

**Annual Growth vs. Catch  
Up Growth:  
Responding to Instruction  
& Intervention**

# Acknowledgements

The following presentation comes from a knowledge base gained from so many but most specifically, from the following:

- o Thank you to the Kennewick School District in Kennewick, WA for persevering and reaching their 90% goal in 2006 after 11 years of hard work and for the book they wrote to tell us about it.
- o Annual Growth for All Students, Catch Up Growth for Those Who are Behind by L. Fielding, P. Rosier and N. Kerr

# Goals for Today's Session

To better understand:

- o What annual and catch-up growth are
- o Define prescriptive instruction/intervention
- o Overview of the “Reading Brain” - understand that reading depends on language proficiency
- o Define time-on-task (eyeball to eyeball instruction)
- o How much time a struggling reader needs when learning to read

# Thoughts to Ponder

## Reading Statistics

- Too many are not proficient (NAEP), up to 70% of children in high-poverty schools are “below basic,” especially African American, Hispanic and Native American in urban or isolated areas.
- This problem is preventable!
  - If we start early, in pre-K and K-1
  - If we use research-based instruction

# More Thoughts to Ponder

- o The NICHD has characterized reading difficulty as a major public health concern because reading failure is associated with social ills such as:
  - dropping out of school, delinquency, unwanted pregnancy, and chronic underemployment.
  - About 25% of the adult population cannot read with fluency, accuracy and comprehension necessary to read labels, newspapers, schedules or manuals.
  - One out of four individuals is said to be functionally illiterate.

# When We are Prepared as Teachers ... We Can

- o interpret assessments and group children for instruction
- o identify and teach students before they get into big trouble
- o respond to children's errors insightfully
- o make better decisions about programs
- o feel confident about children making annual growth and catch up growth in our classrooms.

# Thoughts to Start Living By

**“Students who are behind do not learn faster than those who are ahead.” - Lynn Fielding**

# The “Tony Story”: Student With a Reading Deficiency

- o Tony will be making “good” growth from the excellent teaching he receives in his 120-minute block. Because seriously struggling students are at risk of falling further behind, we call their achievement of normal annual growth “good” growth.
- o However, “good” or annual growth merely perpetuates Tony’s reading deficiency. Tony must grow at an accelerated rate to erase his three-year deficiency.

- Fielding, Kerr, Rosier (2004)

# A “Happening” Third-Grade Classroom in Alaska!

- o September 2007
  - 67% of students are in Tier III/Intensive
- o Teacher states: “The class would appear as a distortion of the RTI 3-Tier Model, being entirely intensive.
- o The immediacy of their reading needs was met with prompt intervention!”

# What did this teacher do with 67% of her students in Tier III?

- o “We applied scientifically based teaching resources and methods including an:
  - analysis of beginning baseline performance to determine what strategies should be used to remediate or improve their reading deficits.
- o We embraced more intensive instruction since intensive students learn reading skills at a slower rate than others. These readers need at least three times more repetition of the same instruction than an average reader to achieve normal progress (FCRR, 2006).”

# What does a week of Instruction / Intervention look like in this “happening” classroom?

- o Daily 90 minute uninterrupted core instruction reading block in SRA Open Court, entire class
- o Rotating one or two students in and out of a small group for 30 minutes on Monday, Tuesday, & Thursday during Specials with classroom teacher (most highly qualified teacher)
- o Daily 60 minute content instruction (writing & social studies) with reading enhancement
- o Two after school reader’s club meetings for 90 minutes

- o Homework take-home reinforcing core instruction introduced during eyeball-to-eyeball instruction time.
- o In addition, another 65 minutes is allocated for the most intensive students on a rotating basis according to attendance and other factors
- o Use of four adults (one teacher, one counselor, one Migrant Ed., one classroom aide) during core instruction and an additional two adults during interventions, both are teachers. (Note: only one adult has training in the core curriculum as taught by Open Court for her grade level and is orchestrating the instruction implemented by all others)

# How much are they getting?

<b>Core Instruction</b>	90 minutes/5x
<b>#1 intervention</b>	30 minutes/3x
<b>#2 intervention</b>	90 minutes/2x
<b>#3 intervention</b>	65 minutes/1x

