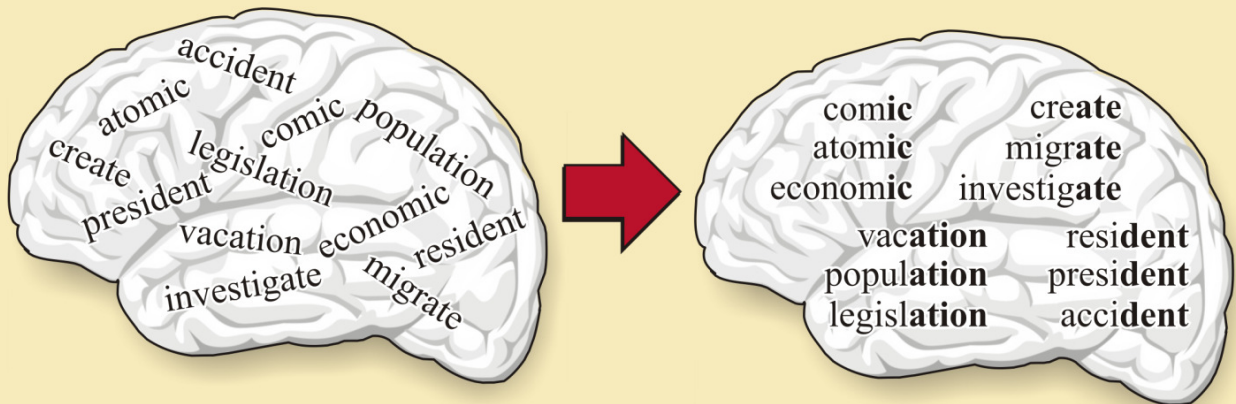


HOW TO **SHORT-CIRCUIT** READING INTERVENTION



MIDDLE AND HIGH SCHOOL STRUGGLING READERS

- **Make Dramatic Reading Improvement**
- **Connect to Core Curriculum Textbooks**
- **Succeed in School**

INCLUDES CLASSROOM LESSONS

Matthew Glavach, Ph.D.

HOW TO

**SHORT-
CIRCUIT**

READING INTERVENTION

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Introduction

“If you only have a hammer, you tend to see every problem as a nail.”

Abraham Maslow

How to Short-Circuit Reading Intervention is a book about a new reading intervention program that connects struggling-reader middle school and high school students to core textbooks such as science, social studies, mathematics, and English, while dramatically improving their reading. The book describes the program, including strategies and materials that made up the program and research and experiences that led to its remarkable successes.

More than half the students in the high school reading laboratory, where I, the author of the book, used the program, made three to six years’ reading growth in one year and most were successful in core academic classes. The program may be the only program using words taken directly from core textbooks and organized by identical endings into a reading intervention program specifically for middle school and high school students.

In the book, I present the following information.

- How I created an adult-like reading intervention program that students liked. I no longer heard student comments about not wanting to do “this baby work”.
- How I had students at different reading levels all working in the same instructional program on the same lesson. Student reading levels ranged from two to five years below expected grade levels.
- How I increased reading interest and motivation with students who were defeated and overwhelmed by the high school curriculum. A large number of the students were second language learners.
- How I used reading research, music research (although the program contained no music), and new brain research findings to short-circuit reading intervention and to connect students to core textbooks.

The book, *How to Short-Circuit Reading Intervention*, is an outcome of a research article by the author published in *Academic Leadership*, in 2005, entitled “Closing the Gap: A New Model for Adolescent Reading Intervention.”

CHAPTER 1

Looking at Adolescent Reading

Finding Many Struggling Readers

Reading is the most important skill needed in school, yet many adolescents struggle with reading. Research shows that the number of students in grade four and above who cannot adequately read to learn from print exceeds 25 percent and in some urban schools is as high as 60 percent.¹ Educators, concerned about the lack of reading skills among middle school and high school students, are searching for solutions because reading failure at this level limits access to school success.

...reading failure at this level results in limited access to school success.

Connecting Students to Core Textbooks

Many middle school and high school students' successes in core academic classes are limited because they cannot read the textbooks. Emphasis in middle school is on learning new vocabulary and organizing, summarizing, and interpreting information.² Successful students decode and understand difficult words; have rich general and content-area vocabularies found in science, history, and mathematics core textbooks; read fluently; and implement strategies for understanding textbooks. But other students are frustrated and unmotivated, find reading difficult, and do not like to read. Therefore, they are unskilled in vocabulary, sentence structure, and text organization.³ They seldom read books, newspapers, and magazines, and they are not prepared for the increasing requirements of core textbooks.

Students who are three, four, five, and more years behind in reading have an immediate need to short-circuit reading intervention...

Dictates for the students go beyond improving basic reading skills one or two years. Students who are three, four, five, and more years behind in reading have an immediate need to short-circuit reading intervention, to close the reading gap, and to have access to core textbooks.

CHAPTER 2

Beginning a High School Reading Intervention Program

Designing and Implementing an Intervention Program in a High School Reading Laboratory

The idea of beginning a reading intervention program began when administrators of a public high school asked me (a high school teacher and researcher) to participate in designing and implementing a federally funded, Title I, reading laboratory at the 1600-student high school with many students reading far below grade level and not able to access the school's core classes.

Assessment Instruments

I reviewed current school-wide assessment data. For students scoring in the lowest quartile, I administered individual reading assessments including the *Brigance Oral Word Recognition Test* to determine each student's reading level for individual words, the *Brigance Oral Reading Test* to determine each student's reading level for oral passage reading, and the *Brigance Reading Comprehension Test* to determine each student's reading comprehension grade level.⁴

Assessment Results

I assessed 90 students of which 65 students qualified for the reading laboratory. Qualifying students scored between grades two and seven in oral word recognition (with approximately 90% scoring between grades four and six). Students scored between grades three and eight in oral passage reading (with most scoring between grades four and eight). Oral word recognition scores averaged two to four years lower than oral passage reading scores; however, oral

Oral word recognition scores averaged two to four years lower than oral passage reading scores...

Test results indicated a consistent relationship between low oral word recognition scores and poor oral passage reading.

passage reading grade level scores did not reveal that most students struggled to read the passages fluently. Test results indicated a consistent relationship between low oral word recognition scores and poor oral passage reading.

Interest, Attitude, and Feeling Assessment

At middle school and high school levels, attention to affective concerns such as student attitudes, feelings, and interests must be taken into consideration because they play a large role in student reading success. Middle school and high school students who have experienced years of reading frustration are so concerned with embarrassment, failure, criticism, and ridicule, that they use much energy escaping them. Acting out and misbehaving are ways of escaping reading frustration. After years of reading failure, students have little faith in their abilities for educational accomplishment. Their interest levels have moved beyond their reading skills, and books read by their peers are no longer accessible to them.

...reading and understanding the "big words" was their greatest reading difficulty.

Conversations with students during reading assessments revealed how reading difficulties had affected them. I asked students, "What do you find most difficult about reading?" and "How has reading affected you in school?" Students appeared confident, yet resistant to discussing the questions. Their confidence dispelled as they talked about their reading difficulties. Most students said that reading and understanding the "big words" was their greatest reading difficulty. In telling how reading difficulty affected them in school, they told about feeling fear and embarrassment when having to read aloud, and in core classes, about saying nothing rather than exposing their inadequate reading skills. Cope⁵ notes that unrehearsed oral reading is the single most negative experience reported by adolescents about their entire school experience.

Reading Intervention Program Instruction

The 65 students who qualified participated in the reading laboratory, usually 15 with one teacher, for five hours a week, a 1-hour block and a couple of 2-hour blocks. A computer software program delivered much of the reading laboratory instruction at individual learning stations. This instruction method was chosen with the thought that it would be more interesting and adult-like to older struggling readers.

The software program, an expensive, well-designed, individualized program with lessons for five reading levels, focused on vocabulary and comprehension. Students could be placed in their reading levels and have their progress monitored through computer printouts of lesson scores. The lesson presentations were almost exclusively visual and often were based on books and skills with which students were familiar from elementary school.

Other reading laboratory instruction included weekly 1-hour explicit phonics lessons, focusing mostly on single-syllable words, and silent reading and response writing using the reading laboratory's extensive library with appropriate reading levels and a wide range of book titles of interest to students.

Although the computer presentation excited the students initially, most quickly lost their enthusiasm when they realized it was the same material with which they had worked before but now it was on the computer

Although, initially, the computer presentation excited the students, most quickly lost enthusiasm when they realized the material was the same kind of material with which they had worked in previous grades, but now it was on a computer screen. A student who had missed most of the questions one week, while discussing her results from the printout, said, "I didn't know you checked these. I just pushed the buttons because I was bored." Still, computer lessons and feedback and the weekly printouts of students' scores kept most students on task.

Because computer-assisted instruction as a delivery system for information had many advantages, I was

surprised to hear negative student responses. But I had noticed that many students preferred learning with other students. They did not like being isolated at individual learning stations.

Noticing a Core Textbook Reading Ability Gap

Reading laboratory students could choose to bring their core textbooks from science and other classes to the reading laboratory for help on assignments during class breaks or after class. On becoming familiar with the textbooks, I observed the large gap between the students' reading levels and their abilities to read the textbooks. I typed some textbook passages into a software program that gave general reading levels and found that many passages were at grade levels 13 and 14, one and two grade levels beyond high school.

Considering a Reading Intervention Program Change

At the end of the first year of the reading laboratory, reading posttests indicated that most students had made one year's progress in oral word recognition and oral reading fluency. The test results would have been encouraging if most students had not been three, four, five, and more years behind their reading grade levels and struggling in their core classes. By the middle of the first quarter of the second year, the following question begged an answer: "Is there a way to short-circuit the reading intervention process and to connect students to the core textbooks so that they can succeed in school?"

By the middle of the first quarter of the second year, the following question begged an answer...

CHAPTER 3

Researching a New Reading Intervention Program

Reviewing Core Textbooks

I began researching the new reading intervention program, atypically, by reviewing middle school and high school core textbooks to determine the reading requirements. I theorized that when I had identified the reading requirements, perhaps I could create a program to address them. The textbook review showed textbook meaning was carried by multisyllable words, many technical, the kinds of words that students had difficulties decoding and understanding. (See Core Textbook Sample Words, below)

...when I had identified the reading requirements, perhaps I could create a program to address them.

Core Textbook Sample Words

genetic nuclear solar ecosystem
classification diversity dangerous galaxy
skeleton appendage scientific dehydrate

explorer amendment conquer legislature
suffrage expansion revolution democracy
terrorism colonial domestic emancipate

fiction nonfiction punctuate synonym biography
grammar fantasy summary selection classic
singular abbreviation juncture acceptable

centimeter circumference congruent decimal
factor divisor equation multiple multiplication
rectangle quotient subtraction rectangular

Finding Consistent Word Patterns

While reviewing core textbooks, I looked for consistent patterns in the words. I focused on vowel sounds, prefixes, and rhyming patterns.

Vowel Sounds

Organizing multisyllable words by vowel sounds is difficult because multisyllable words often contain the irregular vowel (schwa) sound in the unaccented syllable. The schwa sound, similar to a short a vowel sound, can be represented by different vowel letters. It is the most dominant sound in multisyllable words and causes much reading and spelling difficulty. Below are some examples of the schwa sound in multisyllable words. (See Schwa Sounds, below.)

