Interventions for Older Struggling Readers

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Straight Talk Live Chat Conference Series, March, 2008

In order to be successful, interventions with older struggling readers must….

1. Provide instruction that improves reading comprehension
2. Accelerate growth in reading comprehension so that students not only meet yearly growth expectations, but also achieve significant amounts of "catch up" growth

What we know about the factors that affect reading comprehension

Proficient comprehension of text is influenced by:

- Accurate and fluent word reading skills
- Oral language skills (vocabulary, linguistic comprehension)
- Extent of conceptual and factual knowledge
- Knowledge and skill in use of cognitive strategies to improve comprehension or repair it when it breaks down.
- Reasoning and inferential skills
- Motivation to understand and interest in task and materials

A research-based view of reading comprehension

Reading comprehension involves active mental effort to construct meaning

Good readers use prior knowledge, information in text, and thinking/reasoning processes to construct new knowledge and understanding

"reading comprehension is thinking guided by print"

Perfetti 1995

What skills and knowledge required for reading comprehension are typically deficient in adolescent struggling readers?

Reading Next (Biancarosa & Snow, 2006) suggested that only 10% of older readers continue to struggle with word level skills

However, a recent study of 8th and 9th grade struggling readers in urban settings indicated that the reading difficulties of these students were more pervasive

Hock, et al., (in press) studied 345 8th and 9th grade students

Struggling readers were defined as those performing below the 40th percentile on the Woodcock Language Proficiency Battery and Gray Oral Reading Test

The sample contained 202 struggling readers, and 143 "proficient" readers

The students were given a 2.5 hour battery of tests measuring alphabetics (decoding), fluency, accuracy, vocabulary, and comprehension

Measure	Struggling	Proficient
Decoding Efficiency	14th	50th
Text Accuracy	12th	70th
Text Rate	14th	61st
Vocabulary	17th	74th
Reading Comp.	9th	64th

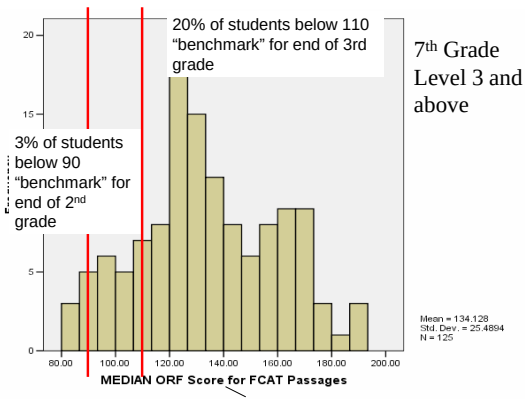
63% of struggling readers had significant deficits in all areas measured

Percentile Rank for Struggling and Proficient Readers on Various Measures

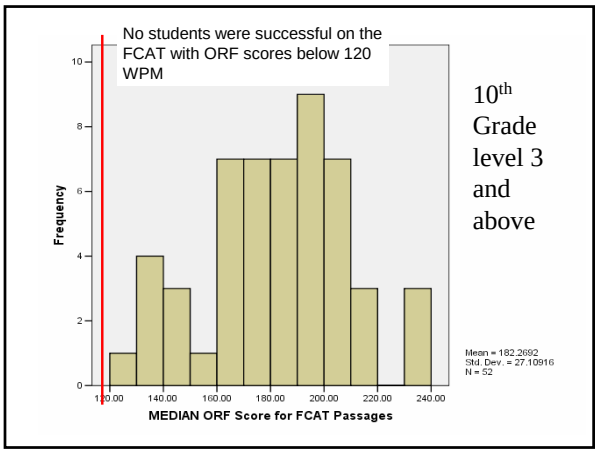
Important issue and question:

Should interventions address all areas of weakness?

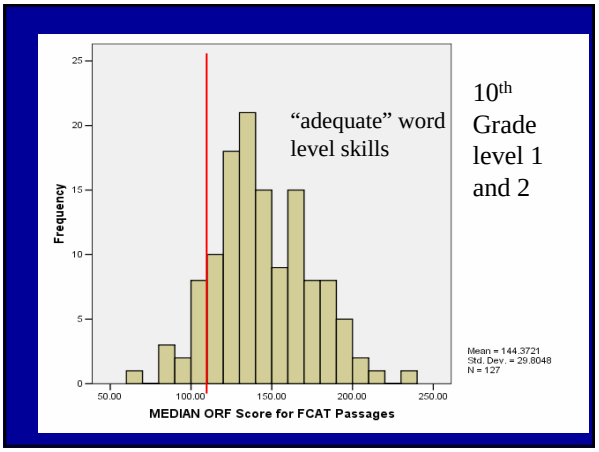
How strong do decoding and fluency skills need to be before they are no longer an issue?