**Totals**            275 minutes per day  
                         785 minutes per week

**Average**        157 minutes for the most intense student

# Is this enough for the students at the 12th percentile?

The state standard in percentiles is:

50th percentile

Student's third grade fall percentiles are:

12th percentile

The difference is:

38 points

- Percentile point difference divided by 13 is = 2.9 years

*(a rough rule of thumb is that each 13 percentile points below 50th is one year growth)*

- The students that are most intense, are still 2.9 years behind, in other words, they are in third grade with the literacy skills of typical five-year-olds entering kindergarten

# How do we convert percentiles to daily instruction minutes?

Daily minutes required for annual third grade growth	= 80
Daily minutes required for annual fourth grade growth	= 80
Additional daily minutes to make three additional years of growth	= 240
Total third and fourth grade daily minutes needed for catch-up	<hr/> 400

*Dividing the instructional time equally between third and fourth grade shows that the students need 200 minutes of direct reading instruction in both third and fourth grades to reach the 50th percentile by the end of fourth grade.*

- Fielding, Kerr & Rosier (2004, 2007)

# What happens when you don't start early in the school year?

*IF the students in this “happening” third grade class do not get additional instructional time until November instead of the second week of school in September, they will lose 2/9ths, or 22%, of their intervention time. If they need 200 minutes and the extra 120 minutes begins in November, they then lose an average of 26 minutes a day over the course of the year and continue to be behind.*

Fielding, Kerr, Rosier (2004, 2007)

# What are the kids in the “happening” classroom getting?

- o The students who were most intense were getting 157 minutes on average a day.
- o According to the research, these students need 200 minutes this year and next or they will NOT make “catch-up” growth and be on target by fifth grade.

# Where to begin with intervention: how to prescribe ...

Proficient reading depends on:

- o Phonological awareness
- o Using phonics to decode accurately
- o Recognizing words automatically
- o Knowing what most words mean
- o Constructing meaning: connecting the text with prior knowledge
- o Monitoring comprehension and repairing miscomprehension if necessary