- Vowel Sounds
- Prefixes
- Rhyming Patterns

Schwa Sounds

a bove

skel e ton

a rith me tic

Prefixes

Prefixes are word parts like **un**, **re**, and **pre** added to the beginnings of words. In addition to vocabulary development, prefixes have a regular letter-sound correspondence that is useful in spelling and decoding. Prefixes speed up reading because they are read as sound units rather than separate sounds. I included prefixes in the program, but there were not enough of them to be the focus of the program. (See Prefixes, below.)

Prefixes

preview

multiply

prejudge

multicellular

prejudice

multilingual

Discovering Patterns in Multisyllable Words

Suffixes

...the consistent parts of most multisyllable words were the ends, the suffixes.

During the core textbook review, I noticed that the consistent parts of most multisyllable words were the ends, the suffixes. In the English language, variations of words are built by adding suffixes. The results are words with identical endings. (See Suffixes, below.)

Suffixes

portable
flammable
enjoyable

...words with identical endings, the important feature that I could use in organizing words for a reading intervention program.

Suffixes also carry meaning, and their primary function is changing words into different parts of speech (nouns, verbs, and adjectives, for example), but I was not choosing to use suffixes for their meanings. Instead, I was choosing suffixes for being words with identical endings, the important feature that I could use in organizing words for a reading intervention program. Suffixes such as -ion could be made useful for decoding by adding the letter t and the letter s for identical endings. (See Suffixes and Identical Patterns, below.)

Suffixes and Identical Patterns.

million station vision

For most of the suffix words that I could use, the suffix was the identical ending. (See Suffixes, below.)

Suffixes

language president abundant intelligence

statementment
 apartmentment
 enjoymentment
 employmentment
 amendment
 governmentment
 experimentment

I determined that organizing multisyllable words by identical patterns could have instructional and cognitive advantages.

(a) There can be greater focus on other syllables because the ending syllables are identical and continually repeated.

(b) Repeating the identical ending strengthens learning the word endings because the pattern is continually repeated. “ The brain’s neural networks respond in a pattern. . . the more often a specific pattern is fired in response to a stimulus, the more firm the nerve assembly becomes.” and

(c.) Most identical word endings are pronounced as whole sounds, which increases reading speed because students do not have to slow down to sound out each letter of the endings.

feature creature adventure

I began organizing key core text words to determine the most frequent endings. (See Frequent Ending Patterns and Examples, below.)

Frequent Ending Patterns and Examples

le	(table <u>e</u>)	al	(natur <u>al</u>)
er	(center <u>er</u>)	ion	(rebell <u>ion</u>)
or	(doct <u>or</u>)	sion	(conclu <u>sion</u>)
ar	(gramm <u>ar</u>)	ate	(communic <u>ate</u>)
y	(libert <u>y</u>)	tion	(civilizati <u>on</u>)
y	(justif <u>y</u>)	ous	(mysteri <u>ous</u>)
ure	(measur <u>e</u>)	ery	(discover <u>ery</u>)
ture	(legislat <u>ure</u>)	ory	(territori <u>ory</u>)
age	(percent <u>age</u>)	ary	(vocabular <u>ary</u>)
ment	(amend <u>ment</u>)	able	(biodegrad <u>able</u>)
ent	(continent <u>ent</u>)	ible	(invisi <u>ble</u>)
ant	(abund <u>ant</u>)	ic	(scientific <u>ic</u>)

Rhyming Patterns

While reviewing the core textbooks, and looking at groups of multisyllable words (See Words Grouped by Common Endings below.), I noted that words with identical endings such as those in Group B were easier to read than words in group A because they rhymed. Most rhyming words have similar sound and letter patterns.

Words Grouped by Common Endings

Group A

plastic
article
hesitate
technical

Group B

plastic
elastic
fantastic
scholastic

Many multisyllable words with the same suffixes or identical endings have the same accented vowels and they rhyme. (See Multisyllable Words That Rhyme, below.)

Multisyllable Words That Rhyme

education, calculation, vaccination

Like music, multisyllable words have rhythm. Each syllable has a beat. Rap singers produce different rhythms by their use of rhyme and by the way that they pronounce the words. Notice the rhythm created when reading multisyllable rhyming words. (See Multisyllable Rhyming Words, below.)

Multisyllable Rhyming Words

creation frustration celebration conversation
demonstration transportation destination
liberation motivation population
violation communication participation
cooperation anticipation explanation

I concluded that there could be advantages to using rhyming patterns and rhythm for learning multisyllable words. The rhyme and rhythm could ease transition to larger words. (See From *Core Reading*, Rapid Word Reading, Lesson 16, and Lesson 21, page 16.)

Contemplating A New Reading Intervention Program

I chose the language features of suffixes, identical word endings, word patterns, rhyming, and rhythm to create a new reading intervention program using core textbook words to increase students' general reading abilities and core textbook reading abilities.

...perhaps my reading intervention could accomplish in months something that for younger students would take years..

Kurt Fischer at the Harvard Graduate School of Education states that children experience two growth surges between the ages of 5 and 12. The first occurs around age 6 or 7 and the other around age 11 or 12. Both surges appear to support emerging cognitive capacities.⁷

Because middle school and high school students have greater knowledge of language and are more advanced cognitively, perhaps my reading intervention could accomplish in months something that for younger students would take years.

From *Core Reading*, Rapid Word Reading 16

RAPID WORD READING 16 (ic)		
<u>top</u> ic	<u>tro</u> p <u>ic</u>	<u>tra</u> gic
<u>pl</u> astic	e <u>la</u> stic	fant <u>as</u> tic
Atl <u>an</u> tic	rom <u>an</u> tic	gig <u>an</u> tic
<u>co</u> mic	at <u>om</u> ic	eco <u>no</u> mic
terr <u>ifi</u> c	spe <u>ci</u> fic	scien <u>tifi</u> c
cos <u>me</u> tic	ge <u>ne</u> tic	system <u>atic</u>
cha <u>ot</u> ic	patri <u>ot</u> ic	antibio <u>ti</u> c
		Correct ___ Time ___
	CHALLENGE WORDS	
<u>ly</u> ric	ana <u>ly</u> tic	stat <u>is</u> tic
hist <u>or</u> ic	meta <u>mor</u> phic	<u>at</u> mospheric

From *Core Reading*, Rapid Word Reading 21

RAPID WORD READING 21 (tion)		
<u>ac</u> tion	<u>tra</u> ction	<u>fra</u> ction
<u>se</u> ction	e <u>le</u> ction	dire <u>ct</u> ion
re <u>ac</u> tion	sub <u>tra</u> ction	con <u>tra</u> ction
<u>na</u> tion	<u>sta</u> tion	infl <u>a</u> tion
loc <u>a</u> tion	voc <u>a</u> tion	vac <u>a</u> tion
sal <u>va</u> tion	pro <u>ba</u> tion	quot <u>a</u> tion
transpor <u>ta</u> tion	popul <u>a</u> tion	gener <u>a</u> tion
infor <u>ma</u> tion	conver <u>sa</u> tion	explor <u>a</u> tion
edu <u>ca</u> tion	calcul <u>a</u> tion	vaccin <u>a</u> tion
civiliz <u>ati</u> on	coloniz <u>a</u> tion	recommen <u>d</u> ation
		Correct ___ Time ___
	CHALLENGE WORDS	
mechaniz <u>a</u> tion	experimen <u>ta</u> tion	personific <u>a</u> tion
generaliz <u>a</u> tion	rehabilit <u>a</u> tion	excommuni <u>ca</u> tion

NOTE: The accented part of the word is in bold print and underlined.

CHAPTER 4

Creating a New Reading Intervention Program

Selecting the Program Design

I used word lists generated from my core textbook review for the new reading intervention program. The program's design had specific instructional components, teaching strategies, and organization. Classroom teaching, research, and literacy writing experience helped me choose program instructional components, program teaching strategies, and program organization.

Program Instructional Components

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING

Program Teaching Strategies

From my work with struggling-reader middle school and high school students, I had learned that direct instruction in phonics, spelling, and vocabulary could produce good results. Although some research questions the benefit of explicit phonics instruction beyond grade 6,⁸ my students consistently had made 1 to 2 years' growth each year. Often phonics programs are not popular with middle school and high school students because they are working with skills in a context far below their interest levels. Teachers hear students comments about “baby work” and other negative remarks.

I knew that struggling-reader middle school and high school students responded positively to meaningful and adult-like materials. I had found that most phonics programs moved too slowly for students and for my goals for them. And even when students had made reading

...programs are not popular with the students because they are working with skills in a context far below their interest levels.

...they were still disconnected from the difficult words in core textbooks, words, which they need to master...

It was based on word morphology, clusters of multisyllable words with identical endings.

growth, they still were disconnected from the difficult words in core textbooks, words which they needed to master.

For one program teaching strategy, I used a strategy more ambitious and fast-paced than that of typical phonics programs. It was based on word morphology, clusters of multisyllable words with identical endings. Identical endings form patterns and chunk material making it easier to put into long term memory.⁹

Program Organization

I organized the program into individual lesson packets of 5 to 6 pages each. I structured each lesson the same. But within the consistent structure, the words and activities became progressively more difficult. The consistent structure had important benefits.

- (a) It provided the security of knowing what was coming next.
- (b) It eliminated confusion from changing instructions, and increased the likelihood that students would focus on the essential information.
- (c) It emphasized lesson content and smooth transition from lesson to lesson.
- (d) It made the program easy to administer.

Describing Instructional Components

Lesson Component 1, Spelling

- **SPELLING, STEP 1**

Presenting Spelling Words

- **SPELLING, STEP 2**

Writing Spelling Words

- **SPELLING, STEP 3**

Taking Practice Spelling Test



SPELLING



VOCABULARY



RAPID WORD READING

Spelling strengthens important word recognition skills: sound symbol association, letter sequencing, and syllable identification. When word recognition becomes automatic, the reading focus can be on comprehension.

SPELLING: STEP 1, Presenting Spelling Words

I began Spelling, step 1, by presenting the spelling words with a word list of ten core words and two to four bonus core words, on a large classroom chart. The words were also on individual student charts. The word list called attention to distinctive spelling patterns. Lesson 1 focused on words with *ture* endings. (See *From Core Reading*, Spelling Chart, Lesson 11, below.) (The first year, the program started with lesson 1, which is now lesson 11.)

From *Core Reading*, Spelling Chart, Lesson 11

			mix	ture
			lec	ture
			fu	ture
			na	ture
			cul	ture
	ag	ri	cul	ture
			mois	ture
		sig	na	ture
	man	u	fac	ture
leg	is	la		ture

I wrote the words by syllables to divide them into pronounceable segments. Dividing the words into syllables also reinforced syllable boundaries.

SPELLING: STEP 2, Writing Spelling Words

Spelling, step 2, Writing Spelling Words, required students to write each word as one word on a sheet of paper and then to draw an arc, or loop, under each syllable. Writing the words reinforced spelling and syllable boundaries through fluent hand and eye movement. It also gave repetition for storing words in long term memory. (See Writing Spelling Words, Lesson 11, below.)

Writing Spelling Words, Lesson 11

●	mixture
	lecture
	future
	nature
●	culture
	agriculture
	moisture
	signature
●	manufacture
	legislature

SPELLING: STEP 3, Taking Practice Spelling Test

Spelling, step 3, Practice Spelling Test, included word form cues (lines for the numbers of letters, slashes for syllable division, and word endings) and increased decoding skills and spelling skills. (See From *Core Reading*, Practice Spelling Test, Lesson 11, below.)

