Targeting Oral and Written Language: Connections to the Classroom, Curriculum, and Common Core Standards

Nickola Wolf Nelson, PhD, CCC-SLP
Western Michigan University

Lorain, Ohio September 22, 2014

Acknowledgments / Disclosure

- Many graduate students, colleagues, and Van Riper named professorship from WMU
- Adelia Van Meter, M.S.
- U.S. Department of Education, Office of Special Education Programs, and Institute of Education Sciences, National Center for Special Education Research for TILLS research.
  - Michele A. Anderson, Ph.D., Senior Research Associate
  - E. Brooks Applegate, Ph.D., WMU
  - Elena Plante, Ph.D., University of Arizona

Learning Objectives

- Describe how sound/word level problems can be targeted using explicit, integrated approaches to help students connect phonemic and morphemic perception and production to improve reading decoding and spelling skills, and vice versa.
- Describe how sentence/discourse level problems can be targeted using integrated approaches to help students build their syntactic and discourse skills to connect listening and reading comprehension and spoken and written expression.
- Identify grade-level core standards that correspond to specific language intervention goals for at least two language/literacy concerns exhibited by children on their caseloads.

4 Big Points

- Spoken and written language development are thoroughly intertwined
  - Spoken → written
  - Written → spoken
- Understanding profiles of sound/word and sentence/discourse abilities can contribute to planning
- Building intermodality connections is critical to building sound/word knowledge
- At the sentence/discourse level, focus on students’ ideas and target elaboration before correctness

Comprehensive Planning

Comprehensive planning - What next?

- Does the child have needs?
  - Parent input
  - Student input
  - School input
  - Prior testing
  - Response-to-Intervention
- What kinds of needs?
  - Is there a problem of speech and/or written language?
  - Does it fit a particular profile?
  - Does it fit a clinical diagnosis?
- What specifically should we target?
  - Most important?
  - Most impaired?
  - Most likely to make a difference?
- How should we conduct intervention?
  - Materials? Theoretical model?
  - Mass trials? Contextualized?
Formal assessment

- Assess sound/word & sentence/discourse abilities across spoken & written modalities
- Could administer multiple tests of oral and written language (e.g., CELF-4, CELF-5, GORT, TOWL, TNL, WMRT)
- Need normative data based on common standardization group
- Current options with common standardization group:
  - WJIII
  - OWLS
  - TILLS
  - CELF-5
- Need to be able to interpret findings (sensible theoretical model)
- Seek corroboration from multiple sources
- Evidence-based checklists (ORS with CELF-4; Bishop’s CCC)
- Language Literacy Rating Scale (LLRS)
- Add qualitative information from non-standardized contextualized measures
  - QRI-5 (Leslie & Caldwell, 2011)
  - CBM (DIBELS, naming sounds from letters)

TILLS

**Language Level**

<table>
<thead>
<tr>
<th>Modality</th>
<th>Language Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sound/Word Level</td>
</tr>
<tr>
<td>Listening</td>
<td>Vocabulary awareness</td>
</tr>
<tr>
<td></td>
<td>Phonemic awareness</td>
</tr>
<tr>
<td>Speaking</td>
<td>Nonword repetition</td>
</tr>
<tr>
<td></td>
<td>Nonword reading</td>
</tr>
<tr>
<td></td>
<td>Reading fluency</td>
</tr>
<tr>
<td>Reading</td>
<td>Nonword reading</td>
</tr>
<tr>
<td>Writing</td>
<td>Nonword spelling</td>
</tr>
<tr>
<td>Memory</td>
<td>Digits forward</td>
</tr>
<tr>
<td></td>
<td>Digits backward</td>
</tr>
</tbody>
</table>

Nelson, N. W., Helm-Estabrooks, N., Hotz, G., & Plante, E. (Developed with support of Brooken Publishing and a grant from the U.S. Dept of Ed, IES)

**Example of 5th Grade Text**


*From Chapter 1: “Homeward Bound”*

The tramp steamer *Drake* plowed away from the coast of India and pushed its blunt prow into the Arabian Sea, homeward bound. Slowly it made its way west toward the Gulf of Aden. Its hold was loaded with coffee, rice, tea, oil seeds and jute. Black smoke poured from its own stack, darkening the hot cloudless sky.

