Preventing Reading Disabilities in Young Children: Requirements at the Classroom and School Level

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Western North Carolina LD/ADD Symposium, November, 2005
The problem of diversity in talent and preparation for learning to read

A central problem in reading instruction arises, not from the absolute level of children’s preparation for learning to read, but from the diversity in their levels of preparation

(Olson, 1998)
What are the most important ways children are diverse-when it comes to learning to read?

1. They are diverse in their talent and their preparation for learning to read words accurately and fluently.

2. They are diverse in their oral language knowledge and abilities—vocabulary and world knowledge.

3. They are diverse in their abilities to manage their learning behaviors and their motivation to apply them selves to learning to read.
Reading is a multifaceted skill, gradually acquired over years of instruction and practice.
Diversity exemplified in the lives of three children

Differences in talent and preparation for learning to read words
Talent and preparation for learning to read words varies enormously among young children.

Children can be strong in this talent-like my grandson Andrew.
Talent and preparation for learning to read words varies enormously among young children.

Children can be moderately weak in this talent-like David.
David
Talent and preparation for learning to read words varies enormously among young children.

Percentile Ranks

- 2nd percentile
- 16th percentile
- 50th percentile
- 84th percentile
- 98th percentile

Standard Scores

- 70
- 85
- 100
- 115
- 130

Serious difficulties—probably require special interventions and a lot of extra support like Alexis.
The challenge of diversity in talent and preparation for learning to read

Diversity in talent and preparation

Diversity of educational response
The challenge of diversity in talent and preparation for learning to read

Diversity in talent and preparation

Diversity of educational response

interventions
What are the primary areas most likely to need intervention to prevent reading difficulties?

1. Interventions to improve phonemic awareness, letter knowledge, phonemic decoding, and reading fluency

2. Interventions to improve vocabulary, background knowledge, thinking/reasoning, and active comprehension strategies

3. Interventions to help students become more engaged in learning and do more reading with materials at the right level and within an accountability framework
The circular relationship between skill and motivation in reading

If we want children to learn to read well, we must find a way to induce them to read lots.

If we want to induce children to read lots, we must teach them to read well.

Marilyn Jager Adams
A moment on motivation...

Detailed studies of effective teachers document that they are powerful motivators:

“Basically, we found that engaging primary-grades teachers do something every minute of every hour of every school day to motivate their students, using every conceivable motivational mechanism to do so—from praising specific accomplishments to reminding students how well they perform when they try to encouraging constructive possible selves (e.g., imagining themselves going to college).” Pressley, 2004
A moment on motivation…

Detailed studies of effective teachers document that they are powerful motivators:

“Less engaging teachers actually do much to undermine student motivation, including, for example, establishing a negative tone in the class, placing great emphasis on extrinsic rewards, calling attention to weak performances by students, providing ineffective or unclear feedback, and fostering competition among students. Engaging teachers never teach in ways that undermine students’ motivation. Pressley, 2004
What are the key ingredients at the classroom and school level needed to prevent reading difficulties in young children?
A model for preventing reading failure in grades K-3: The big Ideas

1. Increase the quality, consistency, and reach of instruction in every K-3 classroom

2. Conduct timely and valid assessments of reading growth to identify struggling readers

3. Provide more intensive interventions to “catch up” the struggling readers

The prevention of reading difficulties is a school-level challenge
The continuum of instructional power within the model for preventing reading failure

1. Increase the quality, consistency, and reach of instruction in every K-3 classroom

If lots of students in the school are at risk, the first level of intervention is spending more time and improving quality of initial instruction—everyone gets this—

- 90 minute block is an intervention
- 120 minute block is a stronger intervention

The intervention continuum begins with differentiated instruction offered by the classroom teacher during the 90 minute block
A common structure for the uninterrupted reading instructional block

Initial, systematic, explicit instruction in essential skills and knowledge – 30-60 minutes

To the extent time for this is increased, and instruction is more powerful, it is an “intervention for the whole group”

Differentiated instruction in small groups targeted to the needs of individual students – 60-90 minutes

This is the beginning of intervention continuum (time and focus and power) based on individual student need
Classroom organization should be related to teaching objectives
Classroom Organization: Learning Centers for differentiated groups

- **Teacher-Led Center**
  - Small group instruction
    - Teaching “on purpose”
    - Careful observation of individual students
    - Addresses particular individual needs
    - Opportunities for responsive scaffolding