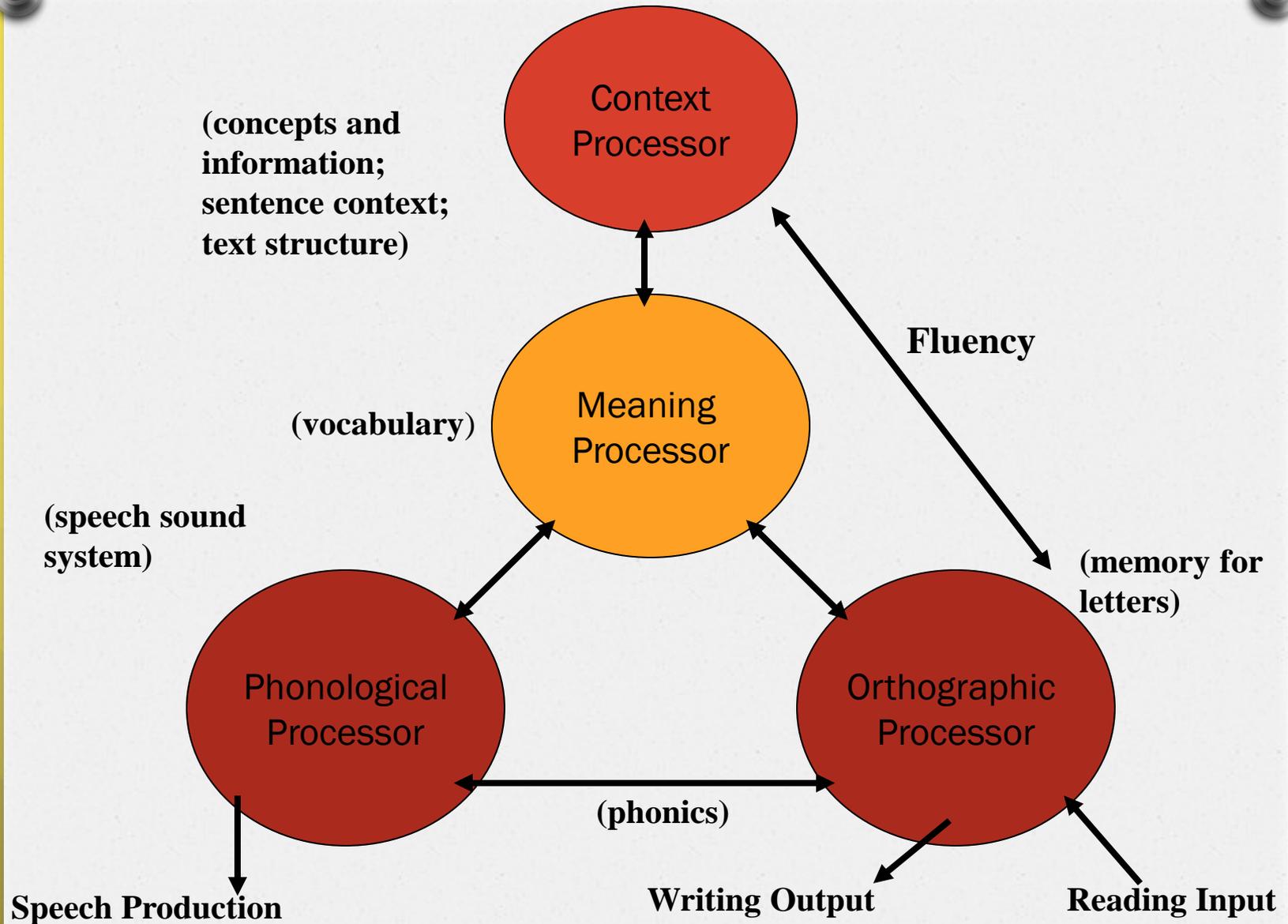
# Skilled Reading

***“ ... skilled readers identify words quickly with little help from context. It is readers of lower skill who rely on context to support word identification.”***

- Rayner, Foorman, Perfetti, Pesetsky & Seidenberg.  
Psychological Science in the Public Interest, 2001

- o What to take home: Good readers know how to decode, we teach them these skills.
- o Pictures enhance comprehension once a child can decode, they do not help a child with decoding skills. These are skills that can be done without pictures at any time.

# Four Part Processing System by Seidenberg & McClelland



# Phonological Processor

- o Phonological processor: generates, sequences and holds the speech sound sequence in short term memory so that letter symbols can be recalled and written
- o It allows us to blend, segment and manipulate sound
- o This processor is all about sound

# Orthographic Processor

- o Recalls the letters and letter sequences in the word to be written
- o This processor holds the memory for parts of letters, puts them together and creates the graphemes we use to write on paper to represent the sounds that the phonological processor identified.

# Meaning Processor

- o Identifies the word's part of speech, meaningful parts (morphemes), language of origin and definition
- o This processor is our mental lexicon, it holds several meanings to a word along with meanings for all vocabulary we use.
- o It is our vocabulary warehouse

# Context Processor

- o It helps identify the word's grammatical role and structure.
- o At this level of processing we are able to choose the meaning of a word that has several meanings because we are able to look at the grammatical role.

# Four Part Processor Activities

## o Phonological

- Tell me the sounds in bird, etc.

## o Orthographic

- What letters represent the sounds we have identified?

## o Meaning

- What is the meaning of the word?

## o Context

- When I put it in a sentence, what grammatical role does the word play?, etc

# Prescriptive Instruction & Intervention

- Now we have the more in depth understanding of the processing that takes place, let's consider what our measurement tools look at and how we might instruct or intervene.

# Bringing It All Together

- o We have talked about annual growth vs. catch up growth
- o We have discussed some real life examples at individual student level all the way to the district level
- o We broke it down into the processing that underlies good reading skills
- o We figured out what our tools are measuring
- o NOW....let's discuss
- o RTI: the framework that we use to provide for instruction and intervention

# What is RTI ?

- o Response to Instruction/Intervention is a systematic approach for meeting the needs of all children.
- o It is a multi-tiered, problem-solving approach that addresses academic and behavioral difficulties of ALL students.
- o It is an integrated school improvement model that is standards driven, proactive and incorporates both prevention and intervention.
- o RTI is effective at ALL levels (Early childhood through High School).

- adapted from Colorado Dept. of Ed

# RTI 3 Tier Model

## Intensive Level / Tier III

Interventions provided to students with Intensive academic needs after comprehensive evaluation.

