asking good questions helps you focus on the most important information.</i></p>
<p><b>MAKE, REVISE, AND CONFIRM PREDICTIONS</b></p> <p><b>Teaching Tips</b></p> <ul style="list-style-type: none"> <li>• Define the strategy.</li> <li>• Point out text features and text structures that will give students clues to make predictions.</li> </ul>	<p>Think Aloud: When you predict, you use clues, along with what you already know, to infer what might happen next in the story. Text clues may include a character's behavior, cause-and-effect relationships, or events. Look at the story structure, or how the story is organized, and look for patterns in order to make logical guesses about story events or character actions. As you read, confirm earlier predictions or decide whether they need to be revised.</p>



<p><b>MAKE INFERENCES</b></p> <p><b>Teaching Tips</b></p> <ul style="list-style-type: none"> <li>• Define the strategy.</li> <li>• Explain how to make inferences.</li> </ul>	<p>Think Aloud: <i>Making inferences asks you to use your understanding of the text, think about your own experiences, and then conclude certain information. Authors do not always tell you directly everything that takes place in a story. You have to take what details the author does give and infer certain conclusions.</i></p>
<p><b>EVALUATE</b></p> <p><b>Teaching Tip</b></p> <ul style="list-style-type: none"> <li>• Define the strategy.</li> <li>• Point out clues to look for in the text that will help students evaluate.</li> <li>• Model questions that students can ask themselves as they read.</li> </ul>	<p>Think Aloud: <i>Evaluating means you use your own judgment to help you understand what you read. As you read, be careful of opinions presented as fact. Look for techniques of persuasion or literary devices that the author might be using. Consider the author's purpose for writing. Also think about the sources an author uses. Are they reliable? Any judgment you make must be supported by the text.</i></p>
<p><b>QAR (Question-Answer-Relationships)</b></p> <p>QAR is a way for students to improve their reading comprehension. The Question-Answer Relationship Strategy will help students answer questions in their Student Book and on tests.</p> <p><b>Teacher Tips</b></p> <ul style="list-style-type: none"> <li>• To teach QAR, make a Classroom Chart.</li> <li>• Add each type to the chart.</li> <li>• Pause after adding each type to define the term and explain how the type can be used to help them find the answer.</li> <li>• Tell students that they will practice using QAR every week when they answer the Critical Thinking questions in the Student Book.</li> </ul>	<p>Say: <i>To help you answer questions in the Student Book and on tests, I am going to teach a strategy called QAR. QAR stands for Question-Answer Relationships.</i></p> <p>Draw a chart with two columns. In one column write <i>In the Book</i> and in the second column write <i>In My Head</i>.</p> <p>Say: <i>There are two types of question-answer relationships: "In the Book" answers and "In My Head" answers. "In the Book" answers are in the text. There are two categories of "In the Book" answers.</i></p> <p>Under the column "In the Book" write 1) <i>Right There</i>.</p> <p>Say: <i>When an answer is in one specific place in the text, it is a "right there" answer. Look for words in the text that are in the question. Often the words in the question and the words in the answer are "right there" in the same sentence.</i></p> <p>Under the column "In the Book," write 2) <i>Think and Search</i></p> <p>Say: <i>When an answer is in the text but you need to put together different parts of the text to find the answer, it is a "think and search" answer. The answer can be within a paragraph, across paragraphs, or even across chapters and books.</i></p> <p>Under the column "In My Head," write 1) <i>Author and Me</i></p> <p>Say: <i>"In My Head" answers are answers that are not found in the text. They also fall into two categories. An "Author and Me" relationship is when you need to think about how the text and what you already know fit together.</i></p> <p>Under the column "In My Head," write 2) <i>On My Own</i></p> <p>Say: <i>"On My Own" answers are not in the text. I need to use my own ideas and experiences to answer.</i></p>

## COMPREHENSION STRATEGIES AT-A-GLANCE

### Steps

#### 1 Define the Strategy

- ✓ Explain to students what the strategy is and why it is important.

#### 2 Model the Strategy

- ✓ Clarify for students that you are thinking aloud. Use a transition statement that tells students you have left the text of the story to provide a think-aloud.
- ✓ Don't ask students questions about strategy use during the modeling step.
- ✓ Provide additional models for students as needed during the reading of the selection.

#### 3 Provide Guided Practice

- ✓ Work together with students to help them learn how and when to use the strategy.
- ✓ Use the strategy name while guiding students.
- ✓ Prompt students to use multiple strategies when appropriate.
- ✓ Provide opportunities for active participation for all students. Use Every Pupil Response and Collaborative Learning techniques, such as Think/Pair/Share.
- ✓ Provide many opportunities for guided practice, and prompt students to use strategies every time they read.
- ✓ Provide sentence starters and frames using key strategy words, such as *I predict that \_\_\_\_\_ because \_\_\_\_\_, I could visualize this scene by \_\_\_\_\_, and I conclude that \_\_\_\_\_ because \_\_\_\_\_.*

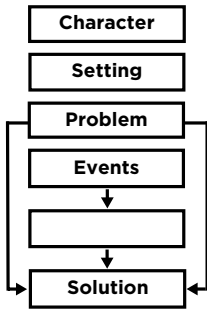
**Steps****4 Provide Corrective Feedback**

- ✓ As students participate in guided practice, provide feedback regarding correct and incorrect usage of the strategy (praise students for strategy steps they used and remind them of steps they left out).

**5 Apply the Strategy to a Wide Variety of Texts**

- ✓ Remind students to use the strategy while they continue to read the current text and while they read other texts.
- ✓ **Self-Selected Strategy Use** Encourage and prompt students to self-select strategies when they face comprehension challenges and to explain their choices. This will help them internalize the use of these strategies.

# COMPREHENSION: READING FICTION

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: INTRODUCE</b></p> <p><b>What Is Fiction?</b> Briefly define fiction and the features of a fictional text.</p> <p><b>How Is Fiction Organized?</b> Tell students that the author organizes the events in a fictional plot using <i>story elements</i> such as character, setting and theme. When students analyze the <b>story structure</b> they should focus on the story elements.</p> <p><b>Why Is Understanding Story Structure Important?</b> Knowing how the story is organized and how the story elements work with one another will help students understand the story.</p>	<p><b>Fiction</b> is a story that comes from imagination and not from fact.</p> <p><b>Story Elements</b></p> <p><b>Character:</b> A character is a person or animal in a story. To understand a character, students must pay attention to the characters' motivations and determine what causes the characters' actions.</p> <p><b>Setting:</b> A setting is where and when the story takes place. Readers analyze the setting to see how it affects the way the characters behave and how it influences the characters' actions.</p> <p><b>Plot:</b> The plot is a series of events that take place in a story. Readers study plot to better understand the conflict in a story.</p> <p><b>Theme:</b> The theme is the overall idea or message about life that the author wants to convey to readers in a story. By knowing the theme the reader will understand what the author thinks is important and meaningful.</p>
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Identify a story that the class has read together or use transparencies for vocabulary selections in <i>California Treasures</i>. Read the selection with the class and then identify the characters, setting, plot, and theme using the definitions provided.</p> <p><b>Additional Story Resources</b></p> <p>Macmillan/McGraw-Hill <i>California Treasures</i> offers short, narrative stories on transparencies to be used for modeling and reteaching.</p> <p>Macmillan/McGraw-Hill <i>California Treasures</i> Interactive Read-Aloud Anthology offers additional narrative stories that can be used for modeling and reteaching.</p>	<p>Say: <i>I would like you to listen as I read this story. After I read the story I will point out the character, and identify the setting, plot, and theme.</i></p>
<p><b>STEP 3: GUIDED PRACTICE (WE DO)</b></p> <p>Once you have modeled how to identify the story elements, help students identify them on another transparency or story that they have previously read. Offer corrective feedback as needed.</p>	<p>Say: <i>Let's look at another story. After we read the story, I would like you to identify the character, setting, plot, and theme. This will help you understand how all of these elements work together. This will help you understand and remember the story.</i></p>
<p><b>STEP 4: PROVIDE INDEPENDENT PRACTICE (YOU DO)</b></p> <p>Have students apply what they have learned by having them identify character, setting, plot, and theme using a story map.</p>	 <pre> graph TD     A[Character] --&gt; B[Setting]     B --&gt; C[Problem]     C --&gt; D[Events]     D --&gt; E[ ]     E --&gt; F[Solution]     F --&gt; C     </pre>

# COMPREHENSION: READING NONFICTION

STEPS	EXPLANATION/SCRIPT
<p><b>STEP 1: INTRODUCE</b></p> <p><b>What Is Nonfiction?</b> Briefly define nonfiction and the features of nonfiction, or informational text.</p> <p><b>How Is Nonfiction Organized?</b> Nonfiction contains text features such as maps, charts, diagrams, time lines, boldface words, and other graphic aids. These features can help make text easier for readers to learn and remember.</p> <p><b>Additional Resources</b> <i>California Treasures</i> provides a variety of nonfiction selections for practice and review. Use a selection from the <i>Wonders California Content Reader</i> or a nonfiction text from your classroom library to model and reteach.</p>	<p><b>Nonfiction</b> is a selection or article that is based on fact.</p> <p>Textbooks, magazines, and articles are nonfiction.</p> <p>Tell students that when reading nonfiction, they will learn how to:</p> <ul style="list-style-type: none"> <li>• Preview the text by reading the title and section or chapter headings to determine the main ideas in the text.</li> <li>• Use the graphic aids to take additional meaning from the text and integrate this information with that provided in the text.</li> <li>• Identify the text structure, or the way the author organized the text, to increase their understanding and retention of the text information.</li> </ul>
<p><b>STEP 2: MODEL (I DO)</b></p> <p>Identify a selection that the class has read together. Have students read the chapter title and the main headings. Model how to use the title and headings to determine what students will read about and figure out the main ideas of the selection. Have students preview the illustrations and other graphics.</p>	<p><i>Say: Let's look at this article. I will point out the <b>text features</b> that will help with meaning and later help us figure out the main idea of different sections of the article.</i></p>
<p><b>STEP 3: GUIDED PRACTICE (WE DO)</b></p> <p>Read the selection with the class. As you read, stop at each section and review by asking the students to identify any text features they see. Tell them to explain how that feature helps them understand the information in the article.</p>	<p><i>Say: Let's read the selection together. As we read, we will stop and I will ask you to point out the text features you see. I want you to tell me how they help you figure out what kind of information will be found in the selection. I will also ask you to explain how text features can help you learn more about the information in the selection.</i></p>
<p><b>STEP 4: PROVIDE INDEPENDENT PRACTICE (YOU DO)</b></p> <p>Have the students apply what they have learned by having them explain how previewing the article, pointing out the text features, and making predictions about the information in an article will help them learn more about the information in the article.</p>	

# GRAMMAR, USAGE, AND MECHANICS

**What Is It?** *Grammar* is the sound, structure, and meaning system of the English language. The study of grammar includes parts of speech (nouns, verbs, adjectives, adverbs, pronouns, prepositions, conjunctions), which are the form of English words, and sentence structure (subjects, predicates, objects, clauses, phrases), which is the function of English.

*Usage* is the way in which we speak. English usage varies based on geographical region, gender, age group, socioeconomic status, and time. These variations are called dialects. In English, the dialect known as Standard English is associated with education and financial success. African American Vernacular English is another form of English. Speakers of African American Vernacular English will need instructional modifications to help them transition to Standard English in speaking and writing in school and more formal situations. The pages that follow detail some of these modifications. Additional information is provided in the back of the *California Treasures* Teacher's Edition.

*Mechanics* involves the English conventions of punctuation and capitalization. Punctuation includes periods, question marks, exclamation points, commas, quotation marks, semicolons, apostrophes, hyphens, ellipsis, parentheses, brackets, and dashes.

**Why Is It Important?** Proper grammar, usage, and mechanics skills are a sign of a well-educated person. Students need to know these skills to properly communicate orally and in writing. Their expertise in these skills may have a significant impact on their later work life. In addition, identifying these skills gives teachers and students a common language with which to speak about their spoken and written language as they work to improve their speaking and writing skills.

Many grammar skills are associated with fluent reading. For example, a student who knows prepositions and can readily recognize prepositional phrases in sentences will more likely read these meaningful chunks as a unit. This is a sign of a fluent reader—one who correctly phrases text into meaningful words and phrases.

**What Modifications Are Needed?** English learners and students speaking African American Vernacular English will require instructional modifications to accelerate their learning of Standard English grammar, usage, and mechanics skills. Modifications for these learners can be found in the lessons in the *California Treasures* Teacher's Edition. Additional supports for English learners can be found on the Grammar Transparencies. The pages that follow contain a list of African American Vernacular English (AAVE) information of note.



# AFRICAN AMERICAN VERNACULAR ENGLISH (AAVE)

## Linguistic Differences

- Some of your students will be speakers of African American Vernacular English (AAVE). AAVE is a language system with well-formed rules for sounds, grammar, and meanings. Throughout the year you will help these students learn standard academic English by focusing on those places where AAVE differs from the standard and on those patterns that will have the most immediate impact on the students' reading and writing development.
- These students will need help in understanding that what is appropriate in one setting is not appropriate in another, so they can shift easily and competently between varieties in different social contexts. Instruction will be more effective if it identifies non-standard varieties of English as different, rather than inferior. All students should be taught standard English in a way that respects their home language.
- To acquire standard academic English speech and writing, speakers of African American Vernacular English need to learn to use *-s* with a verb and the third person and only there, as in *he is* and *he goes*. Many speakers of AAVE will leave out the *-s* or place it elsewhere, as in *he go* or *we goes*.
- Many speakers of African American Vernacular English have difficulties with subject-verb agreement when the verbs *do/does*, *have/has*, and *was/were* are used. Additional grammar instruction and practice will be needed.
- Many speakers of African American Vernacular English understand the use of *-ed* to form the past tense, but leave it out or add sounds when pronouncing the word, as in *pick* or *picketed* for *picked*. Students will need additional work with *-ed* in order to know when and where to use it in writing.
- Many speakers of African American Vernacular English will add *had* to the simple past tense, saying *We had picked* for *We picked*. The use of *had* indicates the past perfect tense in standard academic English. Other common nonstandard forms of irregular past tense verbs include *He seen that* and *He had ran over there*.
- In the first person present tense, many speakers of African American Vernacular English will properly use *I am* or *I'm*, but say it more like "uhm." Focus on pronunciation.
- To learn standard academic English, many speakers of African American Vernacular English will need to learn not to delete *is* and *are* when speaking and writing. For example, students might say *He my brother* or *She goin' over there*. Additional grammar instruction and practice will be needed.
- Many speakers of African American Vernacular English will use *was* in the singular and plural forms, as in *He was* and *They was*. Additional grammar instruction and practice will be needed.
- To learn standard academic English, many speakers of African American Vernacular English will need to learn to avoid using nonstandard forms, such as *He always be doing this*, in favor of *am*, *are*, and *is*. Also, additional instruction and practice will be needed to show the proper placement of the adverbs *always* and *never*. For example, *He is always doing this* rather than *He always is doing this*.
- In standard academic English, *'s* is added to a noun to show possession. For many speakers of African American Vernacular English the *'s* is absent. However, the *'s* is regularly added to *mine*, as in *This is mines*.
- The possessive pronoun *whose* is often not used by many speakers of African American Vernacular English. For example, students will say *I don't know who book this was*. Students will need additional instruction and practice to acquire this skill.
- Many speakers of African American Vernacular English will need help in pronouncing *its* in standard academic English and in properly using the patterns *there is* and *there are*. In AAVE it is common to replace the word *there* with *it*, as in *It's a man at the door* rather than *There's a man at the door*.
- Most speakers of African American Vernacular English correctly use plurals, except when it involves "nouns of measure," as in *It cost five dollars* or *She owe me five dollars*. However, the plural */s/* is often absent in writing and students will need additional instruction and practice.
- Many speakers of African American Vernacular English will use several negatives in a sentence when only one is required, as in *Nobody never said nothing*. To master standard academic English, speakers of AAVE will need considerable practice to gain control of *any*, *ever*, and *either* after a negative word.



**Steps****1 Define the Skill**

- ✓ Explain to students what the skill is in a functional and concrete manner.

**2 Explain the Skill's Importance**

- ✓ Tell students when and where the skill is used and how it is important for writing.

**3 Model the Skill**

- ✓ Model the skill using a piece of writing or sentences generated about a writing assignment or story read.

**4 Provide Independent Practice**

- ✓ Use the exercises and activity pages to provide structured practice opportunities.
- ✓ Provide corrective feedback.
- ✓ Use the sentences on the practice pages for partner fluency reading opportunities.

**5 Apply the Skill to Writing**

- ✓ Prompt students to note their use of the skill when writing in their Writer's Notebooks.
- ✓ Have students review Writer's Notebook entries and correct for the skill.

# WRITING

**What Is It?** Writing is used to communicate ideas, entertain, inform, persuade, and learn. Writing takes many forms ranging from a personal narrative to a research report. To become skilled writers, students need to be able to craft strong sentences and paragraphs, as well as understand and use various writing structures.

**Why Is It Important?** Strong writing skills are essential to students' success in school and in today's workplace. Students need to be taught key foundational skills: how to write strong sentences and strong paragraphs that demonstrate basic grammar, usage, and mechanics skills. They must also be taught how to express their unique voices and eventually create multiple-paragraph compositions that show focus and contain clearly connected ideas. Learning strong writing skills takes years of targeted practice—developing the basic skills of good writing, examining strong writing models, observing teacher write-alouds, and revising their own works to improve skills.

**What Is In *California Treasures*?** A step-by-step approach that builds on what students can do and helps them learn the skills necessary to move to the next level is the cornerstone of the *California Treasures* writing curriculum. This curriculum is both carefully sequenced for student success and based on years of classroom results.

On the next page is a chart that shows an overview of the writing continuum and the key techniques and methods used to achieve results.

<b>Grade(s)</b>	<b>Focus</b>	<b>Key Techniques/ Methods</b>
<b>Kindergarten</b>	<p>Develop understanding of what writing is.</p> <p><b>Connect sounds to letters to write words and express simple ideas.</b></p> <p>Learn the difference between a letter, a word, and a sentence.</p>	<p>Interactive Writing</p> <p>Shared Writing</p> <p>Phonics and Dictation</p> <p>Sentence Starters/Frames</p>
<b>Grade 1</b>	<p>Connect sounds to spellings.</p> <p><b>Write complete sentences.</b></p> <p>Focus on writing brief narrative and expository pieces.</p>	<p>Interactive and Shared Writing</p> <p>Phonics and Dictation</p> <p>Sentence Frames/Starters</p>
<b>Grade 2</b>	<p>Write complete sentences.</p> <p><b>Write simple paragraphs.</b></p> <p>Focus on writing narratives and friendly letters.</p>	<p>Interactive and Shared Writing</p> <p>Phonics and Dictation</p> <p>Sentence and Paragraph Frames</p> <p>Writing Process</p>
<b>Upper Elementary (Grades 3-6)</b>	<p><b>Write strong paragraphs and simple multiple-paragraph compositions.</b></p> <p>Review foundational skills (strong sentences; simple paragraphs; basic grammar, usage, and mechanics skills).</p> <p>Focus on writing narratives, expository pieces, research papers, summaries, responses to literature, and persuasive essays.</p>	<p>Writer's Express Methods™</p> <p>Writing Process</p>
<b>Middle School (Grades 6-8)</b>	<p><b>Write multiple-paragraph compositions and essays.</b></p> <p>Focus on writing biographies, autobiographies, research papers, summaries, responses to literature, technical documents, and persuasive essays.</p>	<p>Writer's Express Methods™</p> <p>Writing Process</p>

The pages that follow contain information on some of the key writing instructional strategies and techniques. Additional, details information can be found in the *Writing Guide* professional development handbook.

## OVER-THE-SHOULDER CONFERENCES AT-A-GLANCE

### Steps

Traditionally, a conference involves the teacher sitting down with a student to spend at least a few minutes talking over his writing. Over-the-shoulder conferences are different. They're quick, focused comments that a teacher makes to a student while he or she is in the middle of writing, in response to what the teacher sees (or doesn't see) on the page. Over-the-shoulder conferences energize students and bring them back to their work with a sharper sense of why they're writing—by showing them clearly that their teacher is really interested in what they've got to say.

- 1** Quietly, move close enough to the student so that you can read the Writer's Notebook entry she's writing.
- 2** Silently read part of what you see—usually, you won't need to start from the beginning of the Writer's Notebook entry or read the entire piece.
- 3** As unobtrusively as possible, crouch down and show the student a spot in her writing where she is using a particular skill or describing something that piques your interest.
- 4** Whisper a sentence or two about why you noticed that particular spot in the writing, or ask a question that will nudge the student to add detail or clarify. Often, the student won't say anything back to you or even look up. At other times, the student may need to respond quickly. Typically, however, she'll just keep writing. Occasionally, a student feels "stuck" and needs a quick interaction with you. For students who have trouble focusing, jotting down a quick reminder of your verbal comment in the margin of the student's Writer's Notebook can help.
- 5** Move on to the next student. You don't need to go student by student. Pick students strategically; some will need an over-the-shoulder conference every writing period, others less frequently. Try to visit every student's desk at least once per week: your struggling students will need the support, and your stronger students will benefit from the push. If you are moving efficiently around the classroom, you should expect to check in with 12 to 15 students during a typical 15 minute writing period.

## EXAMPLES OF OVER-THE-SHOULDER CONFERENCE COMMENTS

Use an over-the-shoulder conference to *affirm* that a student has used a skill effectively or to *remind* a student about how using a skill might strengthen his piece. The affirmation and reminder comments provided may be used verbatim or as examples of effective comments. Within individual lessons, suggested comments provided are specific to that day's activity.

### Affirmation Comments

- You've already got three sentences just about how you stood admiring the food. I can tell this is going to be a very focused description of your first time eating lobster, and I'm anxious to see how it turns out.
- Mmm ... describing the smell of your mom's meatballs cooking is making me hungry.
- That verb really captures how you moved into the dining room. The reader gets the sense that you were ravenous.
- Those quotation marks help me follow this conversation. Thanks for making sure I could understand it.

### Reminder Comments

- I can see you're going to write about Thanksgiving. Which particular moment are you going to choose?
- I've never seen anyone do the drop stance in kung fu before saying grace. I'd love to see or hear exactly how one of your family members reacted to this moment.
- You're drawing me into the moment by showing exactly what your friends said as the food came out.
- Can you help me keep track of who is talking by putting in quotation marks?
- You say here that Marie felt bad. I'm curious how you could tell she felt that way. Try adding a couple of sentences that show how her face looked when she felt bad. Raise your hand when you're done so I can come back and see what you did.

# REVISION ASSIGNMENTS

**What Is It?** *Revision* assignments are short exercises that target a specific skill, which students complete by using an excerpt from their own writing. As it becomes routine for them to complete these quick, low-stakes revisions each time their Writer's Notebooks are returned, students learn the habit of using feedback to revise their work.

*Revision assignments* fall into four basic types that range from a high degree of teacher intervention to complete student independence. By taking the time to move students through these stages, the teacher both instills the habit of revision AND teaches the students how to revise independently (without relying on extensive and specific commenting and conferencing with the teacher for each new piece of writing). In progressing through these stages, students learn to view revision as a habit that is easy to practice and immediately rewarding.



**Why Is It Important?** *Revision assignments* play a crucial role in the dynamic feedback system that enables teachers to work with each of their students on one skill at a time—and to keep working on that skill until the student has demonstrated his mastery of it. In this sense, revision assignments are like the focused drills that a basketball coach gives the individual players on his team: he gets Player A to work on his bounce passes (because that is the specific skill that he still needs to master) and Player B to practice following through on his free throws (because that's where he is in his development as a player).

When you teach students to respond routinely to revision assignment, you are teaching the foundational habit of “practicing revising.” You will find that once students become proficient in these revision assignments, it is a small leap to independence in the writing process.

Giving a revision assignment involves marking a specific section of a student's Writer's Notebook entry and then asking him to revise it in a specific way. As you'll see from the sequence of revision assignments that follow, with practice, students become so adept at revision assignments, they can assign themselves. They'll do these self-directed assignments first in their Writer's Notebook. And then, when the class is drafting essays or stories, you'll see how smoothly the writing process works with students who know how to assign themselves particular revision tasks.

## Tip: Choosing Which Part to Revise

When choosing which section of a student's writing to ask him or her to revise, keep in mind these guidelines, some of which may seem counterintuitive:

### 1. Play to Student Strengths

Find a place where the student is already beginning to exhibit the skill in some way. **Don't** ask the student to revise a portion of his piece that has no focus. Chances are, if he didn't have much to say about this element the first time through, he won't find more to say about it just because you've asked him to. Remember: the revision assignment isn't aiming to get the student to improve the piece he has written (by, for example, filling in a gap in his description). The point of a revision assignment is to give the student more practice using the particular skill.

Also, students are much more motivated to keep writing when we pay attention to what they can do well rather than to what they can't. Especially at the beginning, we want students to know that the purpose of feedback is to build their skills—not catch their mistakes.

### 2. Zoom In On the Concrete

Students have a hard time focusing on an abstraction. The best way to learn a new skill is to look closely at something small. Point them toward moments in their writing that will challenge them to capture accurately the details of something concrete that they can explore with their senses.

It might seem easier for students to practice focusing by describing an exciting item that has a lot of detail—because it will give them a lot of things to write about. But real focus is about diving deeply into just one thing. When choosing a passage for students to return to in their writing, it's best to concentrate their attention on the small, simple, and ordinary things. Challenge them to show us what's fascinating about a subject that most of us typically overlook. As they go deeper and get past the first, obvious things to say about the subject they're observing, students begin to develop their own, distinctive “take” on their subject.

### 3. Keep an Eye Out for What's Strange

When choosing which part of their writing to ask your students to revise, look for the places where they've already shown some real energy. If there's a detail that seems to fascinate them, or an aspect of their subject that they seem to know a whole lot about, ask them to write more about that. If there's a moment in their writing where they start to do something out of the ordinary—to head off on a path you wouldn't have predicted, to swerve from the typical way of seeing things—push them farther in that direction. When writers start to look at things really carefully, they start to see them in new and unusual ways. Strange is often the place where genuine insight begins.

## LEARNING THE HABIT OF REVISION: THE 4 STAGES OF REVISION ASSIGNMENT

STAGE	EXPLANATION/SCRIPT
<p><b>Stage 1: Individualized Revision Assignments</b></p> <p>The teacher reads a student's Writer's Notebook and writes a <i>revision assignment</i> that applies directly to that student only.</p> <p><b>When to use <i>individualized revision assignments</i>:</b></p> <ul style="list-style-type: none"> <li>• in the beginning of the school year when teachers are still helping students develop habits.</li> <li>• at any time in the school year with students who are struggling with a skill.</li> </ul>	<p><b>Example:</b></p> <p><b>(bracketed excerpt from student writing)</b></p> <p>...[I was unhappy yesterday. I was unhappy because our team lost the basketball game on the last shot. The other team was happy and we were really mad. After, we almost got into a fight]...</p> <p><b>(written teacher comment)</b></p> <p>Dear Joe,</p> <p>This sounds like quite an ending to a game. I can see how you might get angry.</p> <p>Mr. C</p> <p><b>Revision Assignment: Topic</b></p> <p>Look at the section that I've bracketed in your Writer's Notebook. In the space below, please write 2-3 sentences that describe exactly what you did at the moment of the last shot.</p>
<p><b>Stage 2: Shared Revision Assignments</b></p> <p>The teacher reads a group of students' Writer's Notebooks, brackets a passage in each student's Writer's Notebook, and posts a <i>revision assignment</i> that all the students in the group will complete. Each student completes the posted revision assignment by applying it to the bracketed passage in his own piece of writing. Shared revision assignments can be used with a small group of students or with the whole class.</p> <p><b>When to use <i>shared revision assignments</i>:</b></p> <p>Students have developed sufficient skill, for example in Topic Development, to decide independently how they might write more about one particular point.</p>	<p><b>Example:</b></p> <p><b>(bracketed excerpt from student writing)</b></p> <p>...On Tuesday, we went to the mall. First, we picked up my sister. Then we went to the mall and [I spent the whole time playing Stargazer in McDoodle's.] Then we went to Beulah's and then we went to the movies. We saw Scare Tactics. It was a good day...</p> <p><b>(written teacher comment)</b></p> <p>Dear Mike,</p> <p>Movies and video games and Beulah's—sounds like a great day! You described a number of different moments in the same day. I kept wanting to know more about what happened at each place. Give me those details—they'll make pictures in my mind.</p> <p>Mr. C</p> <p><b>Revision Assignment: Topic</b></p> <p>(The following <i>shared revision assignment</i> is posted where all the students can see it. Alternatively, teachers can use the pre-printed <i>revision assignment notes</i> included on the Jump Drive—and tape a note into the Writer's Notebook of each student in a small group.)</p> <ol style="list-style-type: none"> <li>1. Look at the section from your Writer's Notebook that I've bracketed.</li> <li>2. Copy that section below.</li> <li>3. Write 2-3 sentences about that one moment, image, or idea.</li> </ol>



**Stage 3: Self-Directed Revision Assignments**

The teacher posts a *revision assignment* where all the students can see it. Students choose a passage in their own Writer's Notebook to use to complete the posted revision assignment. Before they begin, the teacher models the process by sharing a piece of writing (e.g., on an overhead projector), identifying a passage that would gain strength by becoming more focused, bracketing the passage, and completing the posted revision assignment.

**Stage 4: Independent Revision Assignments**

Students identify a passage in their Writer's Notebook and assign themselves a *revision assignment* that they complete independently. This step requires the highest degree of independence and mirrors the process that students go through when they revise their own work. Before they begin, the teacher models the process as in stage 3, above.

# WRITING PROCESS

STEPS	EXPLANATION/SCRIPT
<b>STEP 1: PREWRITE</b> <ul style="list-style-type: none"> <li>Writers think about and plan their topic.</li> <li>Writers use graphic organizers and other visual devices to help them organize their thinking.</li> <li>Writer's consider their audience, purpose for writing, and the focus of their topic.</li> <li>Writers gather ideas and information, using outside resources as needed. They decide which information to include in their draft.</li> </ul>	<p><b>Tip:</b> Use the graphic organizer reproducibles in the <i>Teacher's Resource Book</i>.</p> <p>In addition, distribute copies of the <b>Rubric</b> and <b>Anchor Papers</b> for the target genre.</p>
<b>STEP 2: DRAFT</b> <ul style="list-style-type: none"> <li>Writers draft, or put their initial ideas about the topic, into written words.</li> <li>Writers use their initial prewriting plans as a guide. They expand or modify these plans as needed.</li> <li>The first draft is often in rough form.</li> </ul>	<p><b>Tip:</b> Use the <b>Text Structure Writing Frames</b> as models for students during this stage.</p>
<b>STEP 3: REVISE</b> <ul style="list-style-type: none"> <li>Writers revisit their drafts to revise for content and structure.</li> <li>Writers carefully reread their drafts to make sure all critical information is included, the meaning is clear, and to consider the impact the piece will have on the audience.</li> </ul>	<p><b>Tip:</b> Use the Anchor Papers as models for students during this stage. Have students refer to the genre rubric as they consider their edits.</p> <p>Use the <b>Revision Assignments</b> (preprinted version). These are available online at <a href="http://www.macmillanmh.com">www.macmillanmh.com</a>.</p>
<b>STEP 4: EDIT/PROOFREAD</b> <ul style="list-style-type: none"> <li>Writers revisit their pieces to correct grammar, mechanics, and usage errors.</li> <li>Writers understand the importance of creating correct pieces for their audience.</li> </ul>	<p><b>Tip:</b> Use the <b>Proofreading Marks Checklist</b> in the <i>Teacher's Resource Book</i>.</p> <p>In addition, have students refer to the <i>Grammar and Writing Handbook</i> as they proofread and edit.</p>
<b>STEP 5: PUBLISH</b> <ul style="list-style-type: none"> <li>Writers create a final version of the piece using their best handwriting or a computer software program. This final form reflects their best efforts.</li> </ul>	<p><b>Tip:</b> Use this time as an opportunity to teach or reinforce handwriting and keyboarding skills.</p>
<b>STEP 6: PRESENT</b> <ul style="list-style-type: none"> <li>Writers share their pieces with their audience (often classmates) and receive feedback on its content and impact.</li> </ul>	<p><b>Tip:</b> Connect students' presentations to the grade level speaking and listening standards.</p>

## USING RUBRICS AND ANCHOR PAPERS

### Steps

#### **1 Distribute the Rubric and/or Anchor Paper**

- ✓ Review the Rubric expectations. If using the blank rubric form, create a rubric with the class based on the specific writing assignment.
- ✓ Use the rubric to evaluate the Anchor Paper. Discuss how and why the 4 Anchor Paper is a strong model of that writing genre.