- **Student Centers**
  - Academically engaged
  - Accountability
  - Group, Pair, Cooperative, Individual
Differentiated instruction in small groups
Classroom Organization: Learning
Centers for differentiated groups

Points of vulnerability with this system

Students waste time at independent learning centers because they are not engaged and centers are not focused and leveled properly.
Effective independent student learning activities...
Classroom Organization: Learning
Centers for differentiated groups

Points of vulnerability with this system

Students waste time at independent learning centers because they are not engaged and centers are not focused and leveled properly

To download up to 240 independent student learning activities for K-1 classrooms, go to http://www.fcrr.org/activities/

Can also download instructions on classroom management during small group instruction, and soon, up to 70 minutes of video training
# Student Center Activities

## Phonological Awareness

**Part One**
- Rhyme
- Alliteration

**Part Three**
- Phonemes

**Part Two**
- Sentence Segmentation
- Syllables
- Onset and Rime

## Phonics

**Part One**
- Letter Recognition

**Part Three**
- Onset and Rime

**Part Five**
- Syllable Patterns
- Morpheme Structures

**Part Two**
- Letter-Sound Correspondence

**Part Four**
- Word Study

## Fluency

**All Parts**
- Letter Recognition
- Letter-Sound Correspondence

- High Frequency Words
- Oral Reading

## Vocabulary

**All Parts**
- Word Identification/Words in Context
- Word Categorization/Word Knowledge

- Words That Describe/Word Meaning
- Word Structure/Word Analysis
Phonics

Word Study - Sorting
Vowel Closed Sort

Objective
The student will sort sounds of letters in words.

Materials
- Word cards (Activity Master P063.AM1a - P063.AM1f)
  May glue to tongue depressors or popsicle sticks.
- Containers (e.g., cups)
  Label the containers (e.g., use markers, construction paper taped on, sticky labels).
- Paper
- Pencil

Activity
Students will sort words based on letter-sound combinations into containers.
1. Place containers and word cards on the table.
2. Taking turns, students match the vowel sound in the word to the vowel on the container.
3. Place the word in the matching container.
4. List words by vowel sounds.
5. Teacher evaluation

Extensions and Adaptations
- Use different words containing variant correspondences.
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Classroom Organization: Learning Centers for differentiated groups

Points of vulnerability with this system

- Students waste time at independent learning centers because they are not engaged and centers are not focused and leveled properly.
- Behavior management issues interfere with teacher-led small group instruction.
- Small group instruction is not really differentiated (time, frequency, focus) by student need.
Screening or Progress monitoring assessment

Correct words per minute

Sept      Dec      Feb      May
TIER II Interventions

Tier II is almost always given in small groups.

Tier II should always increase the intensity of instruction.
The Logic of Instructional Intensity

A child identified as “at risk” by DIBELS or any other measure is already significantly behind.

To achieve grade level standards by third grade, “at risk children must acquire reading-related knowledge and skill at a faster rate than their peers who are performing at grade level.

The most direct way to increase learning rate is by increasing the number of positive, or successful, instructional interactions (pii) per school day.
What is a Positive Instructional Interaction (Pii)

Teacher explains a concept clearly at the right level, and the child is actually attending-processing the information.

Teacher models a correct response and the child attends to the model.

Teacher corrects students error in a way that increases the chance for the student to respond correctly the next time.

Teacher reinforces a correct response in way that increases probability child will respond correctly on future occasions.
The Logic of Instructional Intensity

Many children are already behind in vocabulary and print knowledge when they enter school.

To achieve grade level standards by third grade, poor children acquire print related knowledge and vocabulary words at a faster rate than their middle class peers in grades K-3.

The most direct way to increase learning rate is by increasing the number of positive, or successful, instructional interactions (pii) per school day.

There are a variety of ways to increase the number of positive instructional interactions per school day.
Tier II Interventions

Tier II is almost always given in small groups.

Tier II should always increase the intensity of instruction.

Tier II must be precisely targeted at the right level on student’s most critical learning needs.

