Response to Instruction and Intervention

Components of Reading

Anita L. Archer, Ph.D.

archerteach@aol.com



Components of Reading Instruction





Phonemic Awareness - What?

- The ability to hear and manipulate phonemes (sounds) within words.
- Includes the critical skills of blending, segmenting, and manipulating (substituting, adding, deleting) sounds within words.



Phonemic Awareness - Why?

- Must be aware of phonemes within words in order to map graphemes onto phonemes.
- Highly predictive of acquisition of beginning reading skills.
- Related not only to reading but to spelling.

Phonemic Awareness - How?

All

Phonemic awareness activities should be:

- 1. Few in number.
- 2. Explicitly modeled.
- 3. Supported by concrete materials or gestures.
- 4. Designed to include all students.
- Incorporate phonemic awareness into spelling dictation.

Example A

Blending Sounds into Words

- 1. We're going to play a say-the-word game. I'll say the sounds. You say the word.
- 2. Listen. aaaammmmm
- 3. What word? am
- 4. (Repeat with other words.)
- 5. (If time permits, check individual students.)

(Practice: man, sat, ship, trap)



Example B

Segmenting words into sounds - Smooth Segmenting

- 1. Put your fists together.
- 2. Get ready to stretch the word.
- 3. The word is fin. What word? fin
- 4. Stretch it. fffiiiiinnnn
- 5. Shrink it. fin

6. (If time permits, check individual students.)

(Practice: sit, list, fish, trip)



Example C

Segmenting Words into Sounds - Separate Segmenting

- 1. We're going to say the sounds in a word.
- 2. Fist in the air. Put up one finger for each sound.
- 3. The word is sat. What word? sat
- 4. First sound? /sss/Next sound? /aaa/Last sound? /t/
- 5. (If time permits, check individual students.)

(Practice: fan, fast, shop, with)

Phonemic Awareness - How?

Intervention

- Include phonemic awareness activities in beginning reading programs for students of any age.
- Stress blending and segmenting of phonemes within words.
- Explicitly model blending and segmenting tasks.



Phonemic Awareness - How?

Intervention Programs

Phonemic Awareness is included in all research-based, early decoding programs.

Special supplemental programs such as:

Phonemic Awareness in Young Children (Brookes) Ladders to Literacy (Brookes Publishing) Road to the the Code (Brookes Publishing) Stepping Stones to Literacy (Sopris West)

Decoding - What?

The ability to utilize letter- sound associations and structural elements to determine the **pronunciation of unknown words**.

Letter-sound associations (phoneme-grapheme associations):

- Consonant and vowel letters,
- Consonant combinations including blends (bl, st, tr, pl) and digraphs (sh, th, ph)
- Vowel combinations including digraphs (ai, oa, ee) and diphthongs (oi, oy) and r-controlled vowels (ar, ir, or, er, air)

Decoding of regular, single syllable words

- CVC, CCVC, CVCC, CCVCC
- CVCe, CCVCe
- CVVC, CCVVC, CVVCC



Decoding - What?

- Structural elements including: Inflectional endings Prefixes and suffixes
- Decoding of multisyllabic words
- Reading of irregular words in which letters don't represent most common sound

Decoding - Why?

Decoding is directly related to **comprehension**.

"There is no comprehension strategy powerful enough to compensate for the fact you can't read the words."

- Poor word recognition skills account for the major differences between high performing and low performing readers in the upper grades.
- The inability to decode multisyllabic words is particularly problematic for older struggling readers.



- Carefully teach the decoding strand of core reading programs in primary grades.
- Before introducing a passage, introduce the pronunciation of difficult words. This can be incorporated into vocabulary instruction.

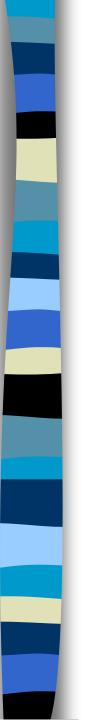


Example A

Sounding Out VC, CVC, CVCC, CCCVC words sip fit lip tip rim

Teaching Procedure #1

- 1. When I touch a letter, I'll say its sound. I'll keep saying the sound until I touch the next letter. I won't stop between sounds.
- 2. My turn to sound out this word. (Touch under each letter and say the sound. Hold continuous sounds and say stop sounds quickly. Don't stop between sounds.)
- 3. Sound this word with me. (Touch under each letter.)
- 4. Your turn. Sound out this word by yourselves. (Touch under each letter.)
- 5. What word?



