Reading Instruction for Adult Basic Education Students

DEBORAH K. REED, PH.D.
FLORIDA CENTER FOR READING RESEARCH
FLORIDA STATE UNIVERSITY

1

Outcomes for the day

2

- Review the rationale for teaching specific reading skills to adult learners

- Learn the components of word study, fluency, and comprehension instruction

- Experience sample instructional activities for word study, fluency, and comprehension

- Understand how to plan appropriate reading instruction for ABE students

---

Word Study

3

Deborah K. Reed, Ph.D.

Rationale

④

- Lowest levels of literacy = need for foundational skill development

- Lexical quality hypothesis (Perfetti, 2007)

Most applicable to NRS Levels 1-2, but evidence suggests that *all* NRS (1-4) levels benefit.

Successful vs. Struggling Readers

⑤

Successful Readers	Struggling Readers
Read multi-syllabic words and use strategies to figure out unknown words	Often read single syllable words effortlessly but have difficulty decoding longer multi-syllable words
Make connections between letter patterns and sounds and use this understanding to read words	May lack knowledge of the ways in which sounds map to print
Break words into syllables during reading	Have difficulty syllabicating words into syllable parts
Use word analysis strategies to break difficult or long words into meaningful parts such as inflectional endings, prefixes, suffixes, and roots	Often do not use word analysis strategies to break words into parts

Goals of Word Study

⑥

- Increase self-efficacy

- Reduce recitation and memorization

- Draw attention to features of print

2

Deborah K. Reed, Ph.D.

Components of Word Reading

7

- Morphology
- Phonics
- Orthography
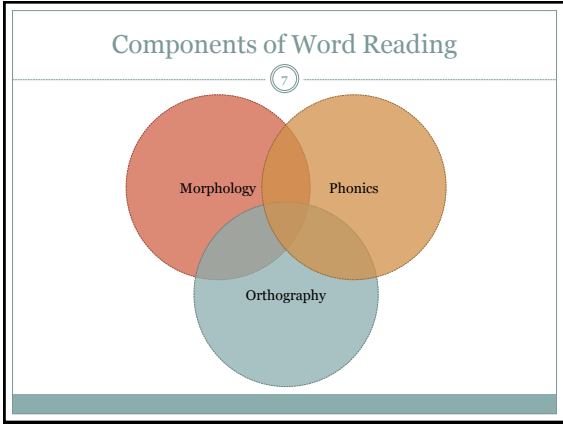
Basic Concepts

8

Letter-sound Knowledge	Alphabetic Principle

• Knowing the common sounds of letters, letter combinations, and spelling patterns
 	
 • Knowing how to blend the sounds of letters together to read words
	• Understanding that the sequence of sounds in spoken words is represented by the sequence of letters in printed words
	
	 • Ability to associate sounds with letters and use these sounds to form words
	
	 • Phonological recoding
	    ○ Regular words
	    ○ Irregular words
	    ○ Advanced word analysis

Letter-sound Knowledge:
Frequency of Major Sounds *(Fry, 2004)*

9

Order of Vowel Sounds	Order of Consonant Graphemes
• Short I • Short A • Short E • Schwa R • Long O • Long E • Short U • Short O • Long A • Long U • Long I • R-controlled A and O • Vowel pairs AU, AW, OU, OW, OO • Vowel pairs OI, OY, and AI	• R • T and N • S, L, and C • D, P, and M • B • F and V • G • H • K and W • TH, SH, and NG • CH • X • Z and J • QU, WH, and Y

Deborah K. Reed, Ph.D.

Other Concepts

10

- **Syllable:** The smallest unit of speech that contains one vowel sound
- **Consonant blend:** A combination of consonant letters found before or after a vowel sound in a syllable, in which each consonant represents a unique sound (e.g., *tr-*, *spr-*)
- **Consonant digraph:** A combination of consonant letters that represent one speech sound (e.g., *ph-*, *ch-*)
- **Irregular word:** A word in which the letter combinations do not make their expected or most common sounds (e.g., *could*, *right*, *beauty*)
- **Schwa:** An indistinct vowel sound found in unstressed English syllables (e.g., *common*)
- **Automaticity:** Immediately recognizing words without having to decode sounds or syllables

---

Common Syllable Types

11

1. Closed (VC, CVC, CCVC, CVCC, or CCVCC)
2. Open (CV or CCV)
3. Vowel-Consonant-e or Silent-e (VC+e or CVC+e)
4. Vowel pairs or teams (CVVC, CCVVC, CVVCC)
5. R-controlled vowels (CV-r, CV-rC, or CC-rC)
6. Consonant-le (-C+le)

Why is it important to be able to identify syllable types?

Closed and Open Syllables

12

Closed Syllables	Open Syllables
• splen – did	• no – tion
• gos – sip	• spry
• in – sect	• pre – dict
• rab – bit	• se – quel
• mag – net	• la – zy
• hom – o – nym	• i – tem

4

Deborah K. Reed, Ph.D.

CLOSED SYLLABLE

Definition: A closed syllable has one vowel that is closed in by a consonant. The vowel sound is short. (VC, CVC, CCVC, CVCC, or CCVCC)

Sample Words:

Language Arts:

In dex

Poet

Ed it

Predict

Con cept

Literature

Relationship

Social Studies:

West

Taft

Empire

Modern

Populist

Democrat ic

Indepen dent

Math:

Sum

Add

Sub tract

Figure

Factor

Ob ject

In ves tigate

Science:

Rust

Energy

Property

Interact

Element

Temperature

Electromag net ic

OPEN SYLLABLE

Definition: An open syllable has one vowel that occurs at the end of the syllable. The vowel sound is long. (CV or CCV)

Sample Words:

Language Arts:

Poet

Student

Pronoun

Predict

Auto biography

Comprehensive

Re lationship

Social Studies:

Triumph

Migrate

Nation

Review

Reform

Develop

Independent

Math:

Meter

Below

Table

Result

Describe

E quation

Denominator

Science:

Science

Lunar

Resource

Climate

Volca no

Reflection

Electromagnetic

Vowel-Consonant-*e* and *R*-controlled Syllables

13

Vowel-Consonant-*e* Syllables	*R*-controlled Syllables
• dic – tate	• bom – bard
• lone – ly	• tur – nip
• pro – file	• cor – ner
• stam – pede	• vir – tue
• in – vite	• per – fect
• wish – bone	• car – pool

Vowel Pair and Consonant-*le* Syllables

14

Vowel Pair Syllables	Consonant-*le* Syllables
• sail – boat	• puz – zle
• man – hood	• bub - ble
• six – teen	• can – dle
• treat – ment	• la – dle
• m<u>oo</u>n – struck	• ma – ple
• <u>ou</u>t – side	• cir – cle

Instruction in Syllable Types

15

- Explicit & sequential
- Salient features
- Practice & cumulative review
- Generalization to new words
- Irregular words (unaccented syllables)

7

Deborah K. Reed, Ph.D.

Vowel-Consonant-E SYLLABLE

Definition: A VCE syllable (silent –e syllable) ends with an –e, has one consonant before the –e, and one vowel before the consonant. The vowel sound is long and the -e is silent. (VC-e or CVC-e)

Sample Words:

Language Arts:

Tale

Write

Theme

Describe

Introduce

Foreshadow

Visualize

Social Studies:

Mine

Rise

Empire

Safeguard

Debate

Populate

Enterprise

Math:

Cube

Score

Shape

Divide

Alike

Evaluate

Investigate

Science:

Plate

Wave

Explore

Nature

Combine

Pollute

Create

R-CONTROLLED VOWELS

<u>Definition</u>: An R-controlled syllable contains a vowel followed by an –r. This combination makes a unique sound. (V-r)

Sample Words:

Language Arts:

In**<u>form</u>**

Auth**<u>or</u>**

The**<u>ater</u>**

Narra**<u>tor</u>**

Chara**<u>cter</u>**

P**<u>er</u>**spective

Fig**<u>ur</u>**ative

Social Studies:

<u>Farm</u>

<u>Mar</u>ket

Ac**<u>cord</u>**

Mod**<u>ern</u>**

An**<u>ar</u>**chist

A**<u>part</u>**heid

Af**<u>firm</u>**ative

Math:

<u>Part</u>

P**<u>er</u>**cent

Pat**<u>tern</u>**

En**<u>large</u>**

Fact**<u>or</u>**

Sim**<u>ilar</u>**

P**<u>er</u>**im**<u>eter</u>**

Science:

Sul**<u>fur</u>**

<u>Car</u>bon

En**<u>er</u>**gy

<u>Par</u>ticle

Cons**<u>er</u>**vation

<u>Zir</u>conium

B**<u>er</u>**kelium

VOWEL PAIRS or TEAMS

Definition: A vowel pair syllable has two vowels together that make one vowel sound.

