

Current Issues in Assessment and Intervention for Younger and Older Students

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Topics to be covered:

1. Discussion of reasons for movement toward alternative methods of diagnosis for children with learning disabilities in reading
2. The diagnostic and instructional challenge for older struggling readers

Consensus statements reaffirming the concept of learning disabilities

1. The concept of Specific Learning Disabilities is valid, supported by strong converging evidence
2. Specific learning disabilities are neurologically-based and intrinsic to the individual
3. Individuals with specific learning disabilities show intra-individual differences in skills and abilities
4. Specific learning disabilities persist across the life span, though manifestations and intensity may vary as a function of developmental state and environmental demands
5. Specific learning disabilities are evident across ethnic, cultural, language, and economic groups

Consensus statements about Eligibility

1. Information from a comprehensive individual evaluation using multiple methods and sources of information must be used to determine eligibility for services
2. Decisions on eligibility must be made through an interdisciplinary team, using informed clinical judgements directed by relevant data
3. A student identified as having SLD may need different levels of services under IDEA at various times during the school experience
4. The ability-achievement discrepancy formula should not be used for determining eligibility

Why has the IQ-Achievement Discrepancy Criteria been rejected so decisively?

It was rejected on scientific grounds for two broad reasons:

It is a psychometrically unsound practice

It is inconsistent with what we have learned about reading disabilities over the past 20 years

Three potential stumbling blocks to becoming a good reader (NRC Report, 1998)

1. Difficulty learning to read words accurately and fluently
2. Insufficient vocabulary, general knowledge, and reasoning skills to support comprehension of written language
3. Absence or loss of initial motivation to read, or failure to develop a mature appreciation of the rewards of reading.

Almost all children who experience reading problems in elementary school have difficulties acquiring accurate and fluent word reading skills

Extreme difficulties mastering the use of “phonics” skills as an aid to early, independent reading

- difficulties learning letter-sound correspondences
- difficulties with the skills of blending and analyzing the sounds in words (phonemic awareness).

Slow development of “sight vocabulary” arising from:

- limited exposure to text
- lack of strategies to reliably identify words in text

Children who experience difficulties acquiring accurate and fluent word reading skills show two kinds of difficulties with word reading

When asked to read grade level text:

1. The child cannot recognize a sufficiently high proportion of the words easily, at a single glance, to support fluent reading. Too many of the words fall outside the child's "sight vocabulary."
2. The child does not employ efficient strategies to accurately and quickly identify unknown words. Use of phonemic decoding strategies is particularly impaired.

The nature of the underlying difficulty for most children who have problems acquiring accurate and fluent word reading problems

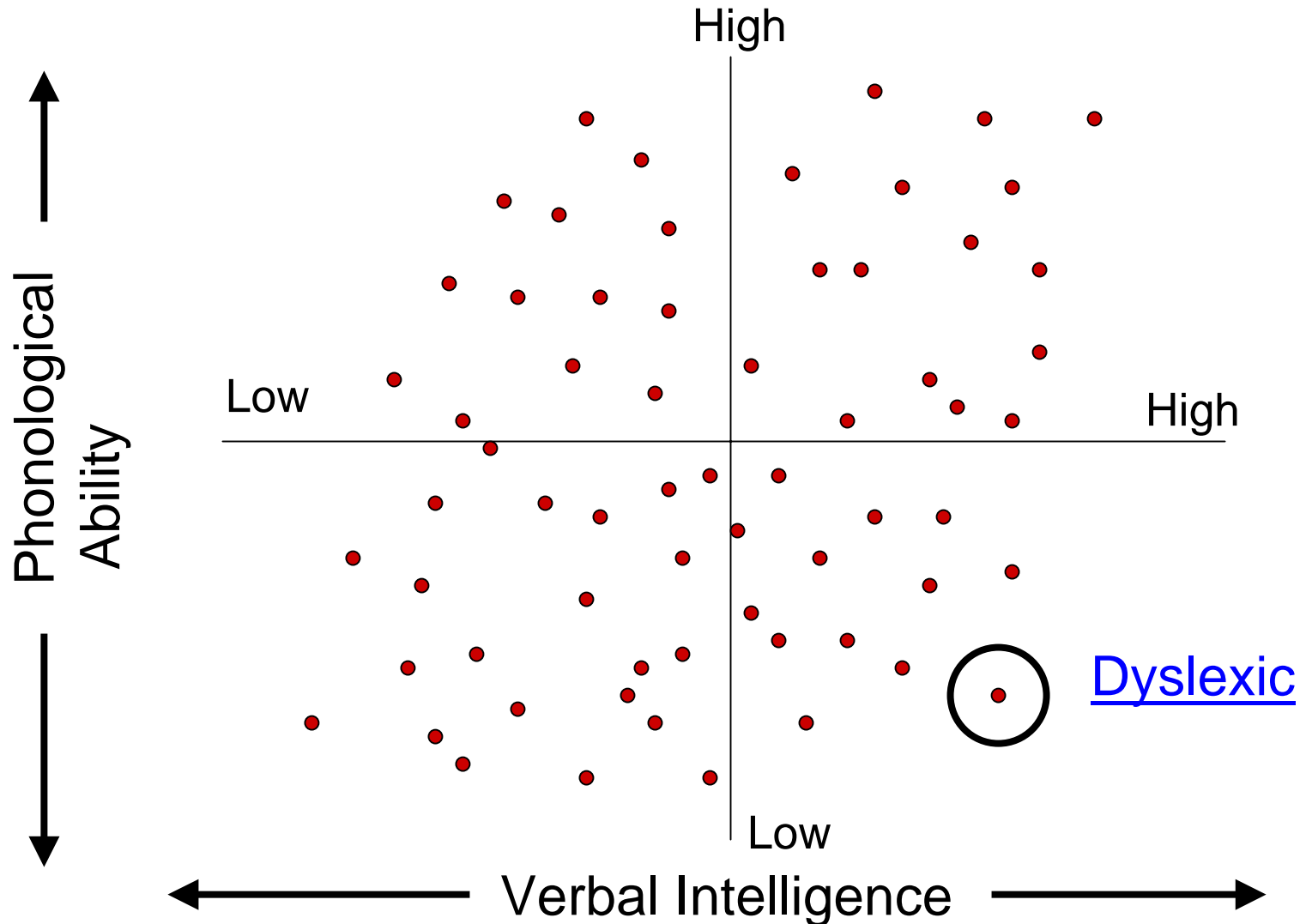
Weaknesses in the phonological area of language ability

inherent, or intrinsic, disability

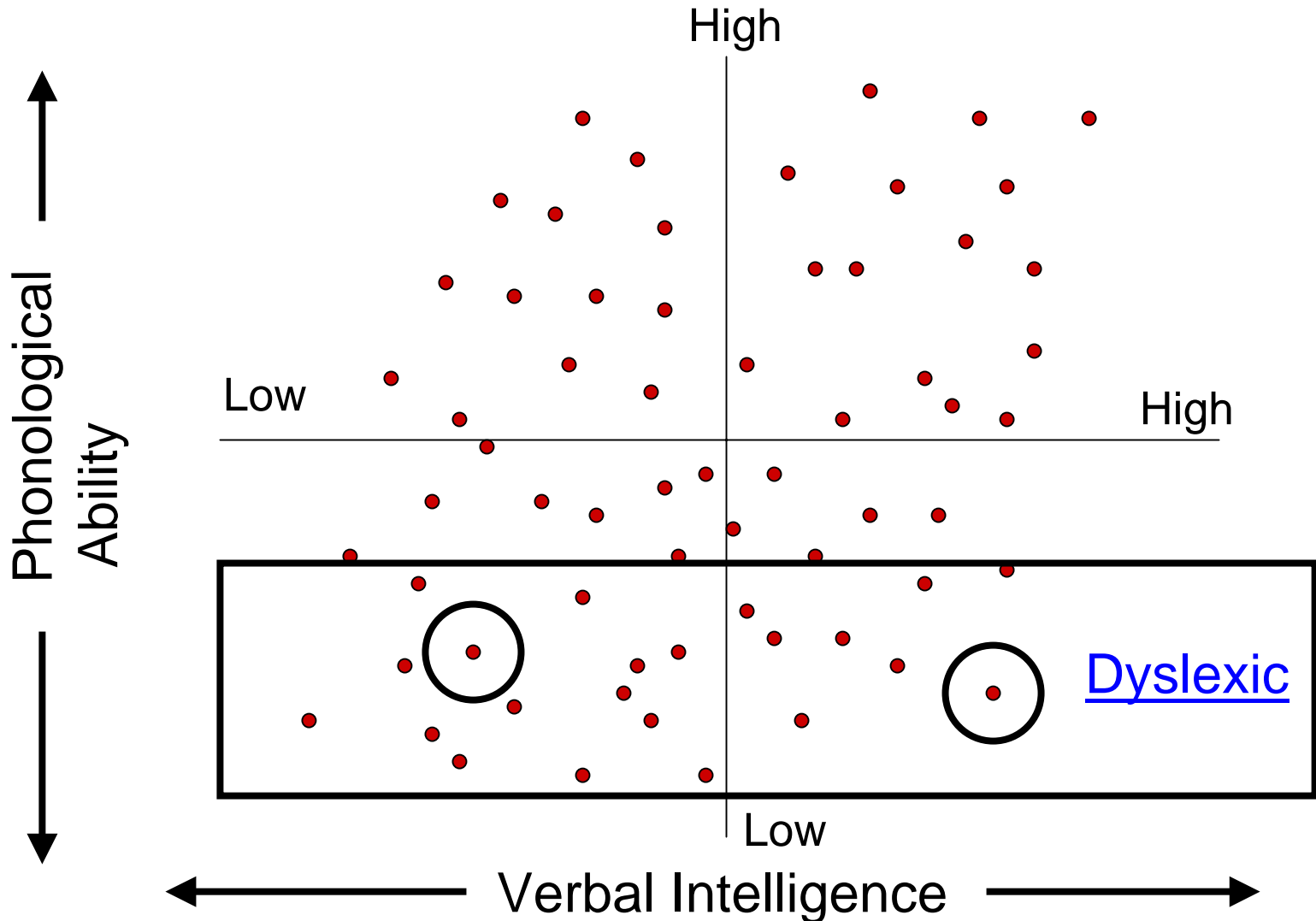
lack of certain types of language experience