Example B

Sounding Out VC, CVC, CVCC, CCVC words

mom top shop dot

Teaching Procedure #2

- 1. (Write the first letter on the board.) What sound?
- 2. (Write the second letter on the board.) What sound?
- 3. (Move your hand under the two letters.) Blend it.
- 4. (Write the third letter.) What sound?
- 5. (Move your hand under the letters.) Blend the sounds.
- 6. What word?



Example C

Sounding Out Words with Letter Combinations

r<u>ai</u>n tr<u>ai</u>n p<u>ai</u>nt s<u>ai</u>l s<u>ea</u>l

Precorrection Procedure

- 1. (Point to the underlined letters.) What sound?
- 2. (Point to the word.) What sound?
- 3. (Have students reread the list without the precorrection.)
- 4. (Have individual students read the words or have them read the words to their partner.)

Example D

Decoding CVCE words

bake rate rat brake mane man

- 1. An *e* at the end of a word tells us to say the name of this letter. (Point to the vowel letter.)
- 2. (Guide students in applying the rule.)
 - a. Is there an e at the end of this word?
 - b. (Point to the vowel letter.) So do we say the name of this letter?
 - c. What is the name of this letter?
 - d. (Point to the word.) What word?



Example E

Decoding of Multisyllabic Words (Loop, Loop, Loop Strategy)

(Preparation: Segment the word into decodable chunks. Be sure that prefixes and suffixes are separate parts. Draw loops to segment the words.)

instruction commitment remarkable

- 1. (Move finger under the first part.) What part?
- 2. (Repeat for remaining parts.)
- 3. (Move finger quickly under the parts.) What part? What part? What part?
- 4. What word?
- 5. Is that a real word?

Intervention

- Provide explicit, systematic decoding instruction to struggling readers.
 - Directly teach letter-sound associations and blending of sounds into words.
 - Provide practice decoding single syllable words in lists and decodable passages.
 - Directly teach the pronunciation of structural elements including inflectional endings, prefixes, and suffixes.
 - Teach older students a flexible strategy for unlocking the pronunciation of long words.

Research-Validated Intervention Programs - Primary Students

Read Well (Sopris West)

SRA Early Interventions in Reading Level 1 (SRA) Voyager Passport (Voyager Learning) Phonics for Reading (Curriuclum Associates)

K-PALS (Sopris West) First Grade PALS (Sopris West) Teacher Directed PALS (Sopris West) Sound Partners (Sopris West)



Research-Validated Intervention Programs - Primary Students

Wilson Foundations (Wilson Language) *Sounds Sensible* (Educators Publishing Service)

Lindamood LiPs (Gander Publishing)

Read, Write, and Type Learning System (Talking Fingers, Inc.) Earobics (Cognitive Concepts) Headsprout Early Reading (School Info.)

Research-Validated Intervention Programs - Older Students

Corrective Reading Decoding (SRA) Language! (Sopris West) Wilson Reading System (Wilson Language) Voyager Passport (Voyager Learning)

Phonics for Reading (Curriculum Associations)
REWARDS (Sopris West)
SiPPS Plus and SiPPS Challenge Level
(Developmental Studies Center)

Fluency - What?

The ability to effortlessly read words accurately and quickly.

The ability to read connected text accurately with appropriate rate and expression.

Fluency - Why?

- Fluency is related to reading comprehension.
- If the underlying reading processes are fast and unconscious, the conscious mind is then free to think about the meaning of the text.
- An accurate, fluent reader will read more. If students read more, many gifts flow to them. "The rich get rich. The poor get poor."



Fluency - Why?

- Fluent readers complete assignments with more ease.
- Fluent readers will also perform better on reading tests.

2005 Hasbrouck & Tindal Oral Reading Fluency Data

Jan Hasbrouck and Gerald Tindal completed an extensive study of oral reading fluency in 2004. The results of their study are published in the technical report, "Oral Reading Fluency: 90 Years of Measurement," (brt.uoregon.edu/tech_reports.htm), and in the article, "Oral Reading Fluency Norms: A Valuable Assessment Tool...," in the April 2006 issue of *The Reading Teacher* (www.reading.org/publications/journals/RT/).

The table below shows the mean oral reading fluency of students in grades 1 through 8 as determined by Hasbrouck and Tindal's data.

You can use the information in this table to draw conclusions and make decisions about the oral reading fluency of your students. Students who score 10 or more words below the 50th percentile using the average score of two unpracticed readings from grade-level materials need a fluency-building program. In addition, teachers can use the table to set the long-term fluency goals for their struggling readers.

