Response to Intervention and EL Learners: Questions and some answers

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What should research-based interventions look like at Tier 2?

Intervention Framework

- Prevention and intervention are viewed as a continuum
- Basic concepts and foundational skills taught are the same
- The level of intensity varies
- Progress monitoring is used to chart student progress

Interventions

Comprehensive reading interventions that include

phonological awareness (Vaughn, Linan-Thompson et al. in press; Vaughn, Mathes et al. in press)

word attack (Denton et al., 2004; Vaughn, Linan-Thompson et al. in press; Vaughn, Mathes et al. in press),

fluency (Gunn et al., 2000; Vaughn, Linan-Thompson et al. in press) and

comprehension (Vaughn, Linan-Thompson et al. in press; Vaughn, Mathes et al. in press)

Instructional Design: Integrated Strands

Vocabulary and Concept Knowledge

Phonemic Awareness

Encoding

Letter-Sound Recognition

Word Recognition

Repeated Connected Text Reading

Comprehension Strategies

Design

- 50 minutes per day October-May
- 1:4 Teacher to Student ratio
- Provided in addition to normal language arts instruction
- **Explicit instruction in synthetic phonics, with emphasis on fluency**
- Integrates decoding, fluency, and comprehension strategies
- 100% decodable text
- Carefully constructed scope and sequence designed to prevent possible confusions

Lesson Cycle

- Reading Lesson (@ 35 minutes)
- **Embedded Language Support**
- **6** (@ 5 minutes)
- Story Retell (@ 10 minutes)

Practices

- Grouping format
- Multiple opportunities for practice
- Teaching to mastery
- Teaching procedures

Results for English Intervention Cohort 1

- Statistically significant differences in favor of English
 Intervention treatment group for outcomes in English. Time ×
 Treatment Interaction effects for:
 - · Letter naming fluency
 - Letter sound identification
 - Phonological composite (sound matching, blending words, blending non-words, segmenting words, elision)
 - Word attack
 - Dictation
 - ◆ Passage comprehension

Results for English Intervention Cohort 2

Statistically significant differences in favor of English Intervention treatment group for outcomes in English. Time × Treatment Interaction effects for:

- Letter sound identification
- Letter word identification
- Phonological composite
- Word attack
- DIBELS, BOY

What works?

Instruction that is

- comprehensive
- ♦ that explicitly and systematically bullds English language skills during reading instruction
- that explicitly teaches English letter/sound correspondences, word patterns and spelling rules
- that introduces skills in isolation and practice in context
- that builds vocabulary and emphasizes the relationships between and among words to build oral language skills
- that includes story retells that target both comprehension and language development

With whom?

English language learners from Spanish speaking homes receiving core reading instruction in English.

In what contexts?

- In schools that are providing good instruction as measured by state accountability systems
- In schools where on average 98% of students are Hispanic
- In schools with large numbers of EL learners
- In schools in which 85- 100% of students qualify for free or reduced lunch program
- In schools in which the language of instruction is consistent across tiers
- In urban and border areas

Is it enough to outperform a control group or do we also need to determine students' RtI?

If the answer is no, what should response to intervention look like?

What is Response to Intervention?

- A practice that includes
 - ◆ High-quality instruction matched to student needs
 - ◆ The use of learning rate over time and level of performance to make instructional decisions

Rationale

Need to determine what constitutes adequate response to intervention for English language learners learning to read in English.

How do we measure response to intervention?

■ Examine the relative number of EL learners at-risk for reading difficulties who meet RtI criteria after an intensive seven month intervention using three different approaches; performance level, growth rate, and discrepancy.

Identification of at-risk students

- Criteria:
 - ◆ Scores below the 25th %ile on LWID And
 - ◆ Unable to read more than 1 word on an experimental word list

Sample

- Longitudinal
 - ◆ 100 student in immersion programs in three sites in TX not in at-risk sample
- At-risk
 - ◆ Intervention 40
 - ◆ Control 36

Response to Intervention Criteria

- Performance level
 - ◆ SSs above 95 on both Word Attack and PC
 - ◆ SSs above 95 on both Word Attack and PC and ORF (40/70)
- Growth
 - ◆ ORF (at least 2 words per week; 48 each year)

Response to Intervention

- Matched longitudinal sample on both:
 - ◆ ORF mean gain within year:
 - English: 33 G1, 25 G2

AND

- ◆ ORF benchmark (mean score)
 - ◆ English: 64 G1, 90 G2

English Intervention Study Cohort 1

	End of Grade 1		End of C	Grade 2
	T	C	T	C
SS below 85 on WA	2/22	10/17	1/18	6/11
or PC	9%	59%	6%	55%
SS between 85-95 on	6/22	4/17	8/18	4/11
WC or PC with no	27%	24%	44%	36%
scores below 85				
SS above 95 on WA	14/22	3/17	9/18	1/11
AND PC	64%	18%	50%	9%

Performance level (WA & PC)

	T (40)	C (36)
Met Criteria in 1st grade	40% (16)	30% (11)
Met criteria in 2nd grade	32% (13)	25% (9)
Met criteria both years	25% (10)	13% (5)
Met Criteria in 1st but not second	15% (6)	16% (6)
Did not meet criteria in 1st but did in 2nd	7% (3)	11% (4)

Performance level (WA, PC, ORF)

	T (40)	C (36)
Met Criteria in 1st grade	7% (3)	5% (2)
Met criteria in 2nd grade	20% (8)	11% (4)
Met criteria both years	5% (2)	5% (2)
Met Criteria in 1st but not second	2% (1)	0
Did not meet criteria in 1st but did in 2nd	15% (6)	5% (2)

Performance level-Comparison

	End of 1st grade		End of 2nd grade	
	Т	C	Т	C
Both WA & PC above SS 95	16/40 40%	11/36 30%	13/40 32%	9/36 25%
Both WA & PC above SS 95 and ORF (40/70)	3/40 7%	2/36 5%	8/40 20%	4/36 11%

Most students aren't meeting the performance level, but are they making gains?