Expressed primarily by delays in the development of phonological awareness

Phonological Language Ability is not highly Correlated with General Verbal Ability as measured by IQ tests



Phonological Language Ability is not highly Correlated with General Verbal Ability as measured by IQ tests



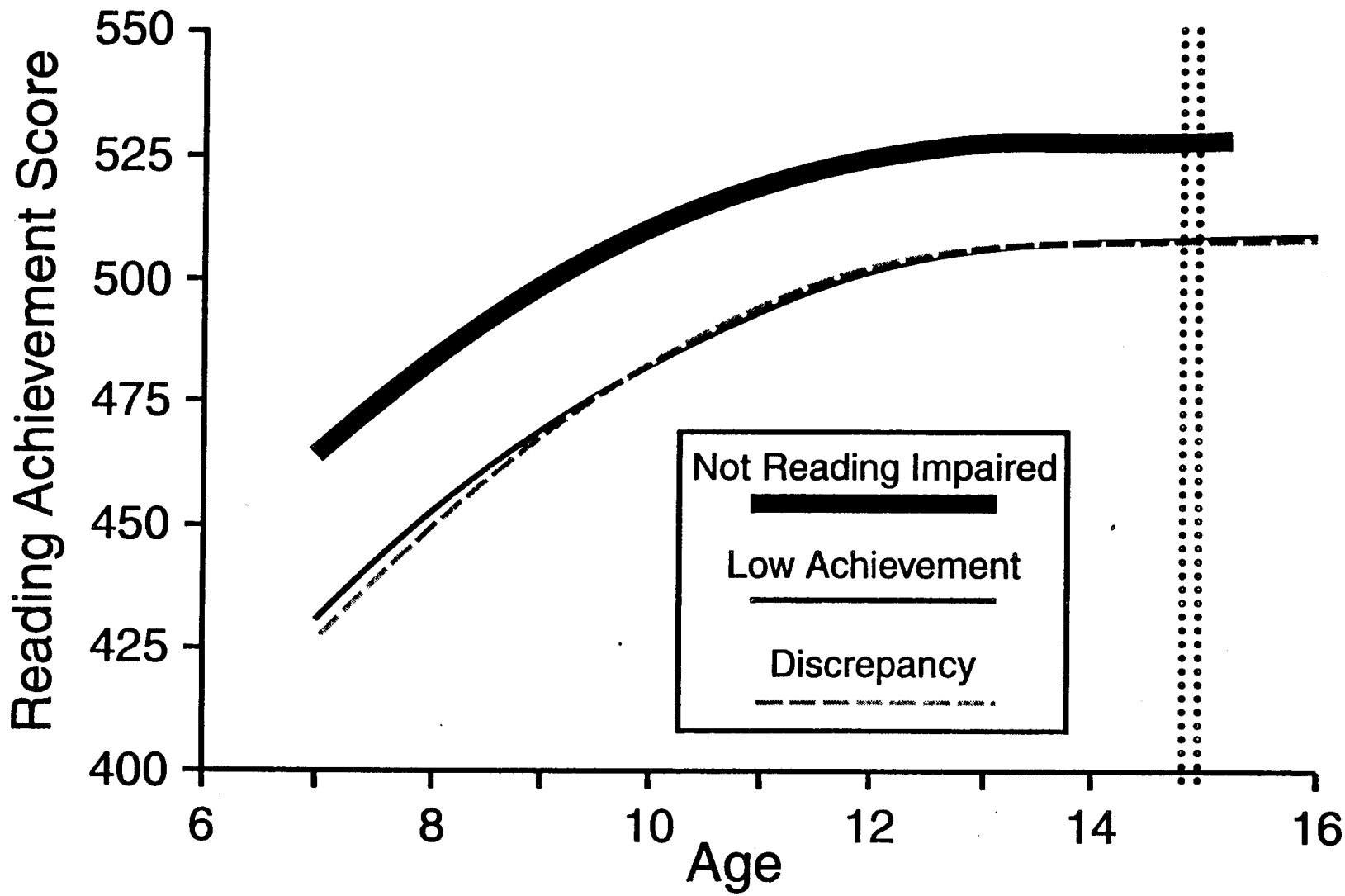


FIGURE 6

What is the fundamental conceptual error in using IQ-achievement discrepancies to identify young children with reading disabilities?

1. Children with reading problems not discrepant from their intelligence appear to have the same type of problems with early reading as children whose reading is discrepant from their IQ: they both have difficulties resulting from weaknesses in the phonological domain.
2. “Slow learners” have difficulties learning to read, not because of low IQ, but because of weaknesses in the phonological language domain.
3. Discrepant and non-discrepant children require the same type of instruction in basic reading skills in order to acquire critical beginning reading skills.

Very simply put, we have two broad classes of children who experience difficulties learning to read in school:

Children who enter school with adequate general verbal ability and knowledge, but specific weaknesses in the phonological language domain

Children who enter school with weaknesses in the phonological language domain, who also have weaknesses in broader language domains such as vocabulary and verbal knowledge

Both groups have the same phonological problem that makes it difficult to learn to read, but only one group (the discrepant one) is eligible for services as learning disabled.

What is the identification/eligibility model currently being proposed to replace IQ-achievement discrepancy?

Sometimes referred to as:

Problem solving model

Response to intervention model

Three-tiered model

Basic elements of the model:

1. All children receive high quality general instruction in the regular classroom
2. Regular education teachers, special education teachers, and other support personnel collaborate to provide immediate intensive interventions for students lagging behind
3. Students who do not respond sufficiently to second tier interventions become eligible for even more intensive and specialized services through IDEA.

Potential benefits of this approach

It focuses a spotlight on the educational opportunities provided to each student--have they been adequately individualized, sufficiently structured, and intensive enough to support learning in all reasonably capable students.

It requires timely monitoring of student learning progress

It increases opportunities for collaboration and shared responsibility between regular and special education personnel

It is consistent with movement toward early identification and focus on preventive, rather than remedial instruction. Does not require “wait to fail” before intervention.

Small scale try-outs have found:

Increased accountability for student learning in general and special education

Decreased numbers of students placed in high incidence special education categories

Reduction in number of evaluations conducted that do not result in special ed. classification or improved learning outcomes

Improved problem solving efforts by regular education personnel

Positive reactions from participants and stakeholders

Remaining concerns and issues:

There is insufficient data available regarding the effects of this approach on student outcomes

Work needs to be done to identify all the essential components needed to make the model work (training, personnel, interventions, professional competence).

Work also needs to be done to address whether this approach will result in more timely service delivery--we don't want another "wait to fail" model.

Clarification is needed to explain and demonstrate how students qualify for and are provided services in each tier of this approach

Points of vulnerability shared with the present system:

Depends upon personnel with professional competence to make complex clinical judgements and not focus on single criteria

Depends on consistent, high quality functioning of an interdisciplinary team.

Reducing the number of referrals for special education depends directly on the quality of classroom instruction and second tier, classroom based interventions

Responsibility for student outcomes must be fully shared between regular and special education personnel

Will not eliminate problems, but should change the kinds of questions we ask to a more productive direction

**Diagnostic and
Instructional Challenges
with older students
(grades 4 and higher)**

How can we efficiently identify the instructional needs of older children who do not meet grade level standards on their state's high stakes measure of reading accountability?

What influences reading comprehension?