Sample Words:

Language Arts:

Read

Goal

Meaning

Speaking

Detail

Proofread

Main Character

Social Studies:

Greek

Speech

Peace

Launch

Freedom

Sweatshop

Bernstein

Math:

Paid

Mean

Speed

Pie

Feature

Explain

Reason

Science:

Stream

Toad

Heat

Sea

Beat

Lead

Rain

CONSONANT-LE SYLLABLE

<u>Definition</u>: A consonant –le syllable has a consonant followed by –le. The vowel sound in this syllable is the schwa sound followed by the *l* sound. The e is silent. (-C+le)

Sample Words:

Language Arts:

Ti<u>tle</u>

Fa<u>ble</u>

Peo<u>ple</u>

Princi<u>ple</u>

Arti<u>cle</u>

Exam<u>ple</u>

Partici<u>ple</u>

Social Studies:

Set<u>tle</u>

Cat<u>tle</u>

Strug<u>gle</u>

Bat<u>tle</u>

Set<u>tle</u>ment

Spin<u>dle</u>top

Profita<u>ble</u>

Math:

Sin<u>gle</u>

Dou<u>ble</u>

Cou<u>ple</u>

Mid<u>dle</u>

Puz<u>zle</u>

Possi<u>ble</u>

Trian<u>gle</u>

Science:

Tur<u>tle</u>

Trem<u>ble</u>

Bee<u>tle</u>

Man<u>tle</u>

Nee<u>dle</u>leaf

Predicta<u>ble</u>

Adapta<u>ble</u>

Instruction in Syllable Types

<u>Sequence of types:</u>

Closed syllables

Open syllables

Vowel-consonant-*e* syllables

Vowel-*r* syllables

Vowel pair syllables

- diphthongs

Consonant-*le* syllables

Irregular words

<u>Instructional Steps:</u>

1. Provide multiple opportunities to practice identifying a syllable type in one-syllable words.
2. Gradually increase practice in a syllable type to include two-syllable words and then multi-syllable words.
3. Ask: Do I need to divide this word into different syllables?
   a. If no: Why not?
   b. If yes: Where? Why?
4. Ask: What is the syllable type? and What does it tell me about the vowel sound?
5. Say each syllable out loud slowly.
6. Put the syllables together and say the whole word.
7. Provide cumulative reviews of the syllable types.
   a. Word sorts
   b. Manipulating words to divide between syllables
   c. Manipulating words to add or remove letters that change the syllable type (e.g. *pin* to *pine*; *so* to *soft*; *bell* to *be*)
   d. Practicing with regular and irregular words

Sample Lesson: Modeling Phase

16

- State purpose
- Review what a syllable is
- Introduce new syllable structure

cake

Sample Lesson: Continue Modeling

17

home

hop

snakebite

Sample Lesson: Continue Modeling

18

home

hop

snakebite

Deborah K. Reed, Ph.D.

Practice with Silent-e Syllable Words

cake

home

hop

snakebite

use

quote

win

whine

nickname

overrule

makeshift

reflex

takeout

Sample Lesson: Guided Practice

19

- use
- quote
- win
- whine
- nickname
- overrule
- makeshift
- reflex
- takeout

Providing Corrective Feedback

20

- This syllable is a/an [closed, open, silent-*e*, vowel-*r*, vowel pair/team, consonant-*le*, irregular] syllable. It is pronounced _____.

- Please read the syllable.

- Let's read each syllable in order.

- Read the whole word.

- Read the word one more time, please.

Where Adults Struggle

21

- Identifying syllables

- Unaccented syllables

Deborah K. Reed, Ph.D.

Rules of Syllable Division

Every syllable must have a vowel in it.

Two Consonants (VCCV)
Divide between two consonants
hap pen and cat nip

Keep digraphs together
rock et

A blend may stay together in the second syllable, especially if there is a prefix in the first syllable
pro gram and re spond

Divide just before the consonant in a word ending in the syllable Consonant-*le*
bu gle and sta ple

Three Consonants (VCCCV)
Keep digraphs together
eth nic and bath tub

Blend stays together in the second syllable
mat tress and hun dred

If the word is a compound word, split between the two words (the blend may be in the first syllable)
hand bag and chest nut

Divide just before the consonant in a word ending in the syllable Consonant-*le*
jug gle and rum ble

Four Consonants (VCCCCV)
Divide between digraphs, blends, and welded sounds
wing span and sling shot

Watch for three-letter blends in the second syllable
con struct and in struct

SIX SYLLABLE TYPES: PRACTICE

Directions: Identify the syllable types underlined in the following words. The first word is done for you.

<u>P o</u> <u>e t</u>
Open   Closed

<u>F a</u> <u>b l e</u>

<u>I n</u> <u>d e</u> <u>p e n</u> <u>d e n t</u>

<u>L u</u> <u>n a r</u>

<u>D e</u> <u>b a t e</u>

<u>E x</u> <u>p l a i n</u>

M a r k e t

SIX SYLLABLE TYPES: KEY

P o e t
Open   Closed

F a b l e
Open   C-le

I n d e p e n d e n t
Closed   Open   Closed   Closed

L u n a r
Open   R-Controlled

D e b a t e
Open   VCE

E x p l a i n
Closed   Vowel Team

M a r k e t
R-Controlled   Closed

Where Adults Struggle

22

- Identifying syllables

- Unaccented syllables

Morphology

23

Components of Word Reading

24

Morphology   Phonics

Orthography

Deborah K. Reed, Ph.D.
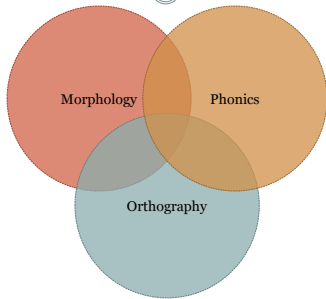
Sample Word Parts

Prefix: A word part that is attached to the beginning of a word
Suffix: A word part that is attached to the end of a word
Root or base word: the basic part of a word that carries meaning

Pre-	Post-	Re-
test	view	game
-ed	-ing	-er

What Are Morphemes?

(25)

Greek and Latin:

- Prefixes
- Roots/Combining Forms
- Suffixes

What is Morphemic Analysis?

(26)

Breaking a word into its constituent morphemes in order to pronounce, spell, and understand it

pretest
pre + test

Morphemic Analysis Instruction

(27)

- Directly teach word parts in supportive contexts.
- Provide practice with examples and non-examples of the application of word parts.

Prefix: *de-*, means *from*; *down*; *away from*; *opposite/reverse*

Context: When you *deflate* a tire, you release the air from it.

Deborah K. Reed, Ph.D.

Deepen Understanding

(28)

- If **deflate** is to take air <u>out</u> of or <u>from</u> the tire, what word means to put air <u>into</u> the tire?

- So, what prefix do you think is the opposite of <u>**de-**</u>?

- If something is **inhumane**, can the opposite be **dehumane**?

- Look at these words: **imbalance, imbed, imbibe, immaculate, immense, immoral, immure, impartial, impediment, impose, impure**. Is there a pattern for when im- is used instead of in-?

Deepen Understanding

(29)

- If **deflate** is to take air <u>out</u> of or <u>from</u> the tire, what word means to put air <u>into</u> the tire?

- So, what prefix do you think is the opposite of <u>**de-**</u>?

- If something is **inhumane**, can the opposite be **dehumane**?

- Look at these words: **imbalance, imbed, imbibe, immaculate, immense, immoral, immure, impartial, impediment, impose, impure**. Is there a pattern for when im- is used instead of in-?

ACTIVITY: Practice Sorting Words Using the Target Word Part(s)

(30)

de-: from; down; away from; opposite/reverse

Examples	**Non-examples**

Word Bank: *decathlon, decide, decigram, dehydrate, descend, detract, dent, democracy, demibastion, demilitarize*

Deborah K. Reed, Ph.D.

Morphology Word Sort

Word Bank: *decathlon, decide, decigram, dehydrate, descend, detract, dent, democracy, demibastion, demilitarize*

Examples of the Prefix *de-*	Non-examples of the Prefix *de-*

Can you think of other examples and non-examples?

ACTIVITY: Practice Sorting Words Using the Target Word Part(s)

(31)

de-: from; down; away from; opposite/reverse

Examples | **Non-examples**

Word Bank: *decathlon, decide, decigram, dehydrate, descend, detract, dent, democracy, demibastion, demilitarize*

Discuss Non-examples

(32)

- **Deca**thlon
- **Deci**gram
- **Dent**
- **Demo**cracy
- **Demi**bastion

Morphemic Analysis Routine While Reading

(33)

- Find the root.
- Find the prefixes and suffixes.
- Think what each part means.
- Combine the meanings of the parts.
- Try the possible meaning in the sentence.
- Ask yourself, "Does it make sense?"

Deborah K. Reed, Ph.D.

Morphemic Analysis Organizer: Fictional Narrative

34

Word meaning in context: flesheating or a beast out to destroy anymore's flesh

Word meaning in context: unable to be corrected or "reformed" by prison
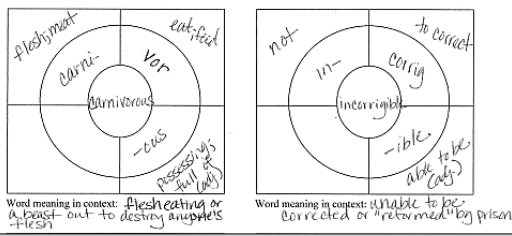
Encourage Transfer

35

- In what other subject areas might you use the words *carnivorous* or *incorrigible*?

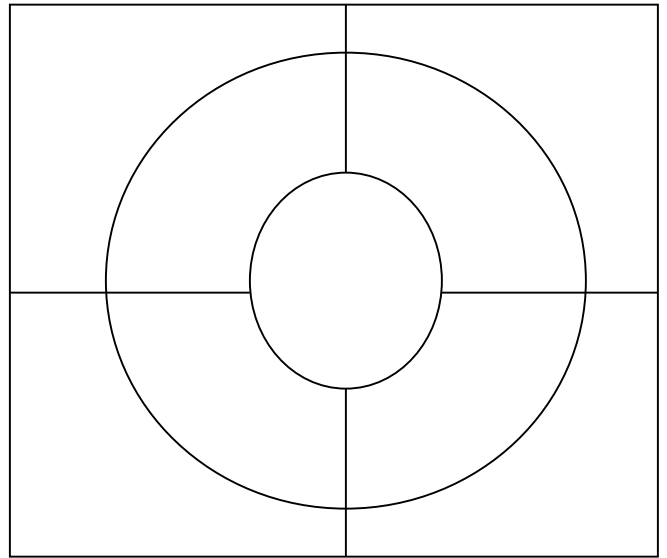- Are there other words that could be formed with the same root (-*vor*- or -*corrig*-)?

Encourage Transfer

36

- In what other subject areas might you use the words *carnivorous* or *incorrigible*?

- Are there other words that could be formed with the same root (-*vor*- or -*corrig*-)?