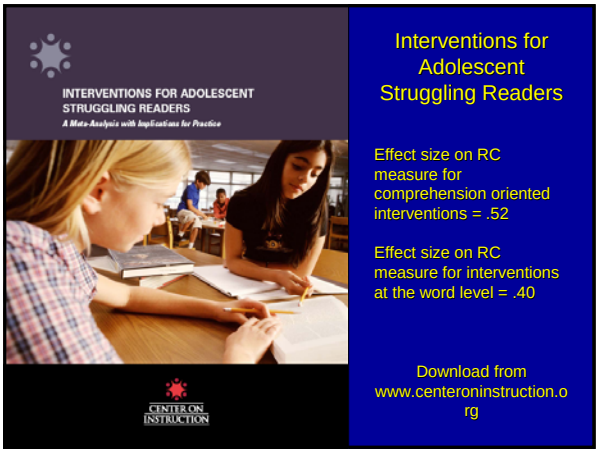
7th Grade Level 3 and above



10th Grade level 3 and above



10th Grade level 1 and 2



Interventions for Adolescent Struggling Readers

Effect size on RC measure for comprehension oriented interventions = .52

Effect size on RC measure for interventions at the word level = .40

Download from www.centeroninstruction.org

A study of intensive, highly skilled intervention with 60 children who had severe reading disabilities

Children were between 8 and 10 years of age

Had been receiving special education services for an average of 16 months

Nominated as worst readers: at least 1.5 S.D's below grade level

Average Word Attack=69, Word Identification=69, Verbal IQ=93

Randomly assigned to two instructional conditions that both taught "phonics" explicitly, but used different procedures with different emphasis

Children in both conditions received 67.5 hours of one-on-one instruction, 2 hours a day for 8 weeks

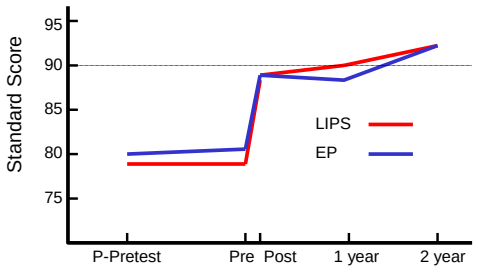
Children were followed for two years after the intervention was completed

Time x Activity Analyses for the Two Intervention Approaches

	LIPS	EP
Phonemic Awareness and Phonemic Decoding	85%	20%
Sight Word Instruction	10%	30%
Reading or writing connected text	5%	50%

Torgesen, J.K., Alexander, A. W., Wagner, R.K., Rashotte, C.A., Voeller, K., Conway, T. & Rose, E. (2001). Intensive remedial instruction for children with severe reading disabilities: Immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities, 34, 33-58.*

Growth in Total Reading Skill Before, During, and Following Intensive Intervention



Interval in Months Between Measurements

Study of struggling readers in 3rd and 5th grade:

We evaluated 4 commercially available intervention methods that are widely used to remediate difficulties in late elementary school-small group instruction, 50 minutes every day

1. Corrective Reading
2. Wilson Reading System

} Used Word-level instructional components only

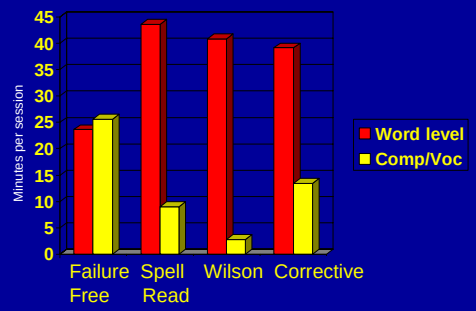
3. Spell Read P.A.T.
4. Failure Free Reading