Alexander Ramsay, Jr., known to his friends back home in New York City as Aber, leaned over the rail and watched the water slide away from the sides of the boat. His red hair blazed redder than ever in the hot sun, his tanned elbows rested heavily on the rail as he turned his freckled face back toward the fast-disappearing shore.
3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
   a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.
   b. Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, dramas, or poems.

Curriculum-based language assessment and intervention
- “Use of curriculum contexts and content for measuring a student’s language intervention needs and progress.” (Nelson, 1989, p. 171, LSHSS)
- Does the student have the language skills to learn the curriculum?
- Used for periodic probes
- Contributes to dynamic assessment

What context?
Interview participants
- Student
- Teacher
- Parents
- Use information from questionnaires
- “If you could change just one thing, what would that be?”

“The goal in interviewing is to have participants talk about things of interest to them and to cover matters of importance to [you] in a way that allows participants to use their own concepts and terms” (Stainback & Stainback, 1988, p. 52)

Lists and labels about strengths and needs
- What’s the best thing about school?
- What’s the hardest/worst thing?

Anecdotes about specific events
- “When was the last time you felt ‘bored’?”
- “When the teacher explained the math lesson, and I didn’t know what to do.”

Four Questions
Assessment
- What does this curricular context require?
- What does the student currently do?

Intervention
- What might the student learn to do differently? (missed cues)
- How should the task be modified or scaffolded?
Curriculum-Based Language Assessment and Intervention

<table>
<thead>
<tr>
<th>Question</th>
<th>What it yields</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What language skills are required?</td>
<td>Expected Response [ER]</td>
<td>Consider language skills and strategies that effective language users employ.</td>
</tr>
<tr>
<td>2. What does the student currently do?</td>
<td>Observed Response [OR]</td>
<td>Describe by working with the student using dynamic assessment procedures.</td>
</tr>
<tr>
<td>3. What might the student learn to do differently?</td>
<td>Mismatch between ER ← OR</td>
<td>Establish instructional goals and benchmarks to target mismatch.</td>
</tr>
<tr>
<td>4. How should curricular task be scaffolded?</td>
<td>Bridge from OR → ER</td>
<td>Use dynamic assessment to design scaffolding and task modifications (if necessary).</td>
</tr>
</tbody>
</table>

Dynamic Assessment

- Analyze task and Expected Response (ER)
- Describe Observed Response (OR)
- Assess difference between OR and ER

- Scaffold the child to bridge the gap
- OR → ER
- Remove the scaffold

- Is OR now closer to ER?
- What next to come even closer?

Skills to observe and target

**Listening/Reading**
- Sound/Word Level
  - Vocabulary/lexicon/semantics
  - Letter sound recognition
  - Phonemic/alphabetic/orthographic/syllabic/morphemic perception, awareness, decoding
  - Rough, rough
  - Mike, Mike
  - Whole word reading fluency
- Sentence/Discourse Level
  - Paraphrase text
  - Point our referents across sentence boundaries
  - Answer questions
  - Draw inferences
  - Summarize or retell passages
  - Author/speaker perspective

**Speaking/Writing**
- Sound/Word Level
  - Vocabulary/lexicon/semantics
  - Sound letter formation
  - Phonemic/phonetic/morphemic/syllabic/orthographic generation, representation, encoding/spelling
  - Handwriting fluency/fluent word retrieval/speech production
- Sentence/Discourse level
  - Plan strategically
  - Generate idea
  - Organize content
  - Formulate sentences orally
  - Transcribe into print (at first)
  - Use variety of sentence structures; written grammar
  - Audience perspective
  - Reread and make edits
  - Repair conversation as needed

Pinball Wizardry Model

A Voyage That Changed History

Have you ever read a book over and over again? About 500 years ago, Christopher Columbus did. The book told of faraway countries where people dressed in brightly colored silk. It described a beautiful gold palace.

The book had been written by an Italian named Marco Polo in 1298, more than 130 years before Columbus was born. It described the 17 years Marco Polo spent in India, China, and Japan. Columbus hoped one day to see those Asian countries for himself. In the 1400’s, however, the trip to Asia was as long and difficult as it had been in Marco Polo’s day. The only routes Columbus knew crossed huge deserts and tall mountains. Still, Columbus felt sure there was a faster, shorter way to Asia. He planned to find it.
Dan and his math problem

- If your school has 5 bike racks and each rack will hold 5 bikes, how many students can park their bikes at your school?
  - Expected response: ?
  - Observed response: 10
  - What did the student do?
  - What does the student need to know about language?