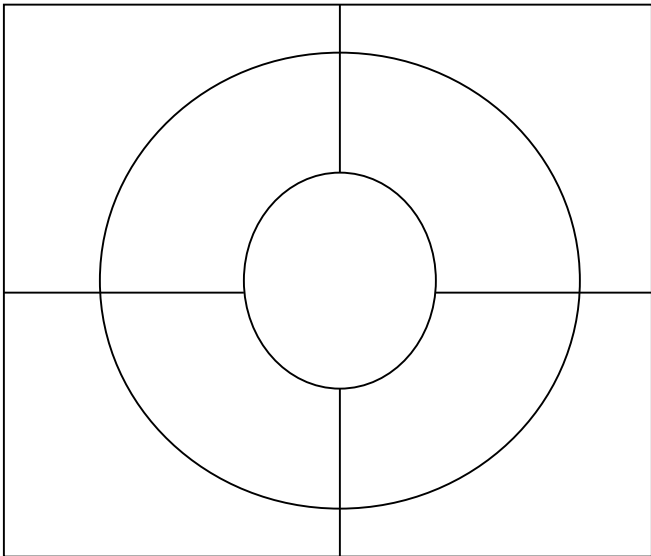25

Deborah K. Reed, Ph.D.
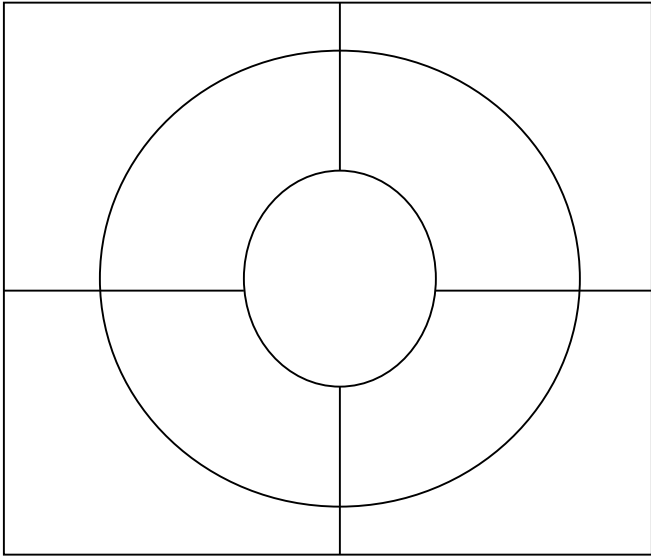
Word meaning in context:
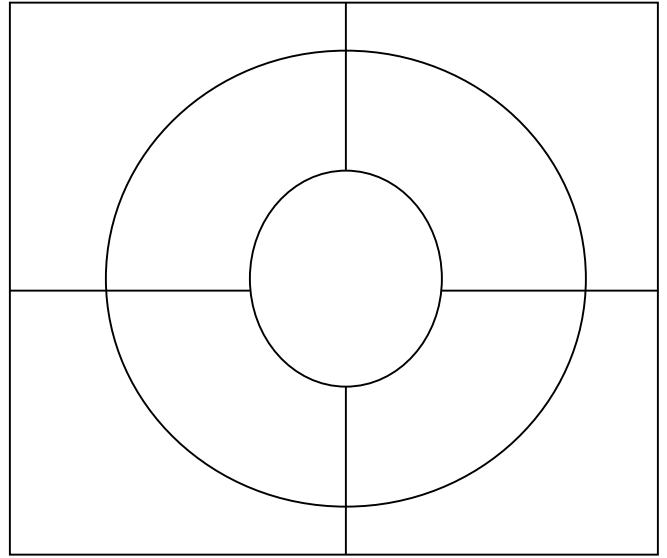
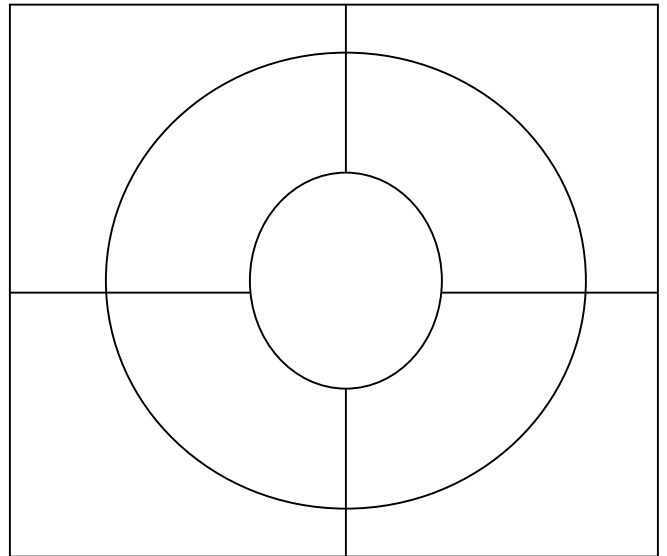Word meaning in context:
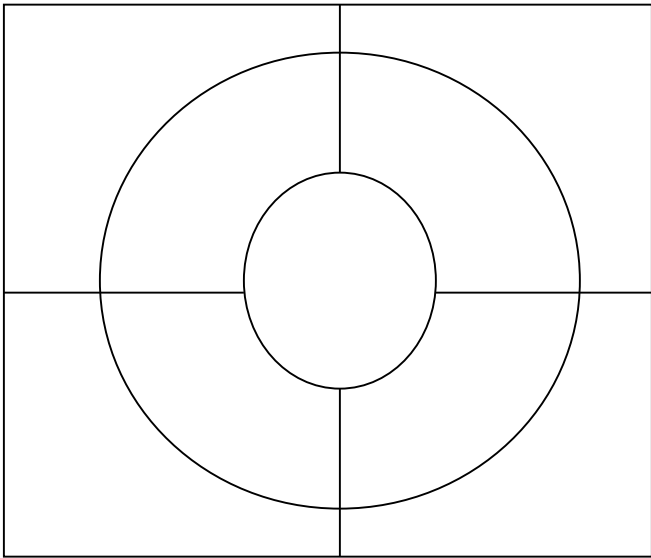
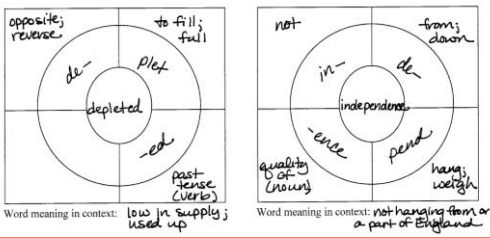Word meaning in context:

Word meaning in context:

Word meaning in context:

Word meaning in context:

Transfer Words

37

Deepen Understanding with Transfer Words

38

- What other relevant words can you make by changing the prefixes or suffixes?
  o Depleted:

  o Independence:

- Are there other words in the text that start with the prefixes de- or in-? Does the prefix have the same meaning?

Deepen Understanding with Transfer Words

39

- What other relevant words can you make by changing the prefixes or suffixes?
  o Depleted:

  o Independence:

- Are there other words in the text that start with the prefixes de- or in-? Does the prefix have the same meaning?

27

Deborah K. Reed, Ph.D.

Scaffolding

- Model, model, model!

- Provide cumulative review of morphemes.

- Consider the difficulty level of morphemes with respect to different students' abilities.

- Encourage students to find and provide additional examples.

Difficulty Level of Morphemes

Easier Morphemes
- Monomorphemic roots (also called base words)
  - star, cup
- Compound words and high frequency prefixes
  - starfish, cupcake
  - un-, pre-, ,mid-
- Inflectional suffixes
  - -ing, -ed, -s

More Difficult Morphemes
- Neutral derivational suffixes
  - -ly, -ness
- Non-neutral derivational suffixes and low frequency prefixes
  - -ial, -eous
  - octa-, dia-
- Multimorphemic words
  - predicament, circumnavigate

What If You Don't Know the Morphemes in a Word?

- The goal is awareness, not rote memorization!
  - Knowledge increases over exposures and practice
  - Improve integration of word and meaning information

- Use resources: http://www.prefixsuffix.com/

Deborah K. Reed, Ph.D.

Morphology Scope and Sequence

Easy

"Not/opposite" Prefix Family

•	anti-	*against*	antisocial, antiseptic, antibiotic, antifreeze
•	contra-	*opposite*	contraband, contradict, contrary, contrast
•	dis-	*not/opposite*	dislike, disarm, disagree, dishonest, discontinue
•	un-	*not/opposite*	unhappy, undefeated, untrue, uncomfortable
•	il-/im-/-in	*not/opposite*	illegal, impolite, impossible, incurable, inexpensive
•	ir-	*not/opposite*	irresponsible, irreplaceable, irresistible, irrelevant
•	non-	*not/opposite*	nonfiction, nonstop, nonliving, nonviolent

"Good" and "Bad" Prefix Families

•	ben-/bene-	*good/well*	benefit, beneficial, benign, benefactor
•	mal-	*not/bad/wrong*	malnourished, malpractice, maladjusted, malady
•	mis-	*bad/ill*	misbehave, misread, misunderstand, mistake

Greek Combining Forms

•	auto	*self*	automatic, autograph, autobiography
•	bio	*body/life*	biology, biography, biomass, biodegradable, biopsy
•	chron	*time*	chronological, chronic, chronicle, synchronize
•	graph	*letter/writing*	graphics, paragraph, photograph
•	meter	*measure*	chronometer, thermometer, odometer, meter
•	photo	*light*	photograph, photosynthesis, photocopy
•	tele	*distant/far*	telegraph, telephone, telephoto, television
•	therm	*heat/warm*	thermometer, thermal, thermostat, thermos

"Person" Suffix Family

•	-ee	*person who*	employee, payee, referee, escapee, awardee
•	-ist	*person who*	scientist, artist, pianist, specialist, realist, biologist
•	-ian/-can	*person who*	Canadian, Russian, Italian, American, Mexican,
•	-cian	*person/thing that does …*	musician, beautician, journalist, cartoonist
•	-ar/-er	*person/thing that does …*	beggar, liar, teacher, reporter, composer, singer
•	-or	*person/thing that does …*	actor, governor, dictator, juror, donor, conductor

"Can be" and "Worthy of" Suffix Families

•	-able	*can be*	drinkable, likable, manageable [verb+suffix]
		worthy of	valuable, comfortable, dependable [adjective+suffix]
•	-ible	*can be*	visible, reversible, collectible [verb=suffix]
		worthy of	terrible, responsible, flexibility [adjective+suffix]
•	-ful	*full of*	joyful, beautiful, successful, painful, careful
•	-less	*without*	hopeless, thoughtless, fearless, harmless, tireless