#### **2 Use the Rubric and/or Anchor Papers While Writing**

- ✓ Have students refer to the Rubric and Anchor Papers while drafting and editing their pieces.
- ✓ Students can use the Rubric during peer conferences to evaluate classmates' works and provide feedback.

#### **3 Use the Rubric and/or Anchor Papers to Evaluate Writing**

- ✓ Grade each completed piece using the rubric. Provide a score of 1-4. Use the Anchor Papers as models when grading.

# WRITING RUBRICS FOR CALIFORNIA STANDARDS

Rating 4	Rating 3
<p><b>The Writing:</b></p> <ul style="list-style-type: none"> <li>• clearly addresses all parts of the writing task</li> <li>• demonstrates a clear understanding of purpose and audience</li> <li>• maintains a consistent point of view, focus, and organizational structure, including the effective use of transitions</li> <li>• includes a clearly presented central idea with relevant facts, details, and/or explanations</li> <li>• includes a variety of sentence types</li> <li>• contains few, if any, errors in the conventions of the English language (grammar, punctuation, capitalization, spelling). These errors do not interfere with the reader's understanding of the writing</li> </ul> <p><b>Fictional or Autobiographical Narrative:</b></p> <ul style="list-style-type: none"> <li>• provides a thoroughly developed plot line, including major and minor characters and a definite setting</li> <li>• includes appropriate strategies (e.g., dialogue; suspense; narrative action)</li> </ul> <p><b>Response to Literature:</b></p> <ul style="list-style-type: none"> <li>• develops interpretations that demonstrate a thoughtful, comprehensive grasp of the text</li> <li>• organizes accurate and coherent interpretations around clear ideas, premises, or images from the literary work</li> <li>• provides specific textual examples and details to support the interpretations</li> </ul> <p><b>Persuasion:</b></p> <ul style="list-style-type: none"> <li>• authoritatively defends a position with precise and relevant evidence and convincingly addresses the reader's concerns, biases, and expectations</li> </ul> <p><b>Summary:</b></p> <ul style="list-style-type: none"> <li>• is characterized by paraphrasing of the main idea(s) and significant details</li> </ul>	<p><b>The Writing:</b></p> <ul style="list-style-type: none"> <li>• addresses all parts of the writing task</li> <li>• demonstrates a general understanding of purpose and audience</li> <li>• maintains a mostly consistent point of view, focus, and organizational structure, including the effective use of some transitions</li> <li>• presents a central idea with mostly relevant facts, details, and/or explanations</li> <li>• includes a variety of sentence types</li> <li>• contains some errors in the conventions of the English language (grammar, punctuation, capitalization, spelling). These errors do not interfere with the reader's understanding of the writing</li> </ul> <p><b>Fictional or Autobiographical Narrative:</b></p> <ul style="list-style-type: none"> <li>• provides an adequately developed plot line, including major and minor characters and a definite setting</li> <li>• includes appropriate strategies (e.g., dialogue; suspense; narrative action)</li> </ul> <p><b>Response to Literature:</b></p> <ul style="list-style-type: none"> <li>• develops interpretations that demonstrate a comprehensive grasp of the text</li> <li>• organizes accurate and reasonably coherent interpretations around clear ideas, premises, or images from the literary work</li> <li>• provides textual examples and details to support the interpretations</li> </ul> <p><b>Persuasion:</b></p> <ul style="list-style-type: none"> <li>• generally defends a position with relevant evidence and addresses the reader's concerns, biases, and expectations</li> </ul> <p><b>Summary:</b></p> <ul style="list-style-type: none"> <li>• is characterized by paraphrasing of the main idea (s) and significant details</li> </ul>

Rating 2	Rating 1
<p><b>The Writing:</b></p> <ul style="list-style-type: none"> <li>addresses only parts of the writing task</li> <li>demonstrates little understanding of purpose and audience</li> <li>maintains an inconsistent point of view, focus, and/or organizational structure, which may include ineffective or awkward transitions that do not unify important ideas</li> <li>suggests a central idea with limited facts, details, and/or explanations</li> <li>includes little variety in sentence types</li> <li>contains several errors in the conventions of the English language (grammar, punctuation, capitalization, spelling). These errors may interfere with the reader's understanding of the writing</li> </ul> <p><b>Fictional or Autobiographical Narrative:</b></p> <ul style="list-style-type: none"> <li>provides a minimally developed plot line, including characters and a setting</li> <li>attempts to use strategies but with minimal effectiveness (e.g., dialogue; suspense; narrative action)</li> </ul> <p><b>Response to Literature:</b></p> <ul style="list-style-type: none"> <li>develops interpretations that demonstrate a limited grasp of the text</li> <li>includes interpretations that lack accuracy or coherence as related to ideas, premises, or images from the literary work</li> <li>provides few, if any, textual examples and details to support the interpretations.</li> </ul> <p><b>Summary:</b></p> <ul style="list-style-type: none"> <li>is characterized by substantial copying of key phrases and minimal paraphrasing</li> </ul>	<p><b>The Writing:</b></p> <ul style="list-style-type: none"> <li>addresses only one part of the writing task</li> <li>demonstrates no understanding of purpose and audience</li> <li>lacks a point of view, focus, organizational structure, and transitions that unify important ideas</li> <li>lacks a central idea but may contain marginally related facts, details, and/or explanations</li> <li>includes no sentence variety</li> <li>contains serious errors in the conventions of the English language (grammar, punctuation, capitalization, spelling). These errors interfere with the reader's understanding of the writing</li> </ul> <p><b>Fictional or Autobiographical Narrative:</b></p> <ul style="list-style-type: none"> <li>lacks a developed plot line</li> <li>fails to use strategies (e.g., dialogue; suspense; narrative action)</li> </ul> <p><b>Response to Literature:</b></p> <ul style="list-style-type: none"> <li>demonstrates little grasp of the text</li> <li>lacks an interpretation or may be a simple retelling of the passage</li> <li>lacks textual examples and details</li> </ul> <p><b>Persuasion:</b></p> <ul style="list-style-type: none"> <li>fails to defend a position with any evidence and fails to address the reader's concerns, biases, and expectations</li> </ul> <p><b>Summary:</b></p> <ul style="list-style-type: none"> <li>is characterized by substantial copying of indiscriminately selected phrases or sentences</li> </ul>

# RESEARCH PROCESS: INQUIRY AT-A-GLANCE

## Steps

Each unit in *California Treasures* is organized around a **Big Question**. Each selection in the unit adds more information to help students formulate an answer to the guiding question. As students read the selections in the Student Book, they are also asked to research an aspect of the Big Question that interests them and will add to their overall understanding of the unit's theme. As they conduct their research, they will follow the steps below.

### 1 Identify Big Question

- ✓ Have students read the Big Question on the Unit Opener in the Student Book.
- ✓ Have students read the unit summary and research project on the pages that follow.
- ✓ Distribute copies of the **Research Roadmap** (available online at [www.macmillanmh.com](http://www.macmillanmh.com) and through the Classroom Presentation Toolkit).
- ✓ Work with students to select one question to research throughout the unit. The question should be one of interest and importance to the student.

### 2 Investigate/Conduct Research

- ✓ Have students conduct research using the Research Roadmap as a guide.
- ✓ Provide classroom and library resources, as needed. See the research links, such as the zip code finder, online at [www.macmillanmh.com](http://www.macmillanmh.com) for additional local and national resources.

**Steps****3 Organize Information/Prewrite**

- ✓ Have students write a draft of their research report.
- ✓ Have students use the **Nonfiction Text Structure Writing** Frame models in the **Content Reader** as models of how to organize their writing and use effective transitions.
- ✓ Teach students how to gather information using the **Note Taking** procedure (see Grades 3-6, Start Smart, Cornell Note Taking form) and/or note cards.

**4 Write**

- ✓ Work with students to write a completed report.
- ✓ Recommend that students create visuals for their report. Provide online resources, as appropriate.

**5 Communicate/Present**

- ✓ Have students display and share their findings. Focus on the grade-level speaking and listening standards.
- ✓ Add the findings to the **Big Question Board**.
- ✓ Review the cumulative body of knowledge gathered throughout the unit, as reflected on the Big Question Board.
- ✓ Provide a **Write-On-Demand prompt** that asks students to write uninterrupted (for a specified period of time, based on grade level) about their new learning in the unit.

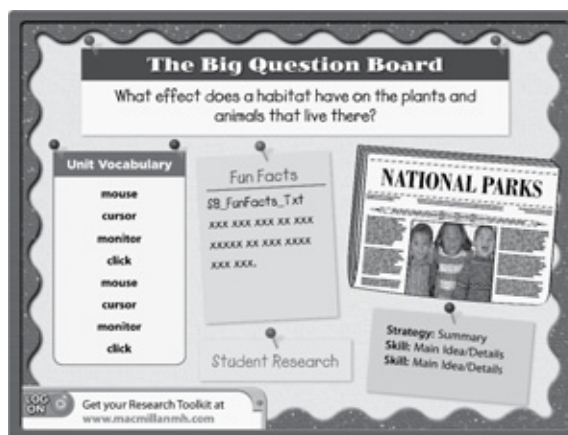


# BIG QUESTION BOARD

**What Is It?** The Big Question Board is a bulletin board or wall in the classroom in which students and teachers place information regarding the skills and new ideas learned in the unit under study. It is a dynamic space, changing weekly as new information is added. Note that the units in the Student Book are organized around themes. That is, in each unit students will be exploring an important topic. For example, one unit will be related to an important grade-level science concept; another unit will be related to an important history/social science concept. Each selection in the unit will build on students' growing knowledge of the topic. The Big Question Board provides a space and a structure for students to record this new learning.

**How Do I Create It?** To create a Big Question Board, do the following:

- Select a large bulletin board or portion of a wall in the classroom.
- Write the unit's Big Question at the top.
- Each week add information regarding how the week's selections add to the information learned about the unit's theme, a list of the key vocabulary words, skills-related information, student work samples, and postings from students regarding information found related to the theme. Use note cards, sentences strips, and newsprint to add information.
- At the end of each week, briefly review the information on the board. Prompt students to search for and add other information. Have them present this information. Use this as an opportunity to teach and reinforce grade-level listening and speaking skills.



# CLASSROOM MANAGEMENT

## Introduction

One of the most difficult challenges teachers face is how to deal with the multiple levels and learning needs of their students. This requires a portion of the English-Language Arts block to be devoted to small group instruction in which students receive differentiated instruction. These students may include those who are struggling with particular reading skills, English learners, speakers of AAVE, or advanced learners. Managing the small group time, in which other students are working with partners or independently, is a primary task and concern. The *California Treasures* program has provided a series of materials to assist in this task.

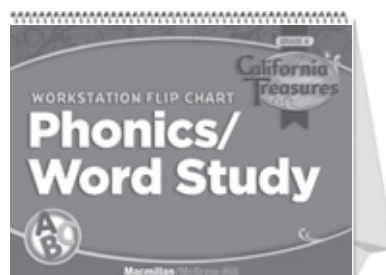


## Tips

- Tell students that every day there will be a time when they are expected to work on activities on their own or with partners.
- Slowly introduce the time period to students over the first few weeks of school. Reinforce rules and procedures firmly and consistently.
- Distribute the **Weekly Contract**. Review the week's expectations and tell students that they will check off each task as it is completed.
- Briefly point out the new **Workstation Flip Chart** activities for the week. Highlight how these activities will help students practice the skills they are learning during whole group lessons.
- Post the daily writing prompt for students to respond to in their Writer's Notebooks.
- Update and post the list of students in each group on the **Class Rotation Chart**.
- Make sure that groups are dynamic. No student should be stuck in a group for an extended period of time without their skills being re-assessed. Base the groups on individual skill needs.
- Post Small Group Independent Work Rules, such as:
  1. Use a quiet "inside" voice.
  2. Share materials.
  3. Take only the materials you need.
  4. Return materials.
  5. Do not interrupt the teacher when she or he is working with a small group.
- Establish a procedure for answering students' questions while working with a small group, such as placing a Question Chair near you in which one student waits silently until you are able to address the question, establishing a buddy system in which selected students are assigned the task of answering questions, or requiring students to post their question on a chart for you to answer when appropriate.
- Have ample books available for independent reading.

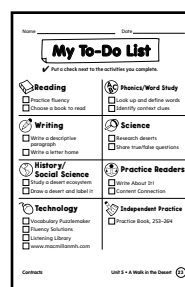
## Workstation Flip Charts

Four Workstation Flip Charts are available. These cover Reading, Phonics/Word Study, Writing, and Content Area (History/Social-Science and Science) standards. The weekly activities are connected to the week's theme, reading selections, and key skills. Students can complete most activities independently or with a partner. Suggestions for materials and time needed are listed on the activities. Review the activities at the beginning of the week so all students know the expectations and can complete the activities without your assistance.



## Contracts

Weekly contracts are available. These contracts list activities related to skills taught throughout the week and associated materials, such as the Workstation Flip Charts. Modify the contracts as needed, such as marking selected activities a student or group of students must complete or assigning the order in which the activities must be completed.



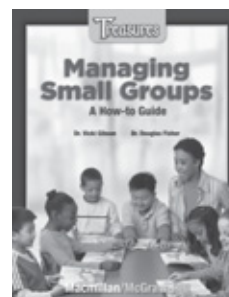
## Rotation Chart

A rotation chart and directions for usage are available. Assign each student a group at the beginning of the week (or day). Post the chart in a place that is easily visible to all students. Students refer to the chart throughout the small group time to know what to do, when, and with whom.



## How-to Guide

A how-to guide, written by program authors Jan Hasbrouck and Vicki Gibson, provides details on how to set up differentiated small groups and manage them effectively. This resource is ideal for new teachers or as a study group title at the beginning of each school year.



## Centers

Establish other classroom centers as appropriate. These may include computer stations with activities from [www.macmillanmh.com](http://www.macmillanmh.com), reading bins with books related to the unit's theme and on different levels, and games to reinforce phonics and decoding skills. Also use the software that comes with *California Treasures*, such as *Fluency Solutions Audio CD* and *New Adventures with Buggles and Beezy*.

## Tips for Students with Special Instructional Needs

- There are a variety of ways for students with special instructional needs to use materials and demonstrate their competence (e.g., physically forming letters for students who have dyslexia or who have difficulties writing legibly or spelling words). Modifications can be made so students have access to the materials. Examples of modifications might include student use of computers to complete pencil and paper tasks, use of on-screen scanning keyboards, enlarged keyboards, word prediction, and spellcheckers.
- Establish a safe and supportive environment in which the students are encouraged to talk and ask questions freely when they do not understand. Circulate the room frequently so they can ask questions. This also allows teachers to see that students are on task and following through as required. Assigning these students a peer buddy can also help when they are working on a partner or group assignment.
- Use a wide variety of ways to explain a concept or assignment. When appropriate, the concept or assignment may be depicted in graphic or pictorial ways, with manipulatives, or with real objects to accompany oral and written instructions. Give alternative assignments rather than long written assignments. Break long assignments into small sequential steps, monitoring each step. Number and sequence steps in a task.
- Provide assistance in the specific and general vocabulary to be used for each lesson, using reinforcement or additional practice afterward. Preteach vocabulary and provide adequate opportunities for students to hear and use new vocabulary in context before applying to practice and application. Instructional resources and instruction should be monitored for the ambiguities of language that would be confusing, such as idioms. Limit the number of concepts and new vocabulary presented at one time.
- Set up learning situations that offer additional assistance. Tutoring by a qualified teacher is optimal. Peer or cross age tutoring should be so designed so as to not distract from the instructional time of either the tutor or the tutee. Educational software where the computer provides multisensory experiences, positive reinforcement, individualized instruction and repetition can be useful in helping students with skill building.
- Prepare students for testing situations. Provide a quiet setting for test taking and allow tests to be scribed if necessary. Allow for oral administration of test and oral response. Divide tests into small sections and allow students as much time as needed to complete. Grade spelling separately from content and consider changing the percentage of work required for a passing grade.
- Explain learning expectations before beginning a lesson. Ask each student to frequently communicate his or her understanding of the concept or assignment. Students should be asked to verbalize or write down what they know. This provides immediate insight into their thinking and level of understanding. Evaluate instruction and reteach as necessary. Modify expectations based on student needs.

# ENGLISH LEARNERS OVERVIEW CHART

Level	From these Questions	To these Questions	Listening/ Speaking	Reading	Writing
<b>LEVEL 1 Beginning</b>	<ul style="list-style-type: none"> <li>Point to ____.</li> <li>Find the ____.</li> <li>Who has the ____?</li> <li>Is this a ____?</li> <li>Give the ____ to ____.</li> </ul>	<ul style="list-style-type: none"> <li>Yes/No questions</li> <li>Either/Or questions</li> <li>1 or 2-word responses</li> <li>Literal questions</li> </ul>	<p>Students use simple words and phrases to:</p> <ul style="list-style-type: none"> <li>Answer questions</li> <li>Follow 1-step directions</li> <li>Retell information</li> <li>Demonstrate understanding of basic vocabulary</li> </ul>	<ul style="list-style-type: none"> <li>Understand basic information read aloud</li> <li>Participate in scaffolded reading</li> <li>Read alouds simple words and sentences</li> <li>Use illustrations to understand main ideas</li> </ul>	<ul style="list-style-type: none"> <li>Use drawings, single words, and simple phrases to communicate ideas</li> <li>Label object drawings</li> <li>Write simple sentences with support</li> <li>Write brief narratives</li> </ul>
<b>LEVEL 2 Early Intermediate</b>	<ul style="list-style-type: none"> <li>Yes/No questions</li> <li>Either/Or questions</li> <li>1 or 2-word response questions</li> <li>Literal questions</li> </ul>	<ul style="list-style-type: none"> <li>Tell me about ____.</li> <li>Talk about ____.</li> <li>Describe ____.</li> <li>Explain ____.</li> <li>Retell ____.</li> </ul>	<p>Students use simple sentences to:</p> <ul style="list-style-type: none"> <li>Ask and answer literal questions</li> <li>Restate and follow multiple-step directions</li> <li>Restate main ideas</li> <li>Retell a basic sequence of events</li> </ul>	<ul style="list-style-type: none"> <li>Read basic paragraphs</li> <li>Identify basic text features</li> <li>Recognize and correct some errors when reading aloud</li> <li>Read aloud with pacing, intonation, and expression</li> </ul>	<ul style="list-style-type: none"> <li>Write short paragraphs</li> <li>Use common words in writing</li> <li>Use writing frames</li> <li>Write simple narratives and informational pieces</li> </ul>
<b>LEVEL 3 Intermediate</b>	<ul style="list-style-type: none"> <li>Tell me about ____.</li> <li>Talk about ____.</li> <li>Describe ____.</li> <li>Explain ____.</li> <li>Retell ____.</li> </ul>	<ul style="list-style-type: none"> <li>Why?</li> <li>How?</li> <li>Summarize</li> <li>Give an example</li> <li>What is your opinion?</li> </ul>	<p>Students use basic language structures to:</p> <ul style="list-style-type: none"> <li>Ask and answer literal questions</li> <li>Ask and answer inferential questions with support</li> <li>Use academic vocabulary in discussions with support</li> <li>Explain main ideas and details</li> </ul>	<ul style="list-style-type: none"> <li>Read grade-level text with support</li> <li>Use basic text features</li> <li>Use a dictionary</li> <li>Recognize and correct errors when reading aloud</li> <li>Understand academic language with support</li> <li>Summarize</li> </ul>	<ul style="list-style-type: none"> <li>Write a sequence of events</li> <li>Write paragraphs with support</li> <li>Use note taking</li> <li>Use Writing Process</li> </ul>

<p><b>LEVEL 4</b> <b>Early</b> <b>Advanced</b></p>	<ul style="list-style-type: none"> <li>• Why?</li> <li>• How?</li> <li>• Summarize</li> <li>• Give an example</li> <li>• What is your opinion?</li> </ul>	<ul style="list-style-type: none"> <li>• Using evidence from the text, explain why/how ____.</li> <li>• What would happen if ____?</li> <li>• How are these the same/different?</li> </ul>	<p>Students use Standard English structures to:</p> <ul style="list-style-type: none"> <li>• Ask and answer inferential questions</li> <li>• Retell information in detail</li> <li>• Use simple figurative language and idioms</li> <li>• Use academic language in discussions</li> </ul>	<ul style="list-style-type: none"> <li>• Read grade-level text</li> <li>• Use text features to get information</li> <li>• Understand academic language</li> <li>• Identify grade-level elements of literature</li> <li>• Recognize and describe themes</li> </ul>	<ul style="list-style-type: none"> <li>• Respond to grade-level writing prompts with support</li> <li>• Use Writing Process</li> <li>• Edit writing</li> </ul>
<p><b>LEVEL 5</b> <b>Advanced</b></p>	<ul style="list-style-type: none"> <li>• Using evidence from the text, explain why/how ____.</li> <li>• What would happen if ____?</li> <li>• How are these the same/different?</li> </ul>	<ul style="list-style-type: none"> <li>• Analyze why/how</li> <li>• Infer why/how</li> <li>• Analyze cause and effect of ____.</li> <li>• Suggest another outcome</li> </ul>	<p>Students use Standard English structures to:</p> <ul style="list-style-type: none"> <li>• Vary speaking according to purpose, audience, and topic</li> </ul>	<ul style="list-style-type: none"> <li>• Read grade-level text aloud with proper fluency</li> <li>• Use text features to get information</li> <li>• Analyze text: themes, plots, literary devices</li> </ul>	<ul style="list-style-type: none"> <li>• Respond to grade-level writing prompts</li> <li>• Vary writing according to purpose, audience, and topic</li> <li>• Write multiple paragraph pieces</li> <li>• Use Writing Process</li> </ul>

# LISTENING/SPEAKING/VIEWING

<p><b>Introduction</b></p> <p>In addition to developing students' reading and writing skills, other skills are necessary to communicate effectively orally, visually, and in writing. These include listening, speaking, and viewing skills.</p> <p>In the <i>California Treasures</i> Teacher's Edition, weekly instruction and practice is provided with these skills. The skills are often linked to the reading and writing skills used throughout the week and get progressively more sophisticated throughout the grades.</p>	<p><b>Tips</b></p> <ul style="list-style-type: none"> <li>• Make sure students have opportunities each week to speak in whole class and small group discussions.</li> <li>• Use sentence starters and frames to facilitate and scaffold the use of academic language and transition words.</li> <li>• Prompt students to use visuals and notes when presenting, as appropriate.</li> <li>• Establish class rules for listening and speaking (e.g., Speak in a loud voice so everyone can hear. Raise hands. Don't interrupt. If speaking, make eye contact with audience. If listening, sit up and look interested. Allow wait time to answer questions.)</li> </ul>
<p><b>Listening</b></p> <p>Listening skills include comprehending what one hears and listening for different purposes. These purpose might include following directions, identifying main ideas or sequence of events, or summarizing.</p>	
<p><b>Speaking</b></p> <p>Speaking skills include oral presentations and communications, both formal and conversational. These skills encompass the use of proper volume, pitch, and intonation, as well as correct use of grammar.</p>	
<p><b>Viewing</b></p> <p>Viewing skills include understanding the main idea and/or messages in photographs, illustrations, mass media, and other multimedia.</p>	



# ASSESSMENT

## Introduction

*California Treasures* contains three types of formal assessments: Diagnostic, Progress Monitoring, and Summative. Each is described below.

In addition, daily lesson Quick Checks enable the teacher to quickly and informally assess students' learning progress. These informal assessments can be used to form daily skills-based small groups.

### Quick Check

Can children spell words with long *a* (*ai, ay*)?

During **Small Group Instruction**:

If No → **Approaching Level** Provide scaffolding spelling and blending work using the Sound Boxes. See Phonics, page 355.

If Yes → **On Level** See page 35Y to consolidate learning.

**Beyond Level** See page 35CC to extend learning.

## Diagnostic

**Diagnostic Assessments** can be used for screening or placement. They can also be used for formative or summative assessment. A diagnostic test:

- Is a test administered to those students who appear at risk of failing to read, or need additional instruction.
- Is a detailed assessment that pinpoints a student's strengths or weaknesses.
- Is a test that can be group or individually administered, depending on the test and the age of the student.
- Should be given near the beginning of year to determine students' instructional needs or whenever a student is suspected of having difficulty learning taught skills. It may also be given throughout the year to monitor student progress (e.g., Fluency Assessment).
- Can be used to form skills-based small groups.



## Progress Monitoring

**Progress Monitoring Assessments** are ongoing and provide up-to-date information on a student's mastery of taught skills. A progress monitoring assessment:

- Is also known as a Formative Assessment.
- Includes teacher observations (Quick Checks), weekly and unit tests, and curriculum assignments.
- Mirrors the types of tasks students complete in the curriculum. (curriculum-based)
- May include a diagnostic assessment that pinpoints the cause of a specific observed reading problem.
- Helps to define the specific focus of instruction (e.g., reteaching a skill students haven't mastered).



## Summative

Summative Assessments are administered at the end of a major unit of study such as at the end of a semester or school year. A summative assessment:

- Provides information about what skills a student exits the major instructional period with.
- Is useful for planning the next major instructional period.
- Is connected to the specific curriculum.
- Can be used to provide a final grade or judgment on a student's strengths and weaknesses.





A Research Alignment of  
Macmillan/McGraw-Hill

# *California* Treasures

COMPREHENSIVE READING CURRICULUM

Synopsis of Findings (Westat) and  
Technical Appendix (IESD)



**Macmillan/McGraw-Hill**

**If reading opens the door of opportunity, will all children be able to cross the threshold to reading success?**

At Macmillan/McGraw-Hill, we have always answered Yes to this question. It is our tradition to help every child learn to read, *and* to help every instructor teach reading in the most effective manner possible – a practice that continues today with the *California Treasures* Comprehensive Reading Curriculum.

The *California Treasures* program will guide children across the literacy threshold to mastery of the skills and strategies they need to become successful readers – because *California Treasures* is anchored in salient and consequential research about what works.

## **The Importance of Reading Research**

The federal government commenced its most sustained commitment to literacy with the landmark Reading First initiative. Based on years of scientifically based research findings, the goal of Reading First is to provide children with effective reading instruction in the early grades, so that as a nation we may ensure that all children grow up to become literate adults.

Learning to read and teaching reading is work that requires the most effective materials because reading is foundational for all other learnings. In fact, The National Institute for Literacy's Partnership for Reading (2000) states that "Success in school starts with reading." Research is now available that suggests how to give each child a good start toward that success. Increasingly, federal, state, and local requirements in every area focus on the need for research-verified instructional strategies, methods, and approaches. Macmillan/McGraw-Hill has stepped up to this challenge by identifying highly-regarded research related to effective reading instruction, summarizing relevant instructional recommendations based on that research, and then showing how those recommendations are incorporated into the Macmillan/McGraw-Hill *California Treasures* Reading Curriculum.

This paper presents the results of the research-based alignment process for *California Treasures* in two parts: Synopsis of Findings (Westat) and a Technical Appendix (IESD).

## **What Are the Components of Reading?**

To meet Reading First guidelines, reading programs must be based on scientific evidence related to five elements that have been identified as essential in reading instruction:

- 1. Phonemic awareness**
- 2. Phonics**
- 3. Fluency**
- 4. Vocabulary**
- 5. Comprehension**

This Westat Synopsis of Findings builds upon the IESD technical work in two ways. The Westat Synopsis presents a user-friendly précis of the key research findings across the five components of reading cited above, and it adds a *demonstration of alignment* by providing specific examples from grades K-6. We describe how Macmillan/McGraw-Hill Reading *California Treasures* meets findings of scientific research related to these five areas, including research-based recommendations for assessment related to these areas.

Although the Westat Synopsis cites some research literature, the IESD Technical Appendix provides the reader with full technical detail.

This paper summarizes key research findings and research-based recommendations related to effective reading instruction from two key sources describing the body of research on which Reading First was based:

- *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (National Institute of Child Health and Human Development [NICHD], 2000). This source presents an extensive, detailed research review related to five broad categories (see below under Reading First Content Focus). In cases where the data were of sufficient quality and uniformity, research results were summarized in a meta-analysis, a method for statistically combining research results across an entire body of research studies.
- *Preventing reading difficulties in young children*, a review of research on early childhood reading commissioned by the National Research Council (Snow, Burns, & Griffin, 1998). This source represents a broad-ranging research summary and review, but without inclusion of specific details of the research.

# The Five Components of Reading Discussed

## 1 Phonemic Awareness

### 1 Components of Reading: *Phonemic Awareness*

“Phonemic awareness instruction helps children learn to read.”

– *Put Reading First* (Armbruster, Lehr, & Osborn, 2003, p. 6)

#### A. What is Phonemic Awareness?

“Phonemic awareness is the ability to hear, identify, and manipulate the individual sounds – phonemes – in spoken words” (Armbruster, Lehr, & Osborn, 2003, p. 10). It is the foundation for reading. It is the ability to detect individual speech sounds within words. This ability is a requirement for developing accurate decoding skills and strategies (McShane, 2006, p. 13). Phonemic awareness is often described as part of a broader category known as phonological awareness. Phonological awareness includes the ability to work with larger units in spoken language such as syllables and rhymes, which often include more than one phoneme. Children typically find it easier to work with these larger units (e.g., rhyming words) before proceeding to develop skills with individual phonemes (NICHD, 2000, p. 2-10).

#### B. Why is Phonemic Awareness instruction important?

Strong phonemic awareness is considered an early indicator of eventual success in beginning reading. Phonemic awareness instruction helps children learn to read words, spell words, and comprehend text. The National Reading Panel reached three conclusions about phonemic awareness instruction in its Teaching Children to read document:

- *Phonemic awareness instruction has a positive overall effect on reading and spelling.*
- *Phonemic awareness instruction leads to lasting reading improvement.*
- *Phonemic awareness instruction can be effectively carried out by teachers.*

Source: *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (National Institute of Child Health and Human Development [NICHD], 2000).

#### C. Who benefits from phonemic awareness instruction?

- Readers do. Phonemic awareness instruction has been shown to have a positive impact on reading skills across many student categories and grade levels. The National Reading Panel cited normally developing readers, children at risk for future reading problems and (later research) specifically for kindergartners at risk for developing dyslexia (Elbro & Petersen, 2004), disabled readers, preschoolers, kindergartners through sixth graders, children across various SES levels, and children learning to read in English as well as in other languages.
- Spellers do. Phonemic Awareness instruction has been shown to have a positive impact on spelling skills across many student categories and grade levels. The Reading panel cited kindergartners, first graders, children at risk for future reading problems, normally developing readers, children across various SES levels, and children learning to spell in English as well as in other languages.