Writing Sample

Columbus sailed to Asia, while Marco Polo I think in the 1800s. For 100 and some other days, they stayed in India. Columbus found a different route to Asia, then the other way back. Things.

Fifth grade girl--age 11 years

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

How should you bridge the gap from OR \rightarrow ER?

- First draw the problem: (Think aloud)
- Then do the math:
  - 5 (racks) \times 5 (bikes each) = 25
- Does that make sense? Does it match the picture?

WHAT DO I NEED TO DO?

FIRST DRAW THE PROBLEM AND THEN DO THE MATH.

CCSS - Grade 3 Mathematics

- Solve problems involving the four operations, and identify and explain patterns in arithmetic.
- \text{CCSS Math Content:} \text{3.OA.D.8} Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.\text{3}
Expository Text Macrostructure

- Hierarchical/descriptive
  - Superordinate
  - Subordinate
    - Procedural sequence
      - [1] details
    - Comparison/contrast
      - [2] details
    - Antecedent
      - Topic
defifferent
    - Consequence
    - [details]
    - [details]

Examples from a 4th Grade Science Textbook

1. How is the crust under the ocean different from the continental crust?
   (compare-contrast)

2. Name 3 ways that plates can move in relation to each other?
   (hierarchical descriptive)

Examples (cont’d.)

3. How could convection currents in the mantle cause the plates to move?
   (antecedent-consequence)

4. How does the movement of the plates in the Atlantic Ocean create volcanoes in the ocean?
   (antecedent-consequence)

Semantic Hierarchies

- Charts
  - Is a...
  - Has a...
  - Kinds of...
- Backward and forward questioning
  - “What is a deciduous tree?”
  - “What is a tree that loses its leaves?”

Compare and Contrast

Hurricanes & Tornados

- Hurricanes
  - Along the coast
  - Warm air rises up water
  - Bring heavy rains
- Tornados
  - Over land
  - Drop from storm clouds
  - Make a narrow path
- Warm and cold air collide
  - High winds
  - Have eyes

Both
Minilesson on Note taking

Grad student: Frazier Jordan

Scaffolding Note-Taking from Videotape

- Keep your questions in mind
- Scan for answers and interesting information
- Chunk information (don’t try to write down everything; abbreviate)
- Use key vocabulary but explain in your own words

Writing Lab Approach

To Language Instruction
And Intervention

Writing Process Instruction
Computer Supports
Inclusive, Collaborative, Individualized Intervention
Combining Instruction & Intervention

- Analyze baseline story probes
- Establish individualized objectives
  - Writing processes
  - Discourse level
  - Sentence level
  - Word/sound level
  - Self-regulation and social interaction
- Plan a project in collaboration with teacher
- Use it to work on individual objectives

Typical Day in the Writing Lab

- 10-15 min — Brief mini-lesson on topic selected by teacher and ST
  - Introduction to new writing process (drafting, editing, peer conferencing)
  - Group opportunities to work on critical thinking and oral language
- 30 min — Next step on works in progress
  - Opportunity to work on individual goals
  - Scaffolding by teacher and ST with individual students and small groups
- 15 min — Sharing of progress, printing, organizing Author Notebooks

Mini-lessons

- Set topic
- Activate schemas
- Model the process
- Look at other products
- Show how to use self-talk to guide thinking
- Encourage brainstorming & active participation
- Provide handout—self-talk to support independence
- Provide opportunity to practice with scaffolding
- Revisit and build into ongoing routine

Oral Communication Opportunities

- Peer conferencing
  - Peers as audience
  - Switching roles
- Teacher conferencing
  - Teacher as audience
  - Setting criteria
- Formal presentations
  - Author chair
  - Publishing parties
Author Chair
Presenting
- Author reads
- Calls on others:
  - questions
  - comments
- Use at revising, as well as publishing stages
- Can involve peer editing
- Opportunities for improving speech production & listener comprehension

Other organizational supports
- Predictable routines
- Word walls
- Self-talk tools in notebooks
- Minilesson handouts
- Environmental reminders
- Computers
- Adults for support