Medium

"Position" Prefix Family
- pre-   *before*   preview, prehistoric, precaution
- mid-   *middle*   midnight, midlife, midterm, midland
- inter-   *between*   interstate, internet, international
- intra-   *within*   intranet, intramural, intravenous, intracranial
- post-   *after*   postwar, posttest, postscript, postdate, posterior

"Over/Under" Prefix Family
- under-   *less than*   underage, underachiever, underestimate, underdone
- over-   *more than;*
                too much   oversleep, overexert, overhaul, overindulge
- sub-   *under;*
                beneath   subset, subcontinent, submerge, subcontract

"Together" Prefix Family
- co-com-/con- *together/with*   coauthor, cooperate, concentric, compatriot

Greek Combining Forms
- ast/astro   *star; heavens*   asterisk, disaster, astronaut, astrology, astronomical
- geo   *earth/rocks*   geography, geology, geothermal, geocentric
- phon/phone   *sound*   megaphone, symphony, microphone, phonograph
- scop   *see*   telescope, periscope, microscopic, kaleidoscope

Latin Roots (Senses)
- aud   *hear*   audience, audible, audition, audiovisual, auditorium
- dict   *speak*   predict, contradict, verdict, dictator
- form   *shape*   uniform, reform, formula, transformation
- mit/miss   *send*   emit, submit, transmit, missile, admission, dismiss
- spect   *see*   spectator, inspector, respectful, suspect, spectacles

"State" or "Character Of" Suffix Family
- -ous   *full of*   nervous, furious, outrageous, serious, fictitious
- -ly   *resembling*   fatherly, scholarly, greedily, cruelly, patiently
- -ic   *relating to*   tragic, comic, patriotic, genetic, economic, heroic
- -ish   *relating to*   childish, English, selfish, outlandish, smallish
- -al/-ial   *relating to*   eternal, natural, musical, influential, judicial, trivial
- -ion   *quality of*   champion, suspicion, division, suspension, caution
- -ness   *quality of*   goodness, darkness, fairness, weariness, happiness
- -ty/-ity   *quality of*   amnesty, honesty, unity, hostility, priority, infinity
- -er/-est   *more/most of*   sweeter/sweetest, louder/loudest, thicker/thickest

Hard

"Direction" Prefix Family
- re-   *back; again*   recede, retest, recall, repaint, redo, rewrite
- dia-   *across*   diagonal, diameter, dialogue
- trans-   *across*   transport, transcribe, transfusion

"Numeric" Prefix Family
- hemi-/semi-   *half*   hemisphere, semicircle, semiconscious, semiannual
- mono-   *one*   monotonous, monopoly, monorail
- bi-   *two*   bilingual, bilateral, binomial
- tri-   *three*   triangle, tricycle, trilogy, triplicate
- quad-   *four*   quadriceps, quadrant, quarter, quart, quadrangle
- pent-   *five*   pentagon, pentameter, pentathlon, pentagram
- dec-   *ten*   decimal, decade, decibel, decapod, decimeter
- cent-   *100*   century, centigrade, centipede, centennial

Latin Roots
- cide/cise   *kill; cut*   insecticide, genocide, scissors, incision, excise
- form   *shape*   uniform, reform, formula, transformation
- mit/miss   *send*   emit, submit, transmit, missile, admission, dismiss
- port   *carry*   transport, supportive, reporter, import, portable
- rupt   *break*   disruption, corrupt, erupt, interrupt, abruptly
- script/scrib *write*/*written* transcript, prescription, scribble, describe
- struct   *build*   construct, instruct, destruction, structure
- tract   *pull*; *drag* traction, attract, abstract, protractor, contract

"Action" Suffix Family
- -fy   *to make*   satisfy, falsify, rectify, terrify, beautify
- -ive   *inclined to*   explosive, passive, negative, active, creative
- -ize   *to make*   standardize, criticize, memorize, fossilize, theorize
- -ure   *action*   censure, failure, exposure, puncture, legislature

Multiple Meaning Suffixes
- -ant/-ent   1)*one who*   assistant, immigrant, superintendent, resident
                2)*inclined to* buoyant, vigilant, defiant, pleasant, stringent
- -ate   1)*to make*   annihilate, liberate, situate, participate, fluctuate
                2)*quality of* desperate, fortunate, passionate, delicate, legitimate
- -ment   1)*act of*   experiment, development, government, judgment
                2)*quality of* amusement, predicament, astonishment, enjoyment
- -ary   1)*one who*   secretary, dignitary, emissary
                2)*relating to* military, secondary, ordinary, literary, honorary
                3)*place for*   library, mortuary, infirmary, glossary, sanctuary

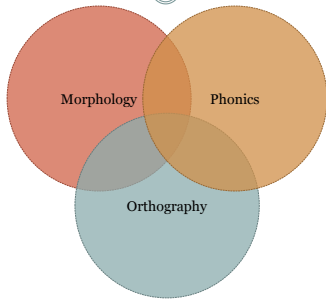## Practical Matters for Implementation

43

- Purposeful selection of words
  - Avoid creating greater confusion
  - Focus on high function, high utility morphemes

- Balance of time commitment

- Pair with spelling

Orthography

44

Components of Word Reading

45

Morphology

Phonics

Orthography

Deborah K. Reed, Ph.D.

People Are Not Innately Bad Spellers

46

When taught an analytical approach to spelling, even adults who identified themselves as "horrible spellers" could improve their abilities.

(Bear et al., 2004; Massengill, 2006)

Errors Are Logical
FEH (for *fish*)
Short-*i*
-*sh* sound

Regularity in the English Language

47

- 50% of words are predictable

- 37% of words are predictable except for one sound (e.g., gnat, team)

- 13% of words have to be learned by sight*

- Vowels are more variable than consonants
  - Vowels = 0.53 (know beginning consonant = 0.65; know final consonant = 0.74)
  - Beginning consonant = 0.91; Final consonant = 0.82
    (Kessler & Treiman, 2001)

Research-based Approaches to Spelling Instruction

48

- Phonetic spelling
  - Regularity of letter-sound correspondences

- Rule spelling
  - e.g.: double, drop, change, rabbit

- Situational spelling
  - Spelling is determined by situation, position of letters in words

---

33

Deborah K. Reed, Ph.D.

Phonetic Spelling: Vowels

(49)

	Short/Long (single vowels)	-r & -l Controlled	Digraphs	
			1 sound	*2 sounds*
a	mad/made	ar, al, all	ai, ay, au, aw	
e	pet/Pete	er, el	ee, ue, ew	ea, ei
i	pinning, pining	ir, il		ie
o	cop, cope	or	oa, oi, oy	oo, ou, ow
u	cutter, cuter	ur, ul		

Henry, 1988

Beginning Instruction in Spelling: Phonetic Approach (Morris, 2005)

(50)

- Start with short vowels
  - One at a time in order of frequency
  - Single-syllable words
  - e.g., *sit, pin, rim*

- Manipulate elements of the word
  - Beginning sounds (easiest): s-i-t – f-i-t – p-i-t
  - Final sounds (more difficult): s-i-n – s-i-l – s-i-p
  - Medial vowel* (hardest): s-a-t – s-e-t

  Must have taught any phonemes used in the practice word(s)

Phonetic Spelling Practice

(51)

- What do all these words have in common?
  - sat
  - nap
  - rag
  - bad
- What other words do you know that have the same sound?

Deborah K. Reed, Ph.D.

Beginning Instruction in Spelling: Phonetic Approach, *continued*

52

- Add consonant digraphs and blends
  - ○ *dish, chip, flip, mist*

- Manipulate sounds of a single vowel
  - ○ *b-i-t – b-i-t-e – b-i-r-d – b-i-l-l*

- Add other ways to produce the vowel sound/pattern*
  - ○ *bright, buy, my, mild*

- Add word parts*

> * *These later-developed skills will lead into rule-based spelling*

Rule-based Approach

53

- Occurs after gaining control of basic vowel patterns in single syllable words

- Produces better outcomes than word families (Darch et al., 2000)

- Includes two basic categories:
  - ○ Making plurals
  - ○ Joining syllables

Which is more difficult?

Rule Spelling: Doubling

54

- A base word ending in one consonant after an accented short vowel doubles the final consonant before a suffix beginning with a vowel.
  - ○ run + ing = running
  - ○ stop + ed = stopped
  - ○ begin + ing = beginning

- v, j, k, w, and x are never doubled

- No doubling on multi-syllable words with an unaccented final syllable
  - ○ open + ing = opening
  - ○ focus + ed = focused

Deborah K. Reed, Ph.D.

Rule Spelling: Dropping

(55)

- A base word ending in silent "-e" drops the "e" before a suffix beginning with a vowel.
  - entice + ing = *enticing*
  - brace + ed = *braced*
  - love + able = *lovable*
  - acknowledge + ment = *acknowledgement*
  - Exception: *judgment**

- Do not drop the "-e" when "-ce" or "-ge" is between "a," "o," or "u" and the suffix "-able" or "-ous".
  - *manageable, outrageous, noticeable*
  - Exception: *spacious*

Rule Spelling: Changing

(56)

- A base word ending in "-y" after a consonant changes "y" to "i" before any suffix -- except one beginning with "i".
  - try + ed = tried
  - try + ing = trying
  - funny + er = funnier

Rule Spelling: Rabbit

(57)

- Two-syllable words with a short vowel sound in the first syllable: double the consonant at the syllable juncture
  - rab-bit
  - pil-lar

- Two-syllable words with a long vowel sound in the first syllable: leave the consonant singular
  - ro-dent
  - pi-lon

36

Deborah K. Reed, Ph.D.

Explain the Spelling

58

1. Why does "*y*" change to "*i*" on *complied* but not *complying*?
2. Why is *fitter* spelled with 2 "*t*"s but *fitness* with 1?
3. Why does the "*-e*" drop on *moving* but not on *movement*
4. Why is *potting* spelled with 2 "*t*"s but *boxing* is spelled with 1 "*x*"?
5. Why does "*y*" change to "*i*" on *prettier* but not *player*?
6. Why is *compelled* spelled with 2 "*l*"s but *canceled* with 1?
7. Why does the "*-e*" drop on *encouraging* but not on *courageous*?