# 1

## Phonemic Awareness

D. Common Phonemic Awareness Tasks and Examples		E. Research Recommendations
<b>Phoneme isolation</b> – Recognizing individual sounds in words.	<b>E.g.:</b> What sound do you hear at the beginning of <i>pin</i> ? (/p/)	<b>1. Range and scope of instruction</b> <b>Grade Levels</b> Research summarized by the NRP suggests that <b>Phonemics Awareness (PA) instruction</b> should be provided <ul style="list-style-type: none"> <li>– At the kindergarten level</li> <li>– At the first-grade level</li> <li>– At elementary levels above first grade as supplemental instruction for students with special needs</li> </ul>
<b>Phoneme identification</b> – Recognizing the common sound in different words.	<b>E.g.:</b> What sound do you hear that is the same in <i>sat</i> , <i>sun</i> , and <i>soup</i> ? (/s/)	
<b>Phoneme categorization</b> – Recognizing the odd sound in a set of words.	<b>E.g.:</b> Listen to these words—hand, heart, sun. Which word begins with a different sound? ( <i>sun</i> )	
<b>Phoneme blending</b> – Listening to a sequence of separately spoken sounds and then blending them naturally into a recognizable word.	<b>E.g.:</b> What word is /b/ - /a/ - /t/? ( <i>bat</i> )	<b>2. Instructional methods and features</b> <b>Spoken and written versus spoken only.</b> Instruction that used letters to teach phoneme manipulation had a considerably greater impact on both reading and spelling than instruction that did not use letters but was limited to spoken sounds only <b>Assessment for kindergarteners based on phoneme recognition.</b> Findings suggest that a group-administered assessment based on phoneme recognition can serve as a useful screening tool for identifying the general level of students' PA skills in kindergarten, which in turn is a useful indicator of students who might need targeted PA skills intervention. <b>Guidance by initial and ongoing assessment in the first and second grades.</b> Based on the research findings, the NRP recommended a design in which assessment results drive PA instruction at the first- and second-grade levels, both initially and through ongoing formative assessments. <ul style="list-style-type: none"> <li>– Assessments conducted before PA instruction begins should “indicate which children need the instruction and which do not, which children need to be taught rudimentary levels of PA (e.g., segmenting initial sounds in words), and which children need more advanced levels involving segmenting or blending with letters” (NICHHD, 2000, p. 2-6).</li> <li>– In order to determine the length of PA instruction, “What is probably most important is to tailor training time to student learning by assessing who has and who has not acquired the skills being taught as training proceeds” (NICHHD, 2000, p. 2-42). The NRC research review argued that “intensity of instruction should be matched to children’s needs” (Snow, Burns, &amp; Griffin, 1998, p. 321).</li> </ul>
<b>Phoneme segmentation</b> – Breaking a word into its sounds by tapping out or counting the sounds.	<b>E.g.:</b> How many sounds do you hear in <i>cat</i> ? (three)	
<b>Phoneme deletion</b> – Recognizing the word that remains when a specific phoneme is removed.	<b>E.g.:</b> What word do we have when we say smile without the /s/? ( <i>mile</i> )	



Summary of Research Recommendations for Phonemic Awareness	Demonstration of Alignment
<p><i>Kindergarten instruction is designed to provide practice with the sound structure of words and the recognition and production of letters.</i></p>	<p><b>Kindergarten:</b></p> <p>Phonemic awareness tasks begin with skills such as “concept of a word,” “rhyme,” and “count syllables.” The tasks then progress to “oral blending” (with continuous first sounds) and “oral segmentation” (with continuous first sounds–2 letter words, then 3-letter words). Finally, tasks progress to “oral manipulation” and more complex blending and segmentation with words beginning with stop sounds and longer words (4 or more phonemes).</p> <p><b>Sample of a Typical Kindergarten Lesson</b></p> <p>Unit 4, Week 1–Phoneme Isolation: /n/ The teacher models the new sound using the corresponding Alphabet Card and Photo Card. Students practice listening to the sound and repeating it. Students then review previously introduced sounds such as /i/ and /t/ with Photo Cards. During guided practice, the teacher displays Photo Cards, and the children identify and pronounce the initial sounds.</p>
<p><i>Assessment for kindergarteners is based on phoneme recognition.</i></p>	<p>Phonemic awareness and phonics skills are assessed together in kindergarten, especially in the beginning units of this level. A new letter is introduced at the beginning of each unit and it is at this point that phoneme isolation is practiced. At the end of the unit, teachers assess these skills by using “Pencil and Paper Assessments.” These assessments are a combination of Activity Book and Practice Book pages. For an example, see page 64 of Kindergarten Unit 1. In this typical unit, Activity Book page 12 and Practice Book pages 25-26 are suggested as a Pencil and Paper Assessment for the sound/letter /m/.</p>
<p><i>First-grade instruction is designed to provide explicit instruction and practice with sound structures that lead to phonemic awareness.</i></p>	<p>Phonemic awareness instruction and practice are incorporated into daily lessons. Teachers are prompted to explicitly model proper pronunciation of sound structures using visual cues such as letter and alphabet cards. After modeling, teachers guide students in group and individual practice of the new sound structure or letter. For additional phonemic awareness instruction, students may also be asked to independently complete complementary pages in the Student Practice Book.</p>
<p><i>At elementary levels above first grade, phonemic awareness is provided as supplemental instruction for students with special needs.</i></p>	<p><b>Sample from a Typical Second Grade Unit:</b></p> <p>Unit 2, Weeks 1-5, features long /a/a, ai, ay, ea, ei; long/ e/e, ee, ea, y, ey, ie; long /i/i, igh, ie, y; long /o/o, oa, ow, oe; and long /u/u, u_e, ew, ue. The correlating Phonemic Awareness skills are reinforced in the <i>Leveled Reader Program, Leveled Practice Books, and the Intervention Anthology for Approaching Level, Beyond Level, and EL students.</i></p> <p>Each lesson has a separate phonemic awareness plan, for example, Second Grade, Unit 2. Week 1, Day 1 is phoneme addition. (p. 157B) The teacher models words with the long /a/ sound. Guided practice and independent practice activities provide children with the opportunities to learn the phoneme. Further practice and assessment is provided in Approaching Practice Book A. A similar procedure is followed for Day 2, phoneme substitution; Day 3, phoneme blending; Day 4 phoneme substitution; and Day 5 phoneme blending.</p>

# 1

## Phonemic Awareness

<p><i>At elementary levels above first grade, phonemic awareness is provided as supplemental instruction for students with special needs.</i></p> <p><i>(continued)</i></p>	<p><b>End of Fourth Grade Example:</b></p> <p>Students sort spelling word cards according to how the schwa + n sound is spelled. They take turns sorting cards and explaining their sorting system.</p> <p><b>Fourth Grade EL Example:</b></p> <p>EL students use phonics and multi-syllabic decoding to learn spelling and vocabulary words. In the section, “EL: Access for All– Practice Spelling,” the teacher supplies a list of words for each long i pattern in the spelling words. The teacher pronounces each word with the EL students. Then she randomly says a word and has students repeat it and spell it aloud. After a few times, she covers the words after she says them and challenges students to spell them.</p> <p><b>Individualized Intervention</b></p> <p>For students with special needs, phonemic awareness skills instruction starts at the beginning of an individualized scope and sequence as determined through the examination of the most recent test score data. For example, upon analysis of post-test data, a third grade student may be diagnosed with a short vowel sound skill need. This student will engage in age-appropriate practices to learn those sounds even though the specific activities are typically found in first-grade level instruction.</p>
<p><i>Phonemic awareness instruction is a part of both reading and spelling.</i></p>	<p><b>Second Grade Example:</b> Each week, spelling words are taken from a decodable reader and reflect the skills emphasized in the phonemic awareness lessons. For example, in Unit 2, Week 1, Day 1, fifteen spelling words are introduced and pre-tested with the long a sound. The decodable reader, <i>Watch the Bird Tree</i>, provides fluency practice when students echo-read words with the long a sound. Students complete the activity in the Practice Book using these elements. On Day 3, students complete a word sort with the words. On Day 4, students work in pairs using the Vocabulary Cards. Day 5 brings review and assessment of phoneme blending and a spelling test with words that have long a.</p>
<p><i>Assessment results drive phonemic awareness instruction at the first-and second-grade levels, both initially and through ongoing formative assessments.</i></p>	<p>The assessments in <i>California Treasures</i> are designed to inform phonemic awareness instruction at Kindergarten, first- and second-grade levels. Therefore, assessment is ongoing, varied, and rigorous. Teachers use results to modify instruction.</p> <p><b>Informal Assessment</b></p> <p>Throughout the lessons, students are observed informally. Because lessons are highly interactive, and the student response rates are high, teachers have ample opportunity to check each student’s daily phonemic progress.</p> <p>Daily “Quick Check” Observations in the Teacher’s Guide (TE) remind teachers what to observe. If students encounter difficulties, immediate lesson modifications are provided via the “Corrective Feedback” suggestions. If additional phonemic awareness instruction and/or guided practice are required, the TE directs teachers to the “Additional Instruction” section.</p> <p><b>Formal Assessment</b></p> <p>Weekly Assessments and Unit Tests are used as ongoing formative assessments to monitor students’ phonemic awareness acquisition. Additionally, the Daily Quick Check Observations are compiled and compared with the Quick Check Rubric to assess student skills, diagnose, and prescribe additional lessons or intervention instruction if necessary.</p>

“Systematic and explicit phonics instruction significantly improves children’s reading comprehension.”

– *Put Reading First* (Armbruster, Lehr, & Osborn, 2003, p. 14)

### A. What is Phonics?

Phonics instruction teaches children the relationship between letters (graphemes) and the sounds in spoken language (phonemes) and how to apply that knowledge in reading and spelling words.

**Phonics instruction builds on phonemic awareness.** Although it includes some types of phonemic awareness activities, in which students “use grapheme-phoneme correspondences to decode or spell words,” it extends beyond such tasks to “include other activities such as reading decodable text or writing stories” (NICHD, 2000, p. 2-11).

### B. What is “systematic and explicit” phonics instruction?

Research recommendations favor phonics instruction that is “systematic and explicit.” An explicit approach includes specific directions to teachers for teaching letter-sound correspondences. A systematic approach is one that incorporates a planned, sequential set of phonetic elements to master. These elements are explicitly and systematically introduced in meaningful reading and writing tasks.

Systematic and explicit phonics instruction includes teaching a full spectrum of key letter-sound correspondences: not just major correspondences between consonant letters and sounds, but also short and long vowel letters and sounds, and vowel and consonant digraphs such as oi, ea, ou, sh, and th.

Several different methods have been developed to teach phonics systematically and explicitly, including synthetic phonics, analytic phonics, embedded phonics, analogy phonics, onset-rime phonics, and phonics through spelling. Broadly speaking, these approaches are all effective (NICHD, 2000, p. 2-89).

### C. Why is phonics instruction important?

Phonics instruction leads to an understanding of the alphabetic principle—the set of systematic and predictable relationships between written letters and spoken sounds. For children to learn how to sound out word segments and blend these parts to form recognizable words, they must know how letters correspond to sounds. Three top-level examples:

- **Phonics instruction has a positive overall effect on reading.** A meta-analysis by the National Reading Panel (NRP) found that systematic and explicit phonics instruction had a significantly stronger effect on children’s reading than every category of nonsystematic or non-phonics instruction that was studied.
- **Phonics instruction has positive overall effects on specific skill areas.** The NRP meta-analysis found that across grades K-6, phonics instruction was “most effective in improving children’s ability to decode regularly spelled words . . . and pseudowords,” but also helped students to read miscellaneous words (some of which were irregularly spelled) and read text orally (NICHD, 2000, pp. 2-94, 2-159).
- **Phonics instruction has a lasting impact on reading.** Follow-up tests in the NRP meta-analysis found that the effects of phonics instruction were reduced, but still significant, several months after the instruction ended, “indicating that the impact of phonics instruction lasted well beyond the end of training” (NICHD, 2000, pp. 2-113, 2-159, 2-161).

D. Who benefits from phonics instruction? <i>Grade Levels</i>	E. Research Recommendations <i>Range and scope of instruction</i>
<p>The NRP meta-analysis found that kindergarten and first-grade students experienced significantly better improvement from phonics instruction than from other types of instruction in all six areas measured (decoding regular words, decoding pseudowords, reading miscellaneous words, spelling, reading text orally, and comprehending text), with a moderate to large effect size for all areas except reading text orally (NICHHD, 2000, p. 2-159).</p>	<p><b>Grade Level.</b> The NRP finding that phonics instruction benefited students in kindergarten, first grade, and grades 2–6 (the majority of which were disabled readers) suggests a value to <i>including phonics instruction at the kindergarten and first-grade levels and beyond, particularly for disabled readers.</i></p> <p><b>Level at which phonics instruction begins.</b> The NRP meta-analysis found that <i>phonics instruction in kindergarten and first grade was “much more effective”</i> than phonics instruction that began in second grade or later, after students have learned to read independently.</p> <p><b>Letter knowledge as precursor.</b> Two developmental studies, drawing on and extending a body of existing research, suggest that knowledge of letter names and/or letter sounds is an important precursor to the earliest stages of reading knowledge. Muter et al. (2004) found that students’ ability to identify letter sounds and/or names on entering schooling (average age 4 years, 9 months) was one of two significant predictors, together with phoneme sensitivity, of word recognition ability a year later (pp. 671–672).</p> <p><b>Instruction over multiple years.</b> Results of a few multi-year studies examined by the NRP “suggest that when phonics instruction is taught to children at the outset of learning to read and continued for 2 to 3 years, the children experience significantly greater growth in reading at the end of training than children who receive phonics instruction for only one year after first grade” (NICHHD, 2000, p. 2-118).</p>

D. Who benefits from phonics instruction? <i>Grade Levels</i>		E. Research Recommendations <i>Range and scope of instruction</i>
<i>Benefits by Student categories</i>		<i>Instructional methods and features</i>
Phonics instruction has been shown to have a statistically significant positive impact across many student categories (NICHD, 2000, p. 2-160):	<b>Kindergartners</b> at risk of developing future reading problems; <b>first graders</b> at risk; first grade normally achieving readers; <b>second to sixth graders</b> —normally achieving readers and disabled readers; and <b>children</b> across various SES (socioeconomic status) levels.	<p><b>Spelling instruction.</b> An analysis of research commissioned by the NRC claimed that spelling instruction, in particular at the second-grade level, is important in building “phonemic awareness and knowledge of basic letter-sound correspondences” (Snow, Burns, &amp; Griffin, 1998, p. 212).</p> <p><b>Phonics instruction as means to an end.</b> Based on their interpretation of the research results, the NRP argued that phonics instruction (i.e., “the teaching of letter-sound relations”) should not be pursued as an end in itself, but should be directed toward the goal of helping students in their “daily reading and writing activities” (NICHD, 2000, p. 2-96). Students should understand that this is the goal of learning letter-sounds, and should have practice in putting their skills to use.</p> <p><b>Variable, guided by assessment.</b> Based on their interpretation of the research results, the NRP argued that, ideally, phonics instruction should be variable based on the needs of individual students as determined through assessment (NICHD, 2000, pp. 2-96, 2-97). Similarly, the NRC research review argued that “intensity of instruction should be matched to children’s needs” in applying explicit instruction on the connection between phonemes and spellings (Snow, Burns, &amp; Griffin, 1998, p. 321).</p>

# Demonstration of Phonics Alignment in *California Treasures*

Summary of Research Recommendations for Phonics	Demonstration of Alignment
<i>Phonics instruction begins before reading is introduced.</i>	In kindergarten, each lesson begins with a phonemic awareness Warm Up that is followed by Oral Language. Next, the teacher uses the <i>Big Book</i> while students practice listening comprehension. Children talk about the story. In every lesson, students engage in phonemic awareness and phonics before reading is introduced.
<i>Letter names and sounds are taught to students early in kindergarten.</i>	Letter name identification and sound instruction begin on the first day of kindergarten. Throughout the Smart Start period (i.e., the first three weeks of kindergarten) the entire alphabet is introduced, and students are guided in letter names and sounds through individual practice and group participation. The “Sing, Talk, Rhyme Chart,” Word-Building Cards, Sound Spelling Cards, and Big Book are resources used by teachers to reinforce letter and sound recognition skills throughout kindergarten.
<i>Phonics instruction begins in kindergarten and continues regularly for 3 years.</i>	Instruction begins with the continuous consonants m and s. After several consonants are learned, students are taught short vowel a and how to blend VC and CVC words with short a (beginning with continuous sounds). First grade follows this same pattern that continues through third grade.
<i>Phonics instruction teaches students to convert letters into sounds and then to blend the sounds to form recognizable words.</i>	<p>Phonics follows a ‘Smart’ scope and sequence in which letter-sounds are introduced and then applied to simple VC and CVC words. As the sequence progresses, students encounter more sophisticated sound-spelling patterns and more complex words, including multi-syllabic words.</p> <p>Kindergarten Example: In a typical lesson, the teacher models the sound for <i>T</i>. She places the Large Word-Building Card, <i>T</i>, in the pocket chart. Next to the <i>T</i>, she places the card i. She moves her hand from left to right below the letters as she sounds out the blending of the two sounds. Students practice blending the sounds. Next, she places the Word-Building Card m in the pocket next to the <i>Ti</i>. She moves her hand from left to right as she blends the three sounds. Students then blend the sounds with the teacher. This routine is repeated with other words.</p> <p>Second Grade Example: In a typical lesson, the teacher places Word-Building Cards <i>c, h, e, e, r</i> in the chart pocket. Students and the teacher blend the sounds together and read the word. After blending the phonemes, they replace the letters to build a new word. Finally, students use their own Small Word-Building Cards to blend and build word pairs such as near/dear and year/fear.</p> <p>Fourth Grade Example: By the fourth grade, students decode the words as a class. For example, they underline the long i syllable or syllables in each of their vocabulary words. They also underline clues that show how to pronounce the words. Following an activity such as this, partners play a game with spelling words having the long i sound.</p> <p>Fifth Grade Example: By fifth grade, Students analyze words such as tractor pointing out the Latin root, tract, and the suffix, -or. They analyze <i>attraction</i> from “A Song for Makaio,” their main reading selection. As they read the selection they identify clues that reveal the meanings and pronunciations of the vocabulary words. In fifth grade, EL students practice sounds in isolation as well as within words that are difficult for them to pronounce.</p> <p>In a typical lesson in grades 4-6, advanced phonics skills, such as prefixes, suffixes, and multi-syllabic words are taught in isolation via the blending lines and explicit instruction. Students then read words containing the skills in the connected text in their Student Anthologies and Student Workbooks.</p>



<p><i>Spelling instruction is used to build phonemic awareness.</i></p>	<p>Primary Grades: Each week has a 5-Day Spelling plan: Day 1—pretest; word sort; Day 2—Teacher-modeled word sort; Day 3—Student word sort; game; Day 4—Test Practice: Dictation; and Day 5—Posttest. For example, in second grade, on the first day of each week, students are given the pretest for 10 spelling words, 2 review words (from previous lessons), and 3 high-frequency words. Word cards are displayed for high-frequency words. The teacher says the words; the children read the words and use each one in a sentence in a “display, say, spell, read, and write” routine. Students then decode the words in the connected text (story in a Decodable Reader). Students complete sentences with each word in the Practice Book. (An “Approaching Reproducibles” and a “Beyond Reproducibles” are also provided depending on the student’s level.)</p> <p>Second Grade Example: In a typical second grade lesson, students identify and make oral rhymes with the spelling words for phonemic awareness practice. On <i>Day Two</i>, Large Word-Building Cards are used to model blending sounds followed by Guided Practice/Practice and Cumulative Review. Students use Spelling Pattern Cards in a pocket chart to build word Automaticity followed by completing a page in their Practice Book. On <i>Day Three</i>, students work independently or in pairs with Vocabulary Cards to practice sorting the spelling words. They complete the next page in the Practice Book. On <i>Day Four</i> students work in pairs to take turns dictating the spelling words. They also use their Vocabulary Cards to practice reading each word quickly. They complete the next page in the Practice Book and write from a prompt using the words. On <i>Day Five</i> students repeat each word as the teacher pronounces it before they write it for the posttest. After the test, the new words are added to the Word Wall.</p> <p>Upper Grades Example: By fifth grade, spelling words fit a pattern such as “all of the words have a suffix,” for example. Students learn that spelling sometimes changes when a suffix is added. They use spelling words in dictation sentences. They invent sorting schemes for Vocabulary Cards and participate in daily teacher and student word sorts. Students create graphics to identify definitions. They proofread and use spelling words in original writing.</p>
<p><i>Phonics instruction is directed toward the goal of helping students in their daily reading and writing activities.</i></p>	<p>The <i>California Treasures</i> curriculum provides checklists that help students understand specific elements of a piece of writing. Students use rubrics to identify their efforts to improve their own writing and to provide a framework for peer editing. The “Word Work” (phonics and spelling) objectives are reinforced in informal cross-curricular activities each week. For example, in small groups or pairs, second graders might play “Guess My Word” with current and past Vocabulary Cards.</p> <p>Fourth Grade Example: By the time students are in fourth grade, they use multi-syllabic decoding when reading words in all texts. For example, the teacher writes on the board <i>disunity</i>, <i>foolhardy</i>, <i>screwdriver</i>, <i>evolution</i>, and <i>uncooked</i>—words that are used in the students’ main selection. The teacher models how to decode <i>disunity</i>, focusing on the long u sound and noting the prefix. Students decode the other words on the list, explaining how the sounds differ. Students use this technique when reading the main selection in the student text. Students also use these words in creative writing.</p> <p>Upper Grades: In fifth grade, students become even more sophisticated in their daily reading and writing activities. For example, they may read the words surrounding a homophone to decide on a definition for the homophone that is based on its contextual use. Or they may choose, based on clues gathered from the main selection, which suggested meaning makes the best sense.</p>



# 2

## Phonics

<p><i>Phonics instruction is integrated with other reading instruction.</i></p>	<p>Primary Grades: The “Word Work” portion of each reading lesson in the primary grades combines phonics, spelling, and vocabulary. Selected spelling words reinforce specified phonemic awareness strategies and the phonics skill highlighted each week. For example, in second grade, Unit 4, Week 1, phonemic awareness emphasizes the diphthong /ou/ <i>ou</i>, <i>ow</i>. Phonics and spelling align with phonemic awareness.</p> <p>Upper Grades: A phonics instructional strategy used in fourth grade is the “Think Aloud.” For example, while reading the main selection, the teacher may say, “I see that his word begins with <i>or</i>. That’s probably pronounced /ô/. I know that <i>ph</i> often has the sound /f/. If the last syllable is unaccented, I should pronounce it / n/. When I blend the sounds together, I get /ô fən/. I know that word.” Students learn to analyze words in this way.</p>
<p><i>Phonics instruction is variable and is based on students’ needs as determined through assessment.</i></p>	<p>Weekly assessments and Daily Quick Check Observations are used in determining the need for differentiated phonics instruction. Based on results of the Weekly Assessments and observed student performance, teachers are provided options (e.g., Approaching, On, and Beyond Level) to appeal to students’ specific instructional needs.</p> <p>For students in need of phonics intervention, assessments are provided in the Phonics-QPS (Quick Phonics Screener). This assessment, developed by program author Jan Hasbrouck, evaluates each student’s decoding skills and provides the teacher with valuable information to form small groups and to address decoding issues.</p>

“Repeated and monitored oral reading improves reading fluency and overall reading achievement.”

—*Put Reading First* (Armbruster, Lehr, & Osborn, 2003, p. 24)

### A. What is Fluency?

Fluency is the ability to read text quickly, accurately, and with expression. It provides a bridge between word recognition and comprehension. “Fluency is vital to comprehension” (McShane, p. 14). Fluency includes word recognition, but extends beyond knowledge of individual words to reflect the meaningful connections among words in a phrase or sentence. Fluent readers are able to recognize words and comprehend them simultaneously.

### B. Why is Fluency Instruction Important?

Fluency is widely acknowledged to be a critical component of skilled reading. A study conducted by the National Assessment of Educational Progress (NAEP) found a “close relationship between fluency and reading comprehension” (NICHHD, 2000, p. 3-1, citing Pinnell et al., 1995). More generally, a National Research Council report stated that “Adequate progress in learning to read English beyond the initial level depends on . . . sufficient practice in reading to achieve fluency with different kinds of texts written for different purposes” (Snow, Burns, & Griffin, 1998, p. 223). Additional evidence of this link between fluency and the development of general reading ability, particularly reading comprehension, is provided by several studies that found student performance on fluency assessments was an effective predictor of their performance on other types of reading measures.

In reviewing the research on fluency instruction, the National Reading Panel (NRP) found value in approaches that incorporated repeated oral reading, guided or unguided, as opposed to less focused attempts to encourage reading in general. Three findings:

**Repeated oral reading instruction has a positive overall effect on reading.** A meta-analysis by the NRP found that fluency instruction in the form of repeated oral reading (guided or unguided) “had a consistent, and positive impact on word recognition, fluency, and comprehension as measured by a variety of test instruments and at a range of grade levels” (NICHHD, 2000, p. 3-3). The weighted average of these effect sizes resulted in a moderate effect on student reading (NICHHD, 2000, p. 3-16).

**Repeated oral reading instruction has a positive impact on specific skill areas.** The NRP meta-analysis found that repeated oral reading had a moderate effect on reading accuracy, a somewhat less strong effect on reading fluency, and a smaller effect on reading comprehension (NICHHD, 2000, pp. 3-3, 3-18).

**In contrast, encouraging children to read on their own has no research-verified impact on reading achievement.** The NRP reviewed research studies on attempts to build fluency through encouraging independent student reading; most of these were studies of sustained silent reading. It found that the body of research failed to confirm any positive effects (NICHHD, 2000, pp. 3-3, 3-24–3-26, citing 14 studies).

### C. Who benefits from fluency instruction? Grade Levels

Analysis of grade levels covered by the studies in the NRP meta-analysis led to the conclusion that “repeated reading procedures have a clear impact” on reading ability among:

“Non-impaired readers at least through fourth grade”

“Students with various kinds of reading problems throughout high school” (NICHHD, 2000, p. 3-17)

## D. Research Recommendations on Fluency

<i>Range and scope of instruction</i>	<b>Grade Level.</b> The NRP research findings suggest a value to including fluency instruction in the form of repeated oral reading procedures at least through the fourth-grade level, and possibly beyond in a supporting capacity for students with reading problems. A review of research on early childhood reading commissioned by the National Research Council (NRC) identified fluency instruction as a key component of first-grade instruction and argued that “Throughout the early grades, time, materials, and resources should be provided” for both daily independent reading and daily supported reading and rereading (Snow, Burns, & Griffin, 1998, p. 195).	
<i>Instructional methods and features</i>	<b>Effective methods.</b> Some of the methods that produced “clear improvement”—albeit with small sample sizes within each category—(NICHHD, 2000, p. 3-15) included the following: →	<b>Repeated readings</b> (set number of repetitions, set amount of time, or until fluency criteria were reached) (NICHHD, 2000, p. 3
		<b>Repeated readings “combined with other [guided] procedures</b> such as a particular type of oral reading feedback . . . or phrasing support for the reader” (NICHHD, 2000, p. 3
		<b>Practice of oral reading</b> “while listening to the text being read simultaneously” (NICHHD, 2000, p.
	<b>Oral reading practice.</b> In the NRP’s description of effective repeated oral reading programs, the NRP stated that many of these programs provided increased oral reading practice “through the use of one-to-one instruction, tutors, audiotapes, peer guidance, or other means,” compared to earlier approaches (NICHHD, 2000, p. 3-11).	
	<b>Regular assessment.</b> The NRP recommended that “teachers should assess fluency regularly,” using both formal and informal methods (NICHHD, 2000, p. 3-4). Such informal methods can include “reading inventories . . . miscue analysis . . . pausing indices . . . running records . . . and reading speed calculations” (NICHHD, 2000, p. 3-9, citing 5 studies). Similarly, the NRC report recommended that “Because the ability to obtain meaning from print depends so strongly on the development of reading fluency,” fluency “should be regularly assessed in the classroom, permitting timely and effective instructional response” (Snow, Burns, & Griffin, 1998, p. 323).	
	<b>Validity of oral reading fluency measures.</b> According to Hasbrouck and Tindal (2006), measuring student oral reading fluency in terms of words correct per minute “has been shown, in both theoretical and empirical research, to serve as an accurate and powerful indicator of overall reading competence, especially in its correlation with comprehension. The validity and reliability of these measures has been well established in a body of research extending over the past 25 years” (citing Fuchs, Fuchs, Hosp, & Jenkins, 2001; Shinn, 1998). For example, several studies have shown that third-grade tests of oral reading fluency from the DIBELS correlated well to high-stakes reading assessments from Arizona, Colorado, Florida, North Carolina, and Oregon.	
<b>Oral reading fluency norms.</b> Based on analysis of assessment data from a pool ranging from approximately 3,500 to over 20,000 students collected between 2000 and 2005, Hasbrouck and Tindal (2006) have developed a new set of oral reading fluency norms to replace the widely used norms that were published in 1992 (Hasbrouck & Tindal, 1992). The new norms “align closely with both those published in 1992, and also closely match the widely used DIBELS norms . . . with few exceptions.” These new norms cover grades 1–8 and provide information for 90th, 75th, 50th, 25th, and 10th percentile rankings.		
<i>The researchers also provided specific norm-related recommendations for using oral reading results for screening, diagnosis, and monitoring student progress:</i> <b>Screening.</b> “Fluency-based assessments have been proven to be efficient, reliable, and valid indicators of reading proficiency when used as screening measures” (citing Fuchs et al., 2001; Good, Simmons, & Kame’enui, 2001). <b>Diagnosis.</b> According to the authors, oral reading fluency norms “can play a useful role in diagnosing possible problems that are primarily fluency based.” <b>Monitoring progress.</b> Oral reading fluency measures “have been found by many educators to be better tools for making decisions about students’ progress than traditional standardized measures which can be time-consuming, expensive, are only administered infrequently, and have limited instructional utility” (citing Good et al., 2001; Tindal & Marston, 1990).		