Average weekly improvement is the average words per week growth you can expect from a student. It was calculated by subtracting the fall score from the spring score and dividing the difference by 32, the typical number of weeks between the fall and spring assessments. For grade 1, since there is no fall assessment, the average weekly improvement was calculated by subtracting the winter score from the spring score and dividing the difference by 16, the typical number of weeks between the winter and spring assessments.

| Grade | Percentile | Fall WCPM* | Winter WCPM* | Spring WCPM* | Avg. Weekly Improvement** |
|-------|------------|---------------|-----------------|-----------------|------------------------------|
| 1 | 90 | | 81 | 111 | 1.9 |
| | 75 | | 47 | 82 | 2.2 |
| | 50 | | 23 | 53 | 1.9 |
| | 25 | | 12 | 28 | 1.0 |
| | 10 | | 6 | 15 | 0.6 |
| 2 | 90 | 106 | 125 | 142 | 1.1 |
| | 75 | 79 | 100 | 117 | 1.2 |
| | 50 | 51 | 72 | 89 | 1.2 |
| | 25 | 25 | 42 | 61 | 1.1 |
| | 10 | 11 | 18 | 31 | 0.6 |

| Grade | Percentile | Fall WCPM* | Winter WCPM* | Spring WCPM* | Avg. Weekly Improvement** |
|-------|------------|---------------|-----------------|-----------------|------------------------------|
| 3 | 90 | 128 | 146 | 162 | 1.1 |
| | 75 | 99 | 120 | 137 | 1.2 |
| | 50 | 71 | 92 | 107 | 1.1 |
| | 25 | 44 | 62 | 78 | 1.1 |
| | 10 | 21 | 36 | 48 | 0.8 |
| 4 | 90 | 145 | 166 | 180 | 1.1 |
| | 75 | 119 | 139 | 152 | 1.0 |
| | 50 | 94 | 112 | 123 | 0.9 |
| | 25 | 68 | 87 | 98 | 0.9 |
| | 10 | 45 | 61 | 72 | 0.8 |
| 5 | 90 | 166 | 182 | 194 | 0.9 |
| | 75 | 139 | 156 | 168 | 0.9 |
| | 50 | 110 | 127 | 139 | 0.9 |
| | 25 | 85 | 99 | 109 | 0.8 |
| | 10 | 61 | 74 | 83 | 0.7 |
| | 90 | 177 | 195 | 204 | 0.8 |
| 6 | 75 | 153 | 167 | 177 | 0.8 |
| | 50 | 127 | 140 | 150 | 0.7 |
| | 25 | 98 | 111 | 122 | 0.8 |
| | 10 | 68 | 82 | 93 | 0.8 |
| 7 | 90 | 180 | 192 | 202 | 0.7 |
| | 75 | 156 | 165 | 177 | 0.7 |
| | 50 | 128 | 136 | 150 | 0.7 |
| | 25 | 102 | 109 | 123 | 0.7 |
| | 10 | 79 | 88 | 98 | 0.6 |
| 8 | 90 | 185 | 199 | 199 | 0.4 |
| | 75 | 161 | 173 | 177 | 0.5 |
| | 50 | 133 | 146 | 151 | 0.6 |
| | 25 | 106 | 115 | 124 | 0.6 |
| | 10 | 77 | 84 | 97 | 0.6 |



All

- Provide extensive reading practice.
- Encourage wide independent reading.
- Use reading procedures in class that promote reading practice (e.g., choral reading, cloze reading, augmented silent reading, individual reading, partner reading).
- Prepare students for passage reading.
 - Introduce the pronunciation of difficult words
 - Explicitly teach vocabulary
 - Introduce background knowledge.



Intervention

- Explicitly teach decoding skills for reading single syllable and multi-syllabic words.
- Increase the number of words that students recognize immediately (sight vocabulary).



Intervention

Utilize repeated reading exercises to increase fluency.

- Student reads material at his/her instructional level or independent level at least three times, trying to read the material faster each time.
- These steps are generally used in repeated reading activities:
 - Cold Timing
 - Practice
 - Hot Timing
- Additional procedures: graphing cold and hot timings, practice reading with audio recording or teacher.



Intervention Programs

- Read Naturally (Read Naturally)
- Six-Minute Solution (Sopris West)
- Great Leaps (Diarmuid, Inc.)
- Soliloquy Reading Assistant (Soliloquy Learning)

Vocabulary - What?

