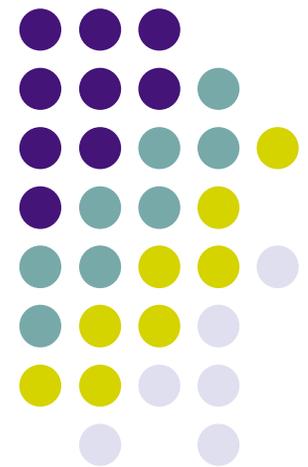# Diagnostic assessment in a tiered system: Who, what, and when?

Katherine Stahl

June 29, 2010

Why did you become a teacher?

- How has teaching exceeded your pre-teaching expectations?

- How and when have you questioned your decision to enter or stay in teaching?

How much is enough?

- How much is too much?

- What types of assessments should we use? CBMs? Standardized? Summative? Informal?

- Can we use DIBELS to inform instruction if we record errors and perform a formal miscue analsyis on those errors?

- Can we use running records as screening instruments and for progress monitoring if we time the reading?

Discussion Web

Yes

Can common assessments be used for screening, progress monitoring and to inform instruction?

No
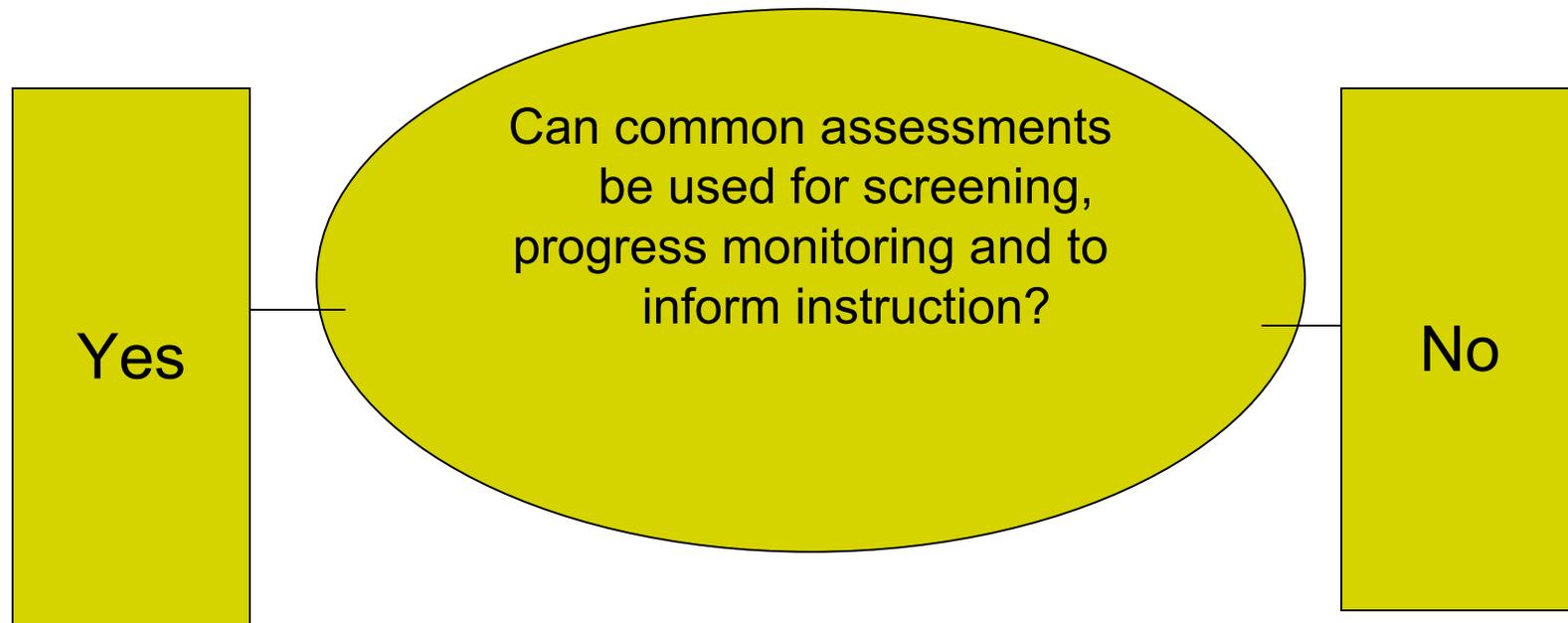
Procedure

- 5 minutes: In pairs develop same number of reasons to support each position (at least 3)

- 10 minutes: In group of 4, share reasons and unanimously choose one position. Develop a written persuasive argument to present to the whole group.