# Demonstration of Phonics Alignment in *California Treasures*

3

Fluency

Summary of Research Recommendations for Fluency	Demonstration of Alignment
<p><i>Fluency instruction is included in the form of repeated oral reading procedures through the fourth-grade level.</i></p>	<p>Primary Grades Example: Students read each story multiple times with varying degrees of ‘scaffold’ supports such as Choral Reading with the teacher providing modeling and corrective feedback; Partner Reading and Independent Reading with the teacher circulating and listening in to provide support and feedback; or Echo-Reading with the teacher modeling pronunciation and students reading back to the teacher one sentence at a time. Students also echo-read with a partner giving the partner feedback, such as, “sound out this word.”</p> <p>Upper Grades Example: By the fourth grade level, students echo-read the main selection. They vary the intonation of their voices to make what is happening in the text clearer. For the same reason, they also pause at appropriate places. The teacher models reading aloud from a transparency that contains excerpts of the main selection. She reads one sentence at a time while students echo-read each sentence. Typically, students are divided into two groups to practice intonation and pauses.</p>
<p><i>In grades K-3, materials and resources are provided for daily independent reading as well as daily supported reading and rereading.</i></p>	<p>Students read multiple short passages and stories each week in both the Student Anthology and Student Workbook. Skill-Based Practice Readers and Practice Books provide rich independent reading sources. Each week has its own theme and genre. For example, for Second Grade, Unit 2, Week 1, the weekly theme is “Family Heroes,” and the genre is realistic fiction. The Decodable Readers are <i>Watch the Birch Trees</i> and <i>The World of Animals</i>; the main selection is <i>Babu’s Song</i>; the Vocabulary/ Comprehension selection is <i>E-mails from Other Places</i>; and the Social Studies Link nonfiction article is “Where in the World is Tanzania?” Each Skill-Based Practice Reader is realistic fiction with the same theme, vocabulary, and comprehension skills: Approaching Level, <i>Ice Cool</i>; On Level, <i>Lions at Last</i>; Beyond Level, <i>Jolly Good Hockey!</i>; and the EL Reader is <i>The Soccer Team</i>. The books in the Classroom Library for the week are <i>George Washington</i>, <i>Jackie Robinson</i>, and <i>Harriet Tubman</i>.</p>
<p><i>Repeated readings are a part of instruction.</i></p>	<p>In the lower grades, students read each story multiple times with varying degrees of scaffolded support such as Choral Reading with the teacher providing modeling and corrective feedback. They also echo-read taking turns with the teacher or a partner. They do Partner Reading and Independent Reading with the teacher circulating and listening in to provide support and feedback.</p> <p>In the upper grades, students read aloud literary/narrative text accurately using appropriate phrasing. A typical fourth grade lesson example:</p> <p>The teacher tells students that good readers learn to read groups of words together in phrases. She uses Transparency 1 to show how the text has been marked with slashes that indicate pauses and stops. A single slash indicates a pause—usually between phrases. A double slash indicates a stop—usually between sentences. Students listen carefully to the teacher’s pauses and intonation as the passage is modeled. Students read aloud the sentences paying close attention to the phrasing.</p> <p>Upper Grades Example: In fifth and sixth grades, typically one student reads aloud, and then a second joins in, then a third, and so on, until all students are reading aloud. Another approach is for pairs of students to read aloud marking the passage for speed, accuracy, and emphasis. They take turns reading aloud with appropriate phrasing and intonation.</p>

# 3

## Fluency

<p><i>Fluency instruction includes oral reading feedback and phrasing support.</i></p>	<p>Primary Grades Example: As a part of a primary grades weekly lesson, the teacher reads aloud a passage from the Practice Book. Students note the teacher's pronunciation of the vocabulary words and her use of expression. The TE provides "Think Alouds" for the teacher to use to encourage student participation. For example, "If I see words I do not know how to pronounce, I can read slowly, sound out each word, and see if it makes sense in the sentence. If I can't figure it out, I can write it down and look it up later." Next, the teacher reads the passage one sentence at a time, and asks the students to echo-read. Later, partners take turns echo-reading the passage. Children write down any words that they could not pronounce and look them up later. There are variations of this procedure each week.</p> <p>Upper Grades Example: In the upper grades, typically students read a Practice Book selection aloud. They watch for commas and exclamation points. Pairs of students read aloud to each other while marking the passage for speed, accuracy, and emphasis. They take turns reading aloud with appropriate phrasing and intonation.</p>
<p><i>Students practice oral reading while listening to the text being read simultaneously. Increased oral reading practice is provided through the use of one-to-one instruction, tutors, audiotapes, and peer guidance.</i></p>	<p>Fluency Transparencies with single and double slashes that indicate phrasing are provided for choral reading. The transparencies contain several paragraphs from each week's main selection. Often choral reading is repeated to give students more practice with natural phrasing, tempo, and expression. Frequently, students read aloud with the teacher or a partner. For additional fluency practice, students use the passages in the Practice Book, or they follow along with the reader on the Fluency Solutions Audio CD's rendition of the weekly main selection.</p>
<p><i>Students read texts at the appropriate instructional level to supplement repeated oral reading.</i></p>	<p>Skill-based Practice Readers—Approaching Level, On Level, Beyond Level, and EL Reader—highlight the weekly literature theme and genre and share the same theme, vocabulary, and comprehension skills. The Decodable Reader, Student Book with the main selection, Vocabulary/Comprehension Selection. There are History/Social Science or Science links in the pupil edition that serve as supplementary texts. The audio CD Listening Library contains main selections, level readers, and the Intervention Anthology for fluency solutions. Leveled Trade Books that reflect the week's theme and genre are available in the Classroom Library. There is also a Leveled Reader Database with available titles at <a href="http://www.macmillanmh.com">www.macmillanmh.com</a>.</p>
<p><i>Repeated oral reading occurs in the context of the overall program and not as a stand-alone intervention.</i></p>	<p>Leveled Readers are used to practice fluency as they also reinforce the weekly theme. There are transparencies specifically for teachers to use to model and have students practice fluency. The teacher uses Fluency Quick Checks each day to determine small group instruction. Through use of "Home-School Connection" stories, parents and other caregivers can help students become more fluent readers.</p>

<p><i>Fluency is assessed regularly using both formal and informal methods.</i></p>	<p><b>Formal Methods:</b> One group of students per week is assessed using the timed readings in the Grades 1-6 Diagnostic Assessment Book. The Oral Fluency Record Sheet is used to track the number of words read correctly.</p> <p><b>Informal Methods:</b> Students are regularly assessed in the classroom through informal reading inventories, miscue analyses, pausing indices, running records, and reading speed calculations. Skill-Based Practice Books are also used for fluency assessment. For example, in second grade, a fluency assessment strategy for Approaching Level Options is for students to read aloud the fluency passage in Approaching Reproducibles paying close attention to the words inside quotation marks. Another strategy is to have students follow along as the teacher rereads the fluency passage from the main selection in the Practice Book modeling expressive reading. Students also practice fluency assessment with partners.</p>
<p><i>Students' oral reading fluency is measured in terms of words correct per minute.</i></p>	<p>In the Diagnostic Assessment Book for grades 1-6, text passages that are several paragraphs in length—not words from a list—are used along with the Oral Fluency Record Sheet to track the number of words read correctly. One group of students is assessed each week. By second grade, for example, the fluency goal for On Level students is 79-99 words correct per minute (WCPM). Approaching Level students are tested weeks 1, 3, and 5; On Level students are tested weeks 2 and 4; and Beyond Level students are tested in week 6. Using these assessments, the teacher is able to diagnose and prescribe. For example, if a student is reading 72-78 WCPM, the Audio CD, Fluency Solutions, is used for remediation, and if a student is reading 0-71 WCPM, the student is evaluated for intervention with the Dynamic Indicators of Basic Early Literacy Skills (DIBELS).</p> <p>By the end of fourth grade, students read a 179-word unfamiliar text with comprehension check. The teacher records first-read WPM, Number of Errors, and Words Correct Score; and second-read WPM, Number of Errors, and Words Correct Score.</p>



## Components of Reading: Vocabulary

“Of the many compelling reasons for providing students with instruction to build vocabulary, none is more important than the contribution of vocabulary knowledge to reading comprehension”

– Baumann, Kame‘enui, & Ash, 2003.

### A. What is vocabulary?

Vocabulary is knowledge of the meaning, use, and pronunciation of individual words. It includes both oral vocabulary—words we use in speaking or recognize in listening—and reading vocabulary—words we use or recognize in print. Vocabulary is a key component of comprehension. Before readers can understand the meaning of spoken or written text, they must know what most of the words mean.

### B. Why is vocabulary instruction important?

Much of our vocabulary knowledge comes from simple exposure to new words in context. However, research has verified that direct instruction in vocabulary—specifically teaching the meaning of new words, and teaching strategies for vocabulary building—has a positive impact on students’ language development. Two links (to comprehension and to specific skills) to vocabulary development are discussed below:

#### Link between vocabulary development and reading comprehension.

According to the National Reading Panel (NRP), although a direct causal link between vocabulary development and reading comprehension has not been established by research, still a variety of studies “underscore the notion that comprehension gains and improvement on semantic tasks are results of vocabulary learning” (NICHHD, 2000, pp. 4-15, 4-20, citing 7 studies). Similarly, a longitudinal study on early reading development among British school children found evidence that vocabulary knowledge, as tested at the start of the students’ first year of school, was one of three predictors of reading comprehension during the first year, as tested at the start of the students’ third year of school—a span of two school years (Muter et al., 2004).

#### Effects on specific skill areas.

According to a review of research on early childhood reading commissioned by the National Research Council (NRC), “Vocabulary instruction generally does result in measurable increase in students’ specific word knowledge. Sometimes and to some degree it also results in better performance on global vocabulary measures, such as standardized tests, indicating that the instruction has evidently enhanced the learning of words beyond those directly taught. Second, pooling across studies, vocabulary instruction also appears to produce increases in children’s reading comprehension” (Snow, Burns, & Griffin, 1998, p. 217).

### C. Who benefits from vocabulary instruction?

At least five studies reviewed by the NRP supported vocabulary instruction by the third-grade level. The NRC report expanded the grade range of students who can benefit from vocabulary instruction, advocating direct instruction in vocabulary development for “children who have started to read independently, typically second graders and above” so that they will “sound out and confirm the identities of visually unfamiliar words” (Snow, Burns, & Griffin, 1998, p. 322). The NRP analysis underscored the fact that development of reading ability is dependent on oral vocabulary: in order for students to understand a word once it has been decoded, it must already be part of their vocabulary (NICHHD, 2000, p. 4-15). Similarly, the NRC report argues that “Learning new concepts and the words that encode them is essential for comprehension development” (Snow, Burns, & Griffin, 1998, p. 217). Based on these factors, it seems reasonable to conclude that even before students can read independently, direct methods for building oral vocabulary may help contribute to students’ ultimate success in reading



## D. Research Recommendations on Vocabulary Instruction

<i>Range and Scope of Instruction</i>	<i>Instructional Methods and Features</i>	
<p><b>Grade Levels.</b> Given the NRP research findings related to effectiveness of vocabulary instruction at third grade and above, and the NRC recommendations for direct instruction in vocabulary at the second-grade level, instruction in vocabulary seems appropriate by the second- and third-grade levels. Before that point, exposure to new words and concepts through oral vocabulary development is a worthwhile goal, since “Even at the youngest ages, the ability to understand and remember the meanings of new words depends quite strongly on how well developed one’s vocabulary already is” (Snow, Burns, &amp; Griffin, 1998, p. 217, citing Robbins &amp; Ehri, 1994).</p>	<p><b>Multiple strategies, incorporating direct and indirect vocabulary instruction.</b> Based on research surveyed by the NRP, “It is clear that vocabulary should be taught both directly and indirectly”—that is, using both explicit instruction in vocabulary and methods of decoding word meanings, on the one hand, and more contextual approaches to exposing students to vocabulary on the other (NICHD, 2000, p. 4-24). Based on both the research results it reviewed and theoretical considerations, the NRP further recommended that reading instruction include a combination of different strategies, both direct and indirect, for building vocabulary, rather than relying on only one method (NICHD, 2000, p. 4-27).</p>	
<p><b>Specific Instructional Methods</b></p>	<p><b>Deriving meaning from context</b> (NICHD, 2000, 4-23, citing 2 studies) and a combination of context-based and definitional approaches (NICHD, 2000, p. 4-23, citing 2 studies)</p> <p><b>“Restructuring the task”</b> of learning new words in a variety of different ways, such as providing redundant information and providing sample sentences along with definitions (NICHD, 2000, pp. 4-22–4-23, citing 7 studies)</p> <p>Direct instruction in “vocabulary items that are required for a specific text to be read as part of the lesson” (NICHD, 2000, pp. 4-24–4-25, citing 4 studies). This includes pre-instruction of vocabulary before the reading or lesson (p. 4-25, citing 3 studies).</p>	
	<p><b>Storybook reading.</b> A body of research evidence shows that “reading storybooks aloud to young children . . . results in reliable gains in incidental word acquisition” (Ewers &amp; Brownson, 1999, p. 12, citing 5 additional studies).</p>	
<p><b>Characteristics of effective instructional methods.</b></p>	<p><b>“Active student participation,”</b> including activities such as student-initiated talk in the context of listening to storybooks (NICHD, 2000, pp. 4-21, 4-26, 4-27). This calls for active student participation, as in the findings of Ewers and Brownson (1999), who reported on a study in which a storybook with 10 targeted vocabulary words was read aloud individually to 66 kindergarteners. Pretest-posttest comparison found that students in both treatments learned a significant number of the targeted vocabulary words; however, students in the active (question-answering) treatment learned significantly more words than those in the passive treatment. This result was true both of students with a high phonological working memory and of those with a low phonological working memory.</p>	<p><b>“Richness of context in which words are to be learned,”</b> including “extended and rich instruction of vocabulary (applying words to multiple contexts, etc.)” (NICHD, 2000, pp. 4-22, 4-27). Along similar lines, the NRC report cites a review of studies in which “methods in which children were given both information about the words’ definitions and examples of the words’ usages in a variety of contexts resulted in the largest gains in both vocabulary and reading comprehension,” compared to drill and practice (Snow, Burns, &amp; Griffin, 1998, pp. 217–218, citing Stahl &amp; Fairbanks, 1986). The NRP further recommended that vocabulary items should be “derived from content learning materials” and likely to appear in a variety of other contexts as well (NICHD, 2000, p. 4-25).</p>
	<p><b>“High frequency and multiple, repeated exposures to vocabulary material”</b> (NICHD, 2000)</p>	

# Demonstration of Vocabulary Instruction in *California Treasures*

<p><i>Summary of Research Recommendations for Vocabulary Instruction</i></p>	<p><b>Demonstration of Alignment</b></p>
<p><i>Vocabulary development begins in kindergarten. Direct instruction in vocabulary begins at the second-grade level and continues in third grade and above.</i></p>	<p>Kindergarten and first grade: In kindergarten, vocabulary words are discussed in relation to the selection in the Read Aloud Anthology. Students draw pictures of the words. High-Frequency Word Cards are used for review and assessment of vocabulary words. In grades K-1, exposure to new words and concepts comes through oral vocabulary development. The Talk About It feature provides visual support for instruction in oral vocabulary. Those words are incorporated and repeated throughout the week to provide multiple exposure and understanding in context.</p> <p>Grades 2-3: In second and third grades, the words are taken directly from the main selection. For example in Second Grade, Unit 4, Week 5, the theme is “Surprising Teamwork.” After the teacher accesses prior knowledge, students make a graphic organizer of concept words that expands their prior knowledge vocabulary. Next, the teacher begins the routine (define, example, ask) for vocabulary introduction based upon prior knowledge. Then a vocabulary strategy is introduced. In this sample lesson, the strategy is to use word parts such as inflectional endings to understand new words. The vocabulary words are highlighted in a selected text— for example, Vocabulary/Comprehension Selection, <i>Bobo’s Celebration</i>. On Day Two, students expand their vocabulary words in a graphic organizer. Next, students review the words in context through introducing discussions and activities. The teacher uses guided practice first, and then students independently complete the exercise. Partners check each other’s answers. After reading the main selection as a group, students typically use vocabulary words in a creative form of writing. On Day 3, students use a transparency to explore inflectional endings, and then they complete a page in their Practice Book using Greek and Latin roots. During days four and five, students use vocabulary words in context and review and assess vocabulary words. This weekly procedure is typical for the second- and third-grade levels.</p> <p>Upper Grades: By the end of fifth grade, students use context clues, Greek and Latin roots, and prior knowledge to predict the meaning of difficult words. Students express orally and in writing why and how they used specific vocabulary strategies.</p>
<p><i>Reading instruction includes a combination of strategies, both direct and indirect, for building vocabulary.</i></p>	<p>Strategies used in <i>California Treasures</i> include accessing prior knowledge of vocabulary words; making graphic organizers; and using words in context—both orally and in writing. Other strategies are introduced as a unit unfolds: recognizing antonyms, base words, comparatives and superlatives, compound words, and context clues. Students learn to recognize homophones, inflected nouns and verbs, multiple-meaning words, prefixes, suffixes, and synonyms. Students also use syntactic and semantic cues, word parts and families. They use dictionaries, thesauruses, and glossaries to find word meanings. Typically, by the end of fifth grade, students analyze words with opposite meanings and use a thesaurus or dictionary to find antonyms for words in the main selection. Students use vocabulary at the end of each unit in a cumulative research project. They investigate indices and glossaries to find pertinent information or confirm word meanings and to clarify shades of meaning.</p>

<i>Vocabulary is taught using a variety of specific instructional methods such as context-based approaches, restructuring, and pre-instruction in vocabulary before the reading lesson begins.</i>	<p>Pre-instruction in vocabulary before the reading lesson begins takes the form of accessing prior knowledge regarding vocabulary meaning. Students make graphic organizers at the beginning of the lesson and add to them as the lesson unfolds.</p> <p>The curriculum uses a context-based approach—students derive word meanings from context clues. Teachers provide a “kid friendly” definition and provide a context for students to understand words. A true “definitional” approach is not used (looking up words in a dictionary for meaning); however, students compose definitions from contextual information using vocabulary skills and strategies such as restructuring. Vocabulary does not come from lists of words that are unrelated to the reading selections. Teachers use questioning strategies that expose vocabulary words and definitions that are required for a specific text as part of the lesson. Spellings and definitions are confirmed by using reference materials.</p>
<i>Storybooks are read aloud to children.</i>	<p>In kindergarten, vocabulary words are discussed in relation to the selection in the Read Aloud Anthology, the Big Books and the Classroom Trade books. Students discuss the author and illustrator as well as the characters in the story. They analyze the illustrations and photographs. Their reading is done, for the most part, in the large group. Kindergartners draw pictures of the vocabulary words and recreate their own storybook scenarios. Students in first through third grades also enjoy hearing stories. They learn to emulate the teacher’s oral expressions, inflections, and pauses. They read to each other in small groups, and they read as partners. Through the Home-School Connection, they are encouraged to read to those at home, and family members are encouraged to read to them.</p>
<i>Students are given both information about the words’ definitions and examples of the words’ usages in a variety of contexts.</i>	<p>Students apply words to multiple contexts beginning with what they already know about the words. They extend their knowledge through cross-curricular activities, research, and creative writing. They use vocabulary words in their personal journal entries. They add suffixes to base words to create new words that they use in creative writing. They locate the words in a variety of genres such as newspaper articles and song lyrics. Students learn to think of words in terms of cultural perspectives and applications.</p>
<i>Vocabulary items are derived from content learning materials.</i>	<p>Vocabulary words related to the weekly theme are taken directly from the weekly main selection. The words are also reinforced in the Vocabulary/Comprehension selection. These words are applied in the selection that follows. The students’ Practice Books provide further word exploration. Skill-Based Practice readers and the Classroom Library as well as selected trade books reinforce vocabulary development.</p>
<i>Vocabulary is taught through active (question-answering) student participation.</i>	<p>Students are given repeated exposure to vocabulary material. They participate in groups of student-initiated conversation in the context of listening to stories related to the theme and genre of the main selection. The Practice Books contain sentence excerpts from the main selection that include targeted vocabulary words.</p> <p>Students substitute vocabulary words with synonyms. Their interaction with vocabulary is always active—not a passive treatment—beginning with prior knowledge and continuing with writing and research that uses words in context. They have repeated exposure to vocabulary material throughout the week as well as later in comprehensive review.</p>
<i>Word recognition is regularly assessed in multiple ways.</i>	<p>Assessment matches instructional context. In Leveled Practice Books, students choose vocabulary words from a list to complete each sentence. They write original sentences using the vocabulary words. Words are highlighted in the reading selections, and students stop at each word and identify clues to the meanings. Using transparencies, students model how to figure out word meanings. They suggest or review the meanings as well. They complete graphic organizers such as semantic webs, and they add words to the Word Wall. Students also use a Practice Book page each week to demonstrate pronunciation and comprehension of vocabulary words.</p>

## Components of Reading: *Comprehension*

“Text comprehension can be improved by instruction that helps readers use specific comprehension strategies.”

–*Put Reading First* (Armbruster, Lehr, & Osborn, 2003, p. 49)

### A. What is text comprehension?

Comprehension is often identified as the primary goal of reading: children and adults read in order to understand. If children can “read” words but cannot understand them, they are merely decoding. Real reading requires understanding. Over the past 30 years, reading researchers have come to understand that such comprehension is not merely passive, but is the result of active involvement on the part of the reader.

### B. Why is text comprehension instruction important?

Researchers have identified a variety of strategies effective readers use in order to actively comprehend texts. Additional research has verified the positive impact of teaching such strategies to students as a means of improving comprehension. Two discussions on instructional effectiveness:

#### Effectiveness of comprehension instruction.

In examining research on reading comprehension instruction, the National Reading Panel (NRP) identified 16 broad categories, or methods, of comprehension instruction. Of these, seven methods were identified as having “a firm scientific basis for concluding that they improve comprehension in normal readers” (NICHHD, 2000, p. 4-42)—demonstrating that comprehension can be improved through explicit, formal instruction. Five of these methods were in use by the third-grade level, and are thus research-verified as appropriate and effective for instruction in the early elementary grades.

Similarly, a review of research on early childhood reading commissioned by the National Research Council (NRC) concluded that “Explicit instruction in comprehension strategies has been shown to lead to improvement” (Snow, Burns, & Griffin, 1998, p. 322).

#### Effects on specific skill areas

According to the NRP, research “favors the conclusion that teaching of a variety of reading comprehension strategies leads to increased learning of the strategies, to specific transfer of learning, to increased memory and understanding of new passages, and, in some cases, to general improvements in comprehension” (NICHHD, 2000, p. 4-52).

### C. Who benefits from text comprehension instruction?

**Grade Levels.** The NRP’s review of research verified the effectiveness of some methods of text comprehension instruction as early as the second- or third-grade level and ranging up to ninth grade. The NRC, based on its interpretation of the research evidence, recommended such instruction as early as the kindergarten and first-grade levels, advocating explicit instruction on text comprehension “throughout the early grades” (Snow, Burns, & Griffin, 1998, p. 323).

## D. Research Recommendations on Comprehension

<b>Range and scope of instruction</b>	<p><b>Early Grades.</b></p> <p>According to the NRC report recommendations for reading instruction in kindergarten through third grade, “Throughout the early grades, reading curricula should include explicit instruction on strategies such as summarizing the main idea, predicting events and outcomes of upcoming text, drawing inferences, and monitoring for coherence and misunderstandings. This instruction can take place while adults read to students or when students read [to] themselves” (Snow, Burns, &amp; Griffin, 1998, p. 323).</p>	<p><b>Grade levels for comprehension strategies.</b></p> <p>Of the seven instructional methods verified by the NRP as having a research base, one (comprehension monitoring) was in use by second grade in the studies examined, and an additional four were in use by third grade. The NRP concluded that “The instruction of comprehension appears to be effective on grades 3 through 6” (NICHHD, 2000, p. 4-51). This suggests a solid research base for including comprehension instruction as part of the reading curriculum by the third-grade level.</p>
<p><b>Instructional Methods and Features</b></p> <p><b>Specific effective methods</b></p>	<p>Methods that were identified by the NRP as having “a firm scientific basis for concluding that they improve comprehension in normal readers” (NICHHD, 2000, p. 4-42) and that were used by third grade in the research studies included the following →</p>	<p><b>Question answering</b> (17 studies, mostly grades 3–5), in which teachers ask questions about the text</p> <p><b>Question generation</b> (27 studies, grades 3–9), in which students “generate questions during reading” (NICHHD, 2000, p. 4-45)</p> <p><b>Story structure</b> (17 studies, grades 3–6), in which students are instructed in the “content and organization of stories,” including use of graphic organizers in conjunction with story content and structure (NICHHD, 2000, p. 4-45)</p> <p><b>Comprehension monitoring</b> (22 studies, grades 2–6), in which students learn how to monitor their own understanding of texts using procedures such as think-aloud</p> <p><b>Cooperative learning</b> (10 studies, grades 3–6), in which “peers instruct or interact over the use of reading strategies” (NICHHD, 2000, p. 4-45)</p>
<b>Multiple strategies</b>	<p>In looking at 36 studies featuring instruction that combined a variety of different comprehension methods, the NRP concluded that “Considerable success has been found in improving comprehension by instructing students on the use of more than one strategy during the course of reading” (NICHHD, 2000, p. 4-47). One particular advantage of this approach is its ability to guide students through the kind of “coordinated and flexible use of several different kinds of strategies” that is required for skilled reading (NICHHD, 2000, p. 4-47).</p>	
<b>Instructional model</b>	<p>In its discussion of the research, the NRP identified a four-part model for building student comprehension strategies in which “teachers demonstrate, explain, model, and implement interaction with students in teaching them how to comprehend a text” (NICHHD, 2000, p. 4-47, citing 6 studies).</p>	
<b>Regular assessment</b>	<p>According to the NRC report, “Conceptual knowledge and comprehension strategies should be regularly assessed in the classroom, permitting timely and effective instructional response where difficulty or delay is apparent” (Snow, Burns, &amp; Griffin, 1998, p. 323).</p>	



## Demonstration of Comprehension Strategies in *California Treasures*

Research Recommendations for Teaching Reading Comprehension	Demonstration of Alignment
<p><i>In kindergarten through third grade, the curriculum includes explicit instruction on strategies such as 1) summarizing the main idea; 2) predicting events and outcomes of upcoming text; 3) drawing inferences; and 4) monitoring for coherence and misunderstandings.</i></p>	<ol style="list-style-type: none"> <li><b>1. Summarizing the Main Idea:</b> Students use graphic organizers to summarize the author's craft, for example. They use outlines and journals to keep track of main events and actions. They learn to identify pertinent facts and summarize the main ideas.</li> <li><b>2. Predicting Events and Outcomes:</b> Before beginning to read the main selection, students preview the title and illustrations and make predictions. Students record their predictions and questions that they want to have answered as they read.</li> <li><b>3. Making Inferences:</b> The teacher explains facts about the text or calls attention to the actions of the characters and asks questions to help students understand why events occur. Students state reasons for believing why story events occurred as they did.</li> <li><b>4. Monitoring for Understandings:</b> Students monitor comprehension by analyzing text structure. They make decisions about the selection based on text and picture clues and prior knowledge.</li> <li><b>5. Draw Conclusions:</b> Students reread the selection for comprehension paying close attention to the text structure. Using what they know from real life, they draw conclusions about the text's topic. They use a graphic organizer (Transparency) to record their conclusions. After they complete the Conclusion Chart, they share their facts and conclusions with the class.</li> </ol>
<p><i>Comprehension instruction begins in second grade and continues as an integral part of the third-grade reading curriculum.</i></p>	<p>Strategies such as analyze story structure, generate questions, monitor comprehension, reread, summarize, visualize, draw conclusions, make predictions, retell, and determine main idea and details are taught each unit levels 2-3. The skill—analyze text structure, for example—is pre-taught using the Student Anthology and applied to a short passage before students read the longer main selection. Students are guided through the application of the strategy with the help of graphic organizers.</p>
<p><i>Students generate questions during reading.</i></p>	<p>Students preview the title of the main selection and make predictions about it. They write about their predictions and list questions that they want to have answered through their reading. They question each other in small group discussions and in pairs. Students learn specific strategies (steps) for answering questions: 1. Analyze Text Structure/Draw Conclusions; 2. Evaluate; 3. Text-to-Self; 4. Text-to-World; and 5. Text-to-Text.</p>

<i>Students use graphic organizers to show story content and structure.</i>	Teaching Charts and/or Graphic Organizer Transparencies are available for students to use to reinforce reading comprehension by displaying the sequence of a story. They are also used to evaluate the author's purpose and to analyze characters and setting. Students make character maps, Venn diagrams, story maps, and charts. By the beginning of fourth grade, as students read, they fill in problems and resulting actions that lead to their solutions on a Problem and Solution Chart. They also fill in Main Idea Webs and Description Webs that show details that the author uses in the main selection. At every grade (1-6) the graphic organizers are found in the pupil edition. These same graphic organizers are also found in the practice books.
<i>Students use procedures such as think-aloud to monitor their own understanding of texts.</i>	As a strategy to develop comprehension, teachers are encouraged to model the Think-Aloud Strategy for students to encourage them to use this strategy on their own. The teacher models the think aloud strategy and then students provide the next think aloud with teacher guidance and then finally students independently provide the think aloud. This procedure allows the teacher to monitor students understanding of the text.
<i>Peers use reading strategies to interact with each other</i>	Students read story selections together as a class or in pairs. During partner reading, one child practices taking turns reading the story to another. They give feedback to each other. Students are also encouraged to role play their favorite scenes from a selection with each other to further improve comprehension development. In the upper grades, students give informal reading inventories to each other and check the WCPM of peers.
<i>Students use multiple strategies to improve comprehension.</i>	Students are taught strategies through <i>California Treasures</i> to improve reading and listening comprehension. Such strategies include setting a purpose for reading and identifying questions that they want to have answered as they read; analyzing and identifying text structure, generating questions while reading, summarizing, using graphic organizers, and visualizing. In addition, students are also taught to "Think-Aloud" while reading, role play with a peer, talk and write about what has been read, and use illustrations to preview and predict story structure.
<i>Teachers use a multiple-step instructional model</i>	Teachers demonstrate, explain, model, and implement interaction with students in teaching them how to comprehend a text. A typical second grade comprehension lesson flows as follows: The teacher begins with ascertaining student prior knowledge. Next, a comprehension <b>strategy</b> is presented such as Analyzing Text Structure. This is followed by the introduction of a specific comprehension <b>skill</b> such as Draw Conclusions. Students are then asked to Preview and Predict using the title and illustrations. The genre is introduced and the definition of the genre type is read from the Student Book. Next, students discuss the "Read to Find Out" question in the Student Book. Students are reminded to use the Conclusion Chart in the Practice Book to record facts and conclusions that they draw about the selection. Finally, students set their own purpose for reading. Throughout reading, comprehension is developed through Teacher Think Alouds and questioning. Students retell the story and complete a summative assessment, Comprehension Check.
<i>Conceptual knowledge and comprehension strategies are regularly assessed in the classroom.</i>	Comprehension is assessed both formally and informally, and the curriculum uses both formative and summative forms of assessment. Comprehension assessment begins when reading begins. Quick Check Observations are used throughout the passage as an informal means of student comprehension assessment. By the end of the week, Weekly Tests are administered to assess conceptual knowledge and comprehension strategies. In addition, Unit Tests and Benchmark Tests are regularly administered to monitor student progress.



# References

*Used for the Research Alignment of*  
**Macmillan/McGraw-Hill**  
*California Treasures*  
**Comprehensive Reading Curriculum**

**Synopsis of Findings (Westat) and**  
**Technical Appendix (IESD)**

## References

### A

- Adams, A., Carnine, D., & Gersten, R. (1982). Instructional strategies for studying content area texts in the intermediate grades. *Reading Research Quarterly*, 18(1), 27–55.
- Anderson, R., & Biddle, W. (1975). On asking people questions about what they are reading. In G. H. Bower (Ed.), *The psychology of learning and motivation* (Vol. 9, pp. 90–132). New York: Academic Press.
- Anderson, R. C., Wilkinson, I. A. G., & Mason, J. M. (1991). A microanalysis of the small-group, guided reading lesson: Effects of an emphasis on global story meaning. *Reading Research Quarterly*, 26, 417–441.
- Anderson, R., & Biddle, W. (1975). On asking people questions about what they are reading. In G. H. Bower (Ed.), *The psychology of learning and motivation* (Vol. 9, pp. 90–132). New York: Academic Press.
- Anderson, V., & Roit, M. (1993). Planning and implementing collaborative strategy instruction for delayed readers in grades 6–20. Special issue: Strategies instruction. *Elementary School Journal*, 94(2), 121–137.
- Armbruster, C. C., Lehr, F., & Osborn, J. (2003). *Put reading first: The research building blocks for teaching children to read. Second Edition*. Washington, DC: Partnership for Reading, a collaborative effort of the National Institute for Literacy, the National Institute of Child Health and Human Development, and the U.S. Department of Education. Retrieved March 7, 2005, from <http://www.nifl.gov/nifl/partnershipforreading/publications/PFRbooklet.pdf>
- August, D., & Shanahan, T. (Eds.). (2006). *Developing literacy in second-language learners*. Mahwah, NJ: Lawrence Erlbaum Associates.