From *Core Reading*, Practice Spelling Test, Lesson 11

1. <u>m</u> <u>i</u> <u>x</u> / ture	(mixture)
2. _____ / ture	(lecture)
3. ____ / ture	(future)
4. ___ / ture	(nature)
5. _____ / ture	(culture)
6. ____ / ____ / _____ / ture	(agriculture)
7. _____ / ture	(moisture)
8. _____ / ____ / ture	(signature)
9. _____ / ____ / _____ / ture	(manufacture)
10. _____ / ____ / ____ / ture	(legislature)

Lesson Component 2, Vocabulary

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING

Instruction focused on core class words..

Vocabulary is critical to reading comprehension. Most students' limited vocabularies have resulted from not reading and by the time they reach high school, improving vocabulary through reading is not realistic.

Direct vocabulary instruction was essential to the program. Instruction focused on core class words. Most vocabulary lesson words were taken directly from core textbooks. I categorized the words by English, social studies, science, and mathematics. (See *From Core Reading, Vocabulary, Lesson 11, page 23.*)

Brain research suggests that information that fits into or adds to an existing neural network has a much greater chance of storage.

Brain research suggests that information that fits into or adds to an existing neural network has a much greater chance of storage.¹⁰ Further research shows that related words, words that have meaningful relationships, are stored together in specific cerebral regions. Because words are physically closer to each other among the neurons in the semantic network, retrieval speed increases.¹¹

VOCABULARY: STEP 1, Dictionary Definitions and Sentence Writing

For Vocabulary, step 1, dictionary definitions and sentence writing, students were to write dictionary definitions for each vocabulary lesson word. Then they were to write complete sentences for each of five specific vocabulary lesson words. (See *From Core Reading, Vocabulary, Lesson 11, page 23.*)

From *Core Reading, Vocabulary, Lesson 11*

● **VOCABULARY, STEP 1**

Dictionary Definitions
Sentence Writing

● **VOCABULARY, STEP 2**

Vocabulary Drawing

Write a dictionary definition for each word.

General
1. **departure** _____

Social Studies
2. **culture** _____
3. **agriculture** _____
4. **legislature** _____

English
5. **literature** _____

Science
6. **nature** _____
7. **nurture** _____
8. **future** _____
9. **moisture** _____
10. **texture** _____
11. **manufacture** _____
12. **temperature** _____

SENTENCES
Use each word in a complete sentence.
moisture future culture temperature literature

Suzuki¹² found that imagery combined with verbal elaboration dramatically improved learning and remembering.

VOCABULARY: STEP 2, Vocabulary Drawing

The Vocabulary Drawing reinforced four vocabulary lesson words (individual student-chosen words from the lesson) through drawing. Students were to draw each word as a picture, a symbol, a cartoon, or an ad. For words that could not be pictured, students were to write the word in an interesting way. (See *From Core Reading, Vocabulary Drawing, Lesson 11, below.*)

From *Core Reading, Vocabulary Drawing, Lesson 11*

VOCABULARY DRAWING 11
Choose four words to illustrate.

Word _____ 	Word _____
Word _____ 	Word _____

Lesson Component 3, Rapid Word Reading

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING

...automaticity, fast and effortless word recognition.

Rapid Word Reading was a timed reading of a word list to develop automaticity, fast and effortless word recognition.

“Automatic procedures such as walking, driving a car or decoding words are part of procedural memory. After much practice and repetition, they are performed without conscious thought.”¹³ “Trying consciously to express any of these skills while performing them hinders one’s performance.”¹⁴

Imbedding information in music or rhyme, enhances recall.

I organized Rapid Word Reading words by syllable number, sound similarity, and, where possible, rhyming patterns. (See From *Core Reading*, Rapid Word Reading, Lessons 11, 13, 16, and 21, pages 25 and 26.) Rhyme and rhythm are excellent methods for storing information that otherwise would be difficult to retain. Imbedding information in music or rhyme enhances recall.¹⁵

From *Core Reading*, Rapid Word Reading, Lesson 11

Rapid Word Reading 11 (ture)

<u>pic</u>ture	<u>cap</u>ture	<u>mix</u>ture
<u>lec</u>ture	<u>pos</u>ture	<u>nur</u>ture
<u>vul</u>ture	<u>cult</u>ure	<u>agr</u>iculture
<u>fu</u>ture	<u>nat</u>ure	<u>sig</u>nature
<u>fea</u>ture	<u>crea</u>ture	<u>fract</u>ure
<u>ven</u>ture	ad <u>ven</u>ture	<u>tem</u>perature
<u>mois</u>ture	de <u>par</u>ture	manu <u>fact</u>ure
		Correct___ Time___
CHALLENGE WORDS		
<u>lit</u>erature	<u>cur</u>vature	legis <u>lat</u>ure
<u>mini</u>ature	in <u>den</u>ture	<u>ar</u>chitecture

From *Core Reading*, Rapid Word Reading, Lesson 13

Rapid Word Reading 13 (ment)

<u>stat</u>ement	<u>judg</u>ment	<u>seg</u>ment
<u>apar</u>tment	en <u>joy</u>ment	em <u>ploy</u>ment
exc <u>ite</u>ment	<u>tre</u>atment	<u>agre</u>ement
<u>amaz</u>ement	<u>amend</u>ment	<u>compl</u>iment
<u>doc</u>ument	<u>arg</u>ument	<u>amuse</u>ment
<u>lig</u>ament	<u>sed</u>iment	<u>test</u>ament
<u>gov</u>ernment	exp <u>er</u>iment	en <u>vir</u>onment
<u>ach</u>ievement	de <u>vel</u>opment	est <u>abl</u>ishment
		Correct___ Time___
CHALLENGE WORDS		
<u>par</u>liament	dis <u>appoint</u>ment	em <u>bar</u>arrassment
<u>nour</u>ishment	<u>aston</u>ishment	acc <u>om</u>plishment

From *Core Reading*, Rapid Word Reading, Lesson 16

Rapid Word Reading 16 (ic)

<u>top</u> ic	<u>tr</u> opic	<u>tr</u> agic
<u>pl</u> astic	<u>el</u> astic	fant <u>as</u> tic
Atl <u>an</u> tic	rom <u>an</u> tic	gig <u>an</u> tic
<u>com</u> ic	<u>at</u> omic	econ <u>om</u> ic
terr <u>ifi</u> c	spec <u>ifi</u> c	scien <u>tifi</u> c
cos <u>met</u> ic	gen <u>et</u> ic	system <u>at</u> ic
cha <u>ot</u> ic	patri <u>ot</u> ic	antibio <u>ot</u> ic
CHALLENGE WORDS		Correct ____ Time ____
<u>ly</u> ric	analy <u>ti</u> c	stat <u>ist</u> ic
<u>at</u> mospheric	hist <u>or</u> ic	metam <u>or</u> phic

From *Core Reading*, Rapid Word Reading, Lesson 21

Rapid Word Reading 21 (tion)

<u>ac</u> tion	<u>tr</u> action	<u>fr</u> action
<u>se</u> ction	<u>el</u> ection	dire <u>ct</u> ion
re <u>ac</u> tion	sub <u>tr</u> action	con <u>tr</u> action
<u>na</u> tion	<u>st</u> ation	infl <u>a</u> tion
lo <u>ca</u> tion	voc <u>ca</u> tion	vac <u>ca</u> tion
sal <u>va</u> tion	prob <u>a</u> tion	quot <u>a</u> tion
transport <u>a</u> tion	popul <u>a</u> tion	genera <u>a</u> tion
inform <u>a</u> tion	conversa <u>a</u> tion	explora <u>a</u> tion
edu <u>ca</u> tion	calcul <u>a</u> tion	vaccin <u>a</u> tion
civiliz <u>a</u> tion	coloniz <u>a</u> tion	recommen <u>d</u> ation
CHALLENGE WORDS		Correct ____ Time ____
mechaniz <u>a</u> tion	experiment <u>a</u> tion	personific <u>a</u> tion
generaliz <u>a</u> tion	rehabilit <u>a</u> tion	excommunic <u>a</u> tion

Lesson Component 4, Spelling Test

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING
- ➡ **SPELLING TEST**

The Spelling Test used the same words as the Practice Spelling Test but omitted the lines for letters, the slashes for syllables, and the word endings. Each student took the spelling test like a traditional spelling test on a sheet of lined paper. (See Spelling Test Words, left, and Spelling Test below.)

SPELLING TEST WORDS

1. *mixture*
2. *lecture*
3. *future*
4. *nature*
5. *culture*
6. *agriculture*
7. *moisture*
8. *signature*
9. *manufacture*
10. *legislature*

Spelling Test

<input type="radio"/>	_____

<input type="radio"/>	_____

<input type="radio"/>	_____

Lesson Component 5, Vocabulary Quiz

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING
- ➡ SPELLING TEST
- ➡ VOCABULARY QUIZ

The Vocabulary Quiz included twelve vocabulary words, twelve matching dictionary definitions, and a synonym quiz with four synonyms. (See From *Core Reading*, Vocabulary Quiz, Lesson 11, below.)

From *Core Reading*, Vocabulary Quiz, Lesson 11

Vocabulary Quiz 11

Write the word for the definition.

culture future nature agriculture literature legislature
texture moisture nurture departure manufacture temperature

1. _____ wetness in the form of mist or steam
2. _____ written works that are of artistic value
3. _____ the body of people that can make and change laws
4. _____ departing or leaving
5. _____ degree of hotness or coldness
6. _____ the art, thought, and customs of a society
7. _____ to give care and food to
8. _____ time yet to come
9. _____ to make by machinery, especially in large quantities
10. _____ the art or practice of farming, especially of growing crops
11. _____ everything that exists in the world independent of human beings
12. _____ the roughness or softness, coarseness or fineness of a surface

SYNONYM QUIZ 11 (ture)

Circle two synonyms for the first word.

1. culture	customs	nature	life style
2. manufacture	assemble	build	break
3. moisture	mixture	water	sweat
4. nurture	feed	nourish	ignore

Lesson Component 6, Independent Silent Reading

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING
- ➡ SPELLING TEST
- ➡ VOCABULARY QUIZ
- ➡ INDEPENDENT SILENT READING

...providing interesting books at a wide range of reading levels.

Independent Silent Reading increased word attack, reading fluency, and comprehension. One key to successful independent silent reading was providing interesting books at a wide range of reading levels. A reading laboratory colleague (an English and reading teacher) and I organized by levels of difficulty an extensive library of books of interest to high school students.

Another key to successful independent silent reading was for me to be sure that students read the books. To be sure that they read the books, I provided reading log forms that they completed each time they read. The reading forms asked students for information about the books they had read, including a paragraph telling what they had read and their personal responses to what they had read in their Independent Silent Reading. (See Reading Log, below.)

READING LOG	
Book Title:	_____
Author:	_____
Date:	_____ Pages_____
What I Read about Today:	

My Response to What I Read:	

CHAPTER 5

Reporting What I Had Learned about the Reading Lesson Components

Reviewing and Discussing the Reading Lesson Components

The reading lesson component review and discussion includes student responses and my response to each reading lesson component: Spelling, Vocabulary, Rapid Word Reading, Spelling Test, Vocabulary Quiz, and Silent Reading.