Planning supports (Inspiration, clipart)
Drafting, revising, editing tools (spell check, cut-and-paste)
Publication features (fonts, borders, illustrations)

Computers
Logistics

Inclusive, Collaborative, Individualized Instruction
2 to 3 days a week working in classrooms and computer labs, teachers and SLPs side-by-side
Special needs students included for all instruction

Written language probes
Writing Processes
Written Products: Language levels
Spoken language in writing process context

Gathering Writing Samples
- Best gathered within general education class sessions
- One hour sessions
  - 5 minutes introduction
  - 5 minutes to plan on plain paper
  - 45 minutes to draft story
  - 5 minutes to read stories to an adult and finish up
- Logistics
  - Use pens
  - Cross out to make changes
  - Spell the best you can—“Do what you usually do if your teacher is not around.”
  - May circle words if you’re not sure they’re spelled correctly
  - Read the story to an adult (who writes in any words that may be difficult to understand)
Narrative Writing Sample Instructions
Today we are going to write stories. Stories tell about a problem and what happened. Your story can be real or imaginary.

Expository Writing Sample Instructions
Think about topic that’s interesting to you. Write about it.

Describe Initial Levels in Written Language
- Writing Processes (including self-regulation)
- Written Products: Language levels
- Spoken language in writing process contexts

Analyze baseline samples
- Writing processes
  - Planning
  - Drafting
  - Revising
  - Editing
  - Presenting
- Discourse level
  - Mature macrostructure organization
  - Fluency (total words)
  - Cohesion
- Sentence level
  - T-units (Main clause + any subordinated or embedded clauses)
  - Simple Incorrect [SI], Simple Correct [SC], Complex Incorrect [CI], Complex Correct [CC]
- Word/sound level
  - Spelling maturity
  - Word diversity
- Self-regulation and social interaction

Summarize the results from the worksheet and use them to establish objectives.

Writing Lab Outreach Project Web site
http://www.wmich.edu/speech-audiology/wlop/
Assessing Writing Processes

- Planning and organizing
  - Picture
  - Graphic organizer
  - Notes
  - Dictation
- Drafting
  - Refers to planning
  - Pauses periodically
- Revising and editing
  - Rereads work
  - Makes corrections
  - Etc.

Assessing Discourse Level

- Fluency
- Structural organization
  - True to genre (e.g., narrative expository)
  - Maturity level (Stein & Glenn; Hedberg & Westby)
- Sense of audience
- Cohesion

Assessing Narrative Maturity

1. Isolated description (heaps)
2. Action (temporal) sequence (“What next?” strategy often linked by and, so, then)
3. Reactive sequence (Casually linked, without planning)
4. Abbreviated episode (Problem stated; character’s intentions implied, e.g., “decided to”)
5. Complete episode (Plan stated; explicit goal setting; clear ending)
6. Complex/multiple episodes
Assessing Sentence Level

- Sentence Types
  - Simple and complex
  - Correct and incorrect
  - [si] [sc] [ci] [cc]
- Sentence Variability
- Comprehension/Formulation
  - Complex structures
  - More words per T-unit
  - Increase in number different conjunctions
  - Cohesive devices
  - Morpho-syntactic rules (e.g., -ing, plurals, possessives, verb tense agreement)

Each coordinated clause (joined by and, but, or, so) is 1 t-unit

Examples: 2 t-units
- John came to the party, and Cindy came too.
- John came to the party, but Cindy didn’t come.

T-unit: 1 main clause + embedded or subordinated clause

Examples: 1 t-unit
- John and Cindy came to the party.
- John came to the party and brought Cindy.
- When John came to the party, he brought Cindy.
- John, who brought Cindy to the party, came late.

Sentence Types

- Simple correct [sc]
  - I liked the new dress.
  - Tiger and Coco were best buddies.
- Simple incorrect [si]
  - Her and I saw you.
  - Then there 10 seconds left in the game.
- Complex (or compound) correct [cc]
  - My cousin still had his baby teeth when he was six years old.
  - We were glad to be rich.
- Complex (or compound) incorrect [ci]
  - She like to sneak out of the house when the door is open.
  - Jake wasn’t going to read book, except I did.

Practice Dividing T-units

My own dog's name was Spot because it was a very nosy dog. He always came out of his room and barked at the doorbell. He made me laugh.

