Tiered Intervention Within an RtI Framework

Rollanda E. O’Connor
University of California at Riverside
Albany, NY
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From Early Literacy to Skilled Reading

- Oral language
- Phonemic awareness
- Letter to sound correspondences
- Decoding words
- Recognizing words
- Understanding words
- Building reading fluency
- Comprehending written text

[good spelling would be nice, too]
What’s the Fuss All About?

- Average readers already have these skills
- 40% of public school children nationwide are at risk for reading problems (NAEP, 2010)
- Improving instruction in K-3 reduces risk for 10-15% (Coyne et al., 2004; O’Connor, 2000; 2005; 2010; Vaughn, 2003)
RTI: A Layered Model

- Professional Development to improve instruction
- Measurement of children ("Gating")
- Feedback to teachers on children’s progress
- Intervention for children who need it
- Flexible movement across groups and conditions

O’Connor (2000)
Intervention Is More than Good Instruction

- Intervention is:
  - Tightly focused on only a few crucial skills or strategies
  - Explicit:
    - Complex tasks or concepts are broken into small steps
    - Each step is modeled, rehearsed, applied, generalized
  - Matched to area of need
  - Monitored for student responsiveness
  - Changed when students respond poorly
Increasing Intervention Intensity

- Moving from Tier 2 to Tier 3:
  - Increase individualization
  - Fine-tune measures to identify specific targets for intervention
  - Assess learning more frequently:
    - Daily learning
    - 5-minute, 15-minute, and next-day retention
  - Adjust the intervention components
  - Form hypotheses and test them out
Tier 3 Tests the Source of the Problem

- For example:
  - Level of reading materials?
  - An unaddressed weakness?
  - Insufficient practice for skill acquisition or maintenance?
  - Motivation?

- Test the most likely hypothesis by implementing a change and monitoring learning
Issues to Operationalize RTI

☐ Assessments to evaluate “risk”
☐ Intervention matched to need
☐ Level to accept as “response”
☐ When to release students from, or increase the intensity of intervention
Linking Assessment to Intervention

- **Alphabetic principle:**
  - Segmenting & blending sounds in short words
  - Matching sounds to alphabet letters

- **Reading words**
  - Blending letter sounds
  - Letter combinations
  - Sight words

- **Fluency**
  - Rate and accuracy
Building Assessment for Comprehension

- **Vocabulary**
  - Conversational words
  - Academic words

- **Understanding Text**
  - Generating main ideas
  - Summarization
  - Text structures
    - Cause/effect, sequence, compare/contrast
English Language Learners in RtI

- The problem with identifying risk for RD (Klingner et al., 2006):
  - Is it reading risk?
  - Is it language risk?
- Does it matter?
  - Is our RtI system nimble?
What about Vocabulary in Tier 2?

- **Student Issues:**
  - Native English speakers with RD often have poor spoken language (Catts et al., 2009, 2012)
  - EL need conversational vocabulary to participate in Tier 2 intervention
  - EL improve vocabulary in mixed EL/NES groups (Silverman et al., 2009)

- **Potential Solution:**
  - Offer conversational opportunities focused on reading skills
Targets for Tier 2 Intervention

- Kindergarten
  - Alphabetic principle
  - Conversation & sentence expansion

- First Grade
  - Phonics and decoding words
  - Conversation & restatements

- Second Grade
  - Affixes and reading fluently
  - Conversation, justifications, and vocabulary
    - Why do you think that…?

- Third Grade
  - Multisyllable words, morphemes, and comprehension strategies
  - Justifications and evidence in text
    - Show me where….
Stretched Blending in Kindergarten
Find the First Sound

- Stretch and Stop on the First Sound
- Rehearsal strategies
  - Iteration
  - Feel it in your mouth
- Use words that begin with letter sounds you are teaching
Teaching Letter Sounds

- Avoid alphabetical order (Carnine et al., 1997)
- Use cumulative introduction
- Teach short vowels in kindergarten
- Start teaching letter sounds as soon as possible
- Integrate letter sounds with phonological awareness activities (Ball & Blachman, 1991; O’Connor & Jenkins, 1995)
- Assess letter knowledge, and begin “catch-up” instruction immediately
Onset-rime Segmenting
Segment 3-phoneme Words

|     |     |     |
Ex: Segment to Spell in K-1 (O’Connor et al., 2005)
Phonics

- Teach common sounds first
- Teach blending letter sounds
- After 18-20 sounds are well known, add consonant digraphs like th, wh, ch
- After consonant digraphs, introduce letter combinations (ee, ar, ing, or, al, er, ou)
- Next add the silent -e Rule
Teaching with Synthetic Phonics

- *Flat.* Say *flat.*
- Say *flat* slowly.
- How does *flat* start?
  - Which letter makes that sound?
- *Flat.* What comes after */fff/?
  - Which letter makes that sound?
- Say all the sounds. Write *flat*.
- Sound it out. What word did you write?
Which letters say /ar/? [a-r]

What does a-r say? [/ar/]

Write the sound /ar/. [Students write a-r]

Now write car.

Underline the letters that say /ar/.