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING
- ➡ SPELLING TEST
- ➡ VOCABULARY QUIZ
- ➡ INDEPENDENT SILENT READING

SPELLING STEP 1: Presenting Spelling Words

To begin Spelling, step 1, I presented the ten spelling words by syllables to the class, on a large classroom chart. The words also were on individual student charts, in the reading lesson packets. I modeled each word's pronunciation aloud slowly, with an emphasis on each syllable. Reading the words in syllables divided the words into pronounceable segments. I explained that one syllable, or word part, was pronounced louder, was in bold print, was underlined, and was called an *accent*. Then I repeated each word, blending the syllables, with a usual pronunciation. Students said each word aloud after me. (See *From Core Reading*, Spelling Chart, Lesson 11, page 31.)

● **SPELLING: STEP 1**
Presenting Spelling
Words

● **SPELLING: STEP 2**
Writing Spelling
Words

● **SPELLING: STEP 3**
Taking Practice
Spelling Test

From *Core Reading*, Spelling Chart, Lesson 11

		mix	ture
		lec	ture
		fu	ture
		na	ture
		cul	ture
ag	ri	cul	ture
		mois	ture
		sig	na ture
man	u	fac	ture
leg	is	la	ture

At first, students did not like pronouncing the words aloud.

At first, students did not like pronouncing the words aloud. But with initial lesson success, they became comfortable with the program's structure and readily pronounced the words. I discussed common and interesting features of the words, especially of some more difficult core textbook words.

SPELLING: STEP 2: Writing Spelling Words

Writing Spelling Words, Lesson 11

●	<u>mixture</u>
	lecture
	future
	nature
●	culture
	agriculture
	moisture

For Spelling, step 2, students wrote each spelling word as one word and then drew a loop, or arc, under each syllable. Writing the spelling words immediately after

*All students could
participate
Successfully...*

the lesson presentation had behavioral benefits. All students could participate successfully in writing the words. Cognitive benefits included repetition for storing words in long term memory and for Practice Spelling Test preparation.

SPELLING: STEP 3, Taking Practice Spelling Test

Spelling, step 3, taking the Practice Spelling Test included word form cues (the lines for letters, the slashes for syllables, and the word endings) to improve spelling and decoding.

Students studied the words for a few minutes before the test. All students, except the few with severe spelling problems, usually scored between seven and ten on the Practice Spelling Test. The students and I checked the Practice Spelling Test together, which added more spelling practice. (See Practice Spelling Test, Lesson 11, below.)

From *Core Reading*, Practice Spelling Test, Lesson 11

1. <u>m</u> <u>i</u> <u>x</u> / ture	(mixture)
2. _____ / ture	(lecture)
3. ____ / ture	(future)
4. ____ / ture	(nature)
5. _____ / ture	(culture)
6. ____ / ____ / _____ / ture	(agriculture)
7. _____ / ture	(moisture)
8. _____ / ____ / ture	(signature)
9. _____ / ____ / _____ / ture	(manufacture)
10. _____ / ____ / ____ / ture	(legislature)

*It was the key to
decoding and spelling
improvement.*

The Practice Spelling Test was effective. It was a key to decoding and spelling improvement. Direct sound-symbol association instruction through spelling worked well for the students. It was more adult-like, especially in a core-academic word context. And most students would rather ask for help with spelling words than with reading words.

Lesson Component 2, Vocabulary

➡ SPELLING

➡ VOCABULARY

VOCABULARY: PART 1, Dictionary Definitions and Sentence Writing

For Vocabulary, part 1, students wrote dictionary definitions for each word and five complete sentences for five specific vocabulary lesson words. (See *From Core Reading, Vocabulary, Lesson 11*, below.)

From *Core Reading, Vocabulary, Lesson 11*

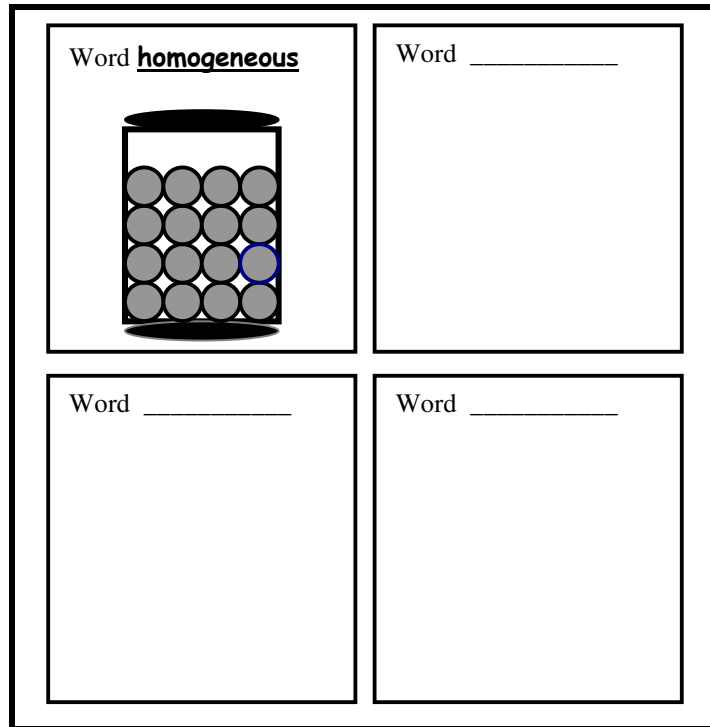
Write a dictionary definition for each word.	
General	
1. departure	_____
Social Studies	
2. culture	_____
3. agriculture	_____
4. legislature	_____
English	
5. literature	_____
Science	
6. nature	_____
7. nurture	_____
8. future	_____
9. moisture	_____
10. texture	_____
11. manufacture	_____
12. temperature	_____
SENTENCES	
Use each word in a complete sentence.	
moisture future culture temperature literature	

...and was a lesson with which all students succeeded.

The reading laboratory provided a dictionary for each student. Students took the dictionaries from the bookcase and wrote the word definitions. They could write the definitions independently or with a partner. Interestingly, few students chose to do the vocabulary lesson with a partner. Looking up the word definitions in the dictionary and writing them on the lesson pages helped all students focus on the lesson and was a lesson with which all students succeeded. Writing sentences for the five words improved writing, reinforced word meanings,

I enjoyed looking at the vocabulary drawings. One student's drawing for the word *homogeneous* showed a jar filled with marbles that were all the same size. (See Vocabulary Drawing, Lesson 22, below.)

From *Core Reading, Vocabulary Drawing, Lesson 22*



Each week, the class had a contest for the best drawings. All drawings were taped to the reading laboratory wall, and students voted for the best drawings. Displaying the drawings, looking at them, and discussing them became a great way for students to learn word meanings.

Writing sentences for the five words improved writing, reinforced word meanings, and personalized the words for students by requiring them to develop their own meanings from the definitions.

Lesson Component 3, Rapid Word Reading

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING

I introduced the Rapid Word Reading, by reading the words aloud with the class. During a vocabulary lesson break, I told students they could read the words to me after they completed the Vocabulary. When individual students completed the vocabulary dictionary definitions and drawing , they came to my desk to read the words aloud, which worked well with the other students occupied in completing the Vocabulary. (See From *Core Reading*, Rapid Word, Reading, Lesson 11 below.)

From *Core Reading*, Rapid Word Reading, Lesson 11

Rapid Word Reading 11 (ture)		
<u>pic</u>ture	<u>cap</u>ture	<u>mix</u>ture
<u>lec</u>ture	<u>pos</u>ture	<u>nur</u>ture
<u>vul</u>ture	<u>cult</u>ure	<u>agr</u>iculture
<u>fu</u>ture	<u>natur</u>e	<u>sig</u>nature
<u>feat</u>ure	<u>creat</u>ure	<u>fract</u>ure
<u>ven</u>ture	<u>advent</u>ure	<u>temper</u>ature
<u>moist</u>ure	<u>depar</u>ture	manu<u>fact</u>ure
		Correct ___ Time ___
CHALLENGE WORDS		
<u>liter</u>ature	<u>cur</u>vature	legis<u>lat</u>ure
<u>mini</u>ature	<u>indent</u>ure	<u>arch</u>itecture

When individual students came to my desk to read the Rapid Word Reading, I asked if there were words they wanted to review before I timed them for 1 minute. Most students wanted to review one or two words. Some wanted to review all the words. Continually, I was pleased to see students studying the words, or asking

...I was pleased to see to see students studying the words...

I noticed that when they came across rhyming words, one rhyming word eased the transition to the next rhyming word.

other students how to pronounce words, before reading the words with me. Rapid Word Reading emphasized reading words rapidly and clearly while being timed. Some students wanted to read the words with the fastest time. Others only wanted to read the words correctly. I circled words students had difficulty pronouncing and after completing the reading, they studied and then read the circled words again.

Each week, I watched students progress to reading the words with improved rhythm and fluency. I noticed that when they came across rhyming words, one rhyming word eased the transition to the next rhyming word.

explanation > investigation

Listening to hundreds of students in the reading laboratory read words for more than four years made it possible for me to adjust and greatly improve the word organization. Word organization was important because it positively affected the transition between multisyllable words. Student motivation increased and multisyllable word reading quickly improved.

During Rapid Word Reading, I interacted with individual students and support their reading growth. On completing lessons 15 or 16, I asked students if reading their core textbooks was becoming easier. Most students said that reading textbooks was becoming easier. Frequently, I reminded students of the direct relationship between their reading laboratory work and their core class work.

Lesson Component 4, Spelling Test

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING
- ➡ SPELLING TEST

When students misspelled words, the misspelled words usually had the correct number of syllables...

The Spelling Test words were the same as the Practice Spelling Test words with the letter lines, syllable slashes, and word endings omitted. Students studied the words before taking the test and most received excellent test scores. When students misspelled words, the misspelled words usually had the correct number of syllables, which showed students had mental models of multisyllable sounds and syllables.

Every school year, some of my students had severe spelling problems and made slow spelling growth. I assured students that if they studied and tried on the tests, their course grades would not be lowered by low spelling test scores. Interestingly, most students with slow spelling progress made reading growth. (See Spelling Test, Lesson 11, below)

Spelling Test, Lesson 11

- mixture
- lecture
- future
- nature
- culture
- agriculture
- moisture
- signature
- manufacture
- legislature

Lesson Component 5, Vocabulary Quiz

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING
- ➡ SPELLING TEST
- ➡ VOCABULARY QUIZ

The Vocabulary Quiz included twelve vocabulary words, twelve matching dictionary definitions, and a synonym quiz with four synonyms. (See Vocabulary Quiz, Lesson 11, below.)

From *Core Reading*, Vocabulary Quiz, Lesson 11

Vocabulary Quiz 11

Write the word for the definition.

culture future nature agriculture literature legislature
texture moisture nurture departure manufacture temperature

1. _____ wetness in the form of mist or steam
2. _____ written works that are of artistic value
3. _____ the body of people that can make and change laws
4. _____ departing or leaving
5. _____ degree of hotness or coldness
6. _____ the art, thought, and customs of a society
7. _____ to give care and food to
8. _____ time yet to come
9. _____ to make by machinery, especially in large quantities
10. _____ the art or practice of farming, especially of growing crops
11. _____ everything that exists in the world independent of human beings
12. _____ the roughness or softness, coarseness or fineness of a surface

SYNONYM QUIZ 11 (ture)

Circle two synonyms for the first word.