Reading is thinking guided by print

Chuck Perfetti



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)

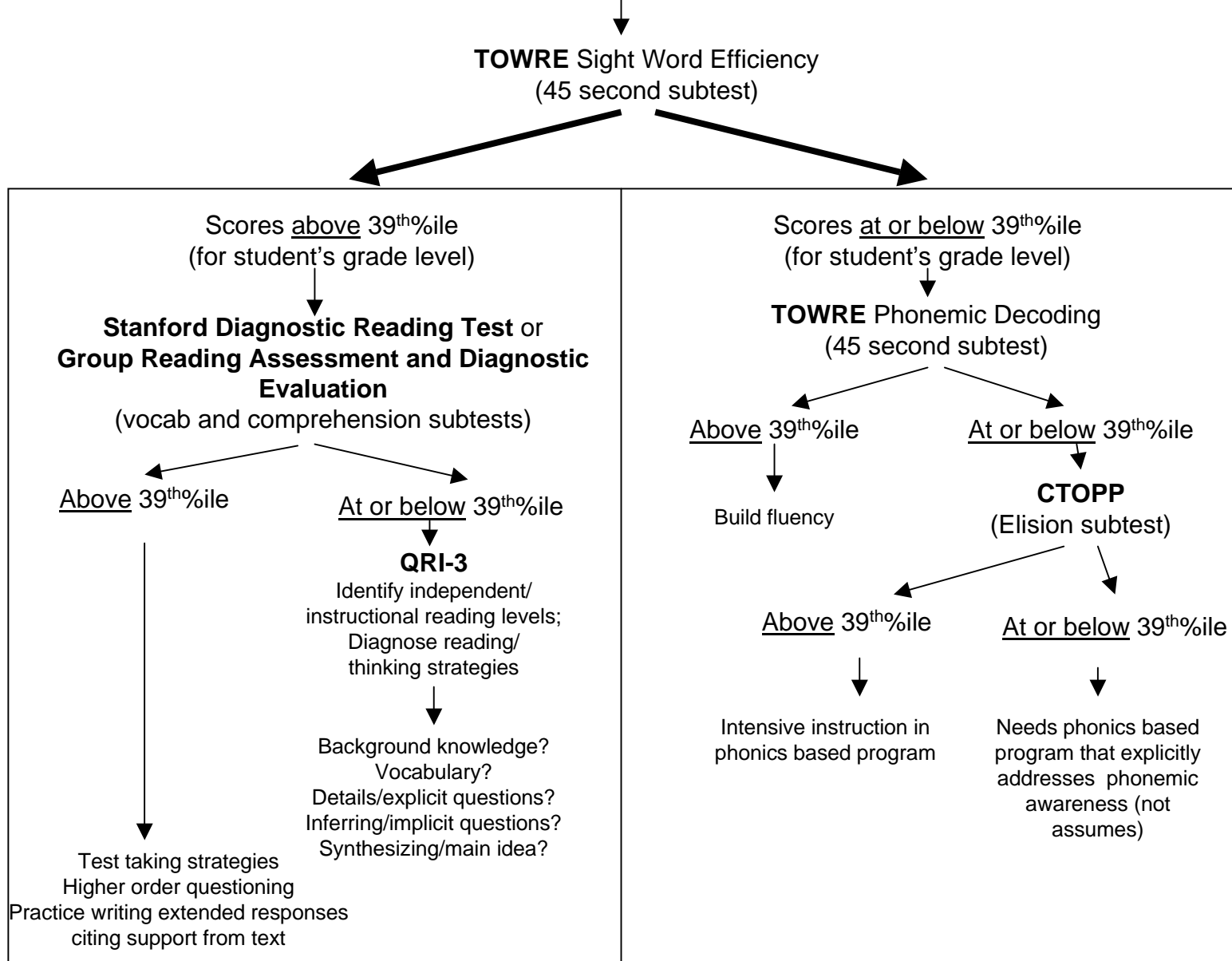
Extent of conceptual and factual knowledge

Knowledge and skill in use of cognitive strategies to improve comprehension or repair it when it breaks down.

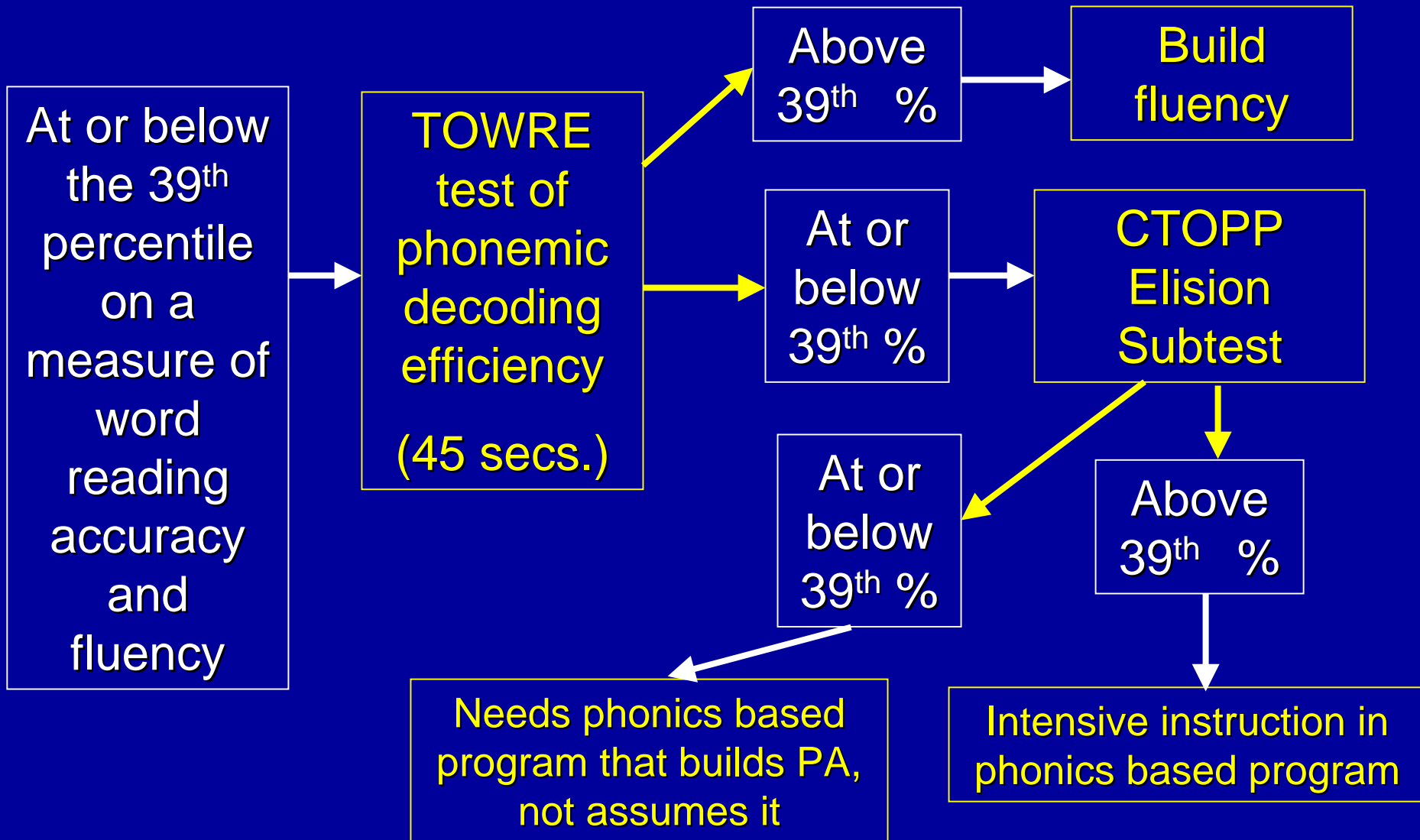
Reasoning and inferential skills

Motivation to understand and interest in task and materials

Diagnostic decision tree for students who perform below standards on a measure of reading comprehension in 3rd Grade or later



The side of the tree for students with word reading difficulties



The side of the tree for students with word level skills above the 39th percentile



**Stanford Diagnostic Reading Test or
Group Reading Assessment and Diagnostic Evaluation**
(vocab and comprehension subtests)



Above
39th %



Test taking strategies
Higher order questioning
Practice writing extended
responses citing support from
text



At or below 39th %



QRI-3

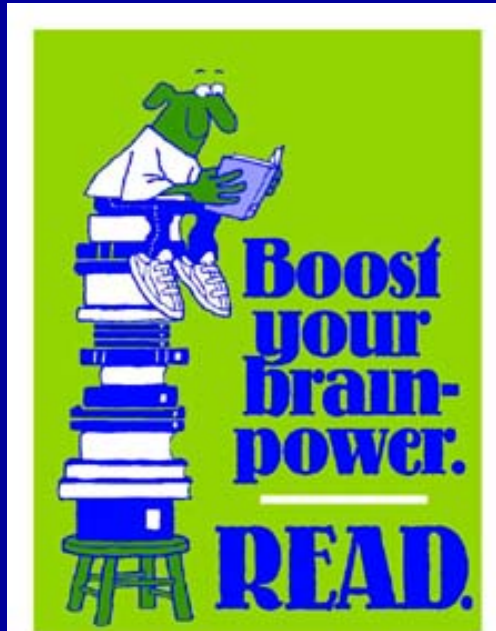
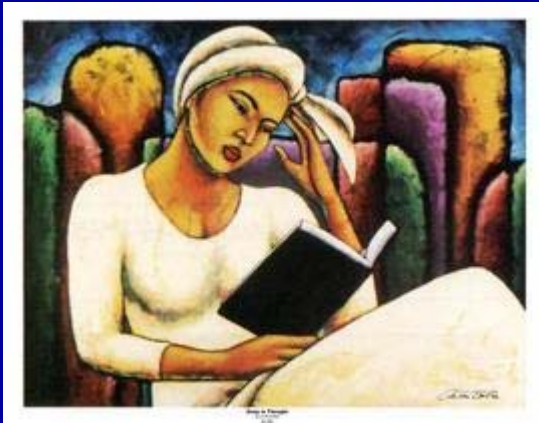
Identify independent/instructional
reading levels; Diagnose reading/
thinking strategies



Build background knowledge
Teach vocabulary
Teach comprehension strategies

What will it require, in terms of a whole school plan, to “leave no child behind” in reading growth from 4-12?