Read what you wrote. [car]

Write far. [Use same procedure for part, dark, tar, park, and ask students to read back their words]
Patterns in the 100 Most Common Words

- **th**: that, than, this
- **or**: for, or, more
- **ch**: much, [which]
- **wh**: when, which, what
- **ee**: see, three
- **al**: all, call, also
- **ou**: out, around
- **er**: her, after
- **ar**: are, part
And for Students Who Reverse…

**Stretched blending** [lap]:

Sound it out:

- Mmmiiix = mix
- Lllaaap = lap

**Bigram blending:** [kit]

- Say the middle sound: iiii
- Add the first sound: kiii
- Do it again: kiiiit = kit
Strategies to Keep Going

- Firm these up first:
- Segment to Spell
- Phonics
- High frequency words
- [and meanings of words]
<table>
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<th>tab</th>
<th>put</th>
<th>must</th>
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<tr>
<td>mind</td>
<td>tent</td>
<td>walk</td>
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Sight Words

- 25 high frequency words make up nearly 1/3 of all print for primary readers
- 100 high frequency words make up nearly 1/2 of all print
# 28 High Frequency Words

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<tr>
<th>the</th>
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<td>be</td>
<td>one</td>
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Teaching Sight Words

- Constant time delay
- Spelling words aloud
- Word walls [ok, but be CAREFUL]
What About Inventive Spelling?

- Strong research support in Grades K-1

- By Grade 1, maintain dual accountability:
  - Require correct spelling for known, decodable words
  - Allow inventive spelling for irregularly spelled & difficult words
Read Connected Text

- As you teach sounds, blending, & decoding:
  - Predictable books
  - Student generated fill-ins
  - Decodable sentences

- As children decode independently:
  - Add decodable books

- As you teach letter patterns
  - Broaden books choices as skills grow
And the Children Who Fall Behind?

- Pocket children
- Cumulative introduction
- Review many times daily
Interventions in Second Grade

- Common letter patterns & affixes
- Fluency
- Conversation & justifications
  - Why do you think that…?
Most Common Affixes

- Inflected endings: -ed, -ing, -s, -es
- Prefixes
  - Un-, re-, in-, dis- account for 58% of words with prefixes (White et al., 1989)
- Suffixes
  - -ly, -er/or, -sion/tion, -ible/able, -al, -y, -ness, -less
Why Bother Building Fluency?

- One piece of the comprehension puzzle
- Minimum fluency requirements (Good et al., in press; O’Connor et al., 2002, 2007)
- Silent reading is NOT effective in improving fluency (NRP, 2000)
- Building fluency requires frequent, long-term practice
Strategies to Increase Fluency

- Rereading (Dowhower, 1991; Sindelar et al., 1990)
- Partner reading (Fuchs et al; 1998; Greenwood et al., 1998)
- Control the difficulty level of text (O’Connor et al., 2002, 2011)
## Reading Rates

<table>
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<tr>
<th>Grade</th>
<th>Average Rate</th>
<th>Danger</th>
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<tr>
<td>1, March</td>
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<tr>
<td>1, May</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>2, Dec</td>
<td>75</td>
<td>50</td>
</tr>
<tr>
<td>2, May</td>
<td>100</td>
<td>60</td>
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<tr>
<td>3, Dec</td>
<td>120</td>
<td>70</td>
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<tr>
<td>3, May</td>
<td>135</td>
<td>80</td>
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</table>
What about rates beyond 3rd grade?

- Work to move all children > 90 wpm

- Beyond 120 wpm, no evidence for direct improvement of reading comprehension
2 Methods of Partner Reading

- **Modeled reading (PALS)**
  - Each student reads in 5 minute intervals
  - Strongest partner reads first
  - Allows a model for the poorer reader

- **Sentence-by-sentence (CWPT)**
  - Partners take turns reading sentence by sentence
  - Reread with other student starting first
  - Encourages attention and error correction
Findings from our Fluency Research
Interventions in Third Grade

- Morphemes
- BEST
- Rules for combining morphemes
- Comprehension strategies
- Continue fluency practice, if needed
- Generating justifications, finding evidence in text
Morphemes

- The meaningful parts of words
  - Improves decoding
  - Improves with spelling
  - Reinforces word meanings
Teaching Morphemes…

(The meaningful parts of words)

- “not”
  - Un, dis, in, im (disloyal, unaware, invisible, imperfect)

- “excess”
  - Out, over, super (outlive, overflow, superhuman)

- “number”
  - Uni, mono, bi, semi (uniform, monofilament, bicolor, semiarid)

- “in the direction of”
  - Ward (skyward, northward)

- “full of”
  - Ful (merciful, beautiful)
English/Spanish Cognates from Morphemes

- Google for lists
- Praise student use of cognates
  - Adult/adulto
  - Atmosphere/atmosfera
  - Chimpanzee/chimpancé
  - Enter/entrar
  - Intelligence/inteligencia
Inter-- means between

- What does inter-- mean?
- So what does interstate mean?
- What’s a word for a highway between states?
- What would interperson mean?
- So what are interpersonal skills?
BEST (or DISSECT) for Multisyllabic Words

- Break apart
- Examine the root
- Say the parts
- Try the whole thing
BEST Examples

- Understandingly
- Uncomfortable
- Strengthening