1. <u>culture</u>	customs	nature	life style
2. <u>manufacture</u>	assemble	build	break
3. <u>moisture</u>	mixture	water	sweat
4. <u>nurture</u>	feed	nourish	ignore

Lesson Component 6, Independent Silent Reading

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING
- ➡ SPELLING TEST
- ➡ VOCABULARY QUIZ
- ➡ INDEPENDENT SILENT READING

Independent Silent Reading developed word attack, reading fluency, and comprehension. One key to successful independent silent reading was student access to interesting books at a wide range of reading levels.

My students read independently from reading laboratory books of their own choosing. A reading laboratory colleague (an English and reading teacher) and I organized by difficulty levels an extensive library of books of interest to high school students.

Students chose books of interest to them. If the books seemed too easy or too difficult, I suggested other books at appropriate reading levels. Yet, if students had books of special interest to them, which were beyond their reading levels, I encouraged them to read the books. I found that the students gained reading skills as they struggled through books that they especially liked.

Another key to successful independent silent reading was for me to be sure that students read the books. To be sure that they read, I provided a reading log form that they completed each time they read. The form asked for information about what they had read, a paragraph telling what they had read and paragraph telling their personal responses to what they had read, in their independent silent reading of the book. (See Reading Log to the left on this page.) Completing the reading log form improved spelling and writing and also worked well for book discussions and book reports.

READING LOG
Book Title: _____
Author: _____
Date: _____ Pages _____
What I Read About Today:

My Response to What I Read:

CHAPTER 6

Reviewing and Discussing Initial Program Results

Examining Program Benefits and Features

...and student classroom behavior problems were almost nonexistent.

By the end of the school year, the students had been in the new reading intervention program for one semester, and I had seen dramatic improvement in reading and spelling and in confidence. Attitudes had improved, reading motivation had improved, and classroom behavior problems were almost nonexistent. I had heard students comment that they were better able to read core textbooks and classroom assignments. Reading test results showed many students making two years' progress in reading in one semester, and students were improving in the core classes.

The program offered important benefits and features.

- Students made significant reading and spelling growth while studying core textbook words that connected them to the core classes.
- Organizing words by suffixes and identical endings made reading multisyllable words manageable.
- Arranging words that had similar sound and visual patterns used language features (rhyme and rhythm) to help students read multisyllable words.
- Repetition of words studied in each lesson gave students exposure to store the words into long term memory,
- Because each lesson packet had an identical structure, the lesson became a ritual that eliminated the something–new–every–day–worry.

CHAPTER 7

Adding New Reading Lesson Components

Adding New Reading Lesson Components

Following the success with the initial lesson components: Spelling, Vocabulary, Rapid Word Reading, Spelling Test, Vocabulary Quiz, and Independent Silent Reading, I added two new components: Timed Repeated Reading, for fluency, and Questions, for comprehension. Also, I added ten lessons (lesson 1 through lesson 10), at lower reading levels to the beginning of the program. With ten new lessons, lesson 1 became lesson 11.

- ➡ SPELLING
- ➡ VOCABULARY
- ➡ RAPID WORD READING
- ➡ SPELLING TEST
- ➡ VOCABULARY QUIZ
- ➡ INDEPENDENT SILENT READING
- ➡ TIMED REPEATED READING
- ➡ QUESTIONS, COMPREHENSION

Lesson Component 7, Timed Repeated Reading

Fluent readers decode words quickly and accurately...

The Timed Repeated Reading taught reading fluency, the ability to read with speed and accuracy. Fluent readers decode words quickly and accurately, and they retain cognitive resources that the brain can use for comprehension.¹⁶ Timed repeated reading, a fluency strategy that has had extensive research,¹⁷ is rereading

a short, meaningful passage until fluency is reached. When students read fluently, their reading is automatic.

Timed Repeated Reading, a one-page passage about core textbook topics, increased gradually in reading difficulty with each lesson. Passage words and core textbook topics became more complex, and sentences became longer and more advanced. I included lesson vocabulary important for core textbook topics and words from previous lessons. The passages began at a third grade reading level and progressed to a twelfth grade reading level. I thought it to be an ambitious reading level span, but possible and necessary because most core textbook words were at the higher reading levels. (See *From Core Reading* Timed Repeated Reading, Lesson 11, below, and Lesson 18, on page 46.) (For examples of Timed Repeated Reading at lower levels, see *From Core Reading*, lesson 1 on page 49, and Lesson 7, on page 50.)

...an ambitious reading level span, but possible and necessary....

From Core Reading, Timed Repeated Reading, Lesson 11

Culture	LESSON 11
When one thinks of a culture, one usually thinks of things such as art, language, music, literature, and architecture. But actually a culture is much more than that.	10 18 28
A culture is a way of life, simple or complex. Every society or group of people has a culture. It includes a mixture of art, language, music, literature and architecture. But it also includes the customs and beliefs that are important to the group.	39 50 57 66 72
Cultures result from basic needs shared by all people. Early culture was a way to extend the ability to obtain food, seek protection, and raise and nurture offspring. Each culture has methods of obtaining food (with agriculture, for example). Also, it has a means of providing food and other goods to its people. Each culture has a system for assigning power and responsibility, including social ranks and governments. This is a way to keep order and settle disputes. In more complex cultures this includes police, court, and prison systems.	81 92 100 108 117 126 134 140 150 157 161
People learn their culture by growing up in a particular society or group. They learn mainly through the use of language and by watching and imitating other group members. To learn about a group's culture one needs to find the answers to such questions as: What language does the group speak? How does the group decide what is right or wrong? and What customs are shared by the group's members? ...	170 178 187 196 206 215 225 231

LESSON 18

The Skeleton

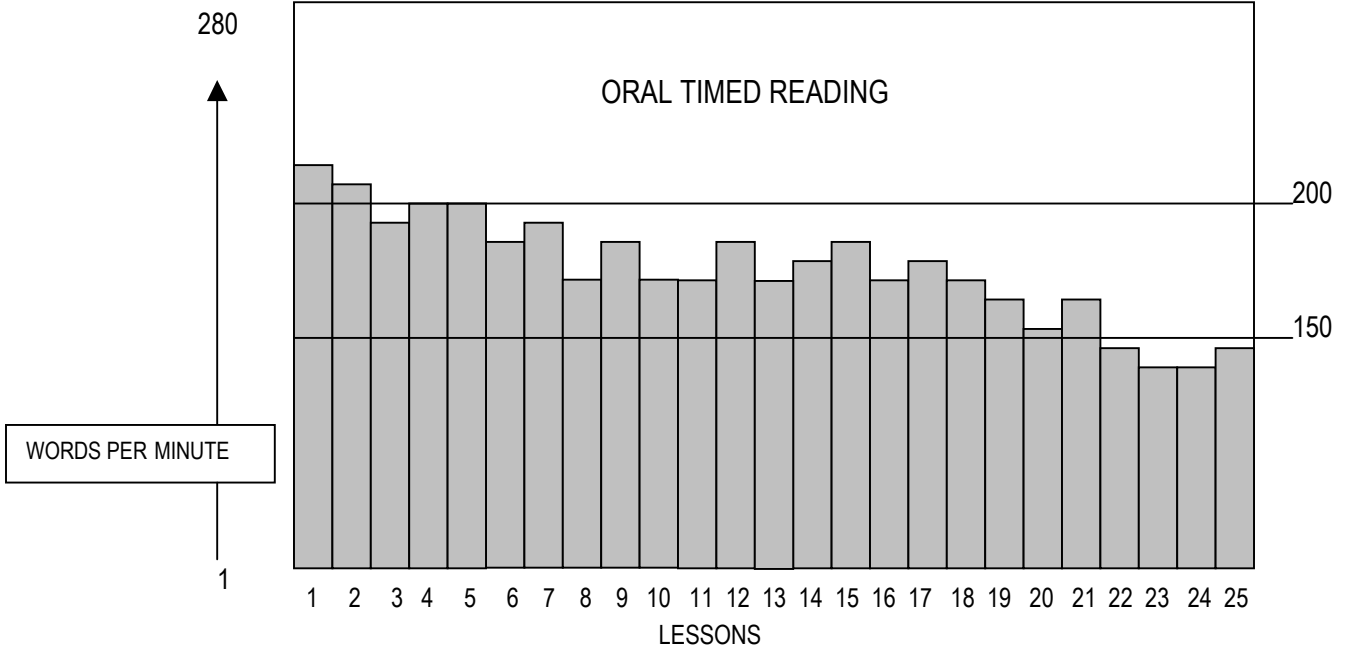
The human skeleton is made up of bones. These	9
bones form a strong framework that supports the	17
body and protects vital organs such as the heart,	26
liver, and lungs. The skeleton is an anchor for the	36
muscles. This union of bone and muscle makes it	45
possible for the body to move. In humans and other	55
animals with backbones, called vertebrates, the	61
skeleton is inside the body. When the skeleton is	70
inside the body, it is called an endoskeleton. It is	80
covered with flesh and skin. By comparison, the	88
skeleton of invertebrates, animals without	93
backbones, is outside the body. It is called an	102
exoskeleton. Common insects and spiders have	108
exoskeletons, which are like hard crusts on the	116
outside of the body. Some animals such as jellyfish	125
and octopus do not have skeletons. Their bodies are	134
supported by the water they live in.	141
The skeleton of an adult human includes more	149
than 200 bones and makes up about 18 percent of	159
the body's weight. At birth the human skeleton is	168
made up of 275 different bones. As the body	177
matures, an interesting phenomenon occurs. Some	183
of the bones, such as the wrist and ankle bones,	193
fuse together leaving only 206 bones in the adult	202
body. The human skeleton has two main regions, or	211
parts, with the skull, backbone, and ribs forming the	220
central, or axial, skeleton. The arms and legs make up	230
the appendicular skeleton.	233
Joints are places where bones meet. Some	240
joints, like those in the skull, do not move. Others,	250
like those in the knees, shoulders, and hips assist	259
in moving. Muscles across the joints tighten, or	267
contract, to move the bones.	272
An amazing fact about the human skeleton that	280
few people know is that over one half of the body's	291
bones are in the hands and feet.	298