### B

- Babbs, P. J. (1984). Monitoring cards help improve comprehension. *Reading Teacher*, 38(2), 200–204.
- Baker, L., & Zimlin, L. (1989). Instructional effects on children's use of two levels of standards for evaluating their comprehension. *Journal of Educational Psychology*, 81(3), 340–346.
- Barger, J. (2003). *Comparing the DIBELS oral reading fluency indicator and the North Carolina end of grade reading assessment*. (Technical Report). Asheville: North Carolina Teacher Academy. Retrieved September 2005 from the DIBELS Technical Reports webpage: <http://dibels.uoregon.edu/techreports/index.php>
- Baumann, J. F., & Bergeron, B. S. (1993). Story map instruction using children's literature: Effects on first graders' comprehension of central narrative elements. *Journal of Reading Behavior*, 25(4), 407–437.
- Baumann, J. F., Seifert-Kessell, N., & Jones, L. A. (1992). Effect of think-aloud instruction on elementary students' comprehension monitoring abilities. *Journal of Reading Behavior*, 24(2), 143–172.
- Beck, I. L., Perfetti, C. A., & McKeown, M. G. (1982). Effects of long-term vocabulary instruction on lexical access and reading comprehension. *Journal of Educational Psychology*, 74(4), 506–521.
- Beck, I. L., & McKeown, M. G. (1991). Conditions of vocabulary acquisition. In R. Barr, M. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research*, (Vol. 2, pp. 789–814). New York: Longman.
- Beck, I. L., & McKeown, M. G. (2001). Text talk: Capturing the benefits of read-aloud experiences for young children. *The Reading Teacher*, 55, 10–20.
- Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford.
- Beck, I. L., McKeown, M. G., & McCaslin, E. S. (1983). All contexts are not created equal. *Elementary School Journal*, 83, 177–181.
- Bereiter, C., & Bird, M. (1985). Use of thinking aloud in identification and teaching of reading comprehension strategies. *Cognition and Instruction*, 2, 131–156.
- Blachowicz, C. L. Z., & Fisher, P. (2000). Vocabulary instruction. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research: Volume III* (pp. 503–525). Mahwah, NJ: Lawrence Erlbaum Associates.
- Blaha, B. A. (1979). The effects of answering self-generated questions on reading. Unpublished doctoral dissertation, Boston University.
- Blanchard, J. S. (1980). Preliminary investigation of transfer between single-word decoding ability and contextual reading comprehension by poor readers in grade six. *Perceptual and Motor Skills*, 51(3), p2.12.
- BockBlock, C. C. (1993). Strategy instruction in a literature-based reading program. Special issue: Strategies instruction. *Elementary School Journal*, 94(2), 139–151.
- Brady, P. I. (1990). Improving the reading comprehension of middle school students through reciprocal teaching and semantic mapping strategies. Unpublished doctoral dissertation, University of Alaska.
- Bramlett, R. K. (1994). Implementing cooperative learning: A field study evaluating issues for school-based consultants. *Journal of School Psychology*, 32(1), 67–84.
- Brett, A., Rothlein, L., & Hurley, M. (1996). Vocabulary acquisition from listening to stories and explanations of target words. *Elementary School Journal*, 96(4), 415–422.
- Breznitz, Z. Fluency in reading: Synchronization of process. Mahwah, NJ: Lawrence Erlbaum Associates.

## References

## References

- Brown, R., Pressley, M., Van Meter, P., & Schuder, T. (1996). A quasi-experimental validation of transactional strategies instruction with low-achieving second-grade readers. *Journal of Educational Psychology*, 88(1), 18–37.
- Buck, J., & Torgesen, J. (2003). *The relationship between performance on a measure of oral reading fluency and performance on the Florida Comprehensive Assessment Test*. (FCRR Technical Report No. 1). Tallahassee: Florida Center for Reading Research. Retrieved September 2005 from the DIBELS Technical Reports Web webpage: <http://dibels.uoregon.edu/techreports/index.php>
- Burley, J. E. (1980). Short-term, high intensity reading practice methods for Upward Bound Students: An appraisal. *Negro Educational Review*, 31, 156–161.
- Buss, R. R., Ratliff, J. L., & Irion, J. C. (1985). Effects of instruction on the use of story structure in comprehension of narrative discourse. *National Reading Conference Yearbook*, 34, 55–58.
- ### C
- Camilli, G., Vargas, S., Yurecko, M. (2003). Teaching children to read: The fragile link between science and federal policy. *Education Policy Analysis Archives*, 11, 1–52.
- Carney, J. J., Anderson, D., Blackburn, C., & Blessing, D. (1984). Preteaching vocabulary and the comprehension of social studies materials by elementary school children. *Social Education*, 48(3), 195–196.
- Carnine, D., & Kinder, D. (1985). Teaching low-performing students to apply generative and schema strategies to narrative and expository material. *Remedial and Special Education*, 6, 20–30.
- Carr, E., Bigler, M., & Morningstar, C. (1991). *The effects of the CVS strategy on children's learning*.
- Carr, E. M., Dewitz, P., & Patberg, J. P. (1983). The effect of inference training on children's comprehension of expository text. *Journal of Reading Behavior*, 15(3), 1–18.
- Carr, E., Bigler, M., & Morningstar, C. (1991). The effects of the CVS strategy on children's learning.
- Carver, R. P., & Liebert, R. E. (1995). The effect of reading library books in different levels of difficulty on gain in reading ability. *Reading Research Quarterly*, 30, 26–48.
- Chan, L. D. S., & Cole, P. G. (1986). Effects of inference training on children's comprehension of expository text. *Remedial and Special Education*, 7, 33–40.
- Clay, M. M. (1972). *The early detection of reading difficulties*. Auckland, NZ: Heinemann.
- Cline, R. K. J., & Kretke, G. L. (1980). An evaluation of long-term SSR in the junior high school. *Journal of Reading*, 23, 503–506.
- Cohen, R. (1983). Students generate questions as an aid to reading comprehension. *Reading Teacher*, 36, 770–775.
- Collins, C. (1980). Sustained silent reading periods: Effects on teachers' behaviors and students' achievement. *Elementary School Journal*, 81, 108–114.
- Cross, D. R., & Paris, S. G. (1988). Developmental and instructional analyses of children's metacognition and reading comprehension. *Journal of Educational Psychology*, 80(2), 131–142.
- ### D
- Davey, B., & McBride, M. (1986). Effects of question-generation on reading comprehension. *Journal of Educational Psychology*, 22, 2–7.
- Davis, Z. T. (1988). A comparison of the effectiveness of sustained silent reading and directed reading activity on students' reading achievement. *The High School Journal*, 72(1), 46–48.
- Dermod, M. (1988). Metacognitive strategies for development of reading comprehension for younger children. Paper presented at the American Association of Colleges for Teacher Education, New Orleans, LA.
- Dole, J. A., Sloan, C., & Trathen, W. (1995). Teaching vocabulary within the context of literature. *Journal of Reading*, 38(6), 452–460.
- Dreher, M. J., & Gambrell, L. B. (1985). Teaching children to use a self-questioning strategy for studying expository text. *Reading Improvement*, 22, 2–7.
- Dunn, L. M., Dunn, L. M., Whetton, C., & Burley, J. (1997). *British Picture Vocabulary Scale II*. Windsor, England: NFER-Nelson.
- ### E
- Elbro, C., & Petersen, D. K. (2004). Long-term effects of phoneme awareness and letter sound training: An intervention study with children at risk for dyslexia. *Journal of Educational Psychology*, 96(4), 660–670.
- Eldredge, J. L. (1990). Increasing the performance of poor readers in the third grade with a group-assisted strategy. *Journal of Educational Research*, 84(2), 69–77.
- Eller, R. G., Pappas, C. C., & Brown, E. (1988). The lexical development of kindergartners: Learning from written context. *Journal of Reading Behavior*, 10, 5–23.
- Elley, W. B. (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly*, 24, 174–187.
- Elliot-Faust, D. J., & Pressley, M. (1986). How to teach comparison processing to increase children's short- and long-term listening comprehension monitoring. *Journal of Educational Psychology*, 78, 27–33.
- Evans, H. M., & Towner, J. C. (1975). Sustained silent reading: Does it increase skills? *Reading Teacher*, 29, 155–156.
- Ewers, C. A., & Brownson, S. M. (1999). Kindergartners' vocabulary acquisition as a function of active vs. passive storybook reading, prior vocabulary, and working memory. *Journal of Reading Psychology*, 20, 11–20.

Ezell, H. K., et al. (1992). Use of peer-assisted procedures to teach QAR reading comprehension strategies to third-grade children. *Education and Treatment of Children*, 15(3), 205–227.

## F

Faulkner, H. J., & Levy, B. A. (1999). Fluent and nonfluent forms of transfer in reading: Words and their message. *Psychonomic Bulletin and Review*, 6, 111–116.

Fischer Galbert, J. L. (1989). An experimental study of reciprocal teaching of expository text with third, fourth, and fifth grade students enrolled in chapter 1 reading. Unpublished doctoral dissertation, Ball State University, Muncie, IN.

Fischer, J. A. (1973). Effects of cue synthesis procedure and post questions on the retention of prose material. *Dissertation Abstracts International*, 34, 615.

Fischer Galbert, J. L. (1989). An experimental study of reciprocal teaching of expository text with third, fourth, and fifth grade students enrolled in chapter 1 reading. Unpublished doctoral dissertation, Ball State University, Muncie, IN.

Fitzgerald, J., & Spiegel, D. L. (1983). Enhancing children's reading comprehension through instruction in narrative structure. *Journal of Reading Behavior*, 15(2), 1–17.

Foorman, B. R., Francis, D. J., Fletcher, J. M., Schatschneider, C., & Mehta, P. (1998). The role of instruction in learning to read: Preventing reading failure in at-risk children. *Journal of Educational Psychology*, 90, 37–55.

Fuchs, L. S., Fuchs, D., & Maxwell, L. (1988). The validity of informal measures of reading comprehension. *Remedial and Special Education*, 9(2), 20–28.

Fuchs, L. S., Fuchs, D., Eaton, S., & Hamlett, C. L. (2000). [Relation between reading fluency and reading comprehension as a function of silent versus oral reading mode]. Unpublished data.

Fuchs, L. S., Fuchs, D., Hosp, M. K., & Jenkins, J. R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading*, 5(3), 239–256.

Fuchs, L. S., Fuchs, D., & Maxwell, L. (1988). The validity of informal measures of reading comprehension. *Remedial and Special Education*, 9(2), 20–28.

## G

Garner, R., Hare, V. C., Alexander, P. A., Haynes, J., & Winograd, P. (1984). Inducing use of a text lookback strategy among unsuccessful readers. *American Educational Research Journal*, 21, 789–798.

Garner, R., Macready, G. B., & Wagoner, S. (1984). Readers' acquisition of the components of the text-lookback strategy. *Journal of Educational Psychology*, 76, 300–309.

Gathercole, S. E., Willis, C. S., Baddeley, A. D., & Emslie, H. (1994). The Children's Test of Nonword Repetition: A test of phonological working memory. *Memory*, 2, 103–127.

Gilroy, A., & Moore, D. W. (1988). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities with ten primary school girls. Special issue: Changing academic behavior. *Educational Psychology*, 8(1–2), 41–49.

Gipe, J. P., & Arnold, R. D. (1979). Teaching vocabulary through familiar associations and contexts. *Journal of Reading Behavior*, 11(3), 281–285.

Good, R. H., Simmons, D. C., & Kame'enui, E. J. (2001). The importance and decision-making utility of a continuum of fluency-based indicators of foundational reading skills for third-grade high-stakes outcomes. *Scientific Studies of Reading*, 5(3), 257–288.

Good, R. H., Simmons, D. S., Kame'enui, E. J., Kaminski, R. A., & Wallin, J. (2002). *Summary of decision rules for intensive, strategic, and benchmark instructional recommendations in kindergarten through third grade*. (Technical Report No. 11). Eugene: University of Oregon.

Goodman, Y. M., & Burke, C. L. (1972). *Reading miscue inventory: Procedure for diagnosis and correction*. New York: Macmillan.

Gordon, C. J., & Rennie, B. J. (1987). Restructuring content schemata: An intervention study. *Reading Research and Instruction*, 26(3), 162–188.

Gordon, J., Schumm, J. S., Coffland, C., & Doucette, M. (1992). Effects of inconsiderate vs. considerate text on elementary students' vocabulary learning. *Reading Psychology*, 13(2), 157–169.

Grant, J., Elias, G., & Broerse, J. (1989). An application of Palinscar and Brown's comprehension instruction paradigm to listening. *Contemporary Educational Psychology*, 14(2), 164–172.

Greenewald, M. J., & Rossing, R. L. (1986). Short-term and long-term effects of story grammar and self-monitoring training on children's story comprehension. *National Reading Conference Yearbook*, 35, 210–213.

Griffey, Q. L., Jr., et al. (1988). The effects of self-questioning and story structure training on the reading comprehension of poor readers. *Learning Disabilities Research*, 4(1), 45–51.

Guthrie, J. T., et al. (1996). Growth of literacy engagement: Changes in motivations and strategies during concept-oriented reading instruction. *Reading Research Quarterly*, 31(3), 306–332.

## H

Hansen, J., & Pearson, P. D. (1983). An instructional study: Improving the inferential comprehension of good and poor fourth-grade readers. *Journal of Educational Psychology*, 75(6), 821–829.



## References

- Hasbrouck, J., & Tindal, G. A. Oral reading fluency norms: A valuable tool for reading teachers. *The Reading Teacher*. Vol. 59, Issue 7, April 2006.
- Hasbrouck, J. E., & Tindal, G. (1992). Curriculum-based oral reading fluency norms for students in grades 2 through 5. *Teaching Exceptional Children*, 24(3), 41–44.
- Hasbrouck, J. E., Woldbeck, T., Ihnot, C., & Parker, R. I. (1999). One teacher's use of curriculum-based measurement: A changed opinion. *Learning Disabilities: Research & Practice*, 14(2), 118–126.
- Hasselhorn, M., & Koerke, J. (1986). Metacognitive versus traditional reading instructions: The mediating role of domain-specific knowledge on children's text-processing. *Human Learning: Journal of Practical Research and Applications*, 5(2), 75–90.
- Heise, B. L., Papalewis, R., & Tanner, D. E. (1991). Building base vocabulary with computer-assisted instruction. *Teacher Education Quarterly*, 18(1), 55–63.
- Helfeldt, J. P., & Lalik, R. (1976). Reciprocal student-teacher questioning. *Reading Teacher*, 33, 283–287.
- Hiebert, E., & Fisher, C. (2005). A review of the National Reading Panel's studies on fluency: The role of text. *Elementary School Journal*, 105, 443–460.
- Hiebert, E. H., & Kamil, M. L. (Eds.). (2005). Teaching and learning vocabulary: Bringing research to practice. Mahwah, NJ: Lawrence Erlbaum Associates.
- Holt, S. B., & O'Tuel, F. S. (1989). The effect of sustained silent reading and writing on achievement and attitudes of seventh and eighth grade students reading two years below grade level. *Reading Improvement*, 26, 290–297.
- Hosp, M. K., & Fuchs, L. S. (2000). *The relation between word reading measures and reading comprehension: A review of the literature*. Manuscript submitted for publication.
- I**
- Idol, L. (1987). Group story mapping: A comprehension strategy for both skilled and unskilled readers. *Journal of Learning Disabilities*, 20, 196–205.
- Idol, L., & Croll, V. J. (1987). Story-mapping training as a means of improving reading comprehension. *Learning Disability Quarterly*, 10, 214–229.
- J**
- Jacobs, J. E., & Paris, S. G. (1987). Children's metacognition about reading: Issues in definition, measurement, and instruction. *Educational Psychologist*, 22, 255–278.
- Jenkins, J. R., Fuchs, L. S., van den Broek, P., Espin, C., & Deno, S. L. (2003). Sources of individual differences in reading comprehension and reading fluency. *Journal of Educational Psychology*, 95(4), 719–729.
- Johnson, M. S., Kress, R. A., & Pikulski, J. J. (1987). *Informal Reading Inventories* (2nd ed.). Newark, IL: International Reading Association.
- Jones, M. P. (1987). Effects of reciprocal teaching method on third graders' decoding and comprehension abilities. Unpublished doctoral dissertation, Texas A&M University.
- Judy, J. E., Alexander, P. A., Kulikowich, J. M., & Wilson, V. L. (1988). Effects of two instructional approaches and peer tutoring on gifted and non-gifted sixth-grade students' analogy performance. *Reading Research Quarterly*, 23(2), 236–256.
- K**
- Kameenui, E., Carnine, D., & Freschi, R. (1982). Effects of text construction and instructional procedures for teaching word meanings on comprehension and recall. *Reading Research Quarterly*, 17(3), 367–388.
- Kelly, M., Moore, D. W., & Tuck, B. F. (1994). Reciprocal teaching in a regular primary school classroom. *Journal of Educational Research*, 88(1), 53–61.
- King, A. (1989). Effects of self-questioning training on college students' comprehension of lectures. *Contemporary Educational Psychology*, 14, 366–381.
- King, A. (1990). Improving lecture comprehension: Effects of a metacognitive strategy. *Applied Educational Psychology*, 29, 331–346.
- King, A. (1992). Comparison of self-questioning, summarizing, and note taking-review as strategies for learning from lectures. *American Educational Research Journal*, 29, 303–325.
- Kirk, S. A., McCarthy, J. J., & Kirk, W. D. (1968). *Illinois Test of Psycholinguistic Abilities*. Urbana: University of Illinois Press.
- Klingner, J. K., Vaughn, S., & Schumm, J. S. (1998). Collaborative strategic reading during social studies in heterogeneous fourth-grade classrooms. *Elementary School Journal*, 99(1), 3–22.
- Kolich, E. M. (1991). Effects of computer-assisted vocabulary training on word knowledge. *Journal of Educational Research*, 84(3), 177–182.
- L**
- Labercane, G., & Battle, J. (1987). Cognitive processing strategies, self-esteem, and reading comprehension of learning disabled students. *Journal of Special Education*, 11, 167–185.
- Langford, J. C., & Allen, E. G. (1983). The effects of U.S.S.R. on students' attitudes and achievement. *Reading Horizons*, 23, 194–200.
- Leung, C. B., & Pikulski, J. J. (1990). Incidental learning of word meanings by kindergarten and first grade children through repeated read aloud events. In J. Zutell & S. McCormick (Eds.), *Literacy theory and research: Analyses from multiple paradigms* (pp. 231–241). Chicago: National Reading Conference. (ERIC Document Reproduction Service No. 324646)

- Levin, J., Johnson, D., Pittelman, S., Levin, K., Shriberg, L., Toms-Bronowski, S., & Hayes, B. (1984). A comparison of semantic- and mnemonic-based vocabulary-learning strategies. *Reading Psychology*, 5(1-2), 1-15.
- Levin, J., McCormick, C., Miller, G., & Berry, J. (1982). Mnemonic versus nonmnemonic vocabulary-learning strategies for children. *American Educational Research Journal*, 19(1), 121-136.
- Levy, B. A., Nicholls, A., & Kohen, D. (1993). Repeated readings: Process benefits for good and poor readers. *Journal of Experimental Child Psychology*, 56, 303-327.
- Lonberger, R. (1988). The effects of training in a self-generated learning strategy on the prose processing abilities of fourth- and sixth- graders. Unpublished doctoral dissertation, State University of New York at Buffalo.
- Loranger, A. L. (1997). Comprehension strategies instruction: Does it make a difference? *Reading Psychology*, 18(1), 31-68.
- Lysynchuk, L. M., Pressley, M., & Vye, N. J. (1990). Reciprocal teaching improves standardized reading-comprehension performance in poor comprehenders. *Elementary School Journal*, 90(5), 469-484.
- ## M
- MacGregor, S. K. (1988). Use of self-questioning with a computer-mediated text system and measures of reading performance. *Journal of Reading Behavior*, 20(2), 131-148.
- Malone, R. A., & McLaughlin, T. F. (1997). The effects of reciprocal peer tutoring with a group contingency on quiz performance in vocabulary with seventh- and eighth-grade students. *Behavioral Interventions*, 12(1), 27-40.
- Manning, G. L., & Manning, M. (1984). What models of recreational reading make a difference. *Reading World*, 23, 375-380.
- Manzo, A. V. (1969). Improving reading comprehension through reciprocal teaching. Unpublished doctoral dissertation, Syracuse University.
- Markman, E. M. (1977). Realizing that you don't understand: A preliminary investigation. *Child Development*, 46, 986-992.
- Marston, D. (1989). A curriculum-based measurement approach to assessing academic performance: What is it and why do it? In M. R. Shinn (Ed.), *Curriculum-based measurement: Assessing special children* (pp. 18-78). New York: Guilford.
- Mathes, P. G., et al. (1994). Increasing strategic reading practice with Peabody classwide peer tutoring. *Learning Disabilities Research and Practice*, 9(1), 44-48.
- McKeown, M. G., Beck, I. L., Omanson, R. C., & Perfetti, C. A. (1983). The effects of long-term vocabulary instruction on reading comprehension: A replication. *Journal of Reading Behavior*, 15(1), 3-18.
- Medo, M. A., & Ryder, R. J. (1993). The effects of vocabulary instruction on readers' ability to make causal connections. *Reading Research and Instruction*, 33(2), 119-134.
- Miller, G. E. (1985). The effects of general and specific self-instruction training on children's comprehension monitoring performances during reading. *Reading Research Quarterly*, 20(5), 616-628.
- Miller, G. E. (1987). The influence of self-instruction on the comprehension monitoring performance of average and above average readers. *Journal of Reading Behavior*, 19(3), 303-317.
- Miller, G. E., Giovenco, A., & Rentiers, K. A. (1987). Fostering comprehension monitoring in below average readers through self-instruction training. *Journal of Reading Behavior*, 19(4), 379-394.
- Miller, J., & Schwanenflugel, P. J. (2006). Prosody of syntactically complex sentences in the oral reading of young children. *Journal of Educational Psychology*, 98, 839-853.
- Morris, D., Bloodgood, J. W., Lomax, R. G., & Perney, J. (2003). Developmental steps in learning to read: A longitudinal study in kindergarten and first grade. *Reading Research Quarterly*, 38(3), 302-328.
- Morrow, L. M., & Weinstein, C. S. (1986). Encouraging voluntary reading: The impact of a literature program on children's use of library centers. *Reading Research Quarterly*, 21, 330-346.
- Muter, V., Hulme, C., Snowling, M. J., & Stevenson, J. (2004). Phonemes, rimes, vocabulary, and grammatical skills as foundations of early reading development: Evidence from a longitudinal study. *Developmental Psychology*, 40(5), 665-681.
- ## N
- Nagy, W. E., & Scott, J. A. (2000). Vocabulary processes. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research: Volume III* (pp. 269-284). Mahwah, NJ: Lawrence Erlbaum Associates.
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (NIH Publication No. 00-4754). Washington, DC: U.S. Government Printing Office.
- Neale, M. (1997). *Neale Analysis of Reading Ability II*. Windsor, England: NFER-Nelson.
- Neill, K. (1979). Turn kids on with repeated reading. *Teaching Exceptional Children*, 12, 6-64.
- Nelson, C. S., et al. (1996). The effect of teacher scaffolding and student comprehension monitoring on a multimedia/interactive videodisc science lesson for second graders. *Journal of Educational Multimedia and Hypermedia*, 5(3-4), 317-348.

## References

- Nolte, R. Y., & Singer, H. (1985). Active comprehension: Teaching a process of reading comprehension and its effects on reading achievement. *Reading Teacher*, 39(1), 24–31.
- ### O
- Omanson, R. C., Beck, I. L., Voss, J. F., McKeown, M. G., et al. (1984). The effects of reading lessons on comprehension: A processing description. *Cognition and Instruction*, 1(1), 45–67.
- O'Shea, L. J., Sindelar, P. T., & O'Shea, D. J. (1985). The effects of repeated readings and attentional cues on reading fluency and comprehension. *Journal of Reading Behavior*, 17, 129–142.
- Omanson, R. C., Beck, I. L., Voss, J. F., McKeown, M. G., et al. (1984). The effects of reading lessons on comprehension: A processing description. *Cognition and Instruction*, 1(1), 45–67.
- ### P
- Padron, Y. N. (1985). Utilizing cognitive reading strategies to improve English reading comprehension of Spanish-speaking bilingual students. Unpublished doctoral dissertation, University of Houston.
- Palinscar, A. S. (1987). Collaborating for collaborative learning of text comprehension. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, D.C.
- Palinscar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction*, 2, 117–175.
- Palinscar, A. S., David, Y. M., Winn, J. A., & Stevens, D. D. (1991). Examining the context of strategy instruction. Special issue: Cognitive instruction and problem learners. *RASE: Remedial and Special Education*, 12(3), 43–53.
- Paris, S. G., & Stahl, S. A. (Eds.). (2005). *Children's reading comprehension and assessment*. Center for improvement of early reading achievement (CIERA). Mahwah, NJ: Lawrence Erlbaum Associates.
- Partnership for Reading. (2001, September). *Put reading first: The research building blocks for teaching children to read*. Washington, D.C.: National Institute for Literacy; National Institute of Child Health and Human Development; and U.S. Department of Education.
- Payne, B. D., & Manning, B. H. (1992). Basal reader instruction: Effects of comprehension monitoring training on reading comprehension, strategy use and attitude. *Reading Research and Instruction*, 32(1), 29–38.
- Peak, J., & Dewalt, M. W. (1994). Reading achievement: Effects of computerized reading management and enrichment. *ERS Spectrum*, 12(1), 31–34.
- Pelow, R. A., & Colvin, H. M. (1983). PQ4R as it affects comprehension of social studies reading material. *Social Studies Journal*, 12, 14–22 (Spring).
- Pickens, J., & McNaughton, S. (1988). Peer tutoring of comprehension strategies. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 8(1–2), 67–80.
- Pinnell, G. S., Pikulski, J. J., Wixson, K. K., Campbell, J. R., Gough, P. B., & Beatty, A. S. (1995). *Listening to children read aloud*. Washington, DC: Office of Educational Research and Improvement, U. S. Department of Education.
- Pressley, M., & Forrest-Pressley, D. (1985). Questions and children's cognitive processing. In A. C. G. B. Black (Ed.), *The psychology of questions* (pp. 277–296). Hillsdale, NJ: Erlbaum.
- ### R
- RAND Reading Study Group. (2002). *Reading for understanding: Toward a R&D program in reading comprehension*. Santa Monica, CA: RAND Corporation.
- Raphael, T. E., & McKinney, J. (1983). An examination of fifth- and eighth-grade children's question-answering behavior: An instructional study in metacognition. *Journal of Reading Behavior*, 15(3), 67–86.
- Raphael, T. E., & Pearson, P. D. (1985). Increasing students' awareness of sources of information for answering questions. *American Educational Research Journal*, 22, 217–235.
- Raphael, T. E., & Wonnacott, C. A. (1985). Heightening fourth-grade students' sensitivity to sources of information for answering comprehension questions. *Reading Research Quarterly*, 20(3), 282–296.
- Rasinski, T. V. (1990). Effects of repeated reading and listening-while-reading on reading fluency. *Journal of Educational Research*, 83, 147–150.
- Rasinski, T. V., & Hoffman, J. V. (2003). Oral reading in the school literacy curriculum. *Reading Research Quarterly*, 38, 510–522.
- Reitsma, P. (1998). Reading practice for beginners: Effects of guided reading, reading-while-listening, and independent reading with computer-based speech feedback. *Reading Research Quarterly*, 23, 219–235.
- Reutzel, D. R. (1984). Story mapping: An alternative approach to communication. *Reading World*, 24(2), 16–25.
- Reutzel, D. R. (1985). Story maps improve comprehension. *Reading Teacher*, 38(4), 400–404.
- Reutzel, D. R. (1986). Clozing in on comprehension: The clozeczlozeczlozeCloze story map. *Reading Teacher*, 39(6), 524–528.
- Reutzel, D. R., & Hollingsworth, P. M. (1991a). Reading comprehension skills: Testing the distinctiveness hypothesis. *Reading Research and Instruction*, 30, 32–46.
- Reutzel, D. R., & Hollingsworth, P. M. (1991b). Reading time in school: Effect on fourth graders' performance on a criterion-referenced comprehension test. *Journal of Educational Research*, 84(3), 170–176.



- Rich, R. Z. (1989). The effects of training adult poor readers to use text comprehension strategies. Unpublished doctoral dissertation, Columbia University, New York.
- Richmond, M. G. (1976). The relationship of the uniqueness of prose passages to the effect of question placement and question relevance on the acquisition and retention of information. In G. H. McNinch (Ed.), *Reflections and investigations on reading. Twenty-fifth Yearbook of the National Reading Conference* (pp. 268–278). Clemson, SC: National Reading Conference.
- Rinaldi, L., Sells, D., & McLaughlin, T. F. (1997). The effects of reading racetracks on the sight word acquisition and fluency of elementary students. *Journal of Behavioral Education*, 7(2), 219–233.
- Ritchie, P. (1985). Graduate research: Reviews and commentary: The effects of instruction in main idea and question generation. *Reading-Canada-Lecture*, 3(2), 139–146.
- Robbins, C., & Ehri, L. C. (1994). Reading storybooks to kindergartners helps them learn new vocabulary words. *Journal of Educational Psychology*, 86(1), 54–64.
- Roberts, T. A., & Meiring, A. (2006). Teaching phonics in the context of children's literature or spelling: Influences on first-grade reading, spelling, and writing and fifth-grade comprehension. *Journal of Educational Psychology*, 98, 690–713.
- Rosenshine, B., & Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research*, 64(4), 479–530.
- Rosenshine, B., Meister, C., & Chapman, S. (1996). Teaching students to generate questions: A review of the intervention studies. *Review of Educational Research*, 66(2), 181–221.
- Rowls, M. D. (1976). The facilitative and interactive effects of adjunct questions on retention of eighth-graders across three prose passages: Dissertation in prose learning. *Journal of Educational Psychology*, 68, 205–209.
- Rush, R. T., & Milburn, J. L. (1988). The effects of reciprocal teaching on self-regulation of reading comprehension in a post-secondary technical school program. Paper presented at the National Reading Conference, Tucson, AZ.
- Schmitt, M. C. (1988). The effects of an elaborated directed reading activity on the metacomprehension skills of third graders. *National Reading Conference Yearbook*, 37, 167–181.
- Schumm, J. S. (Ed.). (2006). *Reading assessment and instruction for all learners*. New York: Guilford Press.
- Schunk, D. H., & Rice, J. M. (1984). Strategy self-verbalization during remedial listening comprehension instruction. *Journal of Experimental Education*, 53(1), 49–54.
- Schunk, D. H., & Rice, J. M. (1985). Verbalization of comprehension strategies: Effects on children's achievement outcomes. *Human Learning: Journal of Practical Research and Applications*, 4(1), 1–10.
- Schwartz, R. M., & Raphael, T. E. (1985). Instruction in the concept of definition as a basis for vocabulary acquisition. In J. A. Niles & R. V. Lalik (Eds.), *Issues in literacy: A research perspective: Thirty-fourth Yearbook of the National Reading Conference* (pp. 116–124). Rochester, NY: The National Reading Conference.
- Scott, J., & Nagy, W. (1997). Understanding the definitions of unfamiliar verbs. *Reading Research Quarterly*, 32, 184–200.
- Senechal, M. (1997). The differential effect of story-book reading on preschoolers' acquisition of expressive and receptive vocabulary. *Journal of Child Language*, 24(1), 123–138.
- Senechal, M., & Cornell, E. H. (1993). Vocabulary acquisition through shared reading experiences. *Reading Research Quarterly*, 28, 360–374.
- Serenty, M. L., & Dean, R. S. (1986). Interspersed post-passage questions and reading comprehension achievement. *Journal of Educational Psychology*, 78(3), 228–229.
- Shaw, R., & Shaw, D. (2002). *DIBELS oral reading fluency-based indicators of third grade reading skills for Colorado State Assessment Program (CSAP)*. (Technical Report). Eugene: University of Oregon. Retrieved September 2005 from the DIBELS Technical Reports webpage: <http://dibels.uoregon.edu/techreports/index.php>
- Sheldon, S. A. (1984). Comparison of two teaching methods for reading comprehension. *Journal of Research in Reading*, 7(1), 41–52.
- Shinn, M. R. (1998). Identifying and defining academic problems: CBM Screening and eligibility procedures. In M. R. Shinn (Ed.), *Curriculum-based measurement: Assessing special children* (pp. 90–129). New York: Guilford.
- Short, E. J., & Ryan, E. B. (1984). Metacognitive differences between skilled and less skilled readers: Remediating deficits through story grammar and attribution training. *Journal of Educational Psychology*, 76(2), 225–235.
- Shortland-Jones, B. (1986). The development and testing of an instructional strategy for improving reading comprehension based on schema and metacognitive theories. Unpublished doctoral dissertation, University of Oregon.
- Silven, M. (1992). The role of metacognition in reading instruction. *Scandinavian Journal of Educational Research*, 36(3), 211–221.
- Simpson, P. S. (1989). The effects of direct training in active comprehension on reading achievement, self-concepts, and reading attitudes of at-risk sixth grade students. Unpublished doctoral dissertation, Texas Technological University.