- After all presentations, write an individual position paper with evidence.

What do we want our assessments to do?

- Measure the achievement of students
- Determine student needs
- Trace the student learning trajectory
- Evaluate the effectiveness of instruction

What is the role of assessment in an RTI model?

- A move away from a single snapshot determination to a GROUP PROCESS determination.

- Screening measures are one "indicator" of children who may need additional support in literacy.

- Historically, students had to "fail" for a sustained period before eligible for "special" services.

- Progress monitoring in ALL settings holds the promise of growth for ALL students regardless of context.

Evaluating assessments in an RTI model
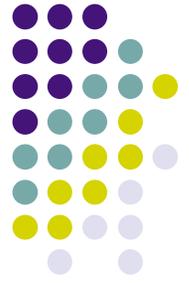
- Psychological tests and CBMs are not designed to inform instruction.

- Often our lowest performing children are operating at frustration levels on CBMs, so it is not a true picture of function.

- While a one-minute measure insures the sensitivity to measure change in a short period of time, they are not specific enough to generate prescriptions for instruction.

Summative Assessments

- Snapshot of a student at a particular point in time to determine that student's performance relative to a standard

- Occur after instruction

- Used to evaluate the effectiveness of programs, achievement of school goals, curriculum alignment, student placement in programs

Examples of Summative Assessments

- State assessments
- District benchmarks
- Unit or chapter tests
- WTW Spelling Inventory Score
- Scores for determining AYP
- Woodcock-Johnson
- Peabody Picture Vocabulary Test
- Wechsler Individual Achievement Test

Formative Assessments

- Provide the information needed to monitor and adjust instruction

- May occur in a variety of formats

- Should inform both teachers and students about ongoing movement toward learning goals
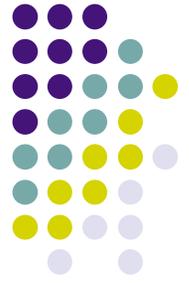
Formative Assessment

- High consequential validity
- May be difficult to separate from instruction because it is used to inform instructional process
- Often teacher constructed
- Students are involved in cyclical process
- Usually diagnostic

Examples of Formative Assessment
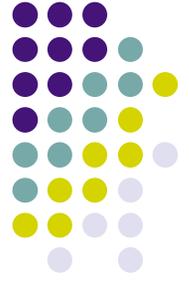
- WTW qualitative stage assessment
- Criteria and goal setting
- Observations/anecdotal records
- Questioning strategies
- Self and peer assessment
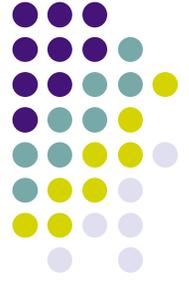- Gray Oral Reading Test

Assessment Consumer Report

- http://www.k12.wa.us/RTI/AssessmentGuide/ FormativeDiagnosticAssessmentGuide.pdf

Three Goals of Reading Instruction

- Comprehension and Learning from text
- Automatic word recognition
- Motivation and Appreciation

Some Specific Functions of Assessment

- Screening
  - Given at beginning of the year to quickly identify children who may need additional help
- Diagnostic
  - An in-depth follow-up to screening
  - Results inform instruction
- Progress monitoring
  - Short measures given throughout the year to make sure all children are developing at an adequate rate
- Evaluation
  - Given at the end of the year to make sure that children made adequate progress

Screening measures

Common measures

- ISAT
- Achievement tests- ITBS, SAT9
- DIBELS
- Mini IRI or running record

Diagnostic Measures

- Extended IRI process
- Developmentally specific tools within each NRP pillar
  - Phonics measures
  - Developmental spelling inventories
  - Think-aloud tasks
  - Retellings, summaries, a range of reading response formats with rubric evaluation
  - Strategy indices
  - Selective vocabulary assessments