Oral Reading (WPM) _____

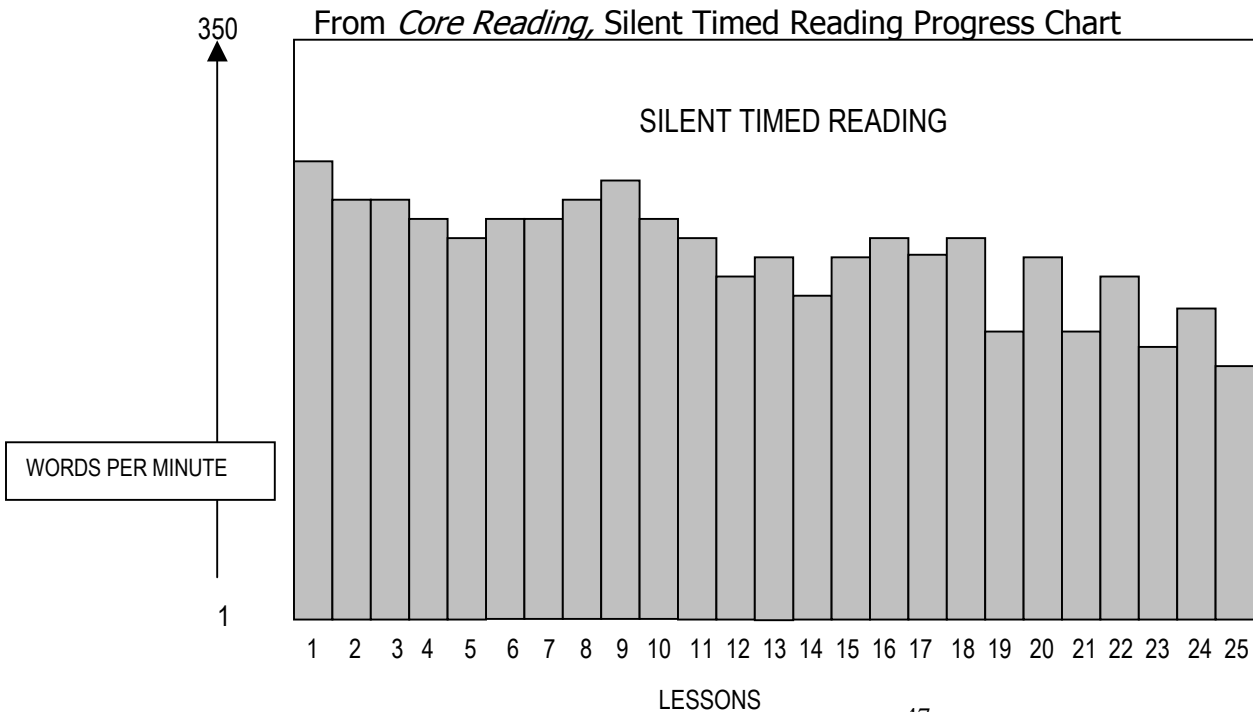
Silent Reading (WPM) _____

Each Timed Repeated Reading had two timed readings, an oral 1-minute timed reading and a silent 1-minute timed reading. Two charts provided for recording and monitoring timed reading progress. (See From *Core Reading*, Oral Timed Reading Progress Chart and Silent Timed Reading Progress Charts, below)

From *Core Reading*, Oral Timed Reading Progress Chart



From *Core Reading*, Silent Timed Reading Progress Chart



⇨ TIMED REPEATED READING

➡ QUESTIONS, COMPREHENSION

Lesson Component 8, Questions, Comprehension, for Comprehension

For each Timed Repeated Reading, for reading fluency, I wrote Questions, Comprehension for comprehension, that included main idea, details, scanning, literal and interpretive comprehension, and vocabulary.

- **QUESTION 1**

Main Idea

- **QUESTIONS 2, 3, 4**

Fill-in Recall;
Scanning

- **QUESTIONS 5-8**

Literal and Interpretive
Comprehension

Each Questions, Comprehension, had the same structure, based on the lesson passage content. The first four questions were of the same type. Question 1 was for the main idea, asking what the story was mostly about. Questions 2, 3, and 4 were fill-in recall questions that provided a scanning or review of the passage. The remaining questions, 5 through 8, were literal and interpretive comprehension questions and a vocabulary question. (See From *Core Reading*, Questions, Comprehension, Lesson 11, below.)

From *Core Reading*, Questions, Comprehension, Lesson 11

Culture		Guided Comprehension (11)
1. What is the passage mostly about?		
(For questions 2, 3, and 4, fill in the missing words from the passage.)		
2. A _____ is a way of _____, simple or _____.		
3. It includes a mixture of art, _____, _____, _____, and architecture.		
4. Customs include everything from _____ and _____ traditions to _____ and _____ traditions.		
5. How do people learn their culture?		
6. Name some interesting customs with which you are familiar.		
7. What is culture and why is it helpful to understand other cultures?		
8. What is the meaning of "nurture" in the phrase "and raise and nurture offspring"?		

Adding Ten Lower Level Lessons

The first year, the program began with what now is lesson 11. The second year, I added ten lessons to the beginning of the program. The ten added lessons, lessons 1 through 10, became part of the program. (See From *Core Reading*, Timed Repeated Reading, Lesson 1, below, and From *Core Reading*, Timed Repeated Reading, Lesson 7, on page 50.)

From *Core Reading*, Timed Repeated Reading, Lesson 1

The Space Shuttle

The space shuttle is like a plane	7
that can travel into space. It takes off	15
like a rocket and lands like a plane. It	24
reaches speeds of over 17,000 miles	30
per hour.	32
The launch of the first space	38
shuttle was in 1981. It showed that a	46
reusable vehicle could go into space.	52
When the shuttle spacecraft lifts off, it	59
has a fuel tank and two rocket boosters.	67
Large, heavy spacecraft need powerful	72
rocket boosters to launch them. The	78
rocket boosters and fuel tank drop off	85
soon after takeoff. Then like the	91
spacecraft, they are used again.	96
Space shuttles have been used	101
for many jobs. Crew members gather	107
information about the earth, the stars,	113
and the sun. They also perform	119
experiments on plants, animals, and	124
themselves. Experiments that are	128
impossible on earth can be performed	134
in space. Some space shuttles take	140
supplies to space stations. A shuttle	146
mission lasts about seven days and has	153
a crew of up to eight people.	160

Oral Reading (WPM) ____ Silent Reading (WPM) ____

From *Core Reading*, Timed Repeated Reading, Lesson 7

Predators of the Deep

Predators are animals that live by hunting and eating other animals. Great white sharks are predators.	8
They have superior speed and strength, and razor sharp teeth. They are real competitors and survivors in the ocean.	16
	24
	32
	35
Great whites are the most feared and dangerous of all sharks. They are carnivores, meat eaters. Their prey are animals such as sea lions, dolphins, and other sharks. Great whites often swallow their prey whole, or they tear off large chunks of flesh. They are also scavengers; they feed on dead or dying animals. Their digestive juices are strong enough to corrode steel.	44
	52
	61
	69
	79
	88
	96
	98
Great whites have been known to attack humans and even fishing boats. But each year, there are only 100 shark attacks reported throughout the world.	105
	114
	122
	123
These muscular warriors grow to a length of 26 feet. Their skin is covered with denticles, toothlike scales that make the skin very rough. Years ago, sailors used shark skins as sandpaper to scrub the decks of their ships. Sharks' razor sharp teeth are constantly being replaced by new ones. During their lifetimes sharks go through thousands of teeth.	131
	140
	149
	158
	167
	175
	182
Great whites can hear, see, smell, taste, and feel. They also have a sixth sense: they use tiny pores in their heads to pick up electrical impulses that every animal emits. With their six senses, and with their other superior physical characteristics, great whites are competitors, survivors, and the most powerful predators of the deep.	190
	202
	212
	221
	227
	234
	238

Oral Reading (WPM) _____

Silent Reading (WPM) _____

CHAPTER 8

Reviewing and Discussing New Reading Components and Added Lessons

Reviewing and Discussing New Reading Components

The reading lesson component review and discussion includes student responses and my responses to each of the new reading lesson components: Timed Repeated Reading, for reading fluency, and Questions Comprehension, for comprehension.



TIMED REPEATED READING



QUESTIONS, COMPREHENSION

Lesson Component 7, Timed Repeated Reading, for Reading Fluency

The Timed Repeated Reading, for reading fluency, had two timed readings, a 1-minute oral Timed Repeated Reading and a 1-minute silent Timed Repeated Reading. I timed all of the students together for the two timed readings.

Step 1, Oral Timed Repeated Reading

I started the 1-minute oral Timed Repeated Reading by reading the passage to all students while they followed along silently, which gave word practice and word exposure and provided students with a fluent reading model. To insure that each student attended to the passage reading, I stopped once or twice during the timed reading and asked one student to read the next word. The student earned bonus points if he or she knew the word.

- **TIMED READING 1**

Oral 1-Minute

- **TIMED READING 2**

Silent 1- Minute

I stopped once or twice during the reading and asked one student to read the next word.

Students stayed focused on the passage and seldom missed the word.

One student read orally, and the partner followed silently and helped with difficult words...

After I read the passage with the students, they worked in pairs. As I timed for 1-minute, each student read the passage with a reading partner, a student sitting nearby. One student read orally, and the partner followed silently and helped with difficult words so the student could continue reading fluently. Then, the partners changed roles, and I timed for another 1-minute. (When I began the new reading intervention program, I had planned to group students by reading levels, the usual way of grouping partner reading. Instead, each student read with a student seated nearby, which seemed less clinical and worked well. Sometimes friends read together.)

I made another change from the usual partner reading. Rather than the student partner circling words the student mispronounced, he or she helped the student pronounce difficult words and continue reading fluently. After the timed reading, on their own pages students circled words that needed practice. Students kept accurate accounts of their difficult words.

Students wanted to help others keep pace with the instruction, and they eagerly volunteered their help.

If students struggled to keep up with the timed reading, the partners helped them study the passage. Students wanted to help others keep pace with the instruction, and they eagerly volunteered their help. By helping others, students strengthened their own reading and social skills.

For students at the lowest reading levels, I included two individualized, audio-workbook reading support programs that helped them keep pace with the class lessons. Students could work on the individualized programs on their own with headphones. (See Appendix B, Reading Support Programs.)

Step 2, Oral Timed Repeated Reading, Monitoring

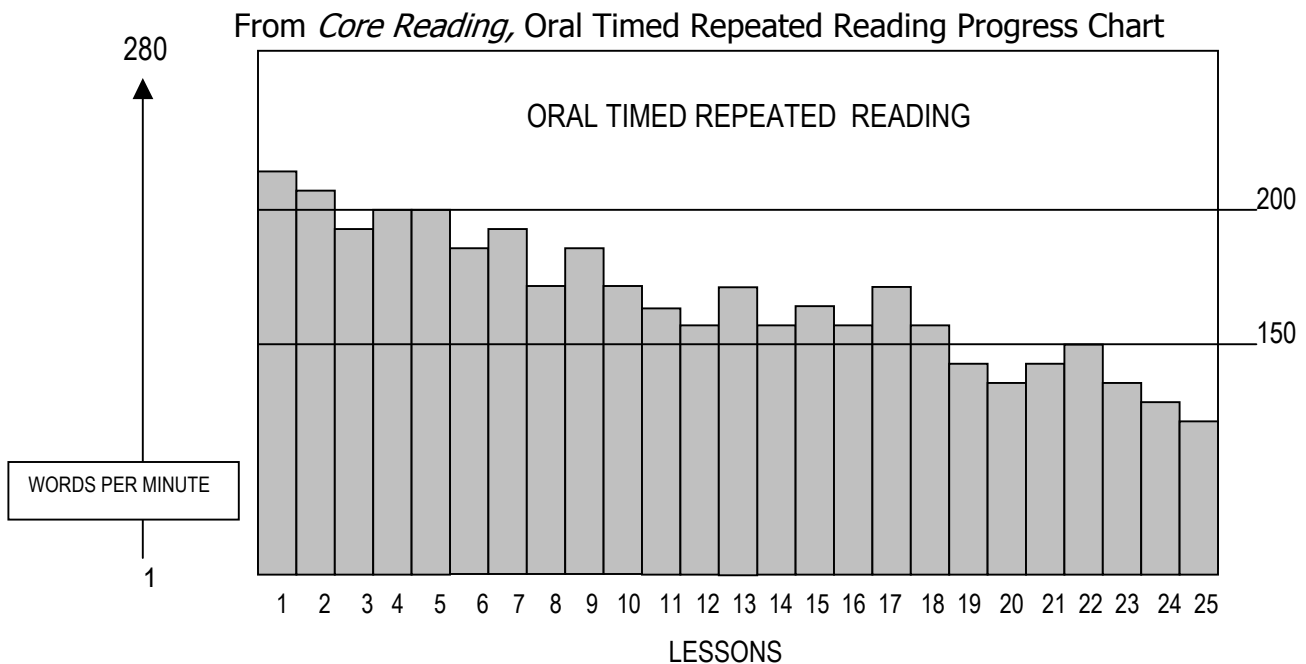
Students recorded their oral Timed Repeated Reading progress weekly, filling in the scores on their individual progress charts, which I collected after each class and

passed out before the next timed reading. After I noticed one student using a colored marker to fill in the score on her chart, I provided colored markers for all students to use in making their charts colorful, unique, interesting, and easier to monitor. Initially, I thought that having the reading levels visible on the charts might be a problem for some students, but most students wanted to share the progress chart information.