## S

## References

- Sindelar, P. T. (1982). The effects of cross-aged tutoring on the comprehension skills of remedial reading students. *Journal of Special Education*, 16(2), 199–206.
- Sindelar, P. T., Monda, L. E., & O'Shea, L. J. (1990). Effects of repeated readings on instructional- and mastery-level readers. *Journal of Educational Research*, 83, 220–226.
- Singer, H., & Donlan, D. (1982). Active comprehension: Problem-solving schema with question generation for comprehension of complex short stories. *Reading Research Quarterly*, 17(2), 166–186.
- Smith, D. D. (1979). The improvement of children's oral reading through the use of teacher modeling. *Journal of Learning Disabilities*, 12(3), 39–42.
- Smith, K., Johnson, D. W., & Johnson, R. T. (1981). Can conflict be constructive? Controversy versus concurrence seeking in learning groups. *Journal of Educational Psychology*, 73(5), 651–663.
- Smith, N. J. (1977). The effects of training teachers to teach students at different reading ability levels to formulate three types of questions on reading comprehension and question generation ability. Unpublished doctoral dissertation, University of Georgia.
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, D.C.: National Academy Press.
- Soriano, M., Vidal-Abarca, E., & Miranda, A. (1996). Comparación de dos procedimientos de instrucción en comprensión y aprendizaje de textos: Instrucción directa y enseñanza recíproca. [Comparison of two procedures for instruction in comprehension and text learning: Direct instruction and reciprocal teaching]. *Infancia y Aprendizaje*, 74, 57–65.
- Spiegel, D. L., & Fitzgerald, J. (1986). Improving reading comprehension through instruction about story parts. *Reading Teacher*, 39(7), 676–682.
- Stahl, S. (1983). Differential word knowledge and reading comprehension. *Journal of Reading Behavior*, 15(4), 33–50.
- Stahl, S., Duffy-Hester, A., & Stahl, K. (1998). Everything you wanted to know about phonics (but were afraid to ask). *Reading Research Quarterly*, 33, 338–355.
- Stahl, S. A., & Fairbanks, M. M. (1986). The effects of vocabulary instruction: A model-based meta-analysis. *Review of Educational Research*, 56(1), 72–110.
- Stahl, S. A., & Kuhn, M. R. (2003). Fluency: A review of developmental and remedial practice. *Journal of Educational Psychology*, 95, 3–21.
- Stevens, R. J. (1988). Effects of strategy training on the identification of the main idea of expository passages. *Journal of Educational Psychology*, 80(1), 21–26.
- Stevens, R. J., Madden, N. A., Slavin, R. E., & Farnish, A. M. (1987). Cooperative integrated reading and composition: Two field experiments. *Reading Research Quarterly*, 22(4), 433–454.
- Stevens, R. J., Slavin, R. E., & Farnish, A. M. (1991). The effects of cooperative learning and instruction in reading comprehension strategies on main idea identification. *Journal of Educational Psychology*, 83(1), 8–16.
- Stoddard, K., Valcante, G., Sindelar, P., O'Shea, L., & Algozzine, B. (1993). Increasing reading rate and comprehension: The effects of repeated readings, sentence segmentation, and intonation training. *Reading Research and Instruction*, 32, 53–65.
- Summers, E. G., & McClelland, J. V. (1982). A field-based evaluation of sustained silent reading (SSR) in intermediate grades. *Alberta Journal of Educational Research*, 28, 100–112.
- ## T
- Taylor, B. M., & Frye, B. J. (1992). Comprehension strategy instruction in the intermediate grades. *Reading Research and Instruction*, 32(1), 39–48.
- Taylor, B. M., Pearson, P. D., Peterson, D. S., & Rodriguez, M. C. (2003). Reading growth in high-poverty classrooms: The influence of teacher practices that encourage cognitive engagement in literacy learning. *Elementary School Journal*, 104, 3–28.
- Taylor, N. E., Wade, M. R., & Yekovich, F. R. (1985). The effects of text manipulation and multiple reading strategies on the reading performance of good and poor readers. *Reading Research Quarterly*, 20, 566–574.
- Tindal, G., & Marston, D. (1990). *Classroom-based assessment: Testing for teachers*. Columbus, OH: Merrill Publishing.
- Tomesen, M., & Aarnoutse, C. (1998). Effects of an instructional programme for deriving word meanings. *Educational Studies*, 24(1), 107–128.
- Torgesen, J. K., & Mathes, P. G. (2000). *A basic guide to understanding, assessing, and teaching phonological awareness*. Austin, TX: Pro-Ed.
- Tregaskes, M. R., & Daines, D. (1989). Effects of metacognitive strategies on reading comprehension. *Reading Research and Instruction*, 29(1), 52–60.
- Tunmer, W. E. (1989). The role of language-related factors in reading disability. In D. Shankweiler & I. Y. Liberman (Eds.), *Phonology and reading disability: Solving the puzzle* (pp. 91–131). Ann Arbor: University of Michigan Press.
- Turpie, J. J., & Paratore, J. R. (1995). Using repeated reading to promote success in a heterogeneously grouped first grade. In K. A. Hinchman, D. J. Leu, & C. K. Kinzer (Eds.), *Perspectives on literacy research and practice: Forty-fourth Yearbook of the National Reading Conference* (pp. 255–263). Chicago: The National Reading Conference.
- ## U
- Utter, D. A. (1988). Activating comprehension through cooperative learning. *Reading Teacher*, 41(4), 390–395.

## V

van Bon, W. H. J., Bokseveld, L. M., Font Freide, T. A. M., & van den Hurk, A. J. M. (1991). A comparison of three methods of reading-while-listening. *Journal of Learning Disabilities*, 24, 471–476.

van Bon, W. H. J., & van Leeuwe, J. F. J. (2003). Assessing phonemic awareness in kindergarten: The case for the phoneme recognition task. *Applied Psycholinguistics*, 24, 195–219.

VanWagenen, M. A., Williams, R. L., & McLaughlin, T. F. (1994). Use of assisted reading to improve reading rate, word accuracy, and comprehension with ESL Spanish-speaking students. *Perceptual and Motor Skills*, 79, 227–230.

Varnhagen, C. K., & Goldman, S. R. (1986). Improving comprehension: Causal relations instruction for learning handicapped learners. *Reading Teacher*, 39(9), 896–904.

Vollands, S. R., Topping, K. J., & Evans, R. M. (1999). Computerized self-assessment of reading comprehension with the Accelerated Reader: Action Research. *Reading and Writing Quarterly*, 15, 197–211.

## W

Watts, G. H. (1973). The “arousal” effect of adjunct questions on recall from prose materials. *Australian Journal of Psychology*, 25, 81–87.

White, T. G., Graves, M. F., & Slater, W. H. (1990). Growth of reading vocabulary in diverse elementary schools: Decoding and word meaning. *Journal of Educational Psychology*, 82(2), 281–290.

Williams, J. P., Hall, K. M., Lauer, K. D., Stafford, K. B., DeSisto, L. A., & deCani, J. S. (2005). Expository text comprehension in the primary grade classroom. *Journal of Educational Psychology*, 97, 538–550.

Williamson, R. A. (1989). The effect of reciprocal teaching on student performance gains in third grade basal reading instruction. Unpublished doctoral dissertation, Texas A&M University.

Wilson, J. (2005). *The relationship of Dynamic Indicators of Basic Early Literacy Skills (DIBELS) oral reading fluency to performance on Arizona Instrument to Measure Standards (AIMS)*. (Research Brief). Assessment and Evaluation Department, Tempe School District No. 3. Retrieved September 2005 from the DIBELS Technical Reports webpage: <http://dibels.uoregon.edu/techreports/index.php>

Wixson, K. K. (1983). Questions about a text: What you ask about is what children learn. *Reading Teacher*, 37(3), 287–293.

Wixson, K. K. (1986). Vocabulary instruction and children’s comprehension of basal stories. *Reading Research Quarterly*, 21(3), 317–329.

Wong, Y. L., & Jones, W. (1982). Increasing meta-comprehension in learning disabled and normally achieving students through self-questioning training. *Learning Disability Quarterly*, 5, 228–239.

Wu, H.-M., & Solman, R. T. (1993). Effective use of pictures as extra stimulus prompts. *British Journal of Educational Psychology*, 63(1), 144–160.

## References

# Technical Appendix (IESD)

# IESD Research:

## Macmillan/McGraw-Hill

### Support for Reading First

## Introduction

### The Importance of Reading Research

Macmillan/McGraw-Hill has a longstanding tradition and commitment to helping every child learn to read—a tradition that continues today with Macmillan/McGraw-Hill Reading *California Treasures*. Our commitment to helping all American children master the skills and strategies they need to become successful readers and lifelong learners is as strong as ever.

The U.S. federal government has strengthened its commitment to literacy with the landmark Reading First initiative. Based on years of scientifically based research findings, the goal of Reading First is to provide children with effective instruction in the early grades, so that as a nation we may ensure that all children grow up to become literate adults.

Increasingly, federal, state, and local requirements in every area focus on the need for research-verified instructional strategies, methods, and approaches. Macmillan/McGraw-Hill Reading *California Treasures* has stepped up to this challenge by identifying reputable research related to effective reading instruction, summarizing relevant instructional recommendations based on that research, and then showing how those recommendations are incorporated into Macmillan/McGraw-Hill Reading. This paper presents the results of that research-based process.

### Reading First Content Focus

To meet Reading First guidelines, reading programs must be based on scientific evidence related to five elements that have been identified as essential in reading instruction:

- Phonemic awareness
- Phonics
- Fluency
- Vocabulary
- Text comprehension

This paper describes how Macmillan/McGraw-Hill Reading meets findings of scientific research related to these five areas, including research-based recommendations for assessment related to these areas.

### Review Process

Development of this research-based white paper included the following steps.

- Key sources were identified that informed the Reading First initiative.

- Additional recent, reputable research related to reading instruction was identified through a combination of referral by reading experts and review of important research journals.

- Research sources were reviewed and summarized, with special reference to

- Details of the supporting research evidence
- Strength of the link between the research and specific instructional recommendations. Sources and findings were excluded which failed in one of these respects, or in overall quality of the research as reported.

- Cross-comparison of the research-based recommendations and Macmillan/McGraw-Hill Reading verified that each research-based recommendation listed in this white paper is supported by Macmillan/McGraw-Hill Reading Research Sources

This paper summarizes key research findings and research-based recommendations related to effective reading instruction from two key sources describing the body of research on which Reading First was based:

- Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups (National Institute of Child Health and Human Development [NICHD], 2000). This source presents an extensive, detailed research review related to five broad categories (see above under Reading First Content Focus). In cases where the data were of sufficient quality and uniformity, research results were summarized in a meta-analysis, a method for statistically combining research results across an entire body of research studies.
- Preventing reading difficulties in young children, a review of research on early childhood reading commissioned by the National Research Council (Snow, Burns, & Griffin, 1998). This source represents a broad-ranging research summary and review, but without inclusion of specific details of the research.

Additionally, specific findings have been incorporated from other recent, reputable research related to reading development, instruction, and assessment. These sources are listed on the next page:



Source	Study Type
Barger, J. (2003). <i>Comparing the DIBELS oral reading fluency indicator and the North Carolina end of grade reading assessment</i> . (Technical Report). Asheville: North Carolina Teacher Academy.	Correlation
Buck, J., & Torgesen, J. (2003). <i>The relationship between performance on a measure of oral reading fluency and performance on the Florida Comprehensive Assessment Test</i> . (FCRR Technical Report No. 1). Tallahassee: Florida Center for Reading Research. Retrieved September 2005 from the DIBELS Technical Reports webpage: <a href="http://dibels.uoregon.edu/techreports/index.php">http://dibels.uoregon.edu/techreports/index.php</a>	Correlation
Elbro, C., & Petersen, D. K. (2004). Long-term effects of phoneme awareness and letter sound training: An intervention study with children at risk for dyslexia. <i>Journal of Educational Psychology</i> , 96(4), 660-670.	Experimental/ Quasi-experimental <sup>1</sup>
Ewers, C. A., & Brownson, S. M. (1999). Kindergartners' vocabulary acquisition as a function of active vs. passive storybook reading, prior vocabulary, and working memory. <i>Journal of Reading Psychology</i> , 20, 11-20.	Experimental
Fuchs, L. S., Fuchs, D., Hosp, M.D., & Jenkins, J.R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. <i>Scientific Studies of Reading</i> , 5(3), 239-256.	Research review/ research-based theoretical analysis
Good, III, R.H., Simmons, D.C., & Kame'enui, E.J. (2001). The importance and decision-making utility of a continuum of fluency-based indicators of foundational reading skills for third-grade high-stakes outcomes. <i>Scientific Studies of Reading</i> , 5(3), 257-288.	Correlation
Hasbrouck, J., & Tindal, G. A. (in press [scheduled for July 2005]). Oral reading fluency norms: A valuable tool for reading teachers. <i>The Reading Teacher</i> .	Norming research
Jenkins, J.R., Fuchs, L.S., van den Broek, P., Espin, C., & Deno, S.L. (2003). Sources of individual differences in reading comprehension and reading fluency. <i>Journal of Educational Psychology</i> , 95(4), 719-729.	Correlation and statistical modeling
Morris, D., Bloodgood, J. W., Lomax, R. G., & Perney, J. (2003). Developmental steps in learning to read: A longitudinal study in kindergarten and first grade. <i>Reading Research Quarterly</i> , 38(3), 302-328.	Statistical modeling
Muter, V., Hulme, C., Snowling, M. J., & Stevenson, J. (2004). Phonemes, rimes, vocabulary, and grammatical skills as foundations of early reading development: Evidence from a longitudinal study. <i>Developmental Psychology</i> , 40(5), 665-681.	Statistical modeling
Shaw, R., & Shaw, D. (2002). <i>DIBELS oral reading fluency-based indicators of third grade reading skills for Colorado State Assessment Program (CSAP)</i> . (Technical Report). Eugene: University of Oregon. Retrieved September 2005 from the DIBELS Technical Reports webpage: <a href="http://dibels.uoregon.edu/techreports/index.php">http://dibels.uoregon.edu/techreports/index.php</a>	Correlation
van Bon, W. H. J., & van Leeuwe, J. F. J. (2003). Assessing phonemic awareness in kindergarten: The case for the phoneme recognition task. <i>Applied Psycholinguistics</i> , 24, 195-219.	Statistical modeling
Wilson, J. (2005). <i>The relationship of Dynamic Indicators of Basic Early Literacy Skills (DIBELS) oral reading fluency to performance on Arizona Instrument to Measure Standards (AIMS)</i> . (Research Brief). Assessment and Evaluation Department, Tempe School District No. 3. Retrieved September 2005 from the DIBELS Technical Reports webpage: <a href="http://dibels.uoregon.edu/techreports/index.php">http://dibels.uoregon.edu/techreports/index.php</a>	Correlation

## About This Paper

This paper includes the following sections:

- Phonemic awareness
- Phonics
- Fluency
- Vocabulary
- Text comprehension
- Assessment and the Five Essential Elements of Reading Instruction

Each section presents a summary of relevant research findings and recommendations. Top-level descriptions of each research finding and research-based recommendation are presented in the main text, with details of the supporting research provided in footnotes.

## Phonemic Awareness

“Phonemic awareness instruction helps children learn to read.”

– *Put Reading First* (Armbruster, Lehr, & Osborn, 2003, p. 6)

### What is phonemic awareness?

“Phonemic awareness is the ability to hear, identify, and manipulate the individual sounds—phonemes—in spoken words” (Armbruster, Lehr, & Osborn, 2003, p. 10).

Phonemic awareness is often described as part of a broader category known as phonological awareness. Phonological awareness includes the ability to work with larger units in spoken language such as syllables and rhymes, which often include more than one phoneme. Children typically find it easier to work with these larger units (e.g., rhyming words) before proceeding on to develop skills with individual phonemes (NICHD, 2000, p. 2-10).

## Why is phonemic awareness instruction important?

Strong phonemic awareness is considered an early indicator of eventual success in beginning reading. Phonemic awareness instruction helps children learn to read words, spell words, and comprehend text.

- **Phonemic awareness instruction has a positive overall effect on reading and spelling.** A meta-analysis by the National Reading Panel (NRP) found that instruction in phonemic awareness (PA) had a “moderate” effect on both reading skills (based on 90 comparisons)<sup>2</sup> and spelling (39 comparisons) (NICHD, 2000, pp. 2-3, 2-63, 2-69).<sup>3</sup> Results across several categories of assessments “show that teaching children to manipulate phonemes in words was highly effective across all the literacy domains and outcomes” (p. 2-3).
- **Phonemic awareness instruction leads to lasting reading improvement.** The NRP meta-analysis found that the effect of PA instruction on reading outcomes was moderate on both immediate and first follow-up posttests, and small on second follow-up posttests (NICHD, 2000, p. 2-63).<sup>4</sup> Based on these results, the NRP concluded that “effects of PA training on reading lasted well beyond the end of training” (NICHD, 2000, p. 2-5).
- **Phonemic awareness instruction can be effectively carried out by teachers.** PA instruction had a positive impact on students’ reading and spelling, whether the instruction was carried out by classroom teachers or by individuals with specialized training, such as researchers (NICHD, 2000, pp. 2-65, 2-74).<sup>5</sup>

<sup>2</sup> Each comparison is a single instance of one treatment group being compared to one control group. Some studies included multiple comparisons (e.g., a single treatment group being compared to multiple comparison groups, or a single comparison group being compared to multiple treatment groups).

<sup>3</sup> Effect size (ES) = 0.53 for reading, 0.59 for spelling. Both results were statistically significant at  $p < 0.05$ . According to the NRP, an effect size of 0.20 is considered “small,” 0.50 is considered “moderate,” and 0.80 is considered “large” (2000, p. 2-3). Characterizations of meta-analysis results as small, moderate, or large in this paper are based on rounding to the nearest of these values.

<sup>4</sup> ES = 0.53 on immediate posttests (90 comparisons), 0.45 on first follow-up posttests (35 comparisons), and 0.23 on second follow-up posttests (8 comparisons). All of these results were statistically significant at  $p < 0.05$ .

<sup>5</sup> On immediate-reading posttests, ES = 0.41 for classroom teachers (22 comparisons) and 0.64 for researchers and others (68 comparisons). On follow-up reading posttests, ES = 0.32 for classroom teachers (12 comparisons) and 0.63 for researchers and others (23 comparisons). On immediate-spelling posttests when reading-disabled comparisons were removed from the analysis, ES = 0.74 for classroom teachers (8 comparisons) and 0.96 for researchers and others (20 comparisons). All of these results were statistically significant at  $p < 0.05$ . (The NRP found that of the groups they analyzed, PA instruction did not have a statistically significant impact on spelling outcomes for reading-disabled students. Results were therefore reported separately by the NRP after excluding reading disabled comparisons. Unless otherwise stated, PA research results in this paper related to spelling do not include reading-disabled comparisons. Additionally, results in some categories for both reading and spelling were reported by the NRP separately for immediate posttests and follow-up posttests, while other results were reported for immediate posttests only. In cases where both immediate posttests and follow-up posttests were reported, both sets of results are included in this paper.)



## Who benefits from phonemic awareness instruction?

### Reading

PA instruction has been shown to have a positive impact on reading skills across many student categories and grade levels (NICHD, 2000, pp. 2-5, 2-66–2-67):

- Normally developing readers<sup>6</sup>
- Children at risk for future reading problems.<sup>7</sup> Later research suggests the benefits of PA instruction specifically for kindergartners at risk for developing dyslexia (Elbro & Petersen, 2004).<sup>8</sup>
- Disabled readers<sup>9</sup>
- Preschoolers<sup>10</sup>
- Kindergartners<sup>11</sup>
- First-graders<sup>12</sup>
- Second- through 6th-graders (most of whom were disabled readers)<sup>13</sup>
- Children across various SES (socioeconomic status) levels<sup>14</sup>
- Children learning to read in English as well as in other languages<sup>15</sup>

### Spelling

PA instruction has been shown to have a positive impact on spelling skills across many student categories and grade levels (NICHD, 2000, pp. 2-6, 2-70–2-74):

- Kindergartners<sup>16</sup>
- First-graders<sup>17</sup>
- Children at risk for future reading problems<sup>18</sup>
- Normally developing readers<sup>19</sup>
- Children across various SES levels<sup>20</sup>
- Children learning to spell in English as well as children learning in other languages<sup>21</sup>

## Common phonemic awareness tasks

The following tasks are commonly used to assess PA skills and/or teach them to students (NICHD, 2000, p. 2-2):

- Phoneme isolation—Recognizing individual sounds in words. For example: What sound do you hear at the beginning of *pin*? (/p/)
- Phoneme identification—Recognizing the common sound in different words. For example: What sound do you hear that is the same in *sat*, *sun*, and *soup*? (/s/)
- Phoneme categorization—Recognizing the odd sound in a set of words. For example: Listen to these words—*hand*, *heart*, *sun*. Which word begins with a different sound? (*sun*)
- Phoneme blending—Listening to a sequence of separately spoken sounds and then blending them naturally into a recognizable word. For example: What word is /b/ - /a/ - /t/? (*bat*)
- Phoneme segmentation—Breaking a word into its sounds by tapping out or counting the sounds. For example: How many sounds do you hear in *cat*? (three)
- Phoneme deletion—Recognizing the word that remains when a specific phoneme is removed. For example: What word do we have when we say *smile* without the /s/? (*mile*)

<sup>6</sup> ES = 0.47 on immediate posttests (46 comparisons), 0.30 on follow-up posttests (12 comparisons). Both results were statistically significant at  $p < 0.05$ .

<sup>7</sup> ES = 0.86 on immediate posttests (27 comparisons), 1.33 on follow-up posttests (15 comparisons). Both results were statistically significant at  $p < 0.05$ .

<sup>8</sup> At-risk students who received 17 weeks of PA and letter knowledge instruction during their kindergarten year significantly outperformed untrained at-risk students in letter knowledge ( $d = .67$ ,  $F(1, 78) = 15.4$ ,  $p < .01$ ), phoneme deletion ( $d = .47$ ,  $F(1, 78) = 4.7$ ,  $p < .05$ ), and phoneme identification ( $d = .54$ ,  $F(1, 78) = 6.6$ ,  $p < .05$ ) at the beginning of grade 1 (p. 664), and “significantly outperformed the at-risk controls on all measures of reading, with effect sizes in the range from .40 to .69” in tests at the beginning of grades 2 and 3 (p. 665; all effects were significant at  $p < .01$  or  $p < .05$ ). Even at the beginning of grade 7, “there were still significant effects” for oral-word-reading efficiency ( $d = .48$ ), oral-nonword-reading efficiency ( $d = .53$ ) and phonological coding ( $d = .49$ ) (p. 665; all effects were significant at  $p < .05$ ). There was also a nonsignificant but positive trend at grade 7 in reading comprehension ( $d = .49$ ), a trend that “was present in both accuracy and efficiency of reading comprehension” (p. 665). At-risk status was determined by having at least one parent with dyslexia.

<sup>9</sup> ES = 0.45 on immediate posttests (17 comparisons), 0.28 on follow-up posttests (8 comparisons). Both results were statistically significant at  $p < 0.05$ .

<sup>10</sup> ES = 1.25 on immediate posttests (7 comparisons),  $p < 0.05$ .

<sup>11</sup> ES = 0.48 on immediate posttests (40 comparisons),  $p < 0.05$ .

<sup>12</sup> ES = 0.49 on immediate posttests (25 comparisons),  $p < 0.05$ .

<sup>13</sup> ES = 0.49 on immediate posttests (18 comparisons),  $p < 0.05$ .

<sup>14</sup> ES = 0.45 on immediate posttests for low SES (11 comparisons), 0.84 for mid & high SES (29 comparisons). Both results were statistically significant at  $p < 0.05$ .

<sup>15</sup> For children learning to read in English, ES = 0.63 on immediate posttests (72 comparisons), 0.42 on follow-up posttests (17 comparisons). For children learning to read in a language other than English, ES = 0.36 on immediate posttests (18 comparisons), 0.47 on follow-up posttests (18 comparisons). All of these results were statistically significant at  $p < 0.05$ .

<sup>16</sup> ES = 0.97 on immediate posttests (15 comparisons),  $p < 0.05$ .

<sup>17</sup> ES = 0.66 on immediate posttests (13 comparisons),  $p < 0.05$ .

<sup>18</sup> ES = 0.76 on immediate posttests (13 comparisons),  $p < 0.05$ .

<sup>19</sup> ES = 0.88 on immediate posttests (15 comparisons),  $p < 0.05$ .

<sup>20</sup> ES = 0.76 on immediate posttests for low SES (6 comparisons), 1.17 for mid and high SES (9 comparisons). Both results were statistically significant at  $p < 0.05$ . (These statistics include reading disabled comparisons. SES results were not reported separately with reading disabled comparisons removed.)

<sup>21</sup> For children learning to spell in English, ES = 0.95 on immediate posttests (22 comparisons), 0.47 on follow-up posttests (18 comparisons). For children learning to spell in a language other than English, ES = 0.51 on immediate posttests (6 comparisons). Both results were statistically significant at  $p < 0.05$ .

## Research recommendations

### Range and scope of instruction

- **Grade level.** Research summarized by the NRP suggests that PA instruction should be provided

*At the kindergarten level*

*At the first-grade level*

*At elementary levels above first grade as supplemental instruction for students with special needs*

Similarly, a review of research on early childhood reading commissioned by the National Research Council (NRC) concluded that “kindergarten instruction should be designed to provide practice with the sound structure of words [and] the recognition and production of letters,” and “first-grade instruction should be designed to provide explicit instruction and practice with sound structures that lead to phonemic awareness” (Snow, Burns, & Griffin, 1998, p. 322).

### Instructional methods and features

- **Spoken and written versus spoken only.** Instruction that used letters to teach phoneme manipulation had a considerably greater impact on both reading and spelling than instruction that did not use letters but was limited to spoken sounds only (NICHHD, 2000, pp. 2-64, 2-73).<sup>22</sup>
- **Assessment for kindergarteners based on phoneme recognition.** A study of Dutch children analyzing the relationship among several different assessments of PA found that a group-administered phoneme recognition assessment was the “best paper and pencil representative” of PA skill in kindergarten,<sup>23</sup> and that it “equals phoneme segmentation” (an individually administered assessment) in “sensitivity and specificity when predicting later literacy failure” (van Bon & van Leeuwe, 2003, p. 195).<sup>24</sup> These findings suggest that a group-administered assessment based on phoneme recognition can serve as a useful screening tool for identifying the general level of students’ PA skills in kindergarten, which in turn is a useful indicator of students who might need targeted PA skills intervention.

- **Guidance by initial and ongoing assessment at first and second grades.** Based on the research findings, the NRP recommended a design in which *assessment results drive PA instruction at the first- and second-grade levels, both initially and through ongoing formative assessments.*

Assessments conducted before PA instruction begins should “indicate which children need the instruction and which do not, which children need to be taught rudimentary levels of PA (e.g., segmenting initial sounds in words), and which children need more advanced levels involving segmenting or blending with letters” (NICHHD, 2000, p. 2-6).

In order to determine the length of PA instruction, “What is probably most important is to tailor training time to student learning by assessing who has and who has not acquired the skills being taught as training proceeds” (NICHHD, 2000, p. 2-42). Similarly, the NRC research review argued that “intensity of instruction should be matched to children’s needs” in acquiring phonological skills (Snow, Burns, & Griffin, 1998, p. 321).

## Phonics

“Systematic and explicit phonics instruction significantly improves children’s reading comprehension.”

—*Put Reading First* (Armbruster, Lehr, & Osborn, 2003, p. 14)

### What is phonics?

Phonics instruction teaches children the relationship between letters (graphemes) and the sounds in spoken language (phonemes), and how to apply that knowledge in reading and spelling words.

Phonics instruction builds on phonemic awareness. Although it includes some types of phonemic awareness activities, in which students “use grapheme-phoneme correspondences to decode or spell words,” it extends beyond such tasks to “include other activities such as reading decodable text or writing stories” (NICHHD, 2000, p. 2-11).

<sup>22</sup> For reading on immediate posttests, ES = 0.67 for programs that used letters (48 comparisons), v. 0.38 for programs that did not use letters (42 comparisons). On follow-up posttests, ES = 0.59 for programs that used letters (16 comparisons), v. 0.36 for programs that did not use letters (19 comparisons). For spelling on immediate posttests, ES = 1.00 for programs that used letters (17 comparisons), v. 0.57 for programs that did not use letters (11 comparisons). All of these ES comparisons were significantly different in favor of programs that use letters at  $p < 0.05$ .

<sup>23</sup> A confirmatory structural analysis using linear structured relations (LISREL) was conducted on assessments administered in May/June of kindergarten (Time 1) and March of grade 1 (Time 2), producing a factor loading score for each of eight PA assessments carried out during the Time 1 administration (four of which were also repeated at Time 2). The analysis also included an Early Reading Test at Time 1 and a spelling test and two portions of the Three-Minute Test (a standardized word reading test) at Time 2. The highest loading factor among Time 1 PA tests was for phoneme segmentation (.91), followed by phoneme recognition (.78), one of two phoneme counting measures (.72), phoneme blending (.70), the second of two phoneme counting measures (.57), phoneme deletion (.50), rhyme judgment (.49), and pseudoword repetition (.40) (p. 206). Analysis also showed a single common factor underlying PA scores, which “is closely related to literacy performance” (p. 209).

<sup>24</sup> “Averaged over reading and spelling, maximum specificity of maximum sensitivity was 46% for Phoneme Segmentation and 47% for Phoneme Recognition. Conversely, choosing 80% as the desired level of specificity, the average sensitivity was found to be 45% for Phoneme Recognition whereas Phoneme Segmentation did not even attain an 80% level of specificity. Maximum Phoneme Segmentation specificity averaged over the three literacy measures was 65%, associated with 77% sensitivity (cf. 75% sensitivity at the same specificity level for Phoneme Recognition). This shows that both the Phoneme Segmentation and Phoneme Recognition Tests tend to identify too many children at kindergarten as running the risk of meeting with literacy problems in Grade 1 and that Phoneme Recognition is not inferior to Phoneme Segmentation in that respect” (p. 213).

## What is “systematic and explicit” phonics instruction?

Research recommendations favor phonics instruction that is “systematic and explicit.” An *explicit* approach includes specific directions to teachers for teaching letter-sound correspondences. A *systematic* approach is one that incorporates a planned, sequential set of phonetic elements to master. These elements are explicitly and systematically introduced in meaningful reading and writing tasks.

Systematic and explicit phonics instruction includes teaching a full spectrum of key letter-sound correspondences: not just major correspondences between consonant letters and sounds, but also short and long vowel letters and sounds, and vowel and consonant digraphs such as *oi*, *ea*, *ou*, *sh*, and *th*.

Several different methods have been developed to teach phonics systematically and explicitly, including synthetic phonics, analytic phonics, embedded phonics, analogy phonics, onset-rime phonics, and phonics through spelling. Broadly speaking, these approaches are all effective (NICHHD, 2000, p. 2-89).

## Why is phonics instruction important?

Phonics instruction leads to an understanding of the alphabetic principle—the set of systematic and predictable relationships between written letters and spoken sounds. For children to learn how to sound out word segments and blend these parts to form recognizable words, they must know how letters correspond to sounds.