Situational Spelling Approach

59

- Concerns letter sequence patterns
- Has many more rules and exceptions
  - Some exceptions explained through morphology
  - Limit of **3** irregular words at a time for very poor spellers

Situational Spelling: FLoSS Rule

60

- A one-syllable base word with one short vowel immediately before the final sounds of (f), (l), or (s) is spelled with ff, ll, or ss.
  - off
  - shall
  - miss
- Exceptions: *yes, gas, bus, this, plus, pal*, etc.

Deborah K. Reed, Ph.D.

Explain the Spelling

1. Why does "*y*" change to "*i*" on *complied* but not *complying*?

2. Why is *fitter* spelled with 2 "*t*"s but *fitness* with 1?

3. Why does the "*-e*" drop on *moving* but not on *movement*

4. Why is *potting* spelled with 2 "*t*"s but *boxing* is spelled with 1 "*x*"?

5. Why does "*y*" change to "*i*" on *prettier* but not *player*?

6. Why is *compelled* spelled with 2 "*l*"s but *canceled* with 1?

7. Why does the "*-e*" drop on *encouraging* but not on *courageous*?

8. Why is fell spelled with 2 "l"s but feel with 1?

9. Why is sass spelled with 2 "s"s but seas with 1?

10. How does the spelling of the /k/ sound in baking and backing indicate the pronunciation of the vowel "a"?

11. Why is the /k/ sound at the beginning of crank spelled differently than at the end?

12. Why is the /ee/ sound in gradient spelled differently than in gleeful?

Situational Spelling:
/k/ in Initial or Medial Position
61

- Use "c" in front of an "a", "o" or any consonant.
  - Most common (cat, corn, actor, victim, direct, mica)

- Sometimes "c" is doubled to "cc" to protect the sound of the short vowel
  - stucco, occupy, raccoon

- Use "k" in front of an "e", "i", or "y".
  - kin, make, sketch, poker, kind, risky, token, skill, keep, liking, flaky
  - "k" never doubles in English words

- Exceptions: school, mosquito, etc.

Situational Spelling: /k/ in Final Position
62

- Use "ck" after a short vowel in single syllable words.
  - sack, duck, wreck, clock
  - Exceptions: yak, trek, disc, attic, etc.

- Use "ck" before suffixes starting with "e," "i," or "y".
  - lucky, picking, blackest, rocker, ticket
  - Exceptions: mosquito, etc.

- Use "k" after any other sound in single syllable words.
  - milk, soak, bark, tank, peek, cork, tusk, hawk

- Exceptions (multi-syllable): monarch, unique, tarmac, etc.

Situational Spelling: "*oi*" and "*oy*"
63

- In initial or medial position in a base word, use "*oi*".
  - oil, boiling, spoiler
  - Exceptions: *oyster*, *loyal*, etc.

- In final position in a word of any length, use "*oy*" (before suffixes)
  - boy, overjoy, deploy, envoy

39

Other Situational Spelling Rules

64

- /s/ in the initial or medial position vs. final position
- /j/ in the initial or medial position vs. final position
- /ch/ in the final position
- "ai" vs. "ay"
- /er/
- /sh/ with suffixes
- /ee/ with suffixes

Cumulative Spelling Practice

65

Explain the Spelling	Change the Spelling	

Explain the Spelling

8. Why is fell spelled with 2 "l"s but feel with 1?
9. Why is sass spelled with 2 "s"s but seas with 1?
10. How does the spelling of the /k/ sound in baking and backing indicate the pronunciation of the vowel "a"?
11. Why is the /k/ sound at the beginning of crank spelled differently than at the end?
12. Why is the /ee/ sound in gradient spelled differently than in gleeful?

Change the Spelling

Starting Word	Directions for Making a Change	Changed Word
placard	Change the ending so that the c makes a /s/ sound.	
agent	Change the ending so that the g makes a /g/ sound.	
dogs	Change the consonant t so that the s makes /x/ sound.	
jam	Change the medial vowel so that the /j/ sound is made with the letter g.	
gin	Add a consonant to change the onset to a consonant blend.	
fixate	Change the silent-e syllable to a final stable syllable.	
nose	Change the medial sounds to a diphthong.	
cell	Change the medial vowel so that the c makes the /k/ sound.	
magnet	Change the ending so that the g makes the /j/ sound.	
rag	Add consonants to create a final consonant digraph.	

Spelling Instruction: Selection of Words

66

- Words and meanings familiar, but spellings unfamiliar
  - Consider words 1-2 years below students' current grade equivalent reading ability
  - Words present in speaking and listening vocabularies

- Subsets of 4-5 words per day/session
  - Cumulative practice
  - Daily tests of subsets
  - Weekly post-test of all words

- Test-Teach-Test sequence so only study words missed

40

Deborah K. Reed, Ph.D.

Change the Spelling

Change the underlined portion of the following words according to the directions.

Starting Word	Directions for Making a Change	Changed Word
plac<u>ard</u>	Change the ending so that the *c* makes a /s/ sound.	
ag<u>ent</u>	Change the ending so that the *g* makes a /g/ sound.	
do<u>t</u>s	Change the consonant *t* so that the *s* makes /z/ sound.	
j<u>a</u>m	Change the medial vowel so that the /j/ sound is made with the letter *g*.	
<u>p</u>in	Add a consonant to change the onset to a consonant blend.	
fixa<u>te</u>	Change the silent-*e* syllable to a final stable syllable.	
n<u>o</u>se	Change the medial sounds to a diphthong.	
c<u>e</u>ll	Change the medial vowel so that the *c* makes the /k/ sound.	
mag<u>net</u>	Change the ending so that the *g* makes the /j/ sound.	
ca<u>t</u>	Add consonants to create a final consonant digraph.	

Spelling Instruction:
Direct Teaching and Student Practice
(67)

- Introduce one pattern or rule at a time.
  - Rule-based approaches produced better outcomes than word families (Darch et al., 2000).
  - Work with examples and exceptions.

- Provide practice opportunities with audiotapes.

- Teach peers to support each others' practice (Delquadri, Greenwood, Stretton, & Vance Hall, 1983)

Instruction: 5-Step Spelling Strategy
(Fulk, 1996; Graham & Freeman, 1985)
(68)

- Say the word.
- Write and say the word.
- Check your spelling.
- Trace and say the word.
- Write the word from memory and check it.

> Practice the 5-Step Spelling Strategy with your partner. Partner A uses List A, part 1, while Partner B helps with the steps. Then, Partner B uses List B, part 1, while Partner A helps with the steps.

Instruction: Steps for Teaching the Strategy
(69)

- Explain the purpose
  - To improve your learning and memory of spelling words
  - To support your reading and writing

- Model by thinking aloud to explain each strategy step (Ellis et al., 1993)
  - Stress combining effort and strategy use (Mushinski et al., 1990)
  - Provide guided practice with instructional feedback

- Have students practice naming the strategy steps until automaticity is reached (Ellis et al., 1993)
  - Self-monitor by checking against the steps
  - Emphasize using the strategy in other settings

42

Deborah K. Reed, Ph.D.

Spelling List A, part 1: 5-Step Spelling Strategy

Word	Spelling Rule(s)
gaff	FLoSS
occurring	Doubling and "cc" for /k/
omitted	Doubling
referred	Doubling
courageous	Dropping
discoveries	Changing and "c" for /k/
kiln	Initial /k/

Step 1: Say the word.

Step 2: Write and say the word.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

Step 3: Check your spelling. Make any necessary corrections.

Step 4: Trace your correct spelling of the word as you say the word out loud.

Step 5: Turn over this paper to the blank side. Write the word from memory. Then, flip

the paper back over to check it.

Spelling List B, part 1: 5-Step Spelling Strategy

Word	Spelling Rule(s)
quell	FLoSS
hiccupped	Doubling and "cc" for /k/
preferred	Doubling
transferred	Doubling
hesitating	Dropping
categories	Changing and "c" for /k/
kernel (of corn or truth)	Initial /k/

Step 1: Say the word.

Step 2: Write and say the word.

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

Step 3: Check your spelling. Make any necessary corrections.

Step 4: Trace your correct spelling of the word as you say the word out loud.

Step 5: Turn over this paper to the blank side. Write the word from memory. Then, flip

the paper back over to check it.

The Point of Word Study

70

- Word ID
- Fluency
- Comprehension
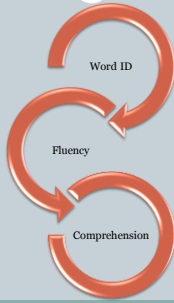
Fluency

71

Successful vs. Struggling Readers

Successful Readers	Struggling Readers
Read 100-160 words per minute (at the middle school level), depending on the nature and difficulty of the text	Read slowly and laboriously
Decode words accurately and automatically	May continue to struggle with decoding or may decode correctly but slowly
Group words into meaningful chunks and phrases	May not pause at punctuation or recognize phrases
Read with expression	Often lack voice or articulation of emotion while reading
Combine multiple tasks while reading (e.g., decoding, phrasing, understanding, and interpretation)	May lack proficiency in individual skills that result in dysfluent reading and limit comprehension

Deborah K. Reed, Ph.D.

ABE Students

73

- Reluctance to read orally
  - Limitations of choral reading
  - Consequences of reading avoidance

- High world knowledge and oral vocabulary

- Low print exposure and print vocabulary

Aspects of Fluency: Automaticity

74

Accuracy	Rate

• The ability to recognize or decode words correctly.
 	
• Example: Knowing that the letters c-a-t-c-h spell the word:
 	
    • Catch
 	
  And not
 	
    • Cat
	• How quickly and accurately a reader reads connected text
	
	• If readers are able to recognize and read words with automaticity, they will read at a more fluent rate.