Tier II must increase the explicitness of instruction.
An Example of an Effective Intervention
Design of Study

1. Most “at risk” first graders from five elementary school—PPVT above 70

2. Instruction provided in 45 min. sessions every day from October through May in groups of 3 or 5 by experienced teachers or well-trained paraprofessionals

3. Used a structured (scripted) reading program that contained instruction and practice in phonemic awareness, phonics, fluency, and comprehension

4. Used a number of methods to achieve fidelity of implementation
   - 3 days of initial training
   - Weekly supervisory visits
   - Monthly inservice (3 hours)
Work on phonemic awareness
Acquiring solid letter-sound skills
Blending sounds into words
Directly building sight recognition of high utility words
Reading text...
Comprehension - story grammar...
Two types of scaffolding....
Programmatic Scaffolding

Instructional sequences organized so that students have the knowledge and skills they need to respond before they are asked to respond.

Micro level within lessons
- Modeling of correct responses
- Complete and clear explanations

Embedded in the instructional sequence
- Oral blending skills before blending printed words
- Awareness of phonemes before learning how they are represented in print
- Grapheme-phoneme knowledge before decoding
Responsive Scaffolding

Teacher follows an error with a question or comment that directs the child to do the thinking necessary to correct the response – a Pii

On video
Teacher notices error – stretches word “slim”

Asks question—what’s the last sound you hear in slim?

Child responds -- /m/

Teacher asks, pointing to spelling, “does that match?”
Two types of scaffolding....
Growth in Correct Words Per Minute on First Grade Level Passages

Comprehension on SAT9 = 50th percentile
Growth in Correct Words Per Minute on First Grade Level Passages for four lowest performers

![Graph showing growth in correct words per minute from October to May for first grade level passages. The y-axis represents the number of correct words per minute, ranging from 0 to 60. The x-axis represents the months from October to May. Different lines represent the progress of four lowest performers. The line for May shows a value of 55.7 correct words per minute. The line for October shows a value of 15 correct words per minute. The line for November shows a value of 21 correct words per minute. The line for December shows a value of 17 correct words per minute. The line for January shows a value of 22 correct words per minute. The line for February shows a value of 21 correct words per minute. The line for March shows a value of 15 correct words per minute. The line for April shows a value of 17 correct words per minute.](image-url)
Tier II interventions across the grade levels

Kindergarten – 20 minutes, small group, push in

First grade – 30-45 minutes, small group, push in or additional instruction outside the block
One important way to enhance the power of instruction during the 90 minute block is to have some of the small group instruction provided by another teacher or paraprofessional.

- Classroom teacher and group of 7
- Independent Learning Activity (4)
- Resource teacher and group of 3
- Independent Learning Activity (3)
- Independent Learning Activity (4)
Tier II interventions across the grade levels

Kindergarten – 20 minutes, small group, push in

First grade – 30-45 minutes, small group, push in or additional instruction outside the block

2-3 grades – 30-45 minutes, small group, push in plus another 30-45 minutes outside of reading block or

2nd and 3rd Grade – a different core, smaller class for 90 minutes—”walk and read”
Four Second Grade Classes
Orderly movement between classes
Possible schedule for a 90 minute intervention class in 2nd and 3rd grade

2 teachers  --  30 minute rotations

Group of 5 – decoding and fluency- low, mid, hi

Group of 5 – fluency, comp, vocab – low, mid, hi

Group of 5 – technology-learning center
Screening or Progress monitoring assessment

Correct words per minute

Sept      Dec      Feb      May
Tier III is intensive, strategic, instruction specifically designed and customized small-group or 1:1 reading instruction that is extended beyond the time allocated for Tier I and Tier II.
What are the critical elements of effective interventions?

Ways that instruction must be made more powerful for students “at-risk” for reading difficulties.

More powerful instruction involves:

- More instructional time
- Smaller instructional groups
- More precisely targeted at right level
- Clearer and more detailed explanations
- More systematic instructional sequences
- More extensive opportunities for guided practice
- More opportunities for error correction and feedback

};
After strong classroom instruction is in place, 8 keys to a strong prevention system for K-3 students

1. Strong motivation and belief on the part of teachers and school leaders to teach all children to read
We can teach even “high risk” children to read
After strong classroom instruction is in place, 8 keys to a strong prevention system for K-3 students

1. Strong motivation and belief the part of teachers and school leaders to teach all children to read

2. A reliable system for identifying students who need intensive interventions in order to make normal progress in learning to read

3. A reliable system for monitoring the effectiveness of interventions

4. Regular team meetings and leadership to enforce and enable the use of data to adjust interventions as needed.
Successful schools use data effectively!
Eight keys to a strong prevention system for K-3 students (cont.)

5. Regular adjustments to interventions based on student progress. The most frequent adjustments should involve group size and time (intensity), but may also involve a change of teacher or program.