## Intensive Level / Tier III

Interventions provided to students with intensive/chronic behavior challenges based on comprehensive evaluation.

1-5%

## Targeted Level/ Tier II

Provided to students identified as at-risk and who require specific supports to make adequate progress in general education.

## Targeted Level / Tier II

Interventions provided to students identified as at-risk of academic or social challenges due to behavioral issues.

5-15%

## Universal Level / Tier I

All Students receive research based high quality general education that incorporates ongoing universal screening, progress monitoring and prescriptive assessment to design instruction

## Universal Level / Tier I

ALL students are taught Expectations which are Reinforced and monitored In all settings by all adults. Ongoing use of discipline And other types of data Inform the design of Interventions that are Preventive and proactive.

80-90%

Academics

Behavior

# Statistics

Poor readers at the end of first grade are at very significant risk for long term academic difficulty.

- o 88% probability of being a poor reader in fourth grade if you were a poor reader in the first grade. (Juel, 1988)
- o 87% probability of remaining an average reader in fourth grade, if you were an average reader in the first grade.

# How Will the Constructs of RTI Change Those Statistics?

- o Using scientifically based reading curriculum
- o Providing evidence that the curriculum in use works with the monitoring of data
- o Teaching with high fidelity, data driven reading instruction / intervention
- o Using student performance to determine instruction

# Places to Help You: What is Scientifically Validated?

o Some places that can help you decide what is scientifically validates are:

- [www.fcrr.org](http://www.fcrr.org)

# Places to Find Interventions:

- o [www.interventioncentral.com](http://www.interventioncentral.com)
- o [www.fcrr.org](http://www.fcrr.org)
- o <https://sites.google.com/a/wvde.k12.wv.us/reading-first-information/phonics-lessons>
- o [www.idonline.org](http://www.idonline.org)
- o [www.studentprogress.org](http://www.studentprogress.org)
- o <http://kc.vanderbilt.edu/pals>
- o <http://reading.uoregon.edu>

# Things to Read About Reading

- o Teaching Reading Is Rocket Science (article)
  - American Federation of Teachers website: [www.aft.org](http://www.aft.org)
  - [www.aft.org/pubs-reports/downloads/teachers/rocketsci.pdf](http://www.aft.org/pubs-reports/downloads/teachers/rocketsci.pdf)
- o Whole Language High Jinx (article)
  - [www.fordhamfoundation.org](http://www.fordhamfoundation.org)
  - <http://www.fordhamfoundation.org/foundation/publication/publication.cfm?id=367>

# Things to Read Continued....

- o Annual Growth For All Students, Catch-Up Growth for Those who are Behind (book) by Fielding, Kerr & Rosier
  - [www.readingfoundation.org](http://www.readingfoundation.org)
- o Delivering on the Promise (book) by Fielding, Kerr & Rosier
  - [www.readingfoundation.org](http://www.readingfoundation.org)
- o The 90% Reading Goal (book) by Fielding, Kerr & Rosier
  - [www.readingfoundation.org](http://www.readingfoundation.org)
- o Response to Intervention, A Practical Guide for Every Teacher (book) by Bender & Shores
  - [www.corwinpress.com](http://www.corwinpress.com), [www.amazon.com](http://www.amazon.com)

# Some books about phonics instruction:

- o **Making Sense of Phonics: The Hows and Whys (Solving Problems In Teaching Of Literacy) by Isabel L. Beck**
- o **Words Their Way: Word Study for Phonics, Vocabulary, and Spelling Instruction (4th Edition) (Words Their Way Series) by Donald R. Bear, Marcia Invernizzi, Shane R. Templeton, and Francine**
- o **Word Journeys: Assessment-Guided Phonics, Spelling, and Vocabulary Instruction**

# Vocabulary books:

- o Bringing Words to Life: Robust Vocabulary Instruction by Isabel L. Beck
- o Vocabulary Instruction: Research to Practice (Solving Problems In Teaching Of Literacy) by James F. Baumann and Edward J. Kame'enui

“We never really leave our non-reading children behind. We may forget about them, but we are chained to them socially and economically. Like a ship and its anchor, we must either lift them up or drag them along behind us.”

- Lynn Fielding