Aspects of Fluency: Prosody

75

- Expression
- Pitch
- Rhythm
- Stress patterns
- Duration
- Appropriate chunking of words into meaningful phrases

46
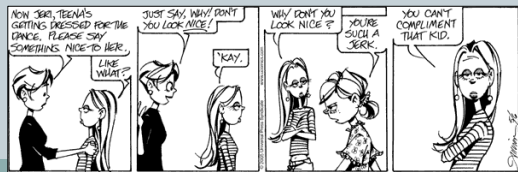
Options for Teaching Fluency

76

- Timed Repeated Oral Reading
- Self-Timed Repeated Oral Reading
- Partner Reading
- Phrase-Cued Reading

- Readers Theatre
- Choral Reading
- Duet Reading
- Echo Reading
- Reading with Recordings

Drawing Attention to Phrases: Poetry

77

Politeness by A. A. Milne

If people ask me,
I always tell them:
"Quite well, thank you, I'm very glad to say."
If people ask me,
I always answer,
"Quite well, thank you, how are you to-day?"
I always answer,
I always tell them,
If they ask me
Politely.....
BUT SOMETIMES

I wish

That they wouldn't.

Instruction in Phrase-Cued Reading

78

- State the purpose: Improve ability to read with expression and understanding.
- Use a text with commas and end punctuation removed.
- Model reading the text aloud with intonation while marking the phrases:
  - Use one slash mark, /, to indicate short pauses at meaningful phrases.
  - Use two slash marks, //, to indicate longer pauses at the end of sentences.
- Correct boundaries based on fluency and meaning.

Deborah K. Reed, Ph.D.

Modeling Phrase-Cued Reading

(79)

From *Eats, Shoots & Leaves: The Zero Tolerance Approach to Punctuation* by Lynne Truss

A panda walks into a cafe He orders a sandwich eats it then draws a gun and proceeds to fire it at the other patrons

"Why?" asks the confused surviving waiter amidst the carnage as the panda makes towards the exit The panda produces a badly punctuated wildlife manual and tosses it over his shoulder

"Well I'm a panda" he says at the door "Look it up"

The waiter turns to the relevant entry in the manual and sure enough finds an explanation ***Panda*** *Large black-and-white bear-like mammal native to China Eats shoots and leaves*

_____

_____

_____

_____

_____

_____

_____

_____

_____

Modeling Phrase-Cued Reading

(80)

From *Eats, Shoots & Leaves: The Zero Tolerance Approach to Punctuation* by Lynne Truss

A panda walks into a cafe He orders a sandwich eats it then draws a gun and proceeds to fire it at the other patrons

"Why?" asks the confused surviving waiter amidst the carnage as the panda makes towards the exit The panda produces a badly punctuated wildlife manual and tosses it over his shoulder

"Well I'm a panda" he says at the door "Look it up"

The waiter turns to the relevant entry in the manual and sure enough finds an explanation ***Panda*** *Large black-and-white bear-like mammal native to China Eats shoots and leaves*

_____

_____

_____

_____

_____

_____

_____

_____

_____

Guided Practice in Phrase-Cued Reading

(81)

John my oldest cousin loves garage sales The other day while driving through the neighborhood I saw a sign that read Giant Moving Sale Today I couldn't wait to tell him what I saw   I knew he would just have to go and see for himself   You just never know what you will find in your own neighborhood do you

_____

_____

_____

_____

_____

_____

_____

_____

_____

Deborah K. Reed, Ph.D.

Phrase-Cued Reading

Read the paragraph aloud with expression.
Insert one slash, /, to indicate short pauses at meaningful phrases.
Insert two slashes, //, to indicate longer pauses at the end of sentences.

Guided Practice Paragraph

     John my oldest cousin loves garage sales The other day while driving through the neighborhood I saw a sign that read Giant Moving Sale Today I couldn't wait to tell him what I saw   I knew he would just have to go and see for himself   You just never know what you will find in your own neighborhood do you

Re-read the paragraph aloud to correct phrase boundaries for fluency and meaning.

Guided Practice in Phrase-Cued Reading
(82)

John my oldest cousin loves garage sales The other day while driving through the neighborhood I saw a sign that read Giant Moving Sale Today I couldn't wait to tell him what I saw   I knew he would just have to go and see for himself   You just never know what you will find in your own neighborhood do you

Correcting Phrase Boundaries: WE Do
(83)

- Discuss possible errors affecting fluency and meaning:

  John my oldest cousin loves garage sales

  Giant Moving Sale Today

Phrase-Cued Reading: Independent Practice
(84)

When we went to lunch the other day one of my friends was talking about business boring the rest of us He said "Banks which hold over a billion dollars in assets are rare I think Bank of Texas has large assets which are federally insured If they do they're right they have 'quality service and attention to detail'"
My other friend finally suggested "Let's stop talking about banks and eat Bob"

50

Phrase-Cued Reading

Read the paragraph aloud with expression.
Insert one slash, /, to indicate short pauses at meaningful phrases.
Insert two slashes, //, to indicate longer pauses at the end of sentences.

Independent Practice Paragraph

When we went to lunch the other day one of my friends was talking about business boring the rest of us He said "Banks which hold over a billion dollars in assets are rare I think Bank of Texas has large assets which are federally insured If they do they're right they have 'quality service and attention to detail'"

My other friend finally suggested "Let's stop talking about banks and eat Bob"

Re-read the paragraph aloud to correct phrase boundaries for fluency and meaning.

Texts for Phrase Boundary Marking

85

- Cross-curricular sources:
  - Math word problems
  - Science articles
  - Social studies source documents

- Released state assessment passages and items

- Passages students find

- Audio texts
  - Speeches (I Have a Dream)
  - Comedians

Review: Why do the pauses matter?

86

Comprehension

87

52
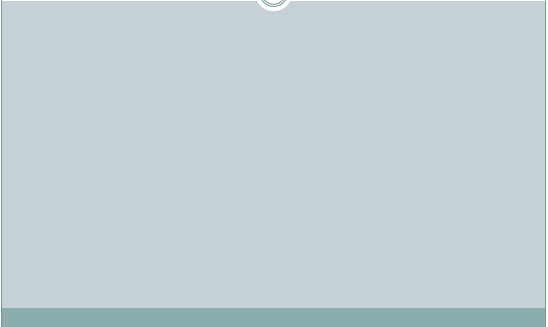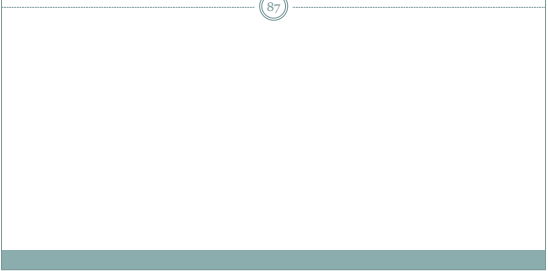
I Have a Dream

Martin Luther King, Jr.

So even though we face the difficulties of today and tomorrow I still have a dream. It is a dream deeply rooted in the American dream.

I have a dream that one day this nation will rise up and live out the true meaning of its creed: 'We hold these truths to be self-evident; that all men are created equal."

I have a dream that one day on the red hills of Georgia the sons of former slaves and the sons of former slave owners will be able to sit together at the table of brotherhood.

I have a dream that one day even the state of Mississippi, a state sweltering with the heat of injustice, sweltering with the heat of oppression, will be transformed into an oasis of freedom and justice.

I have a dream that little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character.

I have a dream today.

I have a dream that one day down in Alabama, with its vicious racists, with its Governor having his lips dripping with the words of interposition and nullification, one day right there in Alabama little black boys and black girls will be able to join hands with little white boys and white girls as sisters and brothers.

I have a dream today.

I have a dream that one day every valley shall be exalted, every hill and mountain shall be made low, the rough places plains, and the crooked places will be made straight, and before the Lord will be revealed, and all flesh shall see it together.

This is our hope. This is the faith that I go back to the mount with. With this faith we will be able to hew out of the mountain of despair a stone of hope. With this faith we will be able to transform the genuine discords of our nation into a beautiful symphony of brotherhood. With this faith we will be able to work together, pray together; to struggle together, to go to jail together, to stand up for freedom forever,)mowing that we will be free one day.

And I say to you today my friends, let freedom ring. From the prodigious hilltops of New Hampshire, let freedom ring. From the mighty mountains of New York, let freedom ring. From the mighty Alleghenies of Pennsylvania!

Let freedom ring from the snow capped Rockies of Colorado!

Let freedom ring from the curvaceous slopes of California!

But not only there; let freedom ring from the Stone Mountain of Georgia!

Let freedom ring from Lookout Mountain in Tennessee!

Let freedom ring from every hill and molehill in Mississippi. From every mountainside, let freedom ring.

And when this happens, when we allow freedom to ring, when we let it ring from every village and hamlet, from every state and every city, we will be able to speed up that day when all of God's children, black men and white men, Jews and Gentiles, Protestants and Catholics, will be able to join hands and sing in the words of the old Negro spiritual, "Free at last! Free at last! Thank God almighty, we're free at last!"

Successful vs. Struggling Readers

88

Successful Readers	Struggling Readers
Continuously monitor reading for understanding	Fail to use meta-cognitive strategies as they read; may not be aware when understanding breaks down
Link content with their prior knowledge	May lack subject-specific prior knowledge; do not readily make connections between what they are learning and what they already know
Use a variety of effective reading strategies before, during, and after reading	Have limited knowledge and use of strategies for gaining information from text
Set a purpose for reading and adjust their rate and strategy use depending on the text and content	Often do not enjoy reading and lack understanding of the utility of reading

Reasons Adults May Experience Comprehension Difficulties

89

- Inability to relate content to prior knowledge
- Over-reliance on background knowledge
- Inability to read text fluently
- Difficulty with decoding words
- Inability to attend to meaning while reading
- Inability to apply comprehension strategies
- Difficulty understanding meaning of words

What Happens When Reading Does Not Result in Meaning?

90

Deborah K. Reed, Ph.D.