6. Enough personnel to provide the interventions with sufficient intensity (small group size and daily, uninterrupted intervention sessions)

7. Programs and materials to guide the interventions that are consistent with scientifically based research in reading

8. Training, support, and monitoring to insure that intervention programs are implemented with high fidelity and quality.
How to choose evidence based programs to guide instruction

Why choose a well-developed intervention “program” to guide instruction?

- It acts as a scaffold for good teaching behaviors
- It provides a well-organized scope and sequence
- It has coordinated and aligned practice materials and activities
- It should help with proper pacing and movement of instruction
What kinds of programs might be helpful to us?

**Kindergarten**
- PA, letter knowledge into phonics
- Vocabulary and oral language

**First Grade**
- PA, letter knowledge, into phonics
- Vocabulary and oral language

**Second and Third Grade**
- Phonics and fluency
- Vocabulary, comprehension strategies
Florida Center for Reading Research

The Science of Reading Reporting Network
FCRR Reports
Assessment
About FCRR
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Resources
PIRT

A Florida State University Center
The Florida Center for Reading Research (FCRR) has established a review process for analyzing reading curricula and materials available for use in Florida. Please read the reports carefully. We have organized them such that a single report may be located under more than one category. You may also view an alphabetical listing or a summary table of FCRR Reports.

A Reader's Guide to FCRR Reports

This important one page document describes the purpose, content, and process of FCRR Reports.

Tier 3 Intervention Programs

Florida students who have been retained two times in third grade (Tier 3) are in need of instruction that is more intensive, more explicit, more systematic, and more motivating than instruction they have previously received. This section provides lists of programs that have been reviewed by FCRR and considered appropriate to be implemented with these students.

Frequently Asked Questions About FCRR Reports

This section contains a list of frequently asked questions and answers concerning FCRR Reports.
Important Note: FCRR reports are prepared in response to requests from teachers and other school personnel for review of specific materials. The reports are intended to be informational and factual. We hope that these reports will be helpful to teachers, principals, and district personnel in their choice of materials for use in the classroom. Whether or not a product has been reviewed does not constitute endorsement or lack of endorsement by the FCRR.

**Core Reading Programs**
A Comprehensive Reading Program is intended to be the initial instructional tool used to guide high quality instruction in K-3 classrooms.

**Supplemental and Intervention Programs**
These materials are intended for flexible use as part of differentiated instruction or as interventions that meet student learning needs in specific areas (phonemic awareness, phonics, fluency, vocabulary, and comprehension). Most students can benefit from the extra practice provided by Supplemental Programs. Other students will need an Intervention Program that guides more intensive instruction.

**Technology-Based Programs**
Programs that use technology to support instruction.

**Programs that may be Implemented by Tutors or Mentors**
These materials may be appropriate for Volunteers (Tutors or Mentors) to implement. It is important to note that training and supervision are critical components for successful student outcomes.

**Intervention and Remedial Programs for Students Above Third Grade**
These materials can be used to guide instruction for students who are...
Supplemental and Intervention Programs

- Academy of Reading
- Accelerated Literacy Learning (A.L.L.)
- Accelerated Reader
- Classworks
- Compass Learning Odyssey Reading
- Corrective Reading
- Destination Reading
- Early Success
- Earbics
- Elements of Reading, Vocabulary
- Essential Learning Systems
- Failure Free Reading
- Fast Forward Language
- FOCUS Reading and Language Program
- Fundations
- Funnix Reading Programs
- Great Leaps
- Harcourt Trophies First Grade Intervention Kit
- Headsprout Early Reading
- HOSTS
- Kaleidoscope
- Language!
- Language First!
- Language for Learning
- Language for Thinking
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A summary: the most essential ideas

Interventions **must** increase the intensity of instruction
   - More time
   - Smaller groups
Interventions **must** be targeted on critical skills at the right level
   - Initial and ongoing assessments
Interventions **must** be skillfully delivered
   - At risk students require clear explanations, systematic practice, and effective error correction
Interventions **must** be coordinated at the school level
   - Principal and coach must be involved because school resources must be used where most needed
A final concluding thought....

There is no question but that “leaving no child behind in reading” is going to be a significant challenge...

It will involve professional development for teachers, school reorganization, careful assessments, and a relentless focus on the individual needs of every child...

But, it's not the most difficult thing we could be faced with...
Consider this task for example...
Questions/
Discussion