Most students averaged between 150 and 200 words per minute or higher (the average for most middle school and high school students) for the beginning lessons. Scores on advanced lessons averaged 100 to 120 words per minute or lower for most students. Therefore, I provided additional practice for the advanced level readings.

Most students averaged between 150 and 200 words per minute (the average for most middle and high school students) for beginning lessons.

Students enjoyed the oral Timed Repeated Readings. I explained to them that their scores might not go up each week because the passages would become more difficult. (See From *Core Reading*, Oral Timed Repeated Reading Progress Chart, below.)



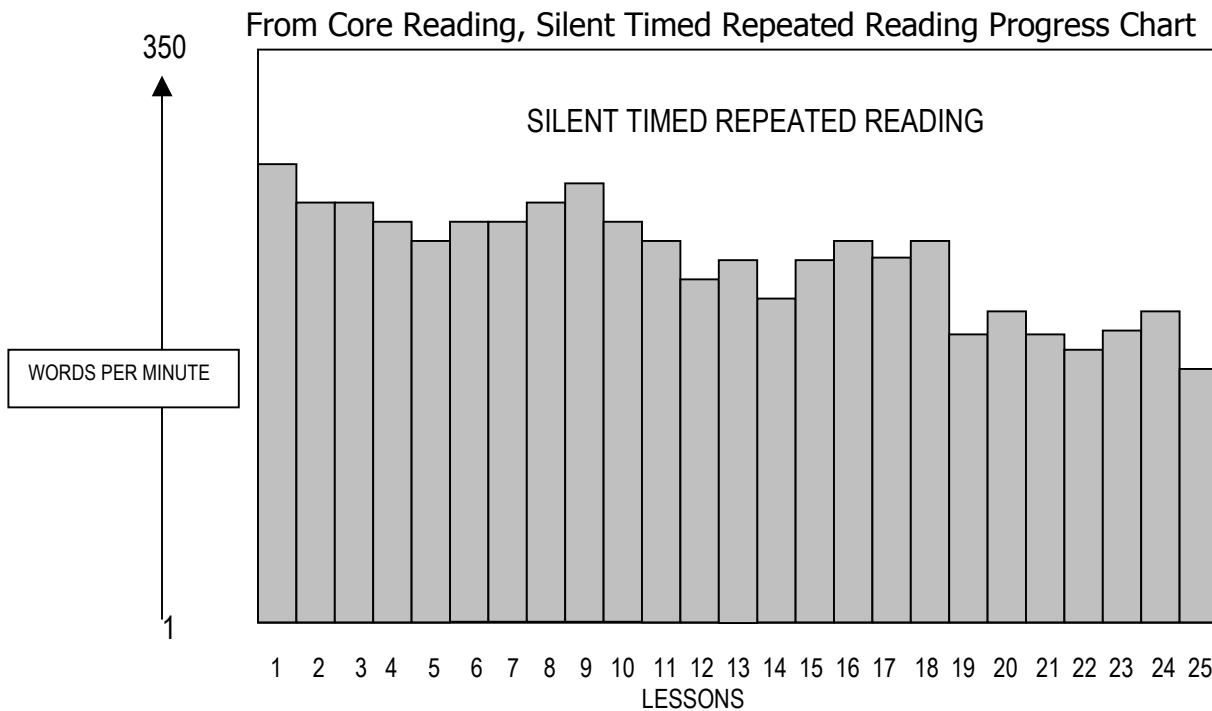
Step 3, Silent Timed Repeated Reading

For added reading fluency practice, I timed all students for 1-minute as they read the silent Timed Repeated Reading. Initially, I questioned including a silent timed reading in the program because I wondered how I could tell if the students had read the passage. I could observe clues such as eye focus and body orientation, but mostly I could tell from working with and knowing the students. Most students read the passages. Before the silent timed reading, I told the students that silent timed reading would increase their reading speeds and reading fluency.

Initially, I questioned including a silent timed reading in the program because I wondered how I could tell if the students had read the passage.

Step 4, Silent Timed Repeated Reading, Monitoring

For the silent Timed Repeated Reading progress chart, I made a chart like the oral Timed Repeated Reading chart, but because students read faster silently, I added lines for the greater numbers of words. (See From *Core Reading*, Silent Timed Repeated Reading Progress Chart, below.)



Lesson Component 8, Questions, Comprehension, for Comprehension

The first four Questions, Comprehension, questions for reading comprehension were the same type. The first question was for the main idea, asking what the passage was mostly about. Questions 2, 3, and 4 were fill-in recall questions for passage scanning and review. Also, they provided easy transition to questions 5 through 8, literal and interpretive comprehension questions and a vocabulary question. The comprehension question structure worked well. Most students started with questions 2, 3, and 4, the recall questions. Completing the recall questions motivated them to continue to the more difficult questions. (See From *Core Reading*, Questions, Comprehension, Lesson 11, below.)

The comprehension questions structure worked well.

From *Core Reading*, Questions, Comprehension, Lesson 11

Guided Comprehension (11)

Culture

1. What is the passage mostly about?

(For questions 2, 3, and 4, fill in the missing words from the passage.)

2. A _____ is a way of _____, simple or _____.

3. It includes a mixture of art, _____, _____, _____, and architecture.

4. Customs include everything from _____ and _____ traditions to _____ and _____ traditions.

5. How do people learn their culture?

6. Name some interesting customs with which you are familiar.

7. What is culture and why is it helpful to understand other cultures?

8. What is the meaning of "nurture" in the phrase "and raise and **nurture** offspring"?

CHAPTER 9

Completing the Program

Looking at the Completed New Reading Intervention Program

The completed new reading intervention program, with the reading components, covered in the previous chapters, was contained in 25 individual reading lessons organized in lesson packets. Teachers used the program in the high school laboratory and in high school classrooms.

Program Reading Components in Lesson Packets

The reading components included in the lesson packets were: Spelling; Practice Spelling Test; Vocabulary; Vocabulary Drawing; Rapid Word Reading; Spelling Test; Vocabulary Quiz; Timed Repeated Reading, for reading fluency; and Questions, Comprehension, for comprehension.

Program Teaching Strategies and Individual Reading Lessons

For teaching strategies in the program, I used direct instruction in phonics, spelling, and vocabulary. The teaching strategies were based on word morphology, clusters of multisyllable words with identical endings. Also, language features of rhyming and rhythm were included. The lesson reading strategies benefited a wide range of students and worked well in the reading laboratory where reading levels ranged from grade three to grade seven each year.

The 25 individual reading lessons, in lesson packets, began with 2-syllable word patterns (mid/dle, bat/tle) and progressed to 3-, 4-, 5-, and 6-syllable word patterns (a/mend/ment, ec/o/nom/ic, civ/i/li/za/tion, and si/mul/ta/ne/ous/ly). The lessons began at approximately

a grade three reading level and continued to a grade twelve reading level. The sequence remained the same for each lesson.

Program Organization, Lesson Packets

A 6 to 7 page lesson packet for each of the 25 lessons was duplicated and stapled for each student. (See Lesson Packets, below.)

Lesson Packets

PRACTICE SPELLING TEST 1	VOCABULARY 2	VOCABULARY DRAWING 3
RAPID WORD READING 4	TIMED REPEATED READING 7	QUESTIONS, COMPREHENSION 8

The student lesson packets did not include the two assessment components, Spelling Test and Vocabulary Quiz. They were individual assessment pages given to students by the teacher. (See Assessment Pages, below.)

Assessment Pages

SPELLING TEST 5	VOCABULARY QUIZ 6
-----------------------	-------------------------

Grouping Students and Using Lesson Packets in the Reading Laboratory

Students did not like being placed in different reading groups...

For instruction in most reading classrooms, students are grouped by reading levels. I found drawbacks to this way of grouping on a high school campus. Students did not like being placed in different reading groups, and they became resistant, which defeated instruction attempts.

Each day in the reading laboratory, all students worked on the same lesson packet. For students at the lowest reading levels, two self-instructional programs were available at a learning-center table with a cassette player and headphones. One program had ten audio-workbook phonics lessons. The other program had audio-workbook reading fluency lessons. Students completed both programs independently. The self-instructional programs helped students at low reading levels keep pace with the lessons. (See Appendix B for Information on the Self-Instructional Programs.)

Using the New Reading Intervention Program in Classrooms

Both middle school and high school classrooms used the new reading intervention program. A continuation high school teacher at the high school where I used the program also used the program with great success in his classroom. He wrote the following comments.

*The **Core Reading** program, a program designed to improve the basic reading comprehension skills of secondary students, is the best of its kind. It has increased the linguistic ability of my high-school*

continuation students without being boring or insulting to their intelligence, and I have not heard one complaint!

"My students work on their packets with drive and enthusiasm".

My students work on their packets with drive and enthusiasm. This program has shown me what I have believed all along. Words can be adventurous, exciting and a great learning experience.

Jan Freifeld,
Continuation High School English Instructor

Behavior Problems Eliminated

Again, I emphasize that students liked the new reading intervention program, and it positively changed their classroom motivation, success, and behavior. In the following comments a middle school teacher tells how the program affected student behavior in her classroom.

*I am very impressed with the **Core Reading** program. The students love it. During their independent choice work time, they ask to work on the packets. After Lesson 7 or 8, I almost had to hide the upcoming lesson packets because students were taking them off the shelf before I had a chance to introduce the lesson -- to work on them on their own! Each lesson has a similar format, which allows the student to be self-directed and comfortable with what is coming next.*

*...the other students are so involved with other **Core** activities that management problems are almost non-existent...*

*One-on-one time with each student is built into each lesson. This has been a real treat for me as it has been completely "doable." The 2-3 minutes spent with each student is invaluable; the other students are so involved with other **Core** activities that management problems are almost non-existent -- these struggling readers are engaged!*

Geri Gmahling,
Middle School Title 1 English Support Teacher

CHAPTER 10

Discussing Assessment Results

Discussing New Reading Intervention Program Assessment Results

Assessment results showed that with only a brief intervention, 5 hours a week for 1 school year, high school students could grow significantly in reading with a program that focused on core textbook words.

Word Recognition

The three tables, below, represent students from several teachers' classrooms.

In 2001-2002, the average word recognition growth was 2.95 years. (See Table 1.)

Table 1. *Brigance Oral Word Recognition Test, 2001-2002 School Year*

Grade Level at Pretest	Grade Level at Posttest	Average Growth
5.80	8.75	+2.95 years

In 2002-2003, the average word recognition growth was 3.05 years, and 60% of the students made 3 or more years' growth. (See Table 2. and Table 3.)