Components of Effective Comprehension Instruction

91

Activate Prior Knowledge

Answer/Generate Questions

Multi-Component Instruction

Monitor Comprehension

Using Graphic Organizers
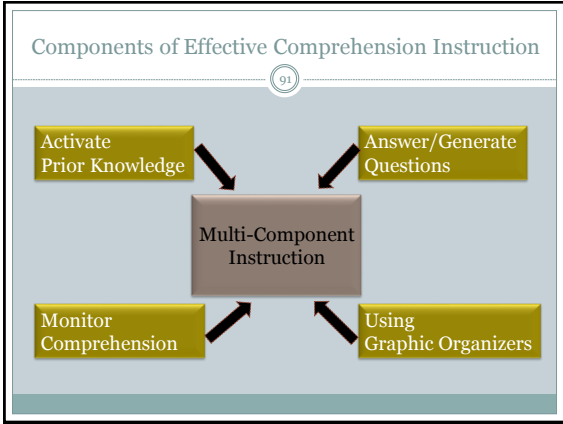
Different Types of Self-Generated Questions

92

- Level 1 Questions: Right There
  - Answers are explicitly stated, word for word, in one place in the text

- Level 2 Questions: Putting it Together
  - Can be answered by looking in the text, but require the reader to put information together from different parts of the text.

- Level 3 Questions: Making Connections
  - Cannot be answered by looking in the text alone; require students to think about what they have just read, what they already know, and how these ideas relate.

(Vaughn et al., 2006)

Caveats

93

- Today's session is a starting point that focuses on introducing the question types – more work needs to be done in guided practice.

- Asking questions skips over pre-reading strategies.
  - Particularly important for English learners

Deborah K. Reed, Ph.D.

Level 1—Right There

❏ Questions can be answered in one word or one sentence

❏ Answers can be found word-for-word in the text

> ➢ Who?   ➢ Where?
> ➢ What?   ➢ Why?
> ➢ When? ➢ How?

Generating "Right There" Questions: Modeling Phase
94

- Explain the purpose for generating questions
  - Help you understand what you read
  - Help you remember important information about what you read

- Introduce the Level 1, "Right There" question type
  - Questions that can be found in one place, word-for-word, in the text.
  - Questions that can be answered in one word or one sentence.

Generating "Right There" Questions: Modeling Phase
95

- Use a short passage from your text to model how to create a "right there" question.
  - Read the passage aloud.
  - Locate a fact that is a who, what, when, where, why, or how.
  - Turn the fact into a question.
  - Check the answer to make sure it is found in one place, word-for-word, in the reading.

Generating "Right There" Questions: Modeling Phase
96

Practice Passage: *Trees Please!*

- Re-read the sentence containing a fact.
  - "More than 90% of all species living on land make their homes in trees and forests!"
- Identify the type of fact.
  - Trees and forests are a "what" but also a "where" (see preposition)
- Make your question.
  - Where do 90% of all species living on land make their homes?
- Check your answer.
  - Trees and forests

58

Deborah K. Reed, Ph.D.

Trees Please!
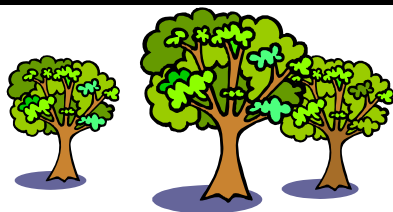
Tree Houses

Trees are not only beautiful plants, they are also home to many creatures! Think of a colobus monkey swinging on tree branches deep in the rainforests of Kenya. Or picture a koala bear sitting in a eucalyptus tree in Australia, munching its tasty leaves. Or imagine a spotted owl nesting in the trunk of a giant redwood tree in California. Without trees, and the forests that contain them, our planet wouldn't be able to support all the different living things, or **organisms,** that depend on them. As a matter of fact, more than 90% of all species living on land make their homes in trees and forests! Without trees and forests, many animal species will become **extinct,** or disappear forever like the dinosaur.

Lungs of the Earth
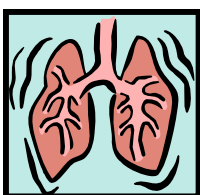
Human beings need lungs to breathe in **oxygen** and breathe out **carbon dioxide**. Without our lungs, we couldn't survive. Trees act like the lungs of the earth. Trees help the planet breathe by turning carbon dioxide into clean, pure oxygen.

Trees and forests around the world also act like the planet's air conditioning system and keep the planet cool. They help stop **global warming**. Global warming happens when we burn too much oil or gasoline and when we cut down too many forests. Global warming makes the weather change in serious ways, which is why it's important to stop it from happening. Protecting forests keeps our planet cool.

Parts of a Tree
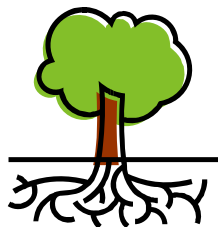
A plant is usually considered a tree if it has one woody stem and branches. The woody stem is called a **trunk**. Tree trunks move water and **nutrients,** or vitamins and minerals, up and down the tree. The trunk is covered in a protective layer called **bark**, and each tree has **roots**. Roots are a big underground system of thin stems that **anchor,** or hold, the tree to the earth. Roots can reach deep down to find the water and nutrients the tree needs to grow. **Chlorophyll** is what makes leaves green, and allows plants to gather energy from the sun through a process called **photosynthesis**. Photosynthesis happens when green leaves use sunlight to turn water and carbon dioxide into sugars that the plant needs to grow. It is also how plants make oxygen.

Fruits and Flowers

Through the magic of nature, flowers turn into fruit. Flowers produce **pollen**, a yellowish dust that helps plants grow. Pollen is blown by the wind, or carried on the antennae of bees into other flowers. This is called **pollination**. When flowers are pollinated they turn into fruit. Fruit acts as a shield, protecting the tree's seeds while they grow. Once the seeds are fully-grown, the fruit is ripe and ready to eat. Different animals like bats, birds and bears, eat these fruits and help spread the seeds to other areas where they can grow into new trees. Some seeds are not protected inside fruits,

so they find other ways of being spread like being blown in the wind or attaching to fur and clothing.

Chocolate and Maple Syrup

Every day we use many things that come from trees. Fruits and nuts like apples, peaches, plums and almonds all come from living trees, as does the cocoa bean that makes chocolate! Living trees also provide spices like cinnamon, nutmeg and black pepper, and the sap from the maple tree makes maple syrup!

Many medicines come from trees and other plants. As a matter of fact, aspirin comes from the bark of a willow tree. Scientists are still searching for new medicines in trees, which is another reason why it's so important to protect our forests. They could provide us a cure for cancer!

Threatened Forests

While living trees provide us with many things, trees that are cut down also provide us with things. When a tree is **logged,** or cut down, it is usually made into **lumber,** or cut wood, for building homes and furniture. Some trees are **pulped,** or ground up, to make paper products such as office paper, cardboard boxes, magazines and newspapers.

While it is okay to cut down trees for the things we need, often too many trees are cut down in one forest. **Clear-cutting** is when every tree in an area is cut down, and it destroys that forest and the home of all the wildlife that lived there. Clear-cutting also makes it easier for floods to happen in logged areas, because the tree roots can no longer soak up water when it rains. While some lumber companies replant trees in areas they have cut, they only replant one or two kinds of trees, which means they are planting a tree farm, or **plantation**, not a forest. Remember, a forest is more than just trees. It is the collection of thousands of different plant, animal and insect species that have been living there for hundreds and thousands of years. It is possible to cut down trees without clear-cutting an entire area and some lumber companies are starting to do this. One thing we can do to help forests is to use less paper and recycle the paper we do use.

Let's Make it Tree Free!

Another way we can protect forests is by using other plants instead! For instance, members of the grass family such as bamboo can be used to build homes and make furniture. Bamboo is a plant that grows very quickly and can be turned into many different forms and materials for building or making floors. We can also use plants like kenaf, hemp, sugarcane, and cotton to make **tree-free** paper. Farmers around the world can grow these crops to make paper. Farmers can also provide **agricultural waste,** or farm leftovers, like corn stalks and wheat straw to make tree-free paper. Rather than burning or burying this waste, farmers can sell these plant leftovers so that others can make paper without using trees.

Web of Life

All of life is connected like the strands of a spider web. If one part of nature is destroyed, other parts will be affected by it. This connection between all living things is called the **web of life**. Trees are a very important part of the web of life, so let's do what we can to protect our trees and forests!

11 Grove St, San Francisco, CA 94102   SF Environment   Our home. Our city. Our planet.   (415) 355-3700   SFEnvironment.org

60

Generating "Right There" Questions: Modeling Phase

97

Correct Examples	Incorrect Examples
• What makes leaves green? • How are flowers turned into fruit? • Why does clear-cutting make it easier for floods to happen?	• What products do we get from trees? • Who depends on tree products to survive? • How is photosynthesis related to respiration?

Generating "Putting it Together" Questions: Modeling Phase

98

- Explain the purpose for generating questions
  - Help you understand what you read
  - Help you remember important information about what you read

- Introduce the Level 2, "Putting it Together" question type
  - Questions that can be answered by looking in more than one place in the text.
  - Questions that can be answered in one or more sentences.

Generating "Putting it Together" Questions: Modeling Phase

99

- Use a short passage from your text to model how to create a "putting it together" question.

  - Read the passage aloud.

  - Locate related facts from at least two different places in the text.

  - Combine the facts to make a question.

  - Show how to put information together to answer the question.

Deborah K. Reed, Ph.D.

Level 2—Putting It Together

❏ Questions can be answered by looking in the text
❏ Answers require one or more sentences
❏ To answer the questions, you have to look in more than one place and put information together
  - ➢ Who?　➢ Where?
  - ➢ What?　➢ Why?
  - ➢ When?　➢ How?

Level 2—Putting It Together

❏ Questions can be answered by looking in the text
❏ Answers require one or more sentences
❏ To answer the questions, you have to look in more than one place and put information together
  - ➢ Who?　➢ Where?
  - ➢ What?　➢ Why?
  - ➢ When?　➢ How?

Level 2—Putting It Together

❏ Questions can be answered by looking in the text
❏ Answers require one or more sentences
❏ To answer the questions, you have to look in more than one place and put information together
  - ➢ Who?　➢ Where?
  - ➢ What?　➢ Why?
  - ➢ When?　➢ How?

Level 2—Putting It Together

❏ Questions can be answered by looking in the text
❏ Answers require one or more sentences
❏ To answer the questions, you have to look in more than one place and put information together
  - ➢ Who?　➢ Where?
  - ➢ What?　➢ Why?
  - ➢ When?　➢ How?