Example: 3 t-units
- My own dog's name was Spot.
- because it was a very nosy dog.
- He always came out of his room and barked at the doorbell.
- He made me laugh.

14 T-units
T-unit types:
SI - 10
SC - 10
CI - 2
CC - 2
Assessing Word Level

- Word decoding
- Word production (articulation/phonemic awareness)
- Spelling accuracy (% correct)
- Spelling developmental stage
- Word choice
  - Mature and interesting
  - Number of different words
  - Few usage errors
- Word retrieval

Assessing Conventions

- Capitalization
  - Initial letter of sentence, titles/proper nouns
- End punctuation
  - Periods/question marks/etc.
- Commas
  - Divide series/clauses
- Apostrophes
  - Contractions/possessives
- Quotation marks
  - Direct quotes
- Formatting
  - Paragraphs, dialogue, poetry

Multilingual Word Form Knowledge & Spelling Strategies

(Apel & Masterson, 2001)

- Alphabetic principle
- Phonemic awareness
  - Representation of phonemes one perceives (e.g., stop/slap)
  - How could you heighten awareness of phonemes when spelling?
  - Knowledge of letter names (consider possibility for interference)
- Orthographic knowledge
  - Phonics—ability to convert phonemes to graphemes & vice versa
  - Association of letter patterns with spoken syllables
  - Awareness of orthotactic principles (positional constraints -ck)
- Morphemic knowledge
  - Inflectional
  - Derivational
  - Mental Graphemic Representations (MGR)

Assessing Self-Regulation & Social Interaction

- Self-regulation
  - Attention and focus
  - Goal directed behavior/independence
  - Reflection, self-correction, handling frustration
  - Task completion
- Social interaction
  - Personal space
  - Strategies for entering/leaving conversation
  - Listening/audience sensitivity
  - Strategies for conflict resolution

Spelling Development

(based on Gentry, 1986)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scribble</td>
<td>Letter-like shapes</td>
</tr>
<tr>
<td>Prephonetic</td>
<td>Real letters but no sound-symbol relationships</td>
</tr>
<tr>
<td>Semiphonetic</td>
<td>Few sounds represented</td>
</tr>
<tr>
<td>Phonetic</td>
<td>Sound-symbol associations</td>
</tr>
<tr>
<td>Transitional</td>
<td>Morphological endings</td>
</tr>
<tr>
<td>Conventional</td>
<td>Multiple strategies</td>
</tr>
</tbody>
</table>

- Listening
- Speaking
- Reading
- Writing
- Reading/Comprehension
- Spelling/Dictation
The interactional processes between the developing human organism and an experienced, intentioned adult, who, by interposing himself between the child and external sources of stimulation, “mediates” the world to the child by framing, selecting, focusing and feeding back environmental experiences in such a way as to produce in [the child] appropriate learning sets and habits. 

Feuerstein’s definition of mediated learning (1979)
Questions
"I wonder," "Wait, let me think," "What if..."

Frame and focus
"Look at you putting the –ed ending on your verbs!" "Take a look at this."

Guides/models/recasts
"How about if we try this? "Say _____ (in syllables)."

Tripping over errors [the Columbo routine]
"Wait a minute, _____ doesn’t make sense to me."

Create new learning strategies
Provide tool book pages and other supports Highlight aspects of text macrostructures

Self-talk Questions: Writing Sentences
What can I do to make interesting sentences that sound right?

1. Think of what I want my reader to know.
2. Say the sentence to myself.
3. Write it or type it a word at a time.
4. Read it again or have the computer read it.
5. Does it sound right?
6. Should I fix anything?

Sentence Level Scaffolding
• Help child formulate sentences orally first
  – "Oh, I see what happened, but I don’t see that on your paper [the screen]"
• Use prosody and feedback to focus student on disordered syntactic and morphological features.
  – Feedback: “I’m going tell you how I feel?”
• Be sensitive to language differences:
  – “Do you want me to show you how a book author would say that?”

Sentence Level Scaffolding (cont’d.)