- The ability to understand words and to use words to understand text.
- The ability to use words to express meaning.

Vocabulary - Why?

- Ability to understand the meaning of words is related to:
 - reading comprehension
 - overall academic success
 - ability to learn more vocabulary
 - other variables such as salary
- Adequate reading comprehension depends on a person knowing between 90 to 95% of the meanings of words in the text.

| Vocabulary - Why? | | | | | | | |
|--|-------------------------|--------------------------------------|--|------------|--|--|--|
| Vocabulary Gap | | | | | | | |
| Meaningful Differences in Cumulative | | | | | | | |
| Experiences (Hart & Risley, 1995) | | | | | | | |
| | Words heard per hour | Words heard in a 100-hour week | Words heard in a 5,200 hour year | 3 years | | | |
| Welfare | 620 | 62,000 | 3 million | 10 million | | | |
| Working Class | 1,250 | 125,000 | 6 million | 20 million | | | |
| Professional | 2,150 | 215,000 | 11 million | 30 million | | | |

Vocabulary- Why?

- Vocabulary Gap
 - Linguistically "poor" first graders knew 5,000 words; linguistically "rich" first graders knew 20,000 words. (Moats, 2001)
 - Children who enter school with limited vocabulary knowledge grow more discrepant over time from their peers who have rich vocabulary knowledge. (Baker, Simmons, & Kame'enui, 1997)
 - The number of words students learn varies greatly.
 - 2 versus 8 words per day
 - 750 versus 3000 words per year

Vocabulary - Why?

- Children who enter school with limited vocabulary knowledge grow more discrepant over time from their peers who have rich vocabulary knowledge.
- Beginning in 4th grade, the reading scores of lowincome students begin a steady **decline** that becomes steeper as students move into the higher grades. This decline is primarily due to lower vocabulary and background knowledge.

Vocabulary - How?

AII

Utilize sophisticated vocabulary in our classrooms.

Read books to students.

- Select interesting books that engage students.
- Select books with challenging vocabulary.
- Read narrative and expository materials.
- Use performance-oriented reading.
- As you read, provide a little explanation of unknown words.
- Ask questions. Focus on retell and prediction.
- Request responses from students.
- Encourage independent reading.

Vocabulary - How

Provide explicit, robust vocabulary instruction.

- Carefully select words for vocabulary instruction. Focus on words that are unknown, important, used in many domains, and more difficult to obtain.
- Introduce the words using student-friendly explanations (definitional information) and illustrate with sentences, examples, or illustrations (contextual information).
- Provide practice that gives multiple exposures, requires deep processing, and connects words to prior knowledge.
- Consistently review vocabulary.
- Teach word-learning strategies.

(Note: Teach words AFTER you have read a story to your students and BEFORE students read a selection.)

Step 1. Introduce the word.

- a) Write the word on the board or overhead.
- b) Read the word and have the students repeat the word.
 - If the word is difficult to pronounce or unfamiliar have the students repeat the word a number of times.

Introduce the word with me.

" This word is relieved. What word?"

Step 2. Present a student-friendly explanation.

- a) Tell students the explanation. OR
- b) Have them read the explanation with you.

Present the definition with me.

"When something that is difficult is over or never happened at all, you feel relieved. So if something that is difficult is over, you would feel _____."

Step 3. Illustrate the word with examples.

- a) Concrete examples.
- b) Visual representations.
- c) Verbal examples.

Present the examples with me.

"When the spelling test is over, you feel <u>relieved</u>."

"When you have finished giving the speech that you dreaded, you feel <u>relieved.</u>"

Step 4.Check students' understanding.Option #1.Ask deep processing questions.

Check students' understanding with me.

When the students lined up for morning recess, Jason said, "I am so relieved that this morning is over." Why might Jason be relieved?

When Maria was told that the soccer game had been cancelled, she said, "I am relieved." Why might Maria be relieved?

Step 4.Check students' understanding.Option #2.Have students discern between
examples and non-examples.

Check students' understanding with me.

"If you were nervous singing in front of others, would you feel relieved when the concert was over?" _{Yes} *"Why?"*

"If you loved singing to audiences, would you feel relieved when the concert was over?" No "Why not?" It was not difficult for you.

Step 4.Check students' understanding.Option #3.Have students generate their own
examples.

Check students' understanding with me.

"Tell your partner a time when you were relieved."