Remember that, beyond third grade, reading can increasingly be characterized as “thinking guided by print”



What are the primary components that affect reading achievement after third grade?

Children must continue to add to the lexicon of words they can recognize “at a single glance.”

Children must acquire the more complex vocabulary that appears primarily in written language

Children must acquire appropriate strategies to effectively process different types of texts

Children must grow in background/conceptual knowledge, and reasoning/inferential skills

What are some of the Big Ideas from research on Adolescent literacy?

1. Word attack and recognition plateau about the 3rd to 5th grade level for many

Direct, systematic, intensive instruction with emphasis on word level skills (phonemic analysis, structural analysis) works

2. Comprehension plateaus at about the 5th to 6th grade level for many more

Direct, systematic, intensive instruction in learning strategies works

3. Attention to vocabulary and background knowledge is needed

Progress, transfer, and maintenance significantly increases when instruction is provided across settings

4. Students must be able to use literacy to solve problems and meet demands across settings if they are to become motivated to develop literacy skills

The Content Literacy Continuum

<http://smarttogether.org/clc/index.html>

1. More powerful instruction in the content areas so that all children learn essential content
2. Embedded instruction in strategies for learning and performance
3. Intensive remedial work for students with serious reading difficulties

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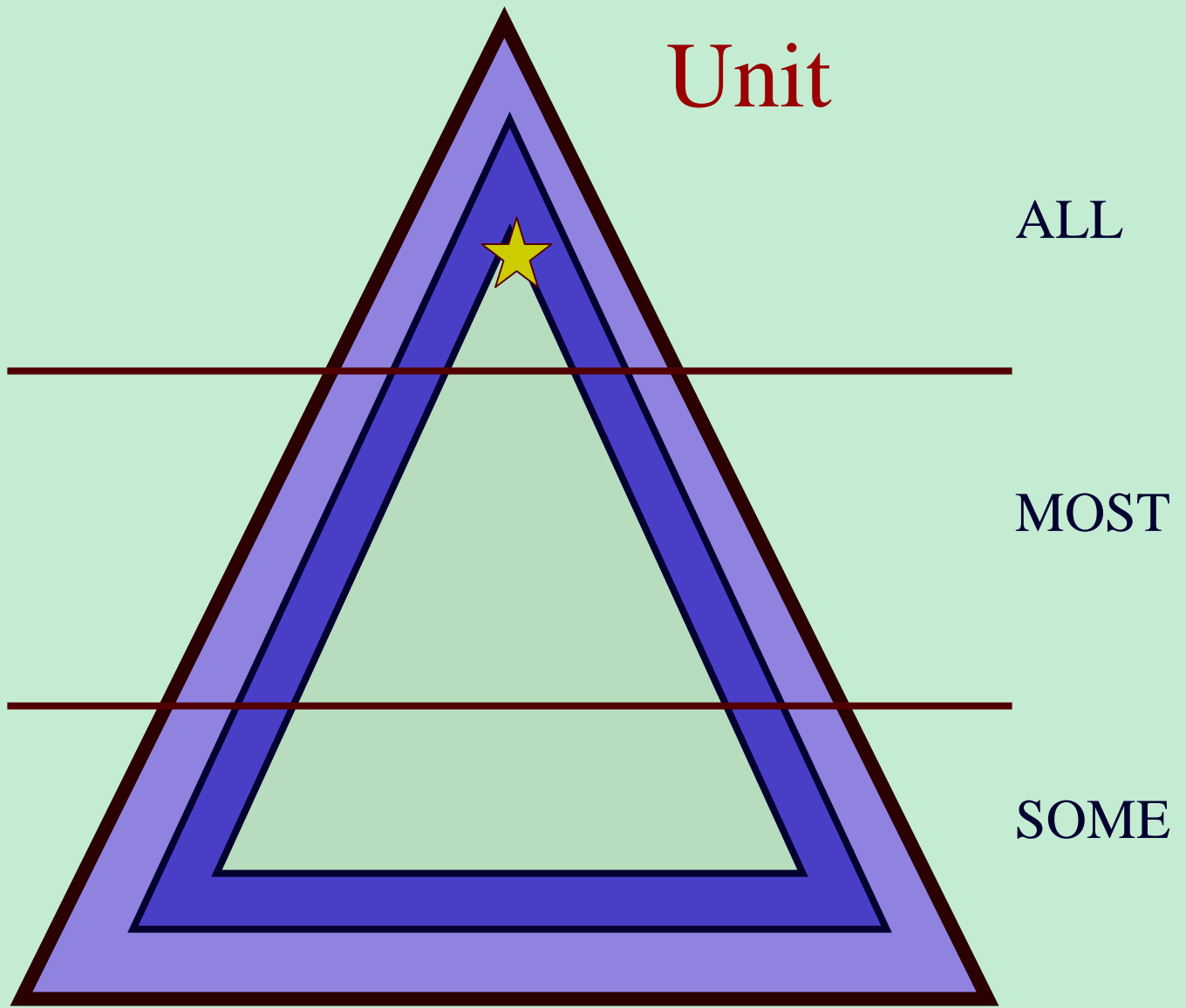
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Insuring content mastery

What students do: Students learn critical content required in the core curriculum regardless of literacy levels.

What teachers do: Teachers compensate for limited levels of literacy by using Content Enhancement Routines to promote content mastery and by making the necessary modifications for students with learning problems.

What it looks like: For example, the history teacher introduces a unit on "Causes of the Civil War" by co-constructing with students a Unit Organizer that depicts the critical content demands of the unit. The organizer is used throughout the unit to link students' prior knowledge to the new unit and to prompt learning strategies such as paraphrasing and self-questioning. Other routines are used to ensure that critical vocabulary is developed.



Unit

ALL

MOST

SOME

Content Enhancement Teaching Routines

Planning and Leading Learning

Course Organizer
Unit Organizer
Lesson Organizer

Explaining Text, Topics, and Details

Framing Routine
Survey Routine
Clarifying Routine

Teaching Concepts

Concept Mastery Routine
Concept Anchoring Routine
Concept Comparison Routine

Increasing Performance

Quality Assignment Routine
Question Exploration Routine
Recall Enhancement Routine

“If it weren’t for students impeding our progress in the race to the end of the term, we certainly could be sure of covering all the content. However, the question should not be whether we are covering the content, but whether students are with us on the journey.”

Pat Cross

“Give me a fish while you’re teaching me how to catch my own. That way I won’t starve to death while I’m learning to tie flies.”

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Teaching strategies to enhance learning and performance

What students do: Students are introduced to and learn to use key learning strategies for increasing literacy across their core curriculum classes.

What teachers do: Teachers directly teach and then embed instruction in selected learning strategies in core curriculum courses. Teachers use direct explanation, modeling, and group practice to teach the strategy and strategy steps and then prompt student application and practice in content-area assignments throughout the year.

Teaching strategies to enhance learning and performance

What it looks like: At the beginning of the year, the history teacher explains that being able to paraphrase the history text is important because paraphrasing is required to write reports, answer questions, and discuss ideas. The teacher shares the steps of the Paraphrasing Strategy (RAP) with students and models how to paraphrase history text to complete different types of learning tasks. This strategy is reinforced and practiced in multiple contexts, in both reading and writing assignments across the year, and across classes.

Learning Strategies Curriculum

Acquisition

Word
Identification

Paraphrasing

Self-
Questioning

Visual
Imagery

Interpreting
Visuals

Multipass

Storage

First-Letter
Mnemonic

Paired Associates

Listening/Notetaking

LINCS Vocabulary

Expression of Competence

Sentences

Paragraphs

Error
Monitoring

Themes

Assignment
Completion

Test-Taking

The importance of teaching content and strategies to struggling readers

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Intensive instruction in reading for students with serious difficulties

What students do: Students develop decoding skills and increase reading fluency through specialized, direct, and intensive instruction in reading.

What professionals do: Teachers, reading specialists, special education teachers, speech-language pathologists, and other support staff team develop intensive and coordinated instructional experiences designed to address severe literacy deficits. Reading specialists and special education teachers often deliver these services. They also assist content teachers in making appropriate modifications in content instruction to accommodate severe literacy deficits.

Intensive instruction in reading for students with serious difficulties

What it looks like: Small group or 1:1, everyday for 45-60 minutes, instruction is systematic and explicit, focuses on phonemic decoding, reading accuracy, and building fluency

One way to do this is to use research-based programs to support and guide the instruction

Corrective Reading

Spell Read P.A.T.

Wilson Reading System

Lindamood-Bell Programs

Failure Free Reading

Examine outcomes from five clinical or experimental studies of remedial interventions with children from 10-12 years of age experiencing reading difficulties

One sample of mildly impaired children with beginning word level skills around the 30th percentile.