Generating "Putting it Together" Questions: Modeling Phase

100

Correct Examples	Incorrect Examples
• Why is it important to protect forests?	• Where do tree roots grow?
• Describe two different processes that living trees carry out.	• What is a forest?
	• How are trees different from grasses?

Practice Passage: *Trees Please!*

Practice Generating "Right There" and "Putting It Together" Questions

101

• Practice writing one "Right There" and two "Putting It Together" questions that could be used with the *Facts About Sharks* passage.

Generating "Making Connections" Questions: Modeling Phase

102

• Explain the purpose for generating questions
  ○ Help you understand what you read
  ○ Help you remember important information about what you read

• Introduce the Level 3, "Making Connections" question type
  ○ Questions that cannot be answered by using text alone.
  ○ Questions that require you to think about what you just read, what you already, and how these ideas relate.

Deborah K. Reed, Ph.D.

Facts about Sharks
by Susanna Batchelor
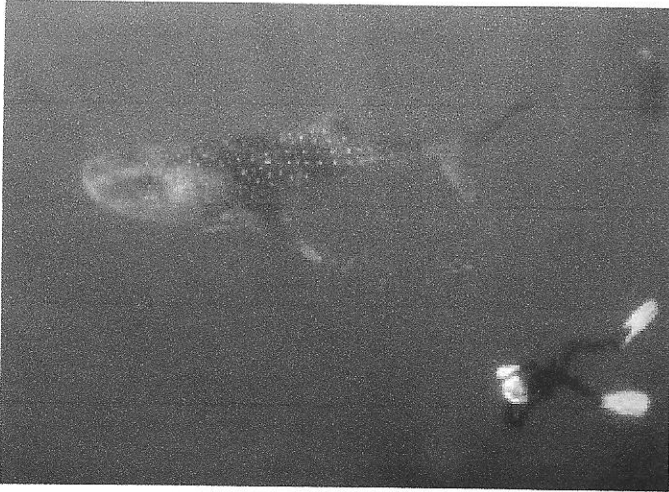
My name is Susanna Batchelor and I am a <u>veterinarian</u> from England. I dive with sharks to learn more about them. I have dived with many different types of sharks all over the world.

There are about 400 different types of sharks. Many of them are named after the way they look or where they live. For example, the hammerhead shark has a head shaped like a hammer; the whale shark is as big as a whale; and the reef shark lives on coral reefs. Sharks range from a few <u>centimeters</u> to many <u>meters</u> in length. And they eat all sorts of different foods - from tiny <u>plankton,</u> to fish, to larger mammals like seals.

I have collected some interesting facts about two different kinds of sharks – hammerhead sharks and whale sharks.

Interesting Facts about <u>Hammerhead Sharks</u>:

1) have a head shaped like a hammer to help it detect <u>electrical signals</u> given off by its <u>prey</u>
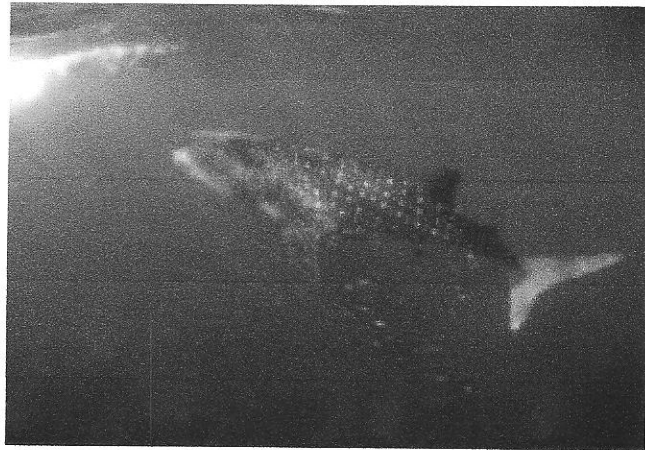2) swing their heads from side to side like a <u>metal detector</u>
3) their eyes and <u>nostrils</u> are at each end of the "hammer"
4) the position of the eyes allows it to look 360° - in a full circle
5) hunt alone at night
6) feed mainly on fish and squid
7) grow up to 4 meters long
8) get scared by the sound of divers' bubbles
9) have been known to eat other sharks

Interesting Facts about <u>Whale Sharks</u>:

1) can grow to 18 meters long
2) are the largest fish in the world
3) feed on <u>plankton</u> that comes through their <u>massive</u> gills
4) have 3,000 tiny teeth but they don't use them for chewing
5) are very curious and will often slow down to inspect divers and even follow their bubbles
6) make long <u>migrations</u> across the oceans to find food
7) can live a long time
8) have a pattern of spots on their sides (just behind the gills) like a <u>fingerprint</u> that is <u>unique</u> to each individual and can be used for <u>identification</u>

For more pictures and shark videos, you can go to http://www.childrenoftheearth.org/shark-information-kids/interesting-facts-about-sharks-for-kids.htm

Generating "Making Connections" Questions: Modeling Phase

103

- Use a short passage from your text to model how to create a "Making Connections" question.
  - Read the passage aloud and discuss what it is about.
  - Relate something in the passage to something you have read, studied, or experienced.
  - Use stems to make a question.
    - How is _____ like (similar to) _____?
    - How is _____ different from _____?
    - How is _____ related to _____?
  - Model combining information in the passage with what you already know to answer the question.

Generating "Making Connections" Questions: Modeling Phase

104

- Talk about the passage in a way that relates to what you have already studied.
  - One section of this passage talked about how plants turn sunlight into stored energy. When we read about respiration, we learned about breaking down molecules to release energy. I wonder how the two processes are related.

- Use a stem to make a question that helps you relate information in the passage to what you already know or have studied.
  - How are photosynthesis and respiration related?

Practice Passage: *Trees Please!*

Generating "Making Connections" Questions: Modeling Phase

105

- Show how you connect information in the passage with information you already learned.
  - I know that respiration occurs in all cells, but this passage says that photosynthesis can only happen in plant cells. Both processes are involved in getting energy. If photosynthesis is how energy is gathered from the sun by plants, and respiration is how the energy is released to fuel cell activity, then maybe they are opposite processes.

66

Deborah K. Reed, Ph.D.

Level 3—Making Connections

❏ Questions cannot be answered by using text alone
❏ Answers require you to think about what you just read, what you already know, and how it fits together

➢ How is ____ like (similar to) ____ ?
➢ How is ____ different from ____ ?
➢ How is _____ related to _____ ?

Level 3—Making Connections

❏ Questions cannot be answered by using text alone
❏ Answers require you to think about what you just read, what you already know, and how it fits together

➢ How is ____ like (similar to) ____ ?
➢ How is ____ different from ____ ?
➢ How is _____ related to _____ ?

Level 3—Making Connections

❏ Questions cannot be answered by using text alone
❏ Answers require you to think about what you just read, what you already know, and how it fits together

➢ How is ____ like (similar to) ____ ?
➢ How is ____ different from ____ ?
➢ How is _____ related to _____ ?

Level 3—Making Connections

❏ Questions cannot be answered by using text alone
❏ Answers require you to think about what you just read, what you already know, and how it fits together

➢ How is ____ like (similar to) ____ ?
➢ How is ____ different from ____ ?
➢ How is _____ related to _____ ?

Generating "Making Connections" Questions: Modeling Phase
106

Correct Examples	Incorrect Examples
• How is protecting the forests similar to protecting fresh water sources? • What would happen to the forests of the Northeastern US in a prolonged pattern of El Niño?	• What plants can be used to make tree-free paper? • Why is tree bark important? • Where is the largest forest in the world?

Generating Questions: Guided Practice
107

- Have students work with partners to create a specified number of each question type.
  - Read the passage together and discuss what it is about.
  - Putting it Together:
    - Locate related facts from at least two different places in the text.
    - Combine the facts to make a question.
    - Put information together to answer the question.
  - Making Connections:
    - Relate something in the passage to something previously read, studied, or experienced.
    - Use the stems to make a question.
      - How is _____ like (similar to) _____?
      - How is _____ different from _____?
      - How is _____ related to _____?
    - Combine information in the passage with what is already known to answer the question.

Sample Levels 1, 2, and 3 Questions Generated
108

	Level 1: Right There	Level 2: Putting It Together	Level 3: Making Connections
English language arts	Who is Atticus Finch in *To Kill a Mockingbird* appointed to defend?	How does Boo Radley show kindness toward Jem and Scout?	How is Atticus Finch similar to and different from the father figure in *Much Ado About Nothing*?
Mathematics	What information is given in the problem?	What math symbols/language/equations will I need to represent the problem statement?	How do I know if my solution is reasonable?
Science	What is the rate of change of velocity over time?	What are two vector quantities included in Newton's Laws?	How is physics related to other sciences?
Social Studies	When did the Berlin Wall fall?	What two events led to the end of the Cold War?	How was the Cold War different from a conventional war?

68

Deborah K. Reed, Ph.D.

Using the Generated Questions After Reading
(109)

- Foster discussion
- Return to the text multiple times

Differentiation:
Scaffolds for Generating Questions
(110)

- Break the text into smaller sections at first, but gradually increase the length.
- Provide a suggested number of questions to generate for each section.
- Levels 1 and 2: Provide passages with some facts already underlined.
- Level 3: Indicate what types of prior knowledge would be helpful in making a connection to the passage.
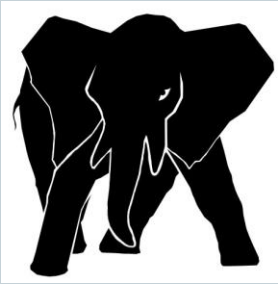- Share questions and provide positive or corrective feedback.

Logistical Issues of ABE Instruction
(111)

- Multiage and multi-ability
- Attendance
- Materials access

69

Deborah K. Reed, Ph.D.

Summary Point

112

_____

_____

_____

_____

_____

_____

_____

dkreed@fcrr.org

113

**RECOMMENDED FOR FURTHER READING ON ADULT
READING INSTRUCTION:**

**HTTP://WIKI.LITERACYTENT.ORG/INDEX.PHP/RESEARCH_
ABOUT_ADULT_READING_INSTRUCTION**

_____

_____

_____

_____

_____

_____

_____

Deborah K. Reed, Ph.D.