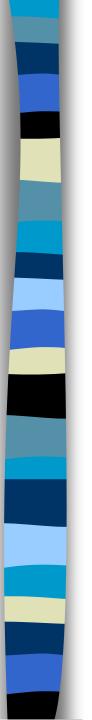
Step 4.Check students' understanding.Option #4.Provide students with a
"sentence starter". Have them say the
complete sentence.

Check students' understanding with me.

Sometimes your mother is relieved. Tell your partner when your mother is relieved. Start your sentence by saying, "My mother is relieved when _____."

Did the teacher:

- 1. Introduce the word?
- 2. Present a student-friendly explanation?
- 3. Illustrate the word with examples?
- 4. Check students' understanding?



Vocabulary - How

Intervention

- Preteach vocabulary found in passages in core or intervention materials.
- Emphasize "word learning" strategies.

Vocabulary - Intervention Programs

For Young Students

Language for Learning (SRA) Language First (Leapfrog: School House) Elements of Reading:Vocabulary (Steck-Vaughn)

Vocabulary - Intervention Programs

For Older Students

Words for Academic Writing: Vocabulary Across Curricula (Sopris West)
Vocabulary Through Morphemes (Sopris West)
Multiple Meaning Vocabulary (Sopris West)
Vocabulary Improvement Program for English Language Learners and their Classmates (Brookes)

Background Knowledge - What?

....what one already knows about a subject. Stevens, 1980

...all knowledge learners have when entering a learning environment that is potentially relevant for acquiring new knowledge.

Biemans & Simons, 1996

Why important? Background Knowledge & Comprehension

Background knowledge of text has a major impact on whether or not a reader can comprehend text.

Anderson & Pearson, 1984; Bransford, Stein, & Shelton, 1984; Wilson & Anderson, 1986

Across grades and reading ability, prior knowledge of subject area and key vocabulary results in higher scores on reading comprehension measures.

Langer, 1984; Long, Winograd, & Bridget, 1989; Stevens, 1980

Why important? Background Knowledge & Learning

- Average correlation between person's background knowledge of a given topic and extent to which a person learns new information is .66. Marzano, 2004
- Prior knowledge has a large influence on student performance, explaining 30 to 60% of variance in performance. Docy, Segers, & Buehl, 1999

Background Knowledge - How?

All

- If students have background knowledge, activate that knowledge.
 - Ask questions.
 - Brainstorm current background knowledge.
 - Facilitate a discussion of current knowledge.

Background Knowledge - How?

All

- If students do not have adequate background knowledge, "front load".
 - Remember Even a thin slice of background knowledge improves comprehension.
- Provide explicit instruction on background knowledge.
 - Teach background knowledge. Anchor in:
 - » Power Point
 - » Supplementary Informational Text
 - » Visuals
 - » Video
 - » Graphic Organizer

Background Knowledge - How? All

Frontload Passage Reading

- Teach the critical vocabulary terms.
- Preview the material with students.
- Encourage wide reading.

Comprehension - What?

- The intentional interaction between the reader and the text to extract meaning.
- The ability to:
 - monitor comprehension
 - check and adjust comprehension
 - make connections within the text and to prior knowledge
 - answer questions (literal, inferential, analytic, evaluative)

Comprehension - Why?

- Comprehension of text material is the goal of ALL reading instruction.
- Teaching students comprehension strategies promotes independence and will help students become more active participants in their learning.
- Comprehension strategies can be **applied** in a variety of classes and when completing homework.

All

- To increase **comprehension in general**, increase decoding, fluency, vocabulary, and background knowledge.
- To increase comprehension of a **specific passage**:
 - preteach the pronunciation of passage words
 - preteach the meaning of vocabulary
 - activate or teach background knowledge
 - preview the passage

AII

To increase comprehension teach **strategies** with proven effectiveness.

- Previewing text material.
- Monitoring comprehension
- Using graphic organizers
- Asking a variety of questions
- Having students generate questions
- Using strategies based on **text structure** (e.g., story grammar)
- Summarizing (preferably in writing)



Intervention Programs Younger Students

- PALS (grades 2 6) Vanderbilt
- Soar to Success (Houghton Mifflin)
- Comprehension Plus (Modern Curriculum Press)
- Collaborative Strategic Reading (Sopris West)

- Intervention ProgramsOlder Students
 - Read to Achieve (SRA)
 - READ 180 Reading Intervention Program (Scholastic)
 - Language ! (Sopris West)
 - REWARDS PLUS (Sopris West)