Table 2. *Brigance Oral Word Recognition Test, 2002-2003 School Year*

Grade Level at Pretest	Grade Level at Posttest	Average Growth
5.94	8.95	+3.05 years

Table 3. *Brigance Oral Word Recognition Test, 2002-2003 School Year*
(Organized by Number of Students and Number of Years' Growth)

6 Years	5 Years	4 Years	3 Years	2 Years	1 Year
4 Students	6 Students	15 Students	15 Students	18 Students	9 Students

Word recognition was important because the ability to decode words was required for fluent reading and comprehension.

Of all the tests, word recognition showed the greatest gains. Word recognition was important because the ability to decode and recognize words was required for fluent reading and for comprehension. Low word recognition scores caused most of the students' reading difficulties.

Oral Passage Reading

On the *Brigance Oral Reading Test*, students at the lowest reading levels made the greatest gains. They averaged three and four years' growth. The fact that the highest reading level measured on the test was grade 9 limited the test results. Also, the test did not measure reading rate, an integral part of the new reading intervention program.

Comprehension

The *Brigance Comprehension Test* scores reflected word recognition growth and oral reading improvement. The assessment results were typical of results recorded each year for five years with 60 to 70 students each year, most (around 80%) were second language students. (Subsequently, high school and middle school teachers with whom I have worked are using the new reading intervention program with similar assessment and classroom performance results.)

Assessment Results Support

The following high school and middle school teacher comments support the assessment results.

From a high school teacher:

*I have found that the **Core Reading** program has been extremely effective in connecting students to the core curriculum, the major goal of our class.*

The program has two basic components. One critical component is the weekly spelling and vocabulary lesson. Not only do students make large gains in spelling skills and vocabulary acquisition, but they also make gains in word recognition and reading fluency because the word study is organized by word patterns and derived from the core curriculum.

A second component that produces the result is the weekly timed reading. The reading is based on the word pattern for the week and also tied to a subject in the core curriculum. Each week, students practice both oral and and silent reading fluency, with the level of reading difficulty gradually increasing.

...students have told us that the program has helped them to be more successful in their core classes.

Each year we administer a battery of tests to our students, and we see results averaging two to four years growth. The biggest gains are usually made in the areas of spelling and word recognition. In addition, students have told us that the program has helped them to be more successful in their core classes.

Jodi Hottel, High School Reading Specialist

From a middle school teacher:

***Core Reading** has been the most successful program I have used. This program increases students' word recognition, fluency, spelling, and comprehension. The average growth for my students: 2 years growth in word recognition in 4.5 months; 26.6 words per minute growth in reading fluency in 4.5 months; and 9 months growth in 3 months on the **Accelerated Reader STAR** test.*

Jessie Kroeck, Middle School English Teacher

From the Title I project manager:

*Dr. Glavach's program, **Core Reading**, has broken the myth that you can't teach reading at the high school level. He has gone beyond traditional reading programs and developed a highly effective linguistics program to increase students' reading skills. Many of our students come to the reading lab with a third or fourth grade reading level, and after a semester or year in the program, all students improve their reading and many advance to grade level or above.*

Ruth Martin, State and Federal Projects

Core Class Success

The high school counselor responsible for reading laboratory students said that most students who studied a year in the reading laboratory were successful in core classes.

...most students who studied a year in the reading laboratory were successful in core classes.

Teacher Comments, *Core Reading*

The following comments were from teachers who taught the *Core Reading* program.

Organizing the lessons according to how words are spelled alleviates the difficulty of reading, writing, and even pronouncing the words. An entire key syllable is instantly mastered!

*The structure of **Core Reading** supports struggling readers, as the consistency removes fear of reading. Yet what I appreciate most about the program is that it also has room for creativity. Lessons can be individualized to accommodate both teacher and students. Using the timed readings, for example, teachers can instruct their students in identifying key information, summarizing, predicting, and responding to text. Students are set up to succeed. Organizing the lessons according to how words are spelled alleviates the difficulty of reading, writing, and even pronouncing the words. An entire key syllable is instantly mastered! I love this program.*

Heather Garcia–Rossi
High School English and Reading Teacher

*The **Core Reading** program produces results. I have witnessed students' vocabulary acquisition, word recognition, and reading fluency expand with this program. The program is effective, and easy to use. What I believe is most valuable about the **Core Reading** program, however, is how it links students with the core curriculum, preparing them to achieve in all of their classes. The **Core Reading** program is truly structured for student success.*

Linsey Hubley
High School English and Reading Teacher

CHAPTER 11

Summarizing the New Reading Intervention Program

Discussing the New Reading Intervention Program for Adolescent Reading

Student reading growth and the new reading intervention program's promising potential for core class success inspired me. Students who had come to the program with little confidence and had seemed destined for failure had new attitudes and reading motivation. Student classroom behavior problems were almost non-existent. I had heard comments like, "My English teacher said my oral reading has really improved." And students commented that they were able to read classroom textbooks and complete assignments.

Familiarity with core textbook vocabulary and topics gave students confidence to try in core classes.

Familiarity with core textbook vocabulary and topics gave students confidence to try in the core classes. Learning a skill was easier if it could be supported by other skills the student already knew or was learning. The new reading intervention program supported the core classes and the core classes supported the reading intervention program.

The reading components, Spelling, Vocabulary, Rapid Word Reading, Timed Repeated Reading, and Questions, Comprehension, and the reading strategies, direct instruction, word morphology, and rhyme and rhythm, organized in lesson packets became a successful reading intervention program for middle and high school struggling readers.

Program Benefits and Features:

- Students made significant reading and spelling progress while studying important core textbook words that connected them to the core classes.

- Organizing words by suffixes and identical endings made reading multisyllable words manageable. One high school English and reading teacher said:

Organizing the lessons according to how words are spelled (identical suffixes and endings) alleviates the difficulty of reading, writing and even pronouncing the words. An entire key syllable is instantly mastered!

- By dividing larger words into syllables, students see words in smaller parts that are easier to decode. (The brain arranges multisyllable word parts into patterns that can be translated to thousands of words.)

- Arranging words that have similar sound and visual patterns used the language and music features of rhyme and rhythm to help students read multisyllable words.

- Word repetition in each lesson increased the possibility for storing words into long term memory.

- Because each lesson packet had an identical structure, the lesson became a ritual that eliminated the something-new-every-day worry.

- The timed reading activities (Rapid Word Reading and Timed Repeated Reading) developed automatic reading skills working toward smooth and effortless reading, allowing the reading focus to be on comprehension.

- Students at different reading levels worked on the same lessons making the program acceptable to the students and easy for teachers to present.

- Students reacted positively to the program. The challenging, adult approach and connection to the core textbooks increased motivation. With success, students took the risks of reading multisyllable words and of reading aloud. When students could read fluently, they wanted to read.

Summarizing

Because success in core classes is a critical concern at middle school and high school, I was encouraged to find that a high percentage of students who completed the reading intervention program in the reading laboratory succeeded in core classes. A student comment, one of many similar comments, upholds my rationale for creating the new reading intervention program. After reading a passage from a science textbook and being asked to discuss the meaning of the passage, the student responded, “I can’t tell you what I read; I was busy trying to pronounce the big words.” Many middle school and high school students do not succeed in core classes because of the gap between their reading skills and the skills needed for reading core textbooks and assignments. The new reading intervention program for adolescent struggling readers *Core Reading* offers a way short-circuit reading intervention and connect students to core academic classes.

Post Script

For some time, I have thought that to make an impact on the nation’s middle school and high school reading problems, much reading intervention should take place within the regular core classrooms, especially for the many students who are only a few years behind in reading. For middle school and high school reading intervention, I have included 15 lessons (lessons 11 through 25) from the *Core Reading* program (the new reading intervention program described in this book). The 15 lessons do not include the *Core Reading* fluency passages and vocabulary tests but can be easily used in most classroom situations including core classes. The easy-to-present lessons could benefit students struggling to succeed in core classes.

In addition to *Core Reading*, my successful reading strategies for adolescent struggling readers have led to creating several programs. *Core Reading*, *Core Reading* support programs and new program information is listed in Appendix B.

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Appendix A

Author Biography

About the Author

Matthew Glavach, Ph.D., teacher, researcher, and writer, has authored and coauthored over 30 educational programs including *High Interest Teaching Systems (HITS)*, a popular music based reading program for older struggling readers, and *Reading with Donny and Marie* (Osmond), an original music based reading program for younger readers. His research articles include “Breaking the Failure Pattern”, “Teaching the Unteachables”, and “Closing the Gap: A New Model for Adolescent Reading Intervention.” His recent research has resulted in *Core Reading*, a reading program that short-circuits reading intervention for older struggling readers. In 2005, *Core Reading* was among programs chosen by the National Institute of Child Health and Human Development (NICHD) for a possible visit by First Lady Laura Bush. With his Northern California publishing company Glavach and Associates, Dr. Glavach is committed to improving middle school and high school student literacy.

Appendix B

Instructional Programs Developed by Dr. Glavach

Middle School and High School Programs by the Author:

Core Reading (GA118-\$150.00)

Develops decoding for multisyllable words and reading fluency, while connecting students to core textbooks. The 25 weekly lessons (lesson packets of 6-8 pages) are based on a core vocabulary from English, biology, science, and social studies. Students carefully move from 2-syllable words to 5-syllable words or more, through a unique spelling approach and content related timed readings from grade 3 through grade 12. The program includes lesson masters and teacher instructions neatly organized in a binder.

CORE READING SUPPORT PROGRAMS

Reading the News for Reading Fluency (GA106-\$80.00)

Students read in meaningful contexts and are given systematic instruction in reading fluency, phrase-cued reading, word attack, spelling, and comprehension. The program has an adult format and uses actual *Associated Press* newspaper articles. Designed for middle school through adult students having a 4.0 and above instructional reading level. Provides hours of individual or group instruction with 12 lessons on 6 cassettes (over 6 hours of audio instruction), teacher's guide, and reproducible student workbooks in an easy-to-use format.

Programmed Spelling Review (GA105-\$80.00)

For grade 3 through adult students who need to review basic spelling and phonics skills and high frequency writing words. The 12 lessons present consistent spelling rules and principles, followed by guided practice to insure success. Provides hours of individual or group instruction with 12 lessons on 6 cassettes (over 6 hours of audio instruction), teacher's guide, and reproducible student workbooks in an easy-to-use format.

NEW PROGRAMS FOR MIDDLE AND HIGH SCHOOL

Latin and Greek Word Roots 1: A Course of Study (GA119-\$30.00)

Engages students and teaches word roots the building blocks for words. Presents hundreds of word roots that translate to understanding thousands of words. Improves decoding, spelling, vocabulary, and reading comprehension. Each lesson presents a word pattern chart, discovery puzzles, word cards, art activities, and practice and review quizzes. Reproducible masters for individual classroom use.

Latin and Greek Word Roots 2: A Course of Study (GA121-\$30.00)

The second course of study in Latin and Greek word roots uses the successful active learning design of course one It's built on words from middle and high school core textbooks: science, history and literature and includes word roots that can unlock the meanings of over 100,000 words. 135-page book of reproducible masters for individual classroom use.

Mastering Science Words (GA126-\$30.00)

Is a unique, scientifically based reading, spelling, and vocabulary program that makes learning science words easy and improves general reading ability. The program consists of easy-to-use lesson packets that can be used in science classes for all students. Provides an opportunity for struggling readers to succeed in science classes and improves general reading ability.

Mastering Social Studies Words (GA127-\$30.00)

The program uses the same lesson structure as **Mastering Science Words**, above, but focuses on social studies words.

.....
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