Two samples of moderately disabled children with beginning word level skills around the 10th percentile

Two samples of severely disabled children with beginning word level skills around the 2nd percentile

Instructional Effectiveness Measured by Outcomes in Four Areas

Phonemic Decoding Accuracy -- skill at using sound-letter relationships to decode novel words

Text reading accuracy -- Accuracy with which individual words are identified in text

Text reading fluency -- speed of oral reading of connected text

Reading Comprehension -- accuracy with which meaning is constructed during reading

Outcomes measured in standard scores. An improvement in standard score means that a child is improving his/her reading skills compared to average readers. On all the measures used here, 100 is average.

A Brief Description of the Spell/Read P.A.T. program

Distribution of activities in a typical 70 minute session:

40 minutes -- Phonemic awareness/phonics

20 minutes -- shared reading

7 minutes -- writing about what was read

3 minutes -- wrap up

Systematic instruction in phonic elements beginning with mastery of 44 phonemes at single syllable level through multi-syllable strategies. Fluency oriented practice from beginning of instruction. Discussion and writing to enhance comprehension.

A Clinical Sample of 48 Students aged 8-16

Middle and upper-middle class students

Mean Age 11 years

79% White, 67% Male

Received 45-80 hours (mean=60) hours of instruction

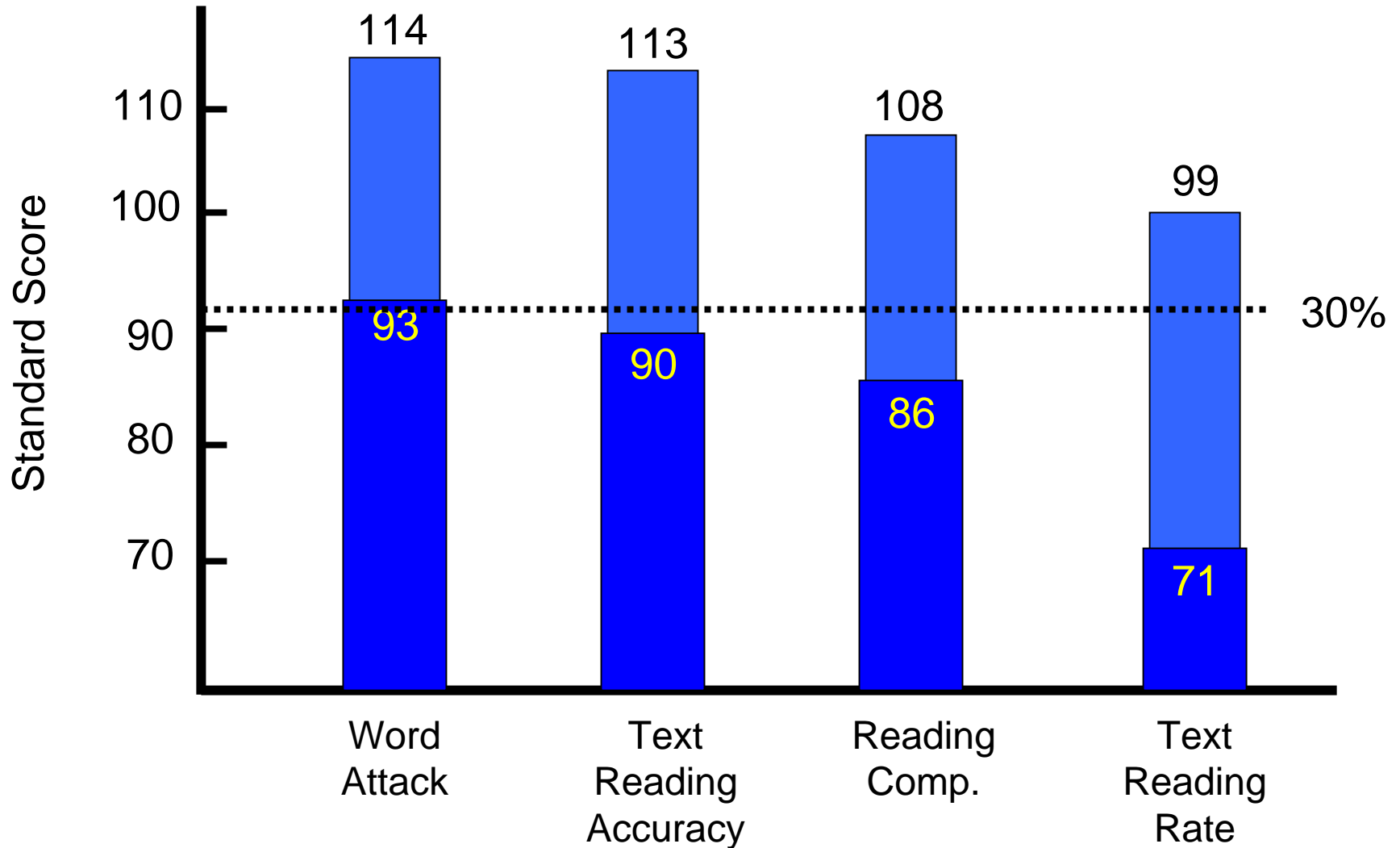
Intervention provided in groups of 2-4

Remedial Method: Spell Read P.A.T.

Mean beginning Word Identification Score = 92

Children with word level skills around the 30th percentile

Outcomes from 60 Hours of Small Group Intervention with upper middle class students--Spell Read



A Middle School Sample of 14 Students aged 11-14

Working class students

Mean Age 12 years

39% White, 64% Male

Received 37-58 hours (mean=51.4) hours of instruction

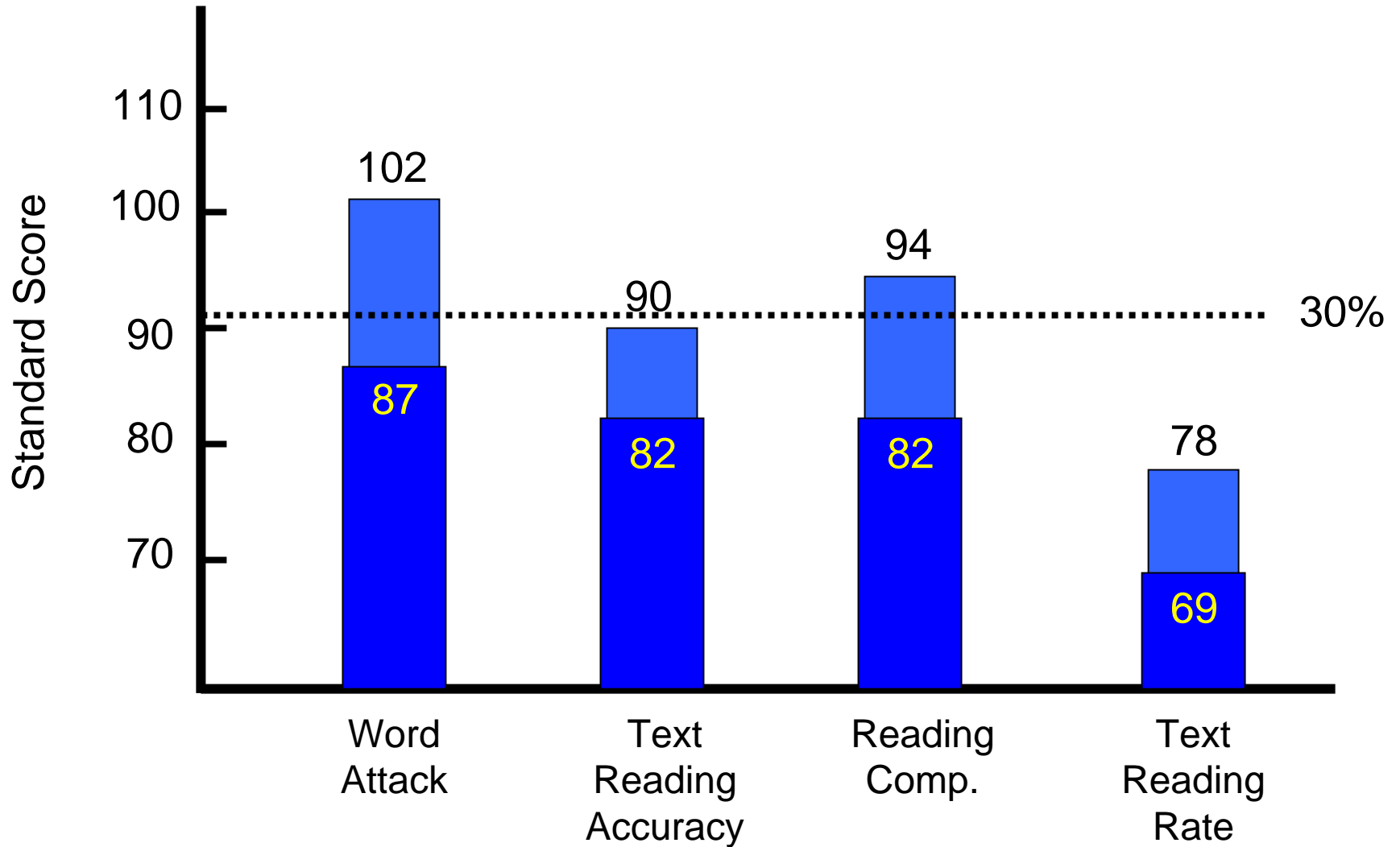
Intervention provided in groups of 2-4

Remedial Method: Spell Read P.A.T.