} Word-level plus comprehension and vocabulary

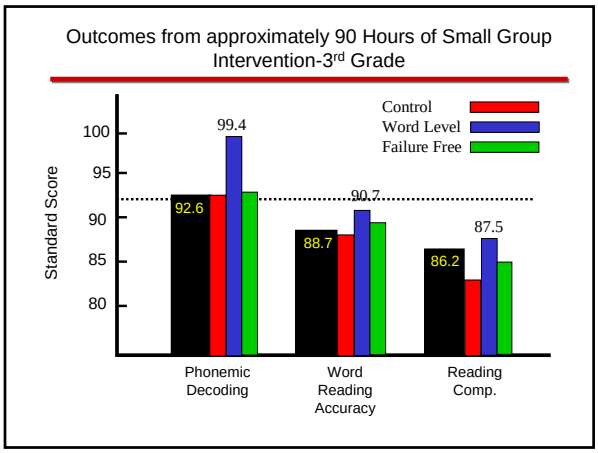
The students participating in the study

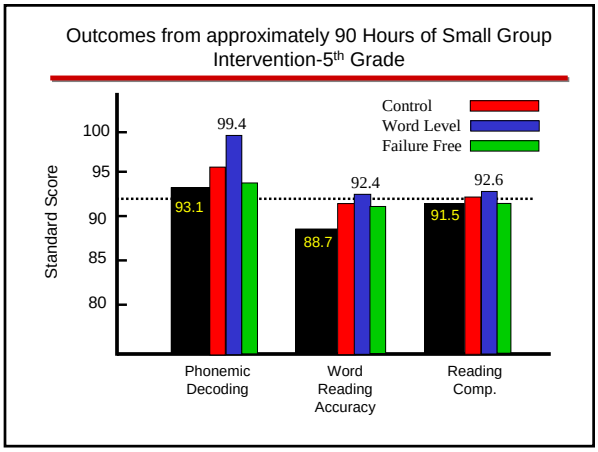
- 3rd and 5th graders, nominated by teachers and selected by screening measures (1576)
- Below the 30th percentile on a combined measure of word reading efficiency, and above the 5th percentile in broad verbal ability (PPVT) (1,042 – 772 gave permission to participate)
- 45 % FR lunch, 27% Min., 33% had L.D. or other school diagnosis
- Average reading levels – Phonemic decoding – 32nd %
  Oral reading fluency – 17th %
  Reading Comprehension – 23rd %

Time by activity analysis



Minutes per session devoted to instruction on Word level vs. comprehension/vocabulary





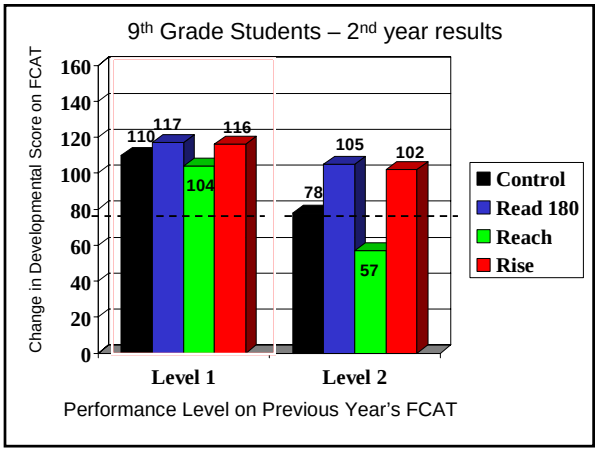
Study of struggling readers in 9th grade

- Students were selected because they performed below grade level (Levels 1 and 2) on 8th grade FCAT
- 592 students were formed into quartets within 5 high schools on basis of 8th grade FCAT. Within quartets in each school, students randomly assigned to one of three treatments or a control treatment
- Average reading levels – Phonemic decoding – 45th %
  Oral reading fluency – 35th %
  Reading Comprehension – 21st %
- All groups received 90 min. instruction per day in groups of 20, 5 days a week for the school year
- Post-testing on FCAT took place in March

Study of struggling readers in 9th grade

Students randomly assigned to one of four groups:

- Control-instruction as usual-reading, discussion, written assignments
- Read 180 – technology based intervention-individualized instruction in word level, comprehension, and vocabulary
- Reach – scripted instruction in word level, comprehension, critical reading and writing
- RISE (locally developed intervention involving lots of reading with leveled text, discussion, vocabulary, responsive help with decoding)