Discourse Level Scaffolds
• Help student explore multiple planning strategies
  - Brainstorm lists
  - Graphic organizers
  - Uses of computer software
• Using framing questions that will help student move to next higher maturity level (e.g., cause-effect, characters’ goals, plans)
• Focus student on multiple points of view
  - Peer conferencing
  - Author chair

Sentence Level Scaffolding
• Encourage complex ideas
  – “So, why (or when or where) did that happen?”
• Ask questions aimed at eliciting temporal, causal, or logical connectors within sentences:
  – “I’m not sure what happened next.”
  – “I want to know why he did that.”
  – “Oh, you said because but I don’t see it there. Do you want to add it?”

Word Level Scaffolding
• Vocabulary/semantic knowledge
  – Ask students about words they know and could use in particular context
  – Help them chart categorical and semantic associations on paper
• Phonologic awareness:
  – Have students slowly sound out the word while spelling
  – Feel the sounds in their mouths as they say them
• Orthographic representation
  – Draw attention to the orthography and ask about spelling patterns
  – Help them develop rhyming word families
• Morphologic knowledge
  – Ask how a word could be chunked to determine morphological awareness
  – Point out regular patterns in reading texts
**Word Level Scaffolds**

- **Vocabulary**
  - What a wonderful word! It really helps me picture your character.
  - Is there another word for this one? More interesting choice?
  - Does this make sense?

- **Spelling/reading**
  - Do I know how this word starts? Ends? Any word parts?
  - Say the word aloud slowly before attempting to spell.
  - Is this word like any other words I know?
  - Do I have this word written down somewhere?

---

**Integrative Word Level Goals**

- Reread work aloud to revise and edit for:
  - Missing words and morphemes
  - Tense agreement across story

- Increase spelling accuracy by:
  - Using end morpheme –ed
  - Learning visual orthographic patterns for at least 5 high frequency words, e.g., was, on, look
  - Learning and applying “silent e” spelling pattern with minimal scaffolding
  - Using a personal dictionary to record and access difficult to spell words and spelling minilessons.

---

**Big Point 3**

Building intermodality connections is critical to building sound/word knowledge

---

**CCSS - Sound/Word Level Skills**

- **Grade 1 standards for Reading Foundational Skills** include the following standard targeting phonological awareness:
  - Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
  - Distinguish long from short vowel sounds in spoken single-syllable words.
  - Orally produce single-syllable words by blending sounds (phonemes), including consonant blends.
  - Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.
  - Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).

- **Grade 1 standards for Reading Foundational Skills** include the following standard in the area of Phonics and Word Recognition:
  - “Know and apply grade-level phonics and word analysis skills in decoding words.
  - Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.”

- **Grade 1 standards for Language** include the following standard in the area of Vocabulary Acquisition and Use:
  - “Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical, advocate, advocacy).”

---

**TILLS**

**Intervention targeting patterns revealed with TILLS profiles**

Connecting word structure knowledge to word meaning knowledge

---

**Case Study for Susan**

- **7 yr; 10 mo 2nd grade**
- Participant in TILLS research

- Inadequate sound-symbol association knowledge
- Reading fluency is a big problem
- Spelling rated lowest by both teacher and parent
7;10 female (2nd Grade)

**Intervention**

- Use strengths, target weaknesses, make connections
- Use curricular materials and contexts
- Gather periodic probes to document progress and decide next steps

**Sound-symbol association (alphabetic principle)**

- Use multi-modality, multi-sensory approach to make sound-symbol association automatic
- Sound/letter → speech “Say /p/”
  - Make page for “My Sounds & Letters Book”
  - Symbol chip (avoid letter names)
  - Precise articulation; attention to distinctive features
- Sound/speech (visual or auditory) → symbol “Point to /p/”
  - From array of easily distinguished sounds/letters
  - Symbol → sound “What sound does this letter make?”
  - Sound → letter “Write /p/”
  - Letter name “Point to ‘p’” (use with caution)

**Sources**

  

Five Critical Components  
(National Reading Panel; NCLB)

- **Phonemic awareness** — ability to focus on and manipulate the smallest units of sound in spoken language
- **Phonics** — relationship between the letters of written language and the sounds of spoken language
- **Vocabulary development** — stored information about the meaning and pronunciation of words
- **Reading fluency** — ability to read accurately, quickly, and with expression
- **Reading comprehension** — ability to understand or gain meaning from text