Mean Word Identification Score = 80

Children with word level skills around the 10 percentile

Outcomes from 50 Hours of Small Group Intervention with working class students--Spell Read



A School-based, treatment control study of 40 students

60% Free and reduced lunch

Mean Age 12 years (range 11-14)

45% White, 45% Black, 10% other

53% in special education

Received 94-108 hours (mean=100) hours of instruction

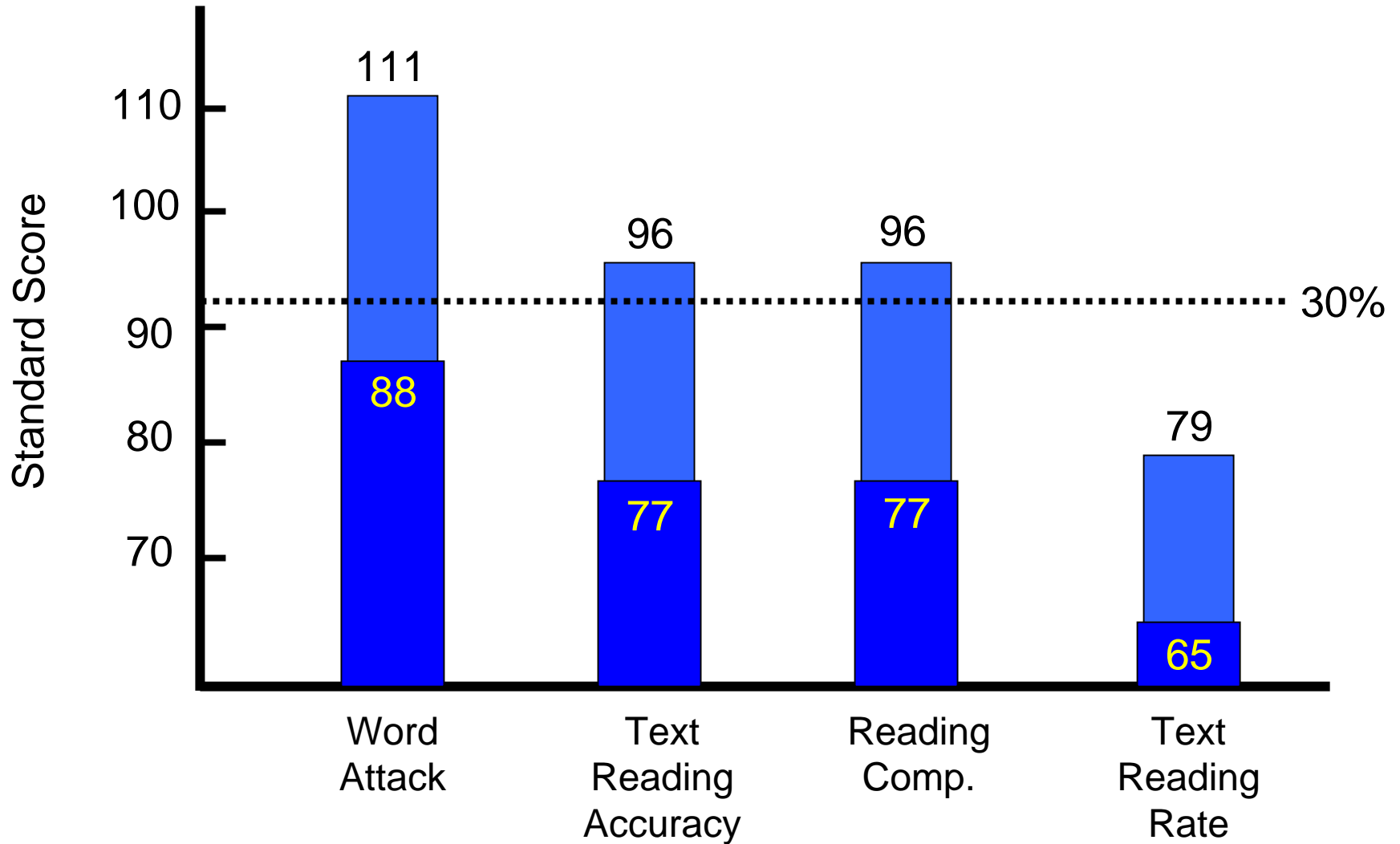
Intervention provided in groups of 4-5

Remedial Methods: Spell Read P.A.T.

Mean Word Identification Score = 83

Children begin with word level skills around 10th percentile

Outcomes from 100 Hours of Small Group Intervention--Spell Read



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

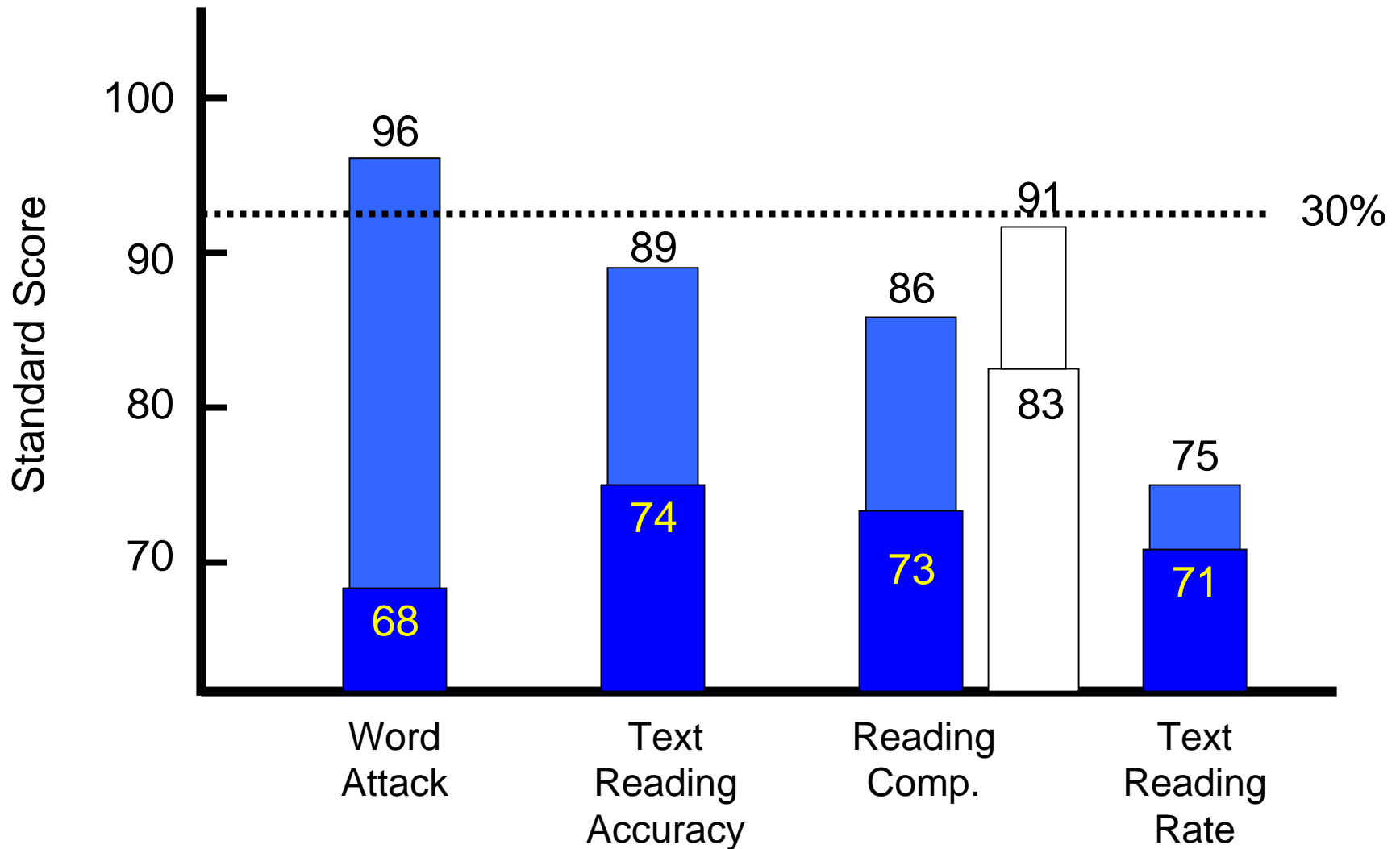
Average Word Attack=69, Word Identification=69, Verbal IQ=93

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

Outcomes from 67.5 Hours of Intensive LIPS Intervention



Oral Reading Fluency was much improved on passages for which level of difficulty remained constant

Absolute change in rate from pretest to 2-year follow-up.