9th Grade Students

Level 1 intervention students

Gap to Level 2 in 8th grade = 134 DSS points

Gap to Level 2 in 9th grade = 93 DSS points

Level 2 intervention students

Gap to grade level in 8th grade = 83 DSS points

Gap to grade level in 9th grade = 68 DSS points

"Enhanced Reading Opportunities" study

- Is a randomized controlled trial testing two supplemental literacy interventions that are designed as full year courses and targeted to students whose reading skills are two or more years below grade
- *Reading Apprenticeship Academic Literacy*, designed by WestEd, and *Xtreme Reading*, designed by the University of Kansas Center for Research on Learning-Don Deshler's group

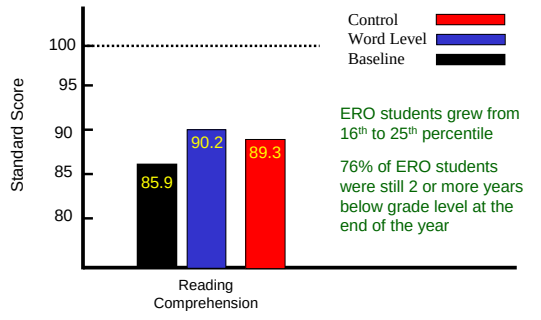
Both interventions are comprehensive, and designed tohelp ninth-grade students "adopt the strategies and routines used by proficient readers, improve their comprehension skills, and be motivated to read more and to enjoy reading."

Participants were 2,916 ninth-grade students from 34 high schools and 10 school districts

"Enhanced Reading Opportunities" study

- Schools were randomly assigned to interventions, and within each school, students were randomly assigned either to intervention or control (no additional instruction) conditions
- Each teacher was responsible for teaching four sections of the ERO class. Each section had 10 and 15 students. Classes met for a minimum of 225 minutes per week and were scheduled as a 45-minute class every day or as a 75- to 90-minute class that met every other day. The classes began an average of six weeks after the start of the 2005-2006 school year.
- Teachers received one week of training during the summer, some booster training sessions during the year, and minimum of two one-day coaching visits during the year
- Students attended 83 percent of the scheduled ERO classes, and they received an average of just over 11 hours of ERO instruction per month. About 80 hours altogether

Outcomes from first year of "Enhanced Reading Opportunities" stucy



ERO students grew from 16th to 25th percentile

76% of ERO students were still 2 or more years below grade level at the end of the year

Two possible instructional models for middle and high school

A model involving focused reading instruction for all students – schools with high proportions of struggling readers

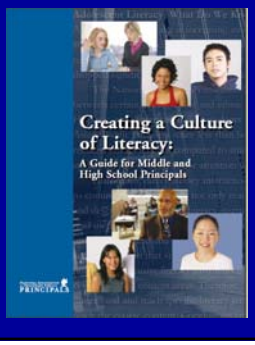
- Every student takes a “reading” or “reading and writing” class for one or two periods a day.
- Almost all teachers participate as reading instructors during the reading period
- All students receive instruction targeted at their level—from basic to advanced
- Will require well developed curriculum supports for teachers to use as instructional scaffolds

Two possible instructional models for middle and high school (cont.)

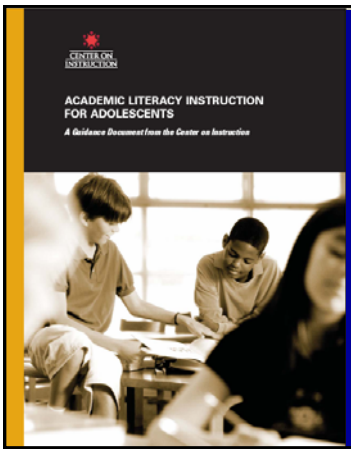
A model involving content-area literacy support and at least two levels of “intervention” classes

- Science, History, Social Studies, English teachers assume more responsibility for teaching students how to comprehend and learn from their texts
- Comprehension strategy /vocabulary oriented intervention classes for students close to grade level standards – one period per day
- Intensive, broad based, intervention classes (90 minutes-no more than 10-15 students) for students with word-level (accuracy and fluency) + other problems.

Documents useful at district and school level



Creating a culture of literacy: A guide for middle and high school principals. National Association of Secondary School Principals (2005).



Instructional recommendations for

Content area teachers

Interventions

ELL students

www.fcrr.org or

www.centeroninstruction.org click on reading

Improving Literacy Instruction in Middle and High Schools: A Guide for Principals

Go to www.centeroninstruction.org click on reading

Questions/ discussion

References

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