- **Phonics instruction has a positive overall effect on reading.** A meta-analysis by the National Reading Panel (NRP) found that systematic and explicit phonics instruction had a significantly stronger effect on children’s reading than every category of nonsystematic or non-phonics instruction that was studied. This was true whether nonsystematic or non-phonics instruction occurred in the context of “basal programs, regular curriculum, whole language approaches, whole word programs, [or] miscellaneous programs” (NICHHD, 2000, pp. 2-95, 2-160).<sup>25</sup> Similarly, a review of research on early childhood reading commissioned by the National Research Council (NRC) cited a research finding that “children taught via the direct code approach” (i.e., systematic and explicit phonics instruction)

showed better reading gains than students receiving whole-language or embedded phonics instruction (Snow, Burns, & Griffin, 1998, p. 205, citing Foorman et al., 1998).

- **Phonics instruction has positive overall effects on specific skill areas.** The NRP meta-analysis found that across grades K-6, phonics instruction was “most effective in improving children’s ability to decode regularly spelled words . . . and pseudowords,” but also helped students to read miscellaneous words (some of which were irregularly spelled) and read text orally (NICHHD, 2000, pp. 2-94, 2-159). Phonics instruction positively impacted spelling and text comprehension for kindergarten and first-grade students, but not for those in grades 2-6 (NICHHD, 2000, p. 2-159).<sup>26</sup>
- **Phonics instruction has a lasting impact on reading.** Follow-up tests in the NRP meta-analysis found that the effects of phonics instruction were reduced, but still significant, several months after the instruction ended, “indicating that the impact of phonics instruction lasted well beyond the end of training” (NICHHD, 2000, pp. 2-113, 2-159, 2-161).<sup>27</sup>

## Who benefits from phonics instruction?

### Grade levels

The NRP meta-analysis found that

- Kindergarten and first-grade students experienced significantly better improvement from phonics instruction than from other types of instruction in all six areas measured (decoding regular words, decoding pseudowords, reading miscellaneous words, spelling, reading text orally, and comprehending text), with a moderate to large effect size for all areas except reading text orally (NICHHD, 2000, p. 2-159). Overall levels of achievement were very similar for kindergartners and first-graders.<sup>28</sup>
- Grades 2-6 students (the majority of which were disabled readers) also experienced significantly better improvement from phonics instruction in four out of six areas (decoding regular words, decoding pseudowords, reading miscellaneous words, and reading text orally), with effect sizes for the various areas ranging from small to moderate (NICHHD, 2000, p. 2-159).<sup>29</sup>

<sup>25</sup> ES = 0.46 v. basal programs (10 comparisons), 0.41 v. regular curriculum (16 comparisons), 0.31 v. whole language (12 comparisons), 0.51 v. whole word programs (10 comparisons), and 0.46 v. miscellaneous programs (14 comparisons); all differences were significant at  $p < 0.05$ . Note that these categories included only instructional programs that did not feature explicit, systematic phonics instruction. For example, a basal program that included systematic and explicit phonics instruction would not be included in the category of “basal programs” as defined here.

<sup>26</sup> Across grades K-6, ES = 0.67 for decoding regular words (30 comparisons), 0.60 for decoding pseudowords (40 comparisons), 0.40 for reading miscellaneous words (59 comparisons), 0.25 for reading text orally (16 comparisons), 0.35 for spelling words (37 comparisons), and 0.27 for comprehending text (35 comparisons). All of these results were statistically significant at  $p < 0.05$ . However, in separate analyses for grades K-1 and 2-6, results for spelling and comprehending text were found to be statistically significant at  $p < 0.05$  for grades K-1 but not for grades 2-6. (For ES data from these separate grade range analyses, see footnote 24 for grades K-1 and footnote 25 for grades 2-6.)

<sup>27</sup> In six studies, the experimental and control groups were tested at the end of training and again “after a delay following training to assess long-term effects” (2000, p. 2-110). ES = 0.51 for testing at the end of training and ES = 0.27 for follow-up testing. In both cases, the results were statistically significant at  $p < 0.05$ . However, the two effect sizes did not significantly differ from one another at  $p < 0.05$ .

<sup>28</sup> For K-1 combined, ES = 0.98 for decoding regular words (8 comparisons), 0.67 for decoding pseudowords (14 comparisons), 0.45 for reading miscellaneous words (23 comparisons), 0.23 for reading text orally (6 comparisons), 0.67 for spelling words (13 comparisons), and 0.51 for comprehending text (11 comparisons). ES for all measures together = 0.56 for kindergartners (7 comparisons), 0.54 for first graders (23 comparisons). All of these results were statistically significant at  $p < 0.05$ . Results were not reported separately for kindergartners and first graders for the six areas measured. The relatively small number of studies at the kindergarten level is partly the result of studies that were incorporated by the NRP into the meta-analysis on phonemic awareness (PA), which were therefore excluded from the phonics meta-analysis. The NRP notes that taking the PA studies measuring reading outcomes into account, “Combined, these findings clearly support the importance of teaching phonemic awareness and grade-appropriate phonics in kindergarten” (NICHHD, 2000, p. 2-115).

<sup>29</sup> ES = 0.49 for decoding regular words (17 comparisons), 0.52 for decoding pseudowords (13 comparisons), 0.33 for reading miscellaneous words (23 comparisons), and 0.24 for reading text orally (6 comparisons). All of these results were statistically significant at  $p < 0.05$ .

## Student categories

Phonics instruction has been shown to have a statistically significant positive impact across many student categories (NICHHD, 2000, p. 2-160):

- Kindergartners at risk of developing future reading problems<sup>30</sup>
- First-graders at risk<sup>31</sup>
- First-grade normally achieving readers<sup>32</sup>
- Second through sixth grade normally achieving readers<sup>33</sup>

Second through sixth graders identified as disabled readers<sup>34</sup>

- Children across various SES (socioeconomic status) levels<sup>35</sup>

## Research recommendations

### Range and scope of instruction

- **Grade level.** The NRP finding that phonics instruction benefited students in kindergarten, grade 1, and grades 2–6 (the majority of which were disabled readers) suggests a value to including phonics instruction at the kindergarten and first-grade levels and beyond, particularly for disabled readers.
- **Level at which phonics instruction begins.** The NRP meta-analysis found that phonics instruction in kindergarten and first grade was “much more effective” than phonics instruction that began in second grade or later, after students have learned to read independently (NICHHD, 2000, p. 2-93, emphasis added).
- **Letter knowledge as precursor.** Two developmental studies, drawing on and extending a body of existing research, suggest that knowledge of letter names and/or letter sounds is an important precursor to the earliest stages of reading knowledge. Muter et al. (2004) found that students’ ability to identify letter sounds and/or names on entering schooling (average age 4 years, 9 months) was one of two significant predictors, together with phoneme sensitivity, of word recognition ability a

year later (pp. 671–672).<sup>36</sup> Similarly, word recognition ability the following year (two years after the first set of tests) was significantly predicted by the three factors of earlier word recognition, letter knowledge, and phoneme sensitivity.<sup>37</sup> In another study involving five assessment rounds spread across kindergarten and first grade, Morris et al. (2003) determined that alphabet knowledge, defined as the ability to name 15 uppercase and lowercase letters, was the first of seven sets of tested reading-related skills to develop chronologically.<sup>38</sup> These findings suggest a possible value for the common practice of explicitly teaching letter names and sounds to students early in kindergarten. One note of caution: these findings are not based on research comparisons of a group of students exposed to such instruction and a similar group of students not so exposed. Thus, a causal link between teaching letter names and sounds to students early in kindergarten and later development of reading skills has not been firmly established from this research.

- **Instruction over multiple years.** Results of a few multi-year studies examined by the NRP “suggest that when phonics instruction is taught to children at the outset of learning to read and continued for 2 to 3 years, the children experience significantly greater growth in reading at the end of training than children who receive phonics instruction for only 1 year after 1st grade” (NICHHD, 2000, p. 2-118).<sup>39</sup>

<sup>30</sup> ES = 0.58 (6 comparisons),  $p < 0.05$ . Results were not reported separately for kindergarten students not at risk.

<sup>31</sup> ES = 0.74 (9 comparisons),  $p < 0.05$ .

<sup>32</sup> ES = 0.48 (14 comparisons),  $p < 0.05$ .

<sup>33</sup> ES = 0.27 (7 comparisons),  $p < 0.05$ .

<sup>34</sup> ES = 0.32 (17 comparisons),  $p < 0.05$ .

<sup>35</sup> ES = 0.66 for low SES (6 comparisons), 0.44 for middle SES (10 comparisons), 0.37 where the SES was varied (14 comparisons), and 0.43 where the SES was not given (32 comparisons);  $p < 0.05$  for all results.

<sup>36</sup> Standardized path coefficient for the effect of letter knowledge on word recognition = .63, based on a path analysis of factors from all three sets of tests. Chi square (24,  $N=90$ ) = 28.80, not significant, comparative fit index = 0.988, goodness of fit index = 0.941, root mean square error of approximation = 0.049 (90% confidence interval = 0.000 to 0.102) (p. 674).

<sup>37</sup> Standardized path coefficient for the effect of letter knowledge on word recognition = .22, based on a path analysis of factors predicting word recognition in the third set of assessments from factors in the second set of assessments. Chi square (2,  $N=90$ ) = 0.64, not significant, comparative fit index = 1.00, goodness of fit index = 0.998, root mean square error of approximation = 0.000 (90% confidence interval = 0.000 to 0.149) (p. 674).

<sup>38</sup> Structural equation modeling found that alphabet knowledge preceded beginning consonant awareness (standardized path coefficient of .42,  $p < .05$ ), which in turn preceded concept of word in text and spelling with beginning and ending consonants. These two factors in turn preceded phoneme segmentation, which preceded word recognition, which preceded contextual reading. Chi square (12df) = 44.23, goodness of fit index = .90, normed chi square = 3.69, comparative fit index = .90 (pp. 315–316). All of the standardized path coefficients were significant at  $p < .05$ .

<sup>39</sup> ES = 0.43 at the end of second grade for students who had received 2–3 years of phonics instruction (4 comparisons), v. 0.27 for “older children receiving only 1 year of phonics instruction in grades beyond 1st” (p. 2-118; number of comparisons not given). Because of the small number of comparisons, the results are described as “mainly suggestive” (p. 2-118).



## Instructional methods and features

- **Varieties of effective programs.** The NRP meta-analysis found small to moderate statistically significant effects that “did not differ statistically from each other” (NICHHD, 2000, p. 2-93) for several types of systematic and explicit phonics instructional programs. Included among these were “Synthetic phonics programs which emphasized teaching students to convert letters . . . into sounds . . . and then to blend the sounds to form recognizable words” (NICHHD 2000, pp. 2-93, 2-160).<sup>40</sup>
- **Spelling instruction.** An analysis of research commissioned by the NRC claimed that spelling instruction, in particular at the 2nd grade level, is important in building “phonemic awareness and knowledge of basic letter-sound correspondences” (Snow, Burns, & Griffin, 1998, p. 212).
- **Phonics instruction as means to an end.** Based on their interpretation of the research results, the NRP argued that phonics instruction (i.e., “the teaching of letter-sound relations”) should not be pursued as an end in itself, but should be directed toward the goal of helping students in their “daily reading and writing activities” (NICHHD, 2000, p. 2-96). Students should understand that this is the goal of learning letter-sounds, and should have practice in putting their skills to use.
- **Part of an integrated reading program.** Based on their interpretation of the research results, the NRP argued that phonics instruction “should be integrated with other reading instruction to create a balanced reading program” including vocabulary and literature (NICHHD, 2000, p. 2-97). Phonics “should not become the dominant component in a reading program, neither in the amount of time devoted to it nor in the significance attached” (NICHHD, 2000, p. 2-97).
- **Variable, guided by assessment.** Based on their interpretation of the research results, the NRP argued that, ideally, phonics instruction should be variable based on the needs of individual students as determined through assessment (NICHHD, 2000, pp. 2-96, 2-97). Similarly, the NRC research review argued that “intensity of instruction should be matched to children’s needs” in applying explicit instruction on the connection between phonemes and spellings (Snow, Burns, & Griffin, 1998, p. 321).

## Vocabulary

“Although a great deal of vocabulary is learned indirectly, some vocabulary should be taught directly.”

—Put Reading First (Armbruster, Lehr, & Osborn, 2003, p. 36)

### What is vocabulary?

*Vocabulary* is knowledge of the meaning, use, and pronunciation of individual words. It includes both *oral vocabulary*—words we use in speaking or recognize in listening—and *reading vocabulary*—words we use or recognize in print.

Vocabulary is a key component of comprehension. Before readers can understand the meaning of spoken or written text, they must know what most of the words mean.

### Why is vocabulary instruction important?

Much of our vocabulary knowledge comes from simple exposure to new words in context. However, research has verified that direct instruction in vocabulary—specifically teaching the meaning of new words, and teaching strategies for vocabulary building—has a positive impact on students’ language development.

- **Link between vocabulary development and reading comprehension.** According to the National Reading Panel (NRP), although a direct causal link between vocabulary development and reading comprehension has not been established by research, still a variety of studies “underscore the notion that comprehension gains and improvement on semantic tasks are results of vocabulary learning” (NICHHD, 2000, pp. 4-15, 4-20, citing 7 studies).<sup>41</sup> Similarly, a longitudinal study on early reading development among British schoolchildren found evidence that vocabulary knowledge, as tested at the start of the students’ first year of school, was one of three predictors of reading comprehension during the first year, as tested at the start of the students’ third year of school—a span of two school years (Muter et al., 2004).<sup>42</sup>

<sup>40</sup> ES = 0.45 overall for synthetic programs (39 comparisons). Among specific groups taught using synthetic programs, ES = 0.64 for kindergartners and first-graders at risk of developing future reading problems (9 comparisons), 0.54 for first-grade normally achieving readers (8 comparisons), 0.27 for second through sixth grade normally achieving readers (6 comparisons), and 0.36 for disabled readers (9 comparisons). All of these results are significant at  $p < 0.05$ .

<sup>41</sup> Beck, Perfetti, & McKeown, 1982; McKeown, Beck, Omanson, & Perfetti, 1983; Wixson, 1986; Carney, Anderson, Blackburn, & Blessing, 1984; Kameenui, Carnine, & Freschi, 1982; Stahl & Fairbanks, 1986; Medo & Ryder, 1993.

<sup>42</sup> Standardized path coefficient for the effect of vocabulary knowledge on reading comprehension = .16, based on a path analysis of factors from all three sets of tests. Chi square (2, N=90) = 3.92, not significant, comparative fit index = 0.992, goodness of fit index = 0.986, root mean square error of approximation = 0.104 (90% confidence interval = 0.000 to 0.257) (p. 675). Vocabulary knowledge was measured by the British Picture Vocabulary Scale II (Dunn, Dunn, Whetton, & Burley, 1997); reading comprehension was measured by the Neale Analysis of Reading Ability II (Neale, 1997). Note that vocabulary knowledge was measured in the first of three annual sets of assessments when students first entered school (average age four years nine months), but was not measured during the second set of assessments. Reading comprehension was measured during the third set of assessments. Thus, vocabulary knowledge from when students first entered school was still a significant predictor of reading comprehension two years later. This held true “even when the effects of early word recognition, phoneme sensitivity, and letter knowledge were controlled” (p. 678). Other significant predictors of reading comprehension were word recognition and grammatical awareness, from the second set of assessments.

- **Effects on specific skill areas.** According to a review of research on early childhood reading commissioned by the National Research Council (NRC), “Vocabulary instruction generally does result in measurable increase in students’ specific word knowledge. Sometimes and to some degree it also results in better performance on global vocabulary measures, such as standardized tests, indicating that the instruction has evidently enhanced the learning of words beyond those directly taught. Second, pooling across studies, vocabulary instruction also appears to produce increases in children’s reading comprehension” (Snow, Burns, & Griffin, 1998, p. 217).

## Who benefits from vocabulary instruction?

Most of the studies reviewed by the NRP occurred within the grades 3–8 range, with only a few studies addressing vocabulary instruction before grade 3. At least five studies reviewed by the NRP supported vocabulary instruction by the third-grade level.<sup>43</sup> The NRC report expanded the grade range of students who can benefit from vocabulary instruction, advocating direct instruction in vocabulary development for “children who have started to read independently, typically second graders and above” so that they will “sound out and confirm the identities of visually unfamiliar words” (Snow, Burns, & Griffin, 1998, p. 322).

It is worth noting that these research findings and recommendations relate specifically to reading vocabulary, and are thus dependent on the development of independent reading skills. In contrast, development of children’s oral vocabulary starts much earlier—as soon as children can begin to understand spoken language. Although the NRP research did not cover development of oral vocabulary per se, the NRP analysis underscored the fact that development of reading ability is dependent on oral vocabulary: in order for students to understand a word once it has been decoded, it must already be part of their vocabulary (NICHHD, 2000, p. 4-15). Similarly, the NRC report argues that “Learning new concepts and the words that encode them is essential for comprehension development” (Snow, Burns, & Griffin, 1998, p. 217). Based on these factors, it seems reasonable to conclude that even before students can read independently, direct methods for building oral vocabulary may help contribute to students’ ultimate success in reading.

## Research Recommendations

### *Range and Scope of Instruction*

- **Grade levels.** Given the NRP research findings related to effectiveness of vocabulary instruction at third grade and above, and the NRC recommendations for direct instruction in vocabulary at second grade, instruction in vocabulary seems appropriate by the second- and third-3rd grade levels. Before that point, exposure to new words and concepts through oral vocabulary development is a worthwhile goal, since “Even at the youngest ages, the ability to understand and remember the meanings of new words depends quite strongly on how well developed one’s vocabulary already is” (Snow, Burns, & Griffin, 1998, p. 217, citing Robbins & Ehri, 1994).

### *Instructional Methods and Features*

- **Multiple strategies, incorporating direct and indirect vocabulary instruction.** Based on research surveyed by the NRP, “It is clear that vocabulary should be taught both directly and indirectly”—that is, using both explicit instruction in vocabulary and methods of decoding word meanings, on the one hand, and more contextual approaches to exposing students to vocabulary on the other (NICHHD, 2000, p. 4-24). Based on both the research results it reviewed and theoretical considerations, the NRP further recommended that reading instruction include a combination of different strategies, both direct and indirect, for building vocabulary, rather than relying on only one method (NICHHD, 2000, p. 4-27).
- **Specific instructional methods.** The NRP found that a variety of instructional methods led to improvements in student vocabulary, including Deriving meaning from context (NICHHD, 2000, p. 4-23, citing 2 studies)<sup>44</sup> and a combination of context-based and definitional approaches (NICHHD, 2000, p. 4-23, citing 2 studies)<sup>45</sup> “Restructuring the task” of learning new words in a variety of different ways, such as providing redundant information and providing sample sentences along with definitions (NICHHD, 2000, pp. 4-22–4-23, citing 7 studies)<sup>46</sup> Direct instruction in “vocabulary items that are required for a specific text to be read as part of the lesson” (NICHHD, 2000, pp. 4-24–4-25, citing 4 studies).<sup>47</sup> This includes pre-instruction of vocabulary before the reading or lesson (p. 4-25, citing 3 studies).<sup>48</sup>

<sup>43</sup> Heise, Papalewis, & Tanner, 1991; Levin, Levin, Glasman, & Nordwall, 1992; Eldredge, 1990; Gipe & Arnold, 1979; Rinaldi, Sells, & McLaughlin, 1997.

<sup>44</sup> Gipe & Arnold, 1979; Tomsen & Aarnoutse, 1998.

<sup>45</sup> Kolich, 1991; Stahl, 1983.

<sup>46</sup> Kameenui, Carnine, & Freschi, 1982; Gordon, Schumm, Coffland, & Doucette, 1992; Schwartz & Raphael, 1985; Scott & Nagy, 1997; Wu & Solman, 1993; Eldredge, 1990; Malone & McLaughlin, 1997.

<sup>47</sup> Tomsen & Aarnoutse, 1998; White, Graves, & Slater, 1990; Dole, Sloan, & Trathen, 1995; Rinaldi, Sells, & McLaughlin, 1997.

<sup>48</sup> Brett, Rothlein, & Hurley, 1996; Wixson, 1986; Carney, Anderson, Blackburn, & Blessing, 1984.



- **Storybook reading.** A body of research evidence shows that “reading storybooks aloud to young children . . . results in reliable gains in incidental word acquisition” (Ewers & Brownson, 1999, p. 12, citing 5 additional studies).<sup>49</sup>
- **Characteristics of effective instructional methods.** Summarizing the characteristics of instructional methods that were found to be effective according to the research surveyed, the NRP identified several factors, including the following:
 

“Richness of context in which words are to be learned,” including “extended and rich instruction of vocabulary (applying words to multiple contexts, etc.)” (NICHD, 2000, pp. 4-22, 4-27). Along similar lines, the NRC report cites a review of studies in which “methods in which children were given both information about the words’ definitions and examples of the words’ usages in a variety of contexts resulted in the largest gains in both vocabulary and reading comprehension,” compared to drill and practice (Snow, Burns, & Griffin, 1998, pp. 217–218, citing Stahl & Fairbanks, 1986). The NRP further recommended that vocabulary items should be “derived from content learning materials” and likely to appear in a variety of other contexts as well (NICHD, 2000, p. 4-25).

“Active student participation,” including activities such as student-initiated talk in the context of listening to storybooks (NICHD, 2000, pp. 4-21, 4-26, 4-27). This calls for active student participation supported by the findings of Ewers and Brownson (1999), who reported on a study in which a storybook with 10 targeted vocabulary words was read aloud individually to 66 kindergarteners. After each sentence that included a targeted vocabulary word, readers either would “recast” the target word using a familiar synonym (e.g., after reading “He is wearing his favorite fedora,” the reader would say, “He is wearing his favorite hat”), or would ask a *what* or *where* question (e.g., “What was he wearing?” with a follow-up question asking “What was the word I used?” if the student answered with a synonym). Pretest-posttest comparison found that students in both treatments learned a significant number of the targeted vocabulary words; however, students in the active (question-answering) treatment learned significantly more words than those in the passive treatment.<sup>50</sup> This result was true both of students with a high phonological working memory and of those with a low phonological working memory.<sup>51</sup>

“High frequency and multiple, repeated exposures to vocabulary material” (NICHD, 2000, p. 4-22)
- **Assessment.** Both the NRP and the NRC report included specific research-based recommendations related to assessment.

The NRC report recommended that “Because the ability to obtain meaning from print depends so strongly on the development of word recognition accuracy,” this skill “should be regularly assessed in the classroom, permitting timely and effective instructional response” (Snow, Burns, & Griffin, 1998, p. 323).

Based on the variety of measures used to assess student vocabulary and the different results those measures can achieve, the NRP recommended that vocabulary be assessed in multiple ways in the classroom. In particular, they argued that “the more closely the assessment matches the instructional context, the more appropriate the conclusions about the instruction will be” (NICHD, 2000, p. 4-26).

## Comprehension

“Text comprehension can be improved by instruction that helps readers use specific comprehension strategies.”

—*Put Reading First* (Armbruster, Lehr, & Osborn, 2003, p. 49)

### What is text comprehension?

Comprehension is often identified as the primary goal of reading: children and adults *read* in order to *understand*. If children can “read” words but cannot understand them, they are merely decoding. Real reading requires understanding. Over the past 30 years, reading researchers have come to understand that such comprehension is not merely passive, but is the result of active involvement on the part of the reader.

### Why is text comprehension instruction important?

Researchers have identified a variety of strategies effective readers use in order to actively comprehend texts. Additional research has verified the positive impact of teaching such strategies to students as a means of improving comprehension.

- **Effectiveness of comprehension instruction.** In examining research on reading comprehension instruction, the National Reading Panel (NRP) identified 16 broad categories, or methods, of comprehension instruction. Of these, seven methods were identified as having “a firm scientific basis for concluding that they improve comprehension in normal readers” (NICHD, 2000, p. 4-42)—demonstrating that comprehension can be improved through explicit, formal instruction. **Five of these methods were in use by the third-grade level, and are thus research-verified as appropriate and effective for instruction in the early elementary grades.** Similarly, a review of research on early childhood reading commissioned by the National Research Council (NRC) concluded that “Explicit instruction in comprehension strategies has been shown to lead to improvement” (Snow, Burns, & Griffin, 1998, p. 322).

<sup>49</sup> Eller, Pappas, & Brown, 1988; Elley, 1989; Leung & Pikulski, 1990; Senechal, 1997; Senechal & Cornell, 1993.

<sup>50</sup>  $F(1, 62) = 19.59, p < .01$  (p. 15).

<sup>51</sup>  $F(1, 62) = 18.60, p < .001$  (p. 16). Level of phonological working memory was determined by administration of the Children’s Test of Nonword Repetition (CNRep) (p. 14, citing Gathercole, Willis, Baddeley, & Emslie, 1994).

- **Effects on specific skill areas.** According to the NRP, research “favors the conclusion that teaching of a variety of reading comprehension strategies leads to increased learning of the strategies, to specific transfer of learning, to increased memory and understanding of new passages, and, in some cases, to general improvements in comprehension” (NICHHD, 2000, p. 4-52).

## Who benefits from text comprehension instruction?

- **Grade levels.** The NRP’s review of research verified the effectiveness of some methods of text comprehension instruction as early as grades 2-3, ranging up to grade 9. The NRC, based on its interpretation of the research evidence, recommended such instruction as early as the kindergarten and first-grade levels, advocating explicit instruction on text comprehension “throughout the early grades” (Snow, Burns, & Griffin, 1998, p. 323).

## Research Recommendations

### Range and Scope of Instruction

- **Early grades.** According to the NRC report recommendations for reading instruction in grades K-3, “Throughout the early grades, reading curricula should include explicit instruction on strategies such as summarizing the main idea, predicting events and outcomes of upcoming text, drawing inferences, and monitoring for coherence and misunderstandings. This instruction can take place while adults read to students or when students read [to] themselves” (Snow, Burns, & Griffin, 1998, p. 323).
- **Grade levels for comprehension strategies.** Of the seven instructional methods verified by the NRP as having a research base, one (comprehension monitoring) was in use by grade 2 in the studies examined, and an additional four were in use by grade 3. The NRP concluded that “the instruction of comprehension appears to be effective on grades 3 through 6” (NICHHD, 2000, p. 4-51). This suggests a solid research base for including comprehension instruction as part of the reading curriculum by the third-grade level.

In addition to this NRP-verified research base in the upper elementary grades, many research-based instructional recommendations, such as those from the NRC, and many state standards call for explicit comprehension instruction at earlier grades as well. Such instruction may help to build a foundation for development of such skills in later grades. It is worth noting that the lack of NRP verification for comprehension instruction at the K-2 levels appears to reflect a scarcity of reputable research on comprehension instruction at these grade levels—a lack of evidence, as opposed to negative or ambivalent evidence.

### Instructional Methods and Features

- **Specific effective methods.** Methods that were identified by the NRP as having “a firm scientific basis for concluding that they improve comprehension in normal readers” (NICHHD, 2000, p. 4-42) and that were used by grade 3 in the research studies included the following:

Question answering (17 studies, mostly grades 3-5), in which teachers ask questions about the text<sup>52</sup>

Question generation (27 studies, grades 3-9), in which students “generate questions during reading” (NICHHD, 2000, p. 4-45)<sup>53</sup>

Story structure (17 studies, grades 3-6), in which students are instructed in the “content and organization of stories,” including use of graphic organizers in conjunction with story content and structure (NICHHD, 2000, p. 4-45)<sup>54</sup>

Comprehension monitoring (22 studies, grades 2-6), in which students learn how to monitor their own understanding of texts using procedures such as think-aloud<sup>55</sup>

<sup>52</sup> Anderson & Biddle, 1975; Ezell et al., 1992; Fischer, 1973; Garner, Hare, Alexander, Haynes, & Winograd, 1984; Garner, Macready, & Wagoner, 1984; Griffey et al., 1988; Levin & Pressley, 1981; Pressley & Forrest-Pressley, 1985; Raphael & McKinney, 1983; Raphael & Pearson, 1985; Raphael & Wonnacott, 1985; Richmond, 1976; Rowls, 1976; Serenty & Dean, 1986; Sheldon, 1984; Watts, 1973; Wixson, 1983.

<sup>53</sup> Blaha, 1979; Brady, 1990; Cohen, 1983; Davey & McBride, 1986; Dermody, 1988; Dreher & Gambrell, 1985; Hansen & Pearson, 1983; Helfeldt & Lalik, 1976; King, 1989; King, 1990; King, 1992; Labercane & Battle, 1987; Lonberger, 1988; Lysynchuk, Pressley, & Vye, 1990; MacGregor, 1988; Manzo, 1969; Nolte & Singer, 1985; Palinscar, 1987; Palinscar & Brown, 1984; Ritchie, 1985; Short & Ryan, 1984; Simpson, 1989; Singer & Donlan, 1982; Smith, 1977; Taylor & Frye, 1992; Williamson, 1989; Wong & Jones, 1982.

<sup>54</sup> Baumann & Bergeron, 1993; Buss, Ratliff, & Irion, 1985; Fitzgerald & Spiegel, 1983; Gordon & Rennie, 1987; Greenwald & Rossing, 1986; Griffey et al., 1988; Idol, 1987; Idol & Croll, 1987; Nolte & Singer, 1985; Omanson, Beck, Voss, McKeown, et al., 1984; Reutzel, 1984; Reutzel, 1985; Reutzel, 1986; Short & Ryan, 1984; Singer & Donlan, 1982; Spiegel & Fitzgerald, 1986; Varnhagen & Goldman, 1986.

<sup>55</sup> Babbs, 1984; Baker & Zimlin, 1989; Baumann, Seifert-Kessell, & Jones, 1992; Block, 1993; Carr, Dewitz, & Patberg, 1983; Cross & Paris, 1988; Elliot-Faust & Pressley, 1986; Hasselhorn & Koerke, 1986; Markman, 1977; Miller, 1985; Miller, 1987; Miller, Giovenco, & Rentiers, 1987; Nelson et al., 1996; Paris, Cross, & Lipson, 1984; Paris & Jacobs, 1984; Paris, Saarnio, & Cross, 1986; Payne & Manning, 1992; Schmitt, 1988; Schunk & Rice, 1984; Schunk & Rice, 1985; Silven, 1992; Tregaskes & Daines, 1989.

Cooperative learning (10 studies, grades 3–6), in which “peers instruct or interact over the use of reading strategies” (NICHHD, 2000, p. 4-45)<sup>56</sup>

- **Multiple strategies.** In looking at 36 studies featuring instruction that combined a variety of different comprehension methods, the NRP concluded that “considerable success has been found in improving comprehension by instructing students on the use of more than one strategy during the course of reading” (NICHHD, 2000, p. 4-47).<sup>57</sup> One particular advantage of this approach is its ability to guide students through the kind of “coordinated and flexible use of several different kinds of strategies” that is required for skilled reading (NICHHD, 2000, p. 4-47).
- **Instructional model.** In its discussion of the research, the NRP identified a four-part model for building student comprehension strategies in which “teachers demonstrate, explain, model, and implement interaction with students in teaching them how to comprehend a text” (NICHHD, 2000, p. 4-47, citing 6 studies).<sup>58</sup>
- **Regular assessment.** According to the NRC report, “Conceptual knowledge and comprehension strategies should be regularly assessed in the classroom, permitting timely and effective instructional response where difficulty or delay is apparent” (Snow, Burns, & Griffin, 1998, p. 323).

## Fluency

“Repeated and monitored oral reading improves reading fluency and overall reading achievement.”

—*Put Reading First* (Armbruster, Lehr, & Osborn, 2003, p. 24)

### What is fluency?

Fluency is the ability to read text quickly, accurately, and with expression. It provides a bridge between word recognition and comprehension. Fluency includes word recognition, but extends beyond knowledge of individual words to reflect the meaningful connections among words in a phrase or sentence. Fluent readers are able to recognize words and comprehend them simultaneously.