---

**Sound blending**

- **ee**
- **fool**
- **fae**

---

**Word Pattern Recognition**  
(Orthographic Principle)

- **Consonant → Vowel**
  - Single consonant → multiple vowels
  - Multiple consonants → single vowel
- **Vowel → Consonant**
  - Single vowel → multiple consonants
  - Multiple vowels → single consonant
- **CVC**
- **Onset → Rime**
  - Common “word families”
- **Morphology ↔ Orthography**
  - Common “chunks” -ing, -tion, un-, dis-
alternative spellings for vowels

i_e igh _y
o_e oa _ow
a_e ai _ay

Combine work on speech & literacy

see see see
sa_e say sai_
si_e si_e sigh
so_e soa so
soo sou sue

Personal minilesson
Tool book page

Fluent Word Recognition/Spelling with Connection to Form & Meaning in Context

• Reading ➔ Saying
  ◦ Make sure that sound-symbol associations are automatic and connections are fluent across modalities.
  ◦ What sound do you see at the beginning of that word? Get your mouth ready for that sound.
  ◦ What’s the first chunk? The next?
  ◦ Does that make sense?
  ◦ Read along with me. [shadow reading]

• Saying ➔ Spelling
  ◦ Say the word you want to spell
    • Say it slowly. What sound do you say first?
    • Say it in chunks
    • That says..., Is that what you wanted? What letters will get me to know you mean “____”? Let me show you a neat little word family. We can make a new page in your author notebook.

Word Families (analogical processes)

Misses cues about orthographic regularities in reading and spelling

Limited use of analogical reading strategies
Blake: 8 years 4 months
- Boy, Caucasian, 8;4 at TILLS testing
- Age at identification – newborn
  - Follow-up ABR results “were conflicting”
  - Reported to have “mild hearing loss”
  - Fitted with bilateral hearing aids at 2 years – programmed for mild loss
  - Not enrolled in early intervention services
  - Did not make typical gains in speech and language
- Testing at 2½ showed moderate-severe hearing loss
- Reprogrammed amplification – age 3 yrs
- Current placement
  - Public school, mainstreamed in Grade 2
  - Teacher consultant support
  - Began weekly language intervention sessions at WMU – Van Riper Language, Speech, & Hearing Clinic, Summer 2013

Teresa Crumpton, AuD, CCC-A; Carls Foundation Grant

Blake’ TILLS profile

Mean for same age hearing peers with typical language

Reading fluency = 78/85 = -.89 SDs
5/10 content units = 25% - .5.0 SDs
5 content/5 T-units = 1.00 SCI = 1.0 SDs
pg/40 wds without error = 63% -6.1 SDs
Planning for Blake

- Blake’s strengths
  - Sound/word level
  - Vocabulary
  - Reading fluency
  - Emerging awareness of morphology
  - Sentence/discourse level
  - Short-term memory and working memory for digits forward and backward
  - Following directions

- Blake’s needs
  - Sound/word level
  - Phonological word analysis/phonemic awareness
  - Phonics
  - Spelling (real and nonword)
  - Sentence/discourse level
  - Story retelling
  - Listening and reading comprehension of narrative texts

Big point 4

At the sentence/discourse level, focus on students’ ideas and target elaboration before correctness

Intervention examples: Discourse & Word Level

- Using a design template for a personal narrative
- Generate key words
- Scaffold to highlight discrepancies between first attempts and intended words
- At(s) / Austin
- with / white
- cloud / cloudy

Example vocabulary in teachable moment for Blake

Graduate Student Clinician: Katie Johnsen

Language Literacy Rating Scale

Grade 2 CCSS for Word Structure/Discourse

 FOUNDATIONAL SKILLS

- CCSS ELA-Literacy RF.2.3d Decode words with common prefixes and suffixes.
- CCSS ELA-Literacy RF.2.a,b,c,d,e Recognize and read grade-appropriate irregularly spelled words.

 WRITING SKILLS

- CCSS ELA-Literacy W.2.3.b Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
- CCSS ELA-Literacy W.2.3.c Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.
Progress for Blake

CCRS ELA Literacy W.2.a
Write narratives in which they:
• Recount a well-embellished event or short sequence of events,
• Include details to describe actions, thoughts, and feelings,
• Use temporal words to signal event order, and
• Provide a sense of closure.

- On Memorial weekend Mom and Dad told me a surprise.
- But I can’t to play because I did not know how to play tennis.
- We finally arrive to the camp ground.
- I learn how to play tennis. That was very fun!