Most difficult passage

Pretest -- 38 WPM, 10 errors

Posttest -- 101 WPM, 2 errors

Next most difficult passage

Pretest -- 42 WPM, 6 errors

Posttest -- 104 WPM, 1 error

Follow-up study of intensive intervention with 60 children who have severe reading disabilities - preliminary results

Children were between 8 and 10 years of age

All are currently receiving or were identified for special education services

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

Average Word Attack= 72, Word Identification= 72, Verbal IQ=87

Randomly assigned to two instructional conditions that both taught “phonics” explicitly, but contained different emphasis on fluency oriented practice

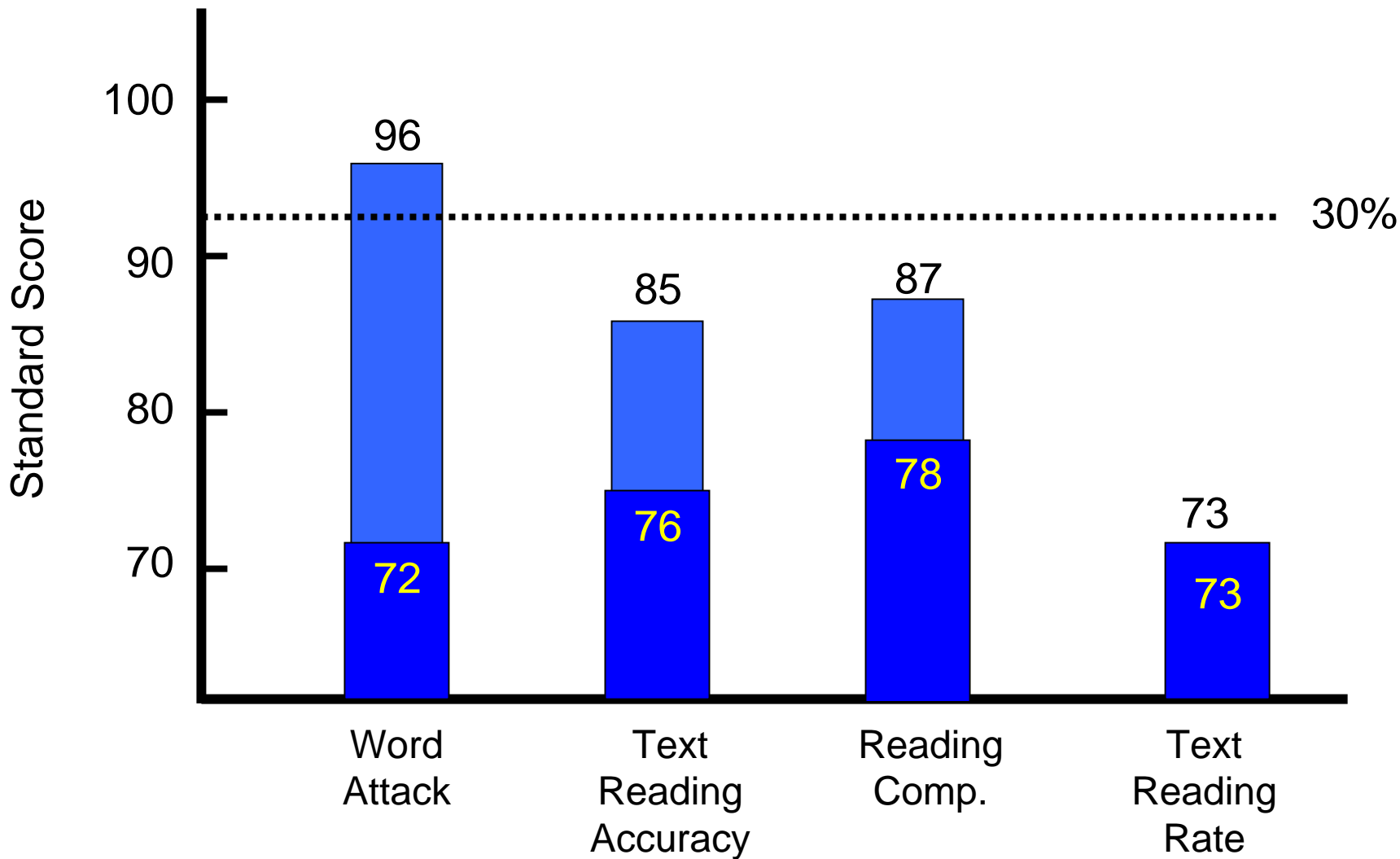
Children in both conditions received 83 hours of one-on-one and 50 hours of small group instruction, 2 hours a day for 16 week

Preliminary results for 45 children in both conditions combined

Major differences between Accuracy and Accuracy + Fluency Groups

	<u>Accuracy</u>	<u>Accuracy + Fluency</u>
First 33 Hrs. 1:1	LIPS	LIPS
Next 50 Hrs. 1:1	LIPS	70% LIPS, 30% Fluency
Next 50 Hrs. Sm. Grp.	Extended LIPS Comprehension V V Accuracy Oriented Text practice	Comprehension--V V Repeated reading practice with text and word drills

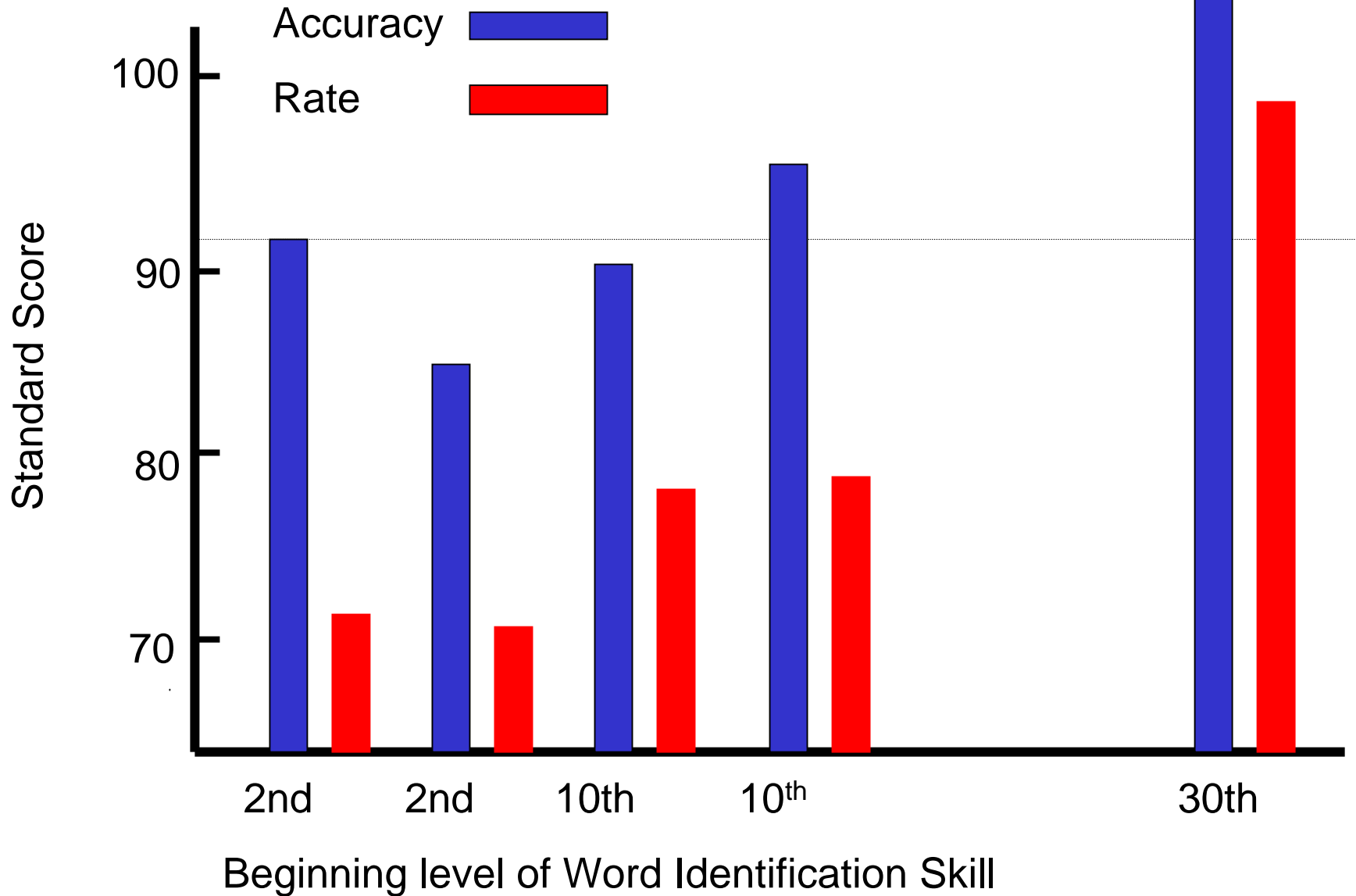
Outcomes from 133 Hours of Intensive LIPS + Fluency+ Comprehension Intervention



Summary and Conclusions:

1. For many older children with word level reading skills around the 30th percentile, a relatively brief (60hrs) dose of appropriate small group instruction can bring their skills in phonemic decoding, text reading accuracy and fluency, and comprehension solidly into the average range.
2. For many older children with word level reading skills around the 10th percentile, a more substantial dose (100hrs) of appropriate small group instruction can bring their skills in phonemic decoding, text reading accuracy, and reading comprehension solidly into the average range. Although the gap in reading fluency can be closed somewhat, reading fluency is likely to remain substantially impaired.
3. For older children with word level reading skills around the 2nd percentile, intensive interventions can have a strong effect on phonemic decoding, text reading accuracy, and reading comprehension, but they are likely to leave the fluency gap essentially unaffected.