### Why is fluency instruction important?

Fluency is widely acknowledged to be a critical component of skilled reading. A study conducted by the National Assessment of Educational Progress (NAEP) found a “close relationship between fluency and reading comprehension” (NICHHD, 2000, p. 3-1, citing Pinnell et al., 1995). More generally, a National Research Council report stated that “adequate progress in learning to read English beyond the initial level depends on . . . sufficient practice in reading to achieve fluency with different kinds of texts written for different purposes” (Snow, Burns, & Griffin, 1998, p. 223). Additional evidence of this link between fluency and the development of general reading ability, particularly reading comprehension, is provided by several studies that found student performance on fluency assessments was an effective predictor of their performance on other types of reading measures.<sup>59</sup>

It is generally agreed that fluency results from reading practice. However, approaches to developing fluency have ranged from simply encouraging independent reading to more structured approaches to oral reading practice, designed to guide students toward developing specific fluency skills (e.g., reading with expression). In reviewing the research on fluency instruction, the National Reading Panel (NRP) found value in approaches that incorporated repeated oral reading, guided or unguided, as opposed to less focused attempts to encourage reading in general.

- **Repeated oral reading instruction has a positive overall effect on reading.** A meta-analysis by the NRP found that fluency instruction in the form of repeated oral reading (guided or unguided) “had a consistent, and positive impact on word recognition, fluency, and comprehension as measured by a variety of test instruments and at a range of grade levels” (NICHHD, 2000, p. 3-3). The weighted average of these effect sizes resulted in a moderate effect on student reading (NICHHD, 2000, p. 3-16).<sup>60</sup>
- **Repeated oral reading instruction has a positive impact on specific skill areas.** The NRP meta-analysis found that repeated oral reading had a moderate effect on reading accuracy, a somewhat less strong effect on reading fluency, and a smaller effect on reading comprehension (NICHHD, 2000, pp. 3-3, 3-18).<sup>61</sup>

<sup>56</sup> Bramlett, 1994; Guthrie et al., 1996; Judy, Alexander, Kulikowich, & Wilson, 1988; Klingner, Vaughn, & Schumm, 1998; Mathes et al., 1994; Pickens & McNaughton, 1988; Soriano, Vidal-Abarca, & Miranda, 1996; Stevens, Madden, Slavin, & Farnish, 1987; Stevens, Slavin, & Farnish, 1991; Uitero, 1988.

<sup>57</sup> Adams, Carnine, & Gersten, 1982; Anderson & Roit, 1993; Blanchard, 1980; Brady, 1990; Brown, Pressley, Van Meter, & Schuder, 1996; Carnine & Kinder, 1985; Carr, Bigler, & Moringstar, 1991; Chan & Cole, 1986; Dermody, 1988; Fischer Galbert, 1989; Gilroy & Moore, 1988; Grant, Elias, & Broerse, 1989; Jacobs & Paris, 1987; Jones, 1987; Kelly, Moore, & Tuck, 1994; Klingner, Vaughn, & Schumm, 1998; Laberane & Battle, 1987; Loranger, 1997; Lysynchuk, Pressley, & Vye, 1990; Padron, 1985; Palinscar, 1987; Palinscar & Brown, 1984; Palinscar, David, Winn, & Stevens, 1991; Pelow & Colvin, 1983; Reutzel & Hollingsworth, 1991a; Reutzel & Hollingsworth, 1991b; Rich, 1989; Ritchie, 1985; Rush & Milburn, 1988; Shortland-Jones, 1986; Sindelar, 1982; Smith, Johnson, & Johnson, 1981; Soriano, Vidal-Abarca, & Miranda, 1996; Stevens, 1988; Taylor & Frye, 1992; Williamson, 1989.

<sup>58</sup> Palinscar & Brown, 1984; Rosenshine, Meister, & Chapman, 1996; Rosenshine & Meister, 1994; Bereiter & Bird, 1985; Block, 1993; Brown, Pressley, Van Meter, & Schuder, 1996.

<sup>59</sup> Barger, 2003; Buck & Torgesen, 2003; Fuchs, Fuchs, Eaton, & Hamlett, 2000; Fuchs, Fuchs, Hosp, & Jenkins, 2001; Fuchs, Fuchs, & Maxwell, 1988; Good, Simmons, & Kame'enui, 2001; Jenkins, Fuchs, van den Broek, Espin, & Deno, 2003; Shaw & Shaw, 2002; Wilson, 2005. For additional information on results of these studies, see below under Validity of oral reading fluency measures.

<sup>60</sup> Weighted ES = 0.41, based on 14 studies incorporating 99 comparisons. Weighting reflected the number of subjects per study (i.e., studies with larger numbers of subjects weighted more than studies with smaller numbers of subjects). The NRP meta-analysis for fluency did not report statistical significance or p-values.

<sup>61</sup> Weighted ES = 0.55 for word recognition (11 comparisons from 8 studies), 0.44 for fluency (35 comparisons from 10 studies), and 0.35 for comprehension (49 comparisons from 12 studies).

- **In contrast, encouraging children to read on their own has no research-verified impact on reading achievement.** The NRP reviewed research studies on attempts to build fluency through encouraging independent student reading; most of these were studies of sustained silent reading. It found that the body of research failed to confirm any positive effects (NICHHD, 2000, pp. 3-3, 3-24–3-26, citing 14 studies).<sup>62</sup>

## Who benefits from fluency instruction?

Analysis of grade levels covered by the studies in the NRP meta-analysis led to the conclusion that “repeated reading procedures have a clear impact” on reading ability among

- “Nonimpaired readers at least through grade 4”
- “Students with various kinds of reading problems throughout high school” (NICHHD, 2000, p. 3-17)

## Research recommendations

### *Range and scope of instruction*

- **Grade level.** The NRP research findings suggest a value to including fluency instruction in the form of repeated oral reading procedures at least through the fourth grade level, and possibly beyond in a supporting capacity for students with reading problems. A review of research on early childhood reading commissioned by the National Research Council (NRC) identified fluency instruction as a key component of first-1st grade instruction and argued that “throughout the early grades, time, materials, and resources should be provided” for both daily independent reading and daily supported reading and rereading (Snow, Burns, & Griffin, 1998, p. 195). However, the NRC did not cite specific studies as the basis for recommending that such activities occur daily.

### *Instructional methods and features*

- **Effective methods.** Small sample sizes in studies reviewed by the NRP made it impossible to compare the effectiveness of different methods that fell within the category of repeated (guided or unguided) oral reading. However, some of the methods that produced “clear improvement” (NICHHD, 2000, p. 3-15) included the following:

Repeated readings (set number of repetitions, set amount of time, or until fluency criteria were reached) (NICHHD, 2000, p. 3-15, citing 9 studies)<sup>63</sup>

Repeated readings “combined with other [guiding] procedures such as a particular type of oral reading feedback . . . or phrasing support for the reader” (NICHHD, 2000, p. 3-15, citing 2 studies)<sup>64</sup>

Practice of oral reading “while listening to the text being read simultaneously” (NICHHD, 2000, p. 3-15, citing 3 studies)<sup>65</sup>

- **Oral reading practice.** In the NRP’s description of effective repeated oral reading programs, the NRP stated that many of these programs provided increased oral reading practice “through the use of one-to-one instruction, tutors, audiotapes, peer guidance, or other means,” compared to earlier approaches (NICHHD, 2000, p. 3-11).
- **Incorporation of independent reading.** The report commissioned by the NRC identified independent reading, whether silent or spoken, as a key strategy for helping students develop fluency. Such reading requires that students read texts at the appropriate instructional level, neither too easy nor too difficult (i.e. at the instructional level) (Snow, Burns, & Griffin, 1998, p. 213). In light of the NRP research results, this recommendation should be considered not as an alternative to repeated oral reading, but as a supplement to it.
- **Part of a larger reading program context.** According to the NRP, in all of the programs reviewed, “the fluency work was only part of the instruction that students received” (NICHHD, 2000, p. 3-20). They cited a study cautioning against too much focus on fluency issues as a potential distraction from reading comprehension, then concluded that repeated oral reading should occur “in the context of an overall reading program, not as stand-alone interventions” (NICHHD, 2000, p. 3-20, citing Anderson, Wilkinson, & Mason, 1991).
- **Regular assessment.** Based on the research, the NRP recommended that “teachers should assess fluency regularly,” using both formal and informal methods (NICHHD, 2000, p. 3-4). Such informal methods can include “reading inventories . . . miscue analysis . . . pausing indices . . . running records . . . and reading speed calculations” (NICHHD, 2000, p. 3-9, citing 5 studies).<sup>66</sup> Similarly, the NRC report recommended that “because the ability to obtain meaning from print depends so strongly on the development of . . . reading fluency,” fluency “should be regularly assessed in the classroom, permitting timely and effective instructional response” (Snow, Burns, & Griffin, 1998, p. 323).

<sup>62</sup> Evans & Townner, 1975; Reutzel & Hollingsworth, 1991a; Collins, 1980; Langford & Allen, 1983; Cline & Kretke, 1980; Davis, 1988; Holt & O’Tuel, 1989; Burley, 1980; Summers & McClelland, 1982; Manning & Manning, 1984; Morrow & Weinstein, 1986; Peak & Dewalt, 1994; Vollands, Topping, & Evans, 1999; Carver & Leibert, 1995. These studies were not considered to be of sufficiently high quality and quantity to conduct a meta-analysis.

<sup>63</sup> Faulkner & Levy, 1999; Levy, Nicholls, & Kohen, 1993; Neill, 1979; O’Shea, Sindelar, & O’Shea, 1985; Rasinski, 1990; Sindelar, Monda, & O’Shea, 1990; Stoddard, Valcante, Sindelar, O’Shea, & Algozzine, 1993; Turpie & Paratore, 1995; VanWagenen, Williams, & McLaughlin, 1994.

<sup>64</sup> Reitsma, 1998; Taylor, Wade, & Yekovich, 1985.

<sup>65</sup> van Bon, Boksebeeld, Font Freide, & van den Hurk, 1991; Rasinski, 1990; Smith, 1979.

<sup>66</sup> Johnson, Kress, & Pikulski, 1987; Goodman & Burke, 1972; Pinnell et al., 1995; Clay, 1972; Hasbrouck & Tindal, 1992.



- **Validity of oral reading fluency measures.** According to Hasbrouck and Tindal (in press), measuring student oral reading fluency in terms of words correct per minute “has been shown, in both theoretical and empirical research, to serve as an accurate and powerful indicator of overall reading competence, especially in its correlation with comprehension. The validity and reliability of these measures has been well established in a body of research extending over the past 25 years” (citing Fuchs, Fuchs, Hosp, & Jenkins, 2001; Shinn, 1998). For example, Fuchs et al. (2001) summarized research showing that measures of oral reading fluency involving text passages that were several paragraphs in length corresponded well with “traditional, commercial, widely used tests of reading comprehension” (p. 243), and were superior in this regard to reading words from a list,<sup>67</sup> measures of silent fluency,<sup>68</sup> and more direct measures of reading comprehension.<sup>69</sup> More specifically, several studies have shown that third-grade tests of oral reading fluency from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) correlated well to high-stakes reading assessments from Arizona,<sup>70</sup> Colorado,<sup>71</sup> Florida,<sup>72</sup> North Carolina,<sup>73</sup> and Oregon.<sup>74</sup>

- **Oral reading fluency norms.** Based on analysis of assessment data from a pool ranging from approximately 3,500 to over 20,000 students collected between 2000 and 2005, Hasbrouck and Tindal (in press) have developed a new set of oral reading fluency norms to replace the widely used norms that were published in 1992 (Hasbrouck & Tindal, 1992). The new norms “align closely with both those published in 1992, and also closely match the widely used DIBELS norms . . . and those developed by Edformation with their AIMSweb system . . . with few exceptions.” These new norms cover grades 1–8 and provide information for 90th, 75th, 50th, 25th, and 10th percentile rankings. The researchers also provided

specific norm-related recommendations for using oral reading results for screening, diagnosis, and monitoring student progress:

- **Screening.** According to the authors, “fluency-based assessments have been proven to be efficient, reliable, and valid indicators of reading proficiency when used as screening measures” (citing Fuchs et al., 2001; Good, Simmons, & Kame’enui, 2001).

For screening in grades 2–8, the authors recommended that “a score falling within 10 words above or below the 50th percentile should be interpreted as within the normal, expected, and appropriate range for a student at that grade level at that time of year.”

For screening in grade 1, the authors recommended following guidelines established by Good et al. (2002) that identified students reading at or above 40 words correct per minute (wcpm) by the end of the school year as being “at low risk of reading difficulty,” students reading at 20–40 wcpm as being “at some risk,” and students reading below 20 wcpm as being “at high risk of failure.”

<sup>67</sup> Jenkins, Fuchs, van den Broek, Espin, & Deno (2003) compared measures of oral reading fluency of (a) connected text (a folktale) and (b) a context-free word list (list of words from the folktale) to performance on the Iowa Test of Basic Skills (ITBS) subtest for reading comprehension for 113 fourth-graders. They found that speed of oral reading from the folktale correlated more strongly to the ITBS score than did speed of oral reading from the word list (criterion validity coefficients of .83 and .54, respectively; the difference was statistically significant,  $t(110) = 7.86, p < .001$ ) (p. 723).

<sup>68</sup> Fuchs, Fuchs, Eaton, & Hamlett (2000) compared measures of oral and silent reading speed with “the number of questions answered correctly on the passages that had been read” and with the raw score on the Iowa Test of Basic Skills (ITBS) subtest for reading comprehension (Fuchs et al., 2001, p. 247, summarizing Fuchs et al., 2000). They found that “for silent reading, the correlation with the questions answered on the passage was .38, and with the Iowa test, it was .47. For oral reading, the correlation with the passage questions was .84, and with the Iowa test, it was .80. So, correlations for the oral reading fluency score were substantially and statistically significantly higher than for the silent reading fluency scores” (Fuchs et al., 2001, p. 247; p-values not reported).

<sup>69</sup> Fuchs, Fuchs, & Maxwell (1988) compared measures of oral reading fluency, short-answer question answering, passage recall, and cloze (all based on the same 400-word passages) with the Reading Comprehension subtest of the Stanford Achievement Test for 70 middle school and junior high school students with reading disabilities. They found that “criterion validity coefficients (average correlations across the different scoring methods) for the question answering, the recall, and the cloze measures were .82, .70, and .72, respectively. The coefficient for oral reading fluency was .91. Tests for differences between these correlations demonstrated that the correlation for oral reading fluency was significantly higher than the correlation for each of the three direct measures of reading comprehension” (Fuchs et al., 2001, p. 244, summarizing Fuchs et al., 1988; p-values not reported). Additionally, according to Fuchs et al. (2001), “high correlations have also been documented for nondisabled elementary school age children within a variety of studies that (a) incorporated different criterion measures of reading accomplishment, (b) examined within-grade as well as across-grade coefficients, and (c) used instructional level as well as a fixed level of text across students” (p. 245, citing as research reviews Hosp & Fuchs, 2000; Marston, 1989).

<sup>70</sup> “The correlation between [Arizona Instrument to Measure Standards] and [DIBELS oral reading fluency assessment] for the overall group was . . .  $r = .741$ ,” based on scores of 241 third-graders (Wilson, 2005; p-value not reported).

<sup>71</sup> The DIBELS oral reading fluency assessment was administered three times: in fall, winter, and spring. The fall and winter administrations each had a correlation coefficient of .73 with the spring assessment of the Colorado State Assessment Program (CSAP). The spring administration of DIBELS oral reading fluency assessment had a correlation of .80 with CSAP (Shaw & Shaw, 2002; p-values not reported). Each correlation was based on the scores of more than 50 third-graders.

<sup>72</sup> “There was a significant correlation between [DIBELS oral reading fluency] scores and reading [Florida Comprehensive Assessment Test–Sunshine State Standards] scores ( $r = .70, p < .001$ ) . . . and reading scores on the [Florida Comprehensive Assessment Tests norm-referenced test] ( $r = .74, p < .001$ ),” based on scores of 1,102 third-grade students (Buck & Torgesen, 2003).

<sup>73</sup> “The correlation between [DIBELS oral reading fluency] Spring scores and [North Carolina] End of Grade reading scores was . . .  $r = .73$ ,” based on scores of 38 third-grade students (Barger, 2003; no p-value reported).

<sup>74</sup> The correlation coefficient between DIBELS oral reading fluency assessment and the Oregon Statewide Assessment was .67 (45% of variance explained,  $p < .001$ ), based on the scores of 364 third-graders (Good, Simmons, & Kame’enui, 2001, p. 275).

- **Diagnosis.** According to the authors, oral reading fluency norms “can play a useful role in diagnosing possible problems that are primarily fluency based.”

For diagnosis of fluency problems, the authors recommended procedures that “are similar to those for screening, except here the level of materials should reflect the student’s instructional reading level, rather than [the] grade level,” with instructional level defined as text that is “challenging but manageable . . . with no more than approximately one in ten difficult words (90% success)” (citing Partnership for Reading, 2001). This allows teachers to determine if students’ fluency is appropriate to their reading level. Hasbrouck and Tindal do not suggest that an oral reading fluency assessment should be the only method of diagnosing reading problems; rather, such an assessment can be used along with other procedures (e.g., miscue analysis).

- **Monitoring progress.** According to the authors, oral reading fluency measures “have been found by many educators to be better tools for making decisions about students’ progress than traditional standardized measures which can be time-consuming, expensive, are only administered infrequently, and have limited instructional utility” (citing Good et al., 2001; Tindal & Marston, 1990). Fuchs et al. (2001) provided a similar, research-based description of how oral reading fluency can be used to monitor student progress, both across and within individual student performance.

For monitoring student progress, Hasbrouck and Tindal (in press) recommended that students scoring within 10 wcpm of the 50th percentile at or above grade level should be “considered as making adequate progress in reading, unless there are other indicators that would raise concern.” Such students “may only need to have their reading progress monitored a few times per year to determine if they are meeting the benchmark standards that serve as predictors of reading success.”

For students reading below grade level, the authors suggested more frequent oral reading fluency assessments: once or twice monthly to once a week, depending on the severity of the problem, with scores graphed against goals and with adjustments to the instructional program if a student falls short of needed progress for three or more consecutive assessments (citing Hasbrouck et al., 1999).

## Assessment and the Five Essential Elements of Reading Instruction

### General Conclusions

General conclusions that can be reached about assessment based on the recommendations of the National Reading Panel (NRP) and the National Research Council (NRC) reports include the following:

- **Assessment should guide instruction.** This was mentioned in combination with each of the five areas.
- **Assessment should be frequent and/or regular.** This was explicitly mentioned for most of the areas.
- **Assessment should use appropriate measures.** This was particularly a concern with fluency and vocabulary.

### Area-Specific Conclusions

- **Phonemic awareness (PA)–kindergarten assessment based on phoneme recognition; guidance by initial and ongoing assessment at 1st and 2nd grades.** A study of kindergartners suggested that PA assessment at this level should focus on phoneme recognition. Additionally, the NRP recommended, based on its research findings, an instructional design in which assessment results drive PA instruction at the 1st and 2nd grade levels, both initially and through ongoing formative assessments. All these research-based recommendations are described in more detail below.

**Assessment for kindergartners based on phoneme recognition.** A study of Dutch children analyzing the relationship among several different assessments of PA found that a group-administered phoneme recognition assessment was the “best paper and pencil representative” of PA skill in kindergarten,<sup>75</sup> and that it “equals phoneme segmentation” (an individually administered assessment) in “sensitivity and specificity when predicting later literacy failure” (van Bon & van Leeuwe, 2003, p. 195).<sup>76</sup> These findings suggest that a group-administered assessment based on phoneme recognition can serve as a useful screening tool for identifying the general level of students’ PA skills in kindergarten, which in turn is a useful indicator of students who might need targeted PA skills intervention.

<sup>75</sup> A confirmatory structural analysis using linear structured relations (LISREL) was conducted on assessments administered in May/June of kindergarten (Time 1) and March of grade 1 (Time 2), producing a factor loading score for each of eight PA assessments carried out during the Time 1 administration (four of which were also repeated at Time 2). The analysis also included an Early Reading Test at Time 1 and a spelling test and two portions of the Three-Minute Test (a standardized word reading test) at Time 2. The highest loading factor among Time 1 PA tests was for phoneme segmentation (.91), followed by phoneme recognition (.78), one of two phoneme counting measures (.72), phoneme blending (.70), the second of two phoneme counting measures (.57), phoneme deletion (.50), rhyme judgment (.49), and pseudoword repetition (.40) (p. 206). Analysis also showed a single common factor underlying PA scores, which “is closely related to literacy performance” (p. 209).

<sup>76</sup> “Averaged over reading and spelling, maximum specificity of maximum sensitivity was 46% for Phoneme Segmentation and 47% for Phoneme Recognition. Conversely, choosing 80% as the desired level of specificity, the average sensitivity was found to be 45% for Phoneme Recognition whereas Phoneme Segmentation did not even attain an 80% level of specificity. Maximum Phoneme Segmentation specificity averaged over the three literacy measures was 65%, associated with 77% sensitivity (cf. 75% sensitivity at the same specificity level for Phoneme Recognition). This shows that both the Phoneme Segmentation and Phoneme Recognition Tests tend to identify too many children at kindergarten as running the risk of meeting with literacy problems in Grade 1 and that Phoneme Recognition is not inferior to Phoneme Segmentation in that respect” (p. 213).



**Pre-assessment.** Assessments conducted before PA instruction begins should “indicate which children need the instruction and which do not, which children need to be taught rudimentary levels of PA (e.g., segmenting initial sounds in words), and which children need more advanced levels involving segmenting or blending with letters” (NICHHD, 2000, p. 2-6).

**Ongoing assessments and instructional time.** In order to determine the length of PA instruction, “What is probably most important is to tailor training time to student learning by assessing who has and who has not acquired the skills being taught as training proceeds” (NICHHD, 2000, p. 2-42). Similarly, a report commissioned by the NRC argued that “intensity of instruction should be matched to children’s needs” in acquiring phonological skills (Snow, Burns, & Griffin, 1998, p. 321).

• **Phonics—variable, guided by assessment.**

Based on their interpretation of the research results, the NRP argued that ideally, phonics instruction should be variable based on the needs of individual students as determined through assessment (NICHHD, 2000, pp. 2-96, 2-97). Similarly, the NRC report argued that “intensity of instruction should be matched to children’s needs” in applying explicit instruction on the connection between phonemes and spellings (Snow, Burns, & Griffin, 1998, p. 321).

• **Fluency—regular assessment, using research-validated methods.** A broad range of research, including both research reviewed by the NRP and research from other sources, describes research-validated measures and provides research-based recommendations for how to use those measures.

**Regular assessment.** Based on the research, the NRP recommended that “teachers should assess fluency regularly,” using both formal and informal methods (NICHHD, 2000, p. 3-4). Such informal methods can include “reading invento-

ries . . . miscue analysis . . . pausing indices . . . running records . . . and reading speed calculations” (NICHHD, 2000, p. 3-9, citing 5 studies).<sup>77</sup> Similarly, the NRC report recommended that “Because the ability to obtain meaning from print depends so strongly on the development of . . . reading fluency,” fluency “should be regularly assessed in the classroom, permitting timely and effective instructional response” (Snow, Burns, & Griffin, 1998, p. 323).

**Validity of oral reading fluency measures.**

According to Hasbrouck and Tindal (in press), measuring student oral reading fluency in terms of words correct per minute “has been shown, in both theoretical and empirical research, to serve as an accurate and powerful indicator of overall reading competence, especially in its correlation with comprehension. The validity and reliability of these measures has been well established in a body of research extending over the past 25 years” (citing Fuchs, Fuchs, Hosp, & Jenkins, 2001; Shinn, 1998). For example, Fuchs et al. (2001) summarized research showing that measures of oral reading fluency involving text passages that were several paragraphs in length corresponded well with “traditional, commercial, widely used tests of reading comprehension” (p. 243), and were superior in this regard to reading words from a list,<sup>78</sup> measures of silent fluency,<sup>79</sup> and more direct measures of reading comprehension.<sup>80</sup> More specifically, several studies have shown that third-grade tests of oral reading fluency from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) correlated well to high-stakes reading assessments from Arizona,<sup>81</sup> Colorado,<sup>82</sup> Florida,<sup>83</sup> North Carolina,<sup>84</sup> and Oregon.<sup>85</sup>

<sup>77</sup> Johnson, Kress, & Pikulski, 1987; Goodman & Burke, 1972; Pinnell et al., 1995; Clay, 1972; Hasbrouck & Tindal, 1992.

<sup>78</sup> Jenkins, Fuchs, van den Broek, Espin, & Deno (2003) compared measures of oral reading fluency of (a) connected text (a folktale), and (b) a context-free word list (list of words from the folktale) to performance on the Iowa Test of Basic Skills (ITBS) subtest for reading comprehension for 113 fourth graders. Fuchs et al. found that speed of oral reading from the folktale correlated more strongly to the ITBS score than did speed of oral reading from the word list (criterion validity coefficients of .83 and .54, respectively; the difference was statistically significant,  $t(110) = 7.86, p < .001$ ) (p. 723).

<sup>79</sup> Fuchs, Fuchs, Eaton, & Hamlett (2000) compared measures of oral and silent reading speed with “the number of questions answered correctly on the passages that had been read” and with the raw score on the Iowa Test of Basic Skills (ITBS) subtest for reading comprehension (Fuchs et al., 2001, p. 247, summarizing Fuchs et al., 2000). They found that “For silent reading, the correlation with the questions answered on the passage was .38, and with the Iowa test, it was .47. For oral reading, the correlation with the passage questions was .84, and with the Iowa test, it was .80. So, correlations for the oral reading fluency score were substantially and statistically significantly higher than for the silent reading fluency scores” (Fuchs et al., 2001, p. 247; p values not reported).

<sup>80</sup> Fuchs, Fuchs, & Maxwell (1988) compared measures of oral reading fluency, short-answer question answering, passage recall, and cloze (all based on the same 400-word passages) with the Reading Comprehension subtest of the Stanford Achievement Test for 70 middle school and junior high school students with reading disabilities. They found that “Criterion validity coefficients (average correlations across the different scoring methods) for the question answering, the recall, and the cloze measures were .82, .70, and .72, respectively. The coefficient for oral reading fluency was .91. Tests for differences between these correlations demonstrated that the correlation for oral reading fluency was significantly higher than the correlation for each of the three direct measures of reading comprehension” (Fuchs et al., 2001, p. 244, summarizing Fuchs et al., 1988; p-values not reported). Additionally, according to Fuchs et al. (2001), “high correlations have also been documented for nondisabled elementary school age children within a variety of studies that (a) incorporated different criterion measures of reading accomplishment, (b) examined within-grade as well as across-grade coefficients, and (c) used instructional level as well as a fixed level of text across students” (p. 245, citing as research reviews Hosp & Fuchs, 2000; Marston, 1989).

<sup>81</sup> “The correlation between [Arizona Instrument to Measure Standards] and [DIBELS oral reading fluency assessment] for the overall group was . . .  $r = .741$ ,” based on scores of 241 third graders (Wilson, 2005; p-value not reported).

<sup>82</sup> The DIBELS oral reading fluency assessment was administered three times: in fall, winter, and spring. The fall and winter administrations each had a correlation coefficient of .73 with the spring assessment of the Colorado State Assessment Program (CSAP). The spring administration of DIBELS oral reading fluency assessment had a correlation of .80 with CSAP (Shaw & Shaw, 2002; p-values not reported). Each correlation was based on the scores of more than 50 third graders.

<sup>83</sup> “There was a significant correlation between [DIBELS oral reading fluency] scores and reading [Florida Comprehensive Assessment Test—Sunshine State Standards] scores ( $r = .70, p < .001$ ) . . . and reading scores on the [Florida Comprehensive Assessment Tests norm-referenced test] ( $r = .74, p < .001$ ),” based on scores of 1,102 third grade students (Buck & Torgesen, 2003).

<sup>84</sup> “The correlation between [DIBELS oral reading fluency] Spring scores and [North Carolina] End of Grade reading scores was . . .  $r = .73$ ,” based on scores of 38 third-grade students (Barger, 2003; no p-value reported).

**Oral reading fluency norms.** Based on analysis of assessment data from a pool ranging from approximately 3,500 to more than 20,000 students collected between 2000 and 2005, Hasbrouck and Tindal (in press) have developed a new set of oral reading fluency norms to replace the widely used norms that were published in 1992 (Hasbrouck & Tindal, 1992). The new norms “align closely with both those published in 1992, and also closely match the widely used DIBELS norms . . . and those developed by Edformation with their AIMSweb system . . . with few exceptions.” These new norms cover grades 1-8, and provide information for 90th, 75th, 50th, 25th, and 10th percentile rankings. The researchers also provided specific norm-related recommendations for using oral reading results for screening, diagnosis, and monitoring student progress:

- Screening. According to the authors, “fluency-based assessments have been proven to be efficient, reliable, and valid indicators of reading proficiency when used as screening measures” (citing Fuchs et al., 2001; Good, Simmons, & Kameenui, 2001).

For screening in grades 2-8, the authors recommended that “a score falling within 10 words above or below the 50th percentile should be interpreted as within the normal, expected, and appropriate range for a student at that grade level at that time of year.”

For screening in grade 1, the authors recommended following guidelines established by Good et al. (2002) that identified students reading at or above 40 words correct per minute (wcpm) by the end of the school year as being “at low risk of reading difficulty,” students reading at 20–40 wcpm as being “at some risk,” and students reading below 20 wcpm as being “at high risk of failure.”

- Diagnosis According to the authors, oral reading fluency norms “can play a useful role in diagnosing possible problems that are primarily fluency based.”

For diagnosis of fluency problems, the authors recommended procedures that “are similar to those for screening, except here the level of materials should reflect the student’s instructional reading level, rather than [the] grade level,” with instructional level defined as text that is “challenging but manageable . . . with no more than approximately one in ten difficult words (90% success)” (citing Partnership for Reading, 2001). This allows teachers to determine if students’ fluency is appropriate to their reading level. Hasbrouck and Tindal do not suggest that an oral reading fluency assessment should be the only method of diagnosing reading problems; rather, such an assessment can be used along with other procedures (e.g., miscue analysis).

- Monitoring progress. According to the authors, oral reading fluency measures “have been found by many educators to be better tools for making decisions about students’ progress than traditional standardized measures which can be time-consuming, expensive, are only administered infrequently, and have limited instructional utility” (citing Good et al., 2001; Tindal & Marston, 1990). Fuchs et al. (2001) provided a similar, research-based description of how oral reading fluency can be used to monitor student progress, both across and within individual student performance.

For monitoring student progress, Hasbrouck and Tindal (in press) recommended that students scoring within 10 wcpm of the 50th percentile at or above grade level should be “considered as making adequate progress in reading, unless there are other indicators that would raise concern.” Such students “may only need to have their reading progress monitored a few times per year to determine if they are meeting the benchmark standards that serve as predictors of reading success.”

For students reading below grade level, the authors suggested more frequent oral reading fluency assessments: once or twice monthly to once a week, depending on the severity of the problem, with scores graphed against goals and with adjustments to the instructional program if a student falls short of needed progress for three or more consecutive assessments (citing Hasbrouck et al., 1999).

- Vocabulary—regular assessment in multiple ways. Both the NRP and the NRC report included specific research-based recommendations related to assessment.

The NRC report identified word recognition accuracy as a skill that “should be regularly assessed in the classroom,” with assessment results used to guide instruction (Snow, Burns, & Griffin, 1998, p. 323).

Based on the variety of measures used to assess student vocabulary and the different results those measures can achieve, the NRP recommended that vocabulary be assessed in multiple ways in the classroom. In particular, they argued that “the more closely the assessment matches the instructional context, the more appropriate the conclusions about the instruction will be” (NICHHD, 2000, p. 4-26).

- Text comprehension—regular assessment. According to the NRC report, “Conceptual knowledge and comprehension strategies should be regularly assessed in the classroom,” with teachers tailoring instruction accordingly “where difficulty or delay is apparent” (Snow, Burns, & Griffin, 1998, p. 323). The NRP did not directly address assessment of text comprehension.