4th Grade Girl

- 10 year 1 month old, African American
- History of Speech-Language Intervention Services
  • IEP held 3 months after TILLS testing dismissing her from speech-language services, having met the following goals:
    • Adequate volume
    • Engage in conversation 2-3 turns
    • Retell a story
    • Talk with peers in hallway and classroom
  • Scores on the Language Processing Test
  • Standard score of 94 for Language-Semantics
- Academic concerns – extra interventions (tier 2)
  • Reading
  • Math
- No Special Education added when S-LI services were ended

Case Study for Tinesha

Tinesha
10 year 1 month old, African American girl
History of Speech-Language Intervention Services
Academic concerns – extra interventions (tier 2)
Results of TILLS support the student’s response to language intervention for semantic problems

- TILLS Vocabulary awareness -.5 SDs
- Continues to have reading problems
  - Phonological issue may not have been addressed
  - Phonological problems were evident across multiple TILLS subtests
    - Nonword repetition -7 SDs
    - Phonemic awareness -4 SDs
    - Nonword spelling -2.4 SDs
    - Nonword reading -2.4 SDs
    - Reading fluency -4.5 SDs
    - Reading comprehension -1.5 SDs
    - Listening comprehension -1.2 SDs
- Has not been identified as needing special education

Case Study for Josh

Josh
8th grade Age 13:7 LD
After school writing lab
Strong social skills; good self-regulation
Dyslexic profile
Played it safe with word, syntax, and discourse choices

The cave men fitted of the great mamist. They trow spears at the mamist. They cepe coming. They wanead food. More cave men come and fit them off but they unsiness fil. The trow rock and stowns and they won the batil but not the wore between man and beast. They ma come back or not but they will be retey.
First story in Writing Lab

ONE MORNING DUKE WOKE ME UP. WE PLAYED WITH HIS CHEWY TOY. IT THREW IT UP AND HE CAUGHT IT. WE DID IT A COUPLE OF TIMES. THEN WE ATE BREAKFAST. WE PLAYED SOME MORE. I LET HIM OUT SIDE. IT WAS RAINING OUT. HE DIDN'T STAY OUT VERY LONG. HE WAS HYPER. BUT HE SETTLED DOWN. HE WENT TO SLEEP FOR A WHILE. THEN HE MESSED WITH THE CAT. THE CAT WAS NOT HAPPY. THE CAT RAN, THE DOG RAN AFTER IT. HE BARKED THEN HE STOPPED. IT WAS NO FUN ANY MORE. I PLAYED WITH HIM HE WAS HAPPY NOW.

Intervention Goals for Josh

- Demonstrate leadership during author groups
- Discourse: Generate story ideas (beyond dogs and horses) using computer supports
- Sentence: Produce majority complex sentences, using variety of subordinating and embedding
  - Use peer editing feedback to add details
- Use computer tools during revising & editing to elaborate syntax and correct any errors
- Word: Improve independent spelling
  - Demonstrate sound-symbol association knowledge with keyboard to generate good phonetic equivalents (GFE) while drafting
  - Show knowledge of morphemic-orthographic relationships (~ed, -tion, -eed, -ough, etc.)
  - Use spell checker effectively to correct spelling during editing

Progress for Josh

- Role model for younger students; friendly competition with sibling of one student in group
- Discourse: Mixed interest in nature with experimentation in adventure and mystery writing “Nature Nightmare,” “On the Edge of Extinction”
- Sentence: Final story
  - 188 total words (100 different word roots)
  - 23 T-units, MLTU 9.35 words
  - Variety of sentence types (although simple still dominated)

- Word: Improve independent spelling
  - Mastered spell checker in two programs
  - When spell checker did not suggest correct alternative, benefited from scaffolding to generate GFE to produce alternative that could be recognized by computer

Take Home Points

- RTI monitoring is not just for the early grades
- Beware of expensive mistakes
  - Inadequate assessment and diagnosis
  - Failing to teach all students how to detect the structure of words
  - Phonemic awareness
  - Phonics
  - Morphological awareness
  - Assuming comprehension without measuring it
  - Underestimating the language demands of the curriculum
  - Failing to target all gaps between curricular expectations and students’ skills
- Keep your eyes on the general education curriculum!

Questions? Comments?

One thing I plan to try....

Thank you