Disparity in outcomes for rate vs. accuracy in five remediation studies





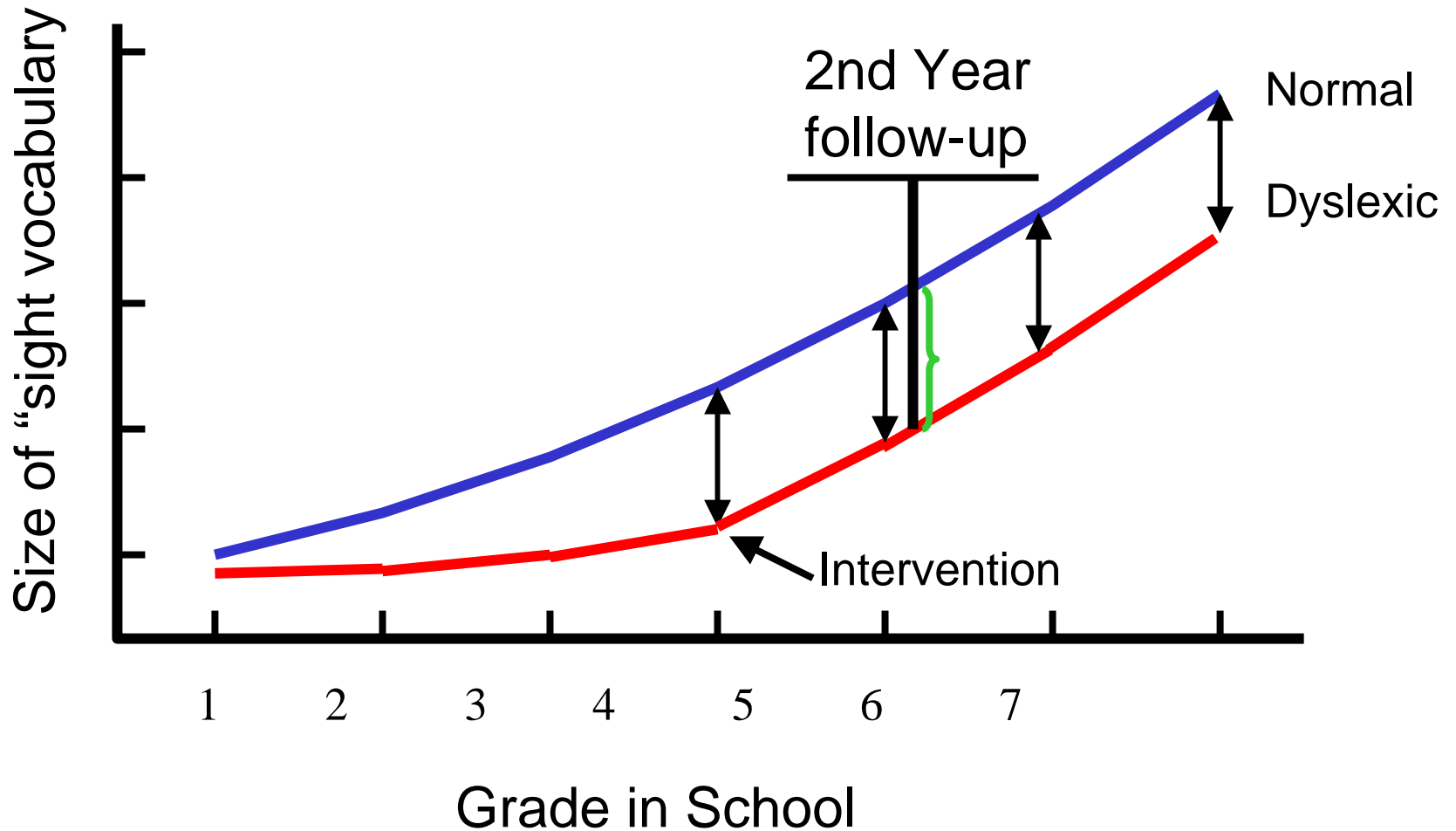
Our current hypothesis about the difficult fluency gap

Children who struggle initially in learning to read miss out on many hundreds of thousands of opportunities to learn to recognize individual words because they read inaccurately and they don't read very much.

By the time they reach 3-4 grade, their "sight word vocabulary" is severely restricted compared to good readers of their same age

After they become more accurate readers, there is still a huge gap in the number of words they can recognize by sight. They can't catch up with their peers because 4th and 5th grade good readers are continuing to add words to their sight vocabulary at a very fast rate.

Projected growth in “sight vocabulary” of normal readers and disabled children before and after remediation



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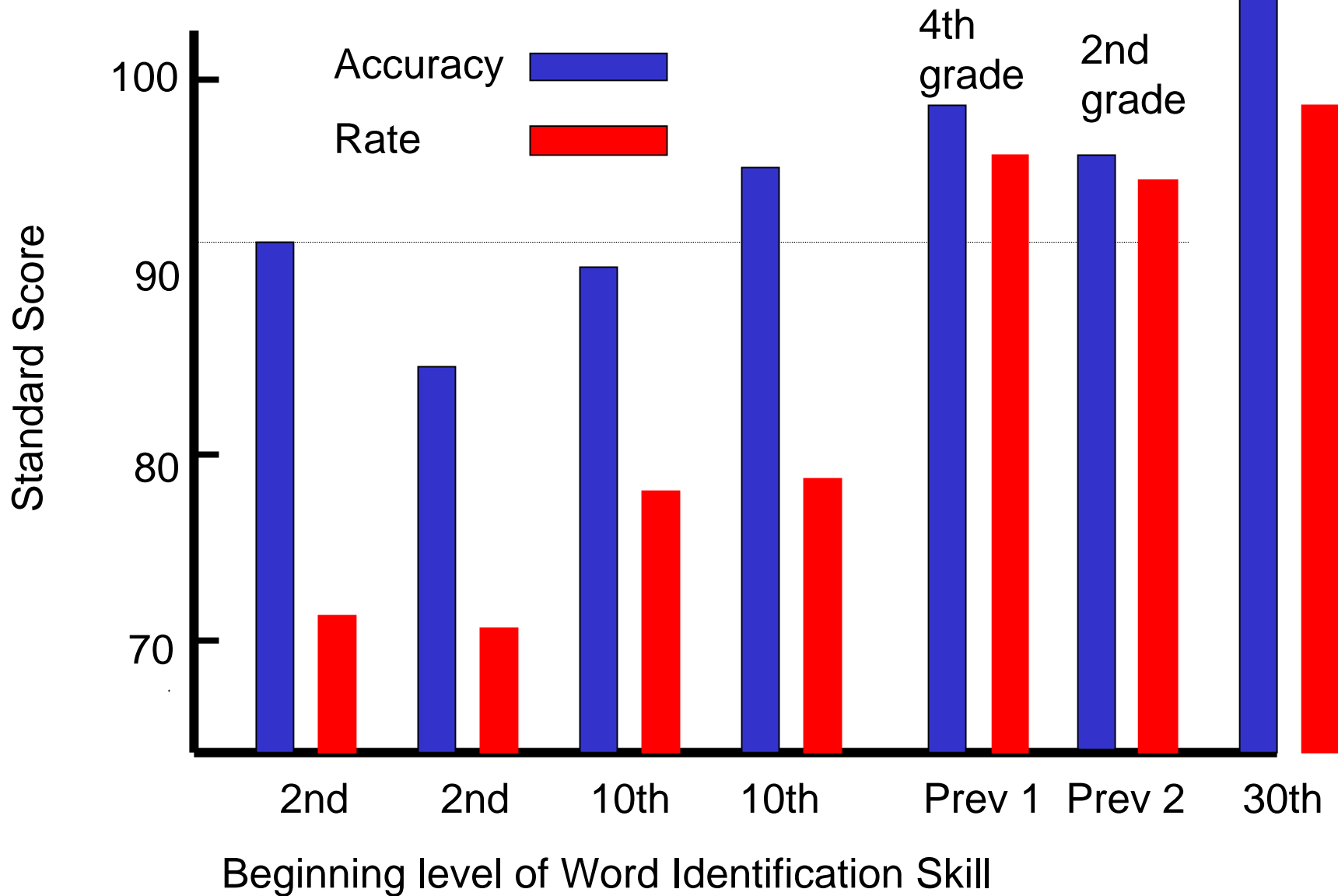
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A very important factor in determining how fluently a child will read a passage involves the proportion of words in the passage the child can recognize by sight

Unless poor readers who have received strong remediation can add words to their "sight vocabulary" at a faster rate than their peers, the "fluency gap" will continue

What happens to accuracy and fluency of reading scores when children receive powerful preventive instruction?

Disparity in outcomes for rate vs. accuracy in remediation and prevention studies



A different model for improving reading skills in middle and high school

Every professional in the school teaches reading/literacy for 45-60 minutes a day

Children with the lowest reading skills are taught in the smallest groups—4-6 students

Instruction is provided to different groups/classes based on need – word level skills, advanced decoding/fluency, comprehension strategies, critical thinking/analysis in reading and writing

Still another model for improving reading skills in middle and high school

Adopt a comprehensive literacy/language arts program like Language! that has been written for older children

Create different classes of 15-20 students based on entering levels of skill

Be prepared to keep most students in this program for 2-3 years

The End