Growth (2 words/week [48])

	T (40)	C (36)
Met Criteria in 1st grade	5% (2)	2% (1)
Met criteria in 2nd grade	17% (7)	8% (3)
Met criteria both years	5% (2)	2% (1)
Met Criteria in 1st but not second	0%	0%
Did not meet criteria in 1st but did in 2nd	12% (5)	5% (2)

How do they compare to their peers in the longitudinal sample?

English: 33 G1, 25 G2

Growth

	T (40)	C (36)
Met Criteria in 1st grade (33)	10% (4)	11% (4)
Met criteria in 2nd grade (25)	40% (16)	27% (10)
Met criteria both years	7% (3)	11% (4)
Met Criteria in 1st but not second	2% (1)	0%
Did not meet criteria in 1st but did in 2nd	32% (13)	16% (6)

Growth-Comparison

	End of 1st grade		End of	f 2nd grade
	Т	C	T	C
2 words/week	2/40	1/36	7/40	3/36
gain	5%	2%	17%	8%
No discrepancy w/longitudinal sample	4/40	4/36	16/40	10/36
	10%	11%	40%	27%

Performance level

	T (40)	C (36)
Met Criteria in 1st grade (61)	2% (1)	0%
Met criteria in 2nd grade (90)	15% (6)	8% (3)
Met criteria both years	2% (1)	0%
Met Criteria in 1st but not second	0%	0%
Did not meet criteria in 1st but did in 2nd	12% (5)	8% (3)

Matched on both growth and performance level

	T (40)	C (36)
Met Criteria in 1st grade	2% (1)	0
Met criteria in 2nd grade	15% (6)	8% (3)
Met criteria both years	2% (1)	0%
Met Criteria in 1st but not second	0%	0%
Did not meet criteria in 1st but did in 2nd	15% (6)	8% (3)

Summary

- Second year of instruction seems to be critical—possibly students need the time to acquire more English skills and more practice reading.
- Treatment group performs better than control at second grade.
- The structure, explicitness, and systematicity of treatment many contribute to outcomes.
- Use of just SS on WA and PC seems to over identify responders.

Response to Intervention

- 6 Title I elementary schools in one nearurban district in the Southwest
- All the schools implemented a 3-tier model
- District percentages
 - ◆15%AA 69%H 14.3%C 1.7%O

Tier 1

■ All K-3 students receive Tier 1 instruction

- Components:
 - Core reading instruction
 - Critical components of reading instruction
 - Features of effective instruction
 - Benchmark testing of all students, 3 times/year
 - Ongoing professional development

Tier 2

- Provided **in addition to** 90 minutes of core reading instruction (Tier 1)
- Does not replace any part of core instruction
- 30 minutes a day, 5 days per week for 10-12 weeks
- Provided in groups of 3-5 students (homogeneous)
- Progress monitoring is conducted every 2 weeks

Intervention

- Increased intensity in critical areas of reading
- Explicit and systematic instruction
- Increased opportunities to practice
- Responsive intervention

Tier 3

- Provided **in addition to** 90 minutes of core reading instruction (Tier 1)
- Does not replace any part of core instruction
- 50 minutes a day, 5 days per week for 10-12 weeks
- Provided in groups of 3 students (homogeneous)
- Progress monitoring is conducted every 2 weeks

Intervention

- Critical areas of reading
- Explicit and systematic instruction
- Increased opportunities to practice
- Responsive intervention

First Grade

- 678 students in the district
- 52 (7.6%) qualified for either 1 or 2 sessions of Tier 2 intervention
- 27 intervention students
- 25 comparison students
- Percentage of all first grade students
 - ◆ .8% AA; 71% H, 13.4 C; .2 Other
- Percentage of at-risk students
 - ◆ 11.5% AA; 71% H; 13.4% C; 3.8% O

Representation in risk category

- African American and Caucasian students are slightly under represented
- Hispanic and Asian and Native American students are slightly over represented.

Representation of students eligible for intervention

District percentages

◆ 15%AA

69%H

14.3%C

1.7%O

■ 1-2 sessions (n = 52)

◆ Expected

→ 7.8

35.8

7.43

8.

Actual

◆4

19

2

2

→ 2

18

5

Second Grade

- 612 students in the district
- 42 (6.8%) students qualified for 2 sessions of Tier 3 intervention
- 17 intervention students
- 25 comparison students
- Percentage of all second grade students
 - ◆ 1.3% AA; 3.9%H; 1.6% C
- Percentage of at-risk second grade students
 - ◆ 19% AA; 57.1%H; 23.8% C

Representation in risk category

- African American and Caucasian students are over represented
- Hispanic students are underrepresented
- No Asian or Native American students were in this category

Representation of students eligible for intervention

District percentages

◆ 15%AA 69%H

14.3%C

1.7%O

 \blacksquare 3-4 sessions (n = 42)

◆ Expected

♦ 6.3

28.9

◆ Actual

♦ 5

9

♦ 3

15

Summary

- At both Tier 2 and Tier 3, students are represented in the intervention groups in almost the same proportions as they appear in the general school population
- There are slight over and under representations and these shift over time

Conclusion

- While there are still questions to answer
 - ◆ We do have some answers in terms of the appropriateness of interventions for some groups of students
 - ◆ Students across groups are represented in consistent patterns when RtI is implemented in a 3-Tier model
 - ◆ We still need to determine the best way to define RtI for eligibility determination