Progress Monitoring

- A means of microscopically examining student achievement, tracing individual learning trajectories and evaluating the effectiveness of instruction within a fairly short duration of time

- Focus = achievement level and rate of progress

Requires a comparison of traditional assessments vs. CBMs
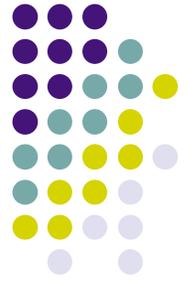
Traditional

- Instructional level running records
- Dolch or Fry List
- % of questions answered correctly
- T-made maze
- Summary or retelling units

CBMs

- DIBELS
- Fuchs Package
- AIMSweb maze

CBMs

- Standardized

- Constant, sensitive measure

- Each weekly test is equivalent

- General outcome = Span the school year

- Fixed time

The primary purpose of reading is to comprehend.

- Automatic word recognition
- Language comprehension
- Intentional strategies used in flexible ways specific to purposes for reading and text

Automatic Word Recognition

- Phonological awareness
- Decoding
- Sight word knowledge
- Fluency
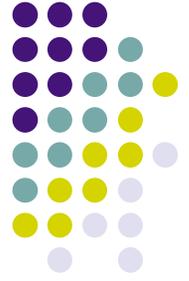
Phonemic Awareness

SCREENING

DIBELS Initial Sound

DIBELS Segmentation

DIAGNOSTIC

Tasks based on NRP

(McKenna & Stahl, p. 98)

Invented Spelling
    (Dictation Task)

Phonological Awareness

- Caution with older students

- Invented spelling can provide insights

- NRP recommends that instruction range from 5-18 hours, certainly no more than a total of 20 hours (6.5 minutes/day)

Decoding

- Become familiar with the stages of decoding and spelling development.

- Use caution-do not overemphasize decoding instruction with older students.

- Differentiate instruction based on individual developmental assessments of decoding and spelling stages.
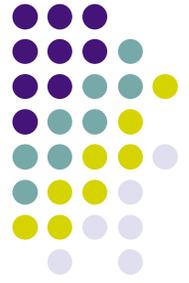
Important stages

Word recognition

- Emergent
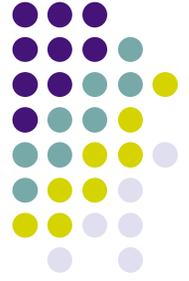- Phonic
- Analogies
- Syllabic
- Morphemic

Spelling

- Emergent
- Letter name
- Within Word
- Syllable & affixes
- Derivational relations

Differentiating Instruction

- Remember, that the NRP findings support explicit and systematic phonics instruction in kindergarten and first grade.

- Children should be taught material at their developmental level-not one size fits all.

- Only diagnostic assessment tells us what those needs are.

- In an RTI model, children in Tier 3 and Special Education should absolutely NOT be placed in a "phonics program." They need individual educational support from a highly trained expert teacher.

National Reading Panel: Phonics Findings

- Phonics instruction can be effective for children with reading problems, but it is most effective in the early grades.

- Phonics instruction did not significantly effect the reading of older children with reading problems, who may not have needed this instruction.
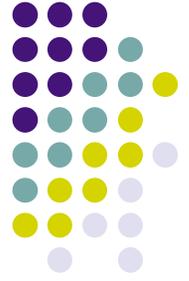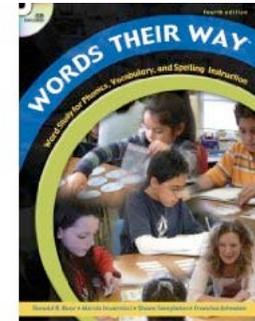
Screening Assessments

- DIBELS
- Letter Naming
- Nonsense Words
- TOWRE Phonemic Decoding
- Woodcock - Johnson Word Recognition

Diagnostic Assessments

- Systematic Phonics Inventories (McKenna/Stahl Inventory)

- Z-Test (McKenna/Stahl)

- Miscue analysis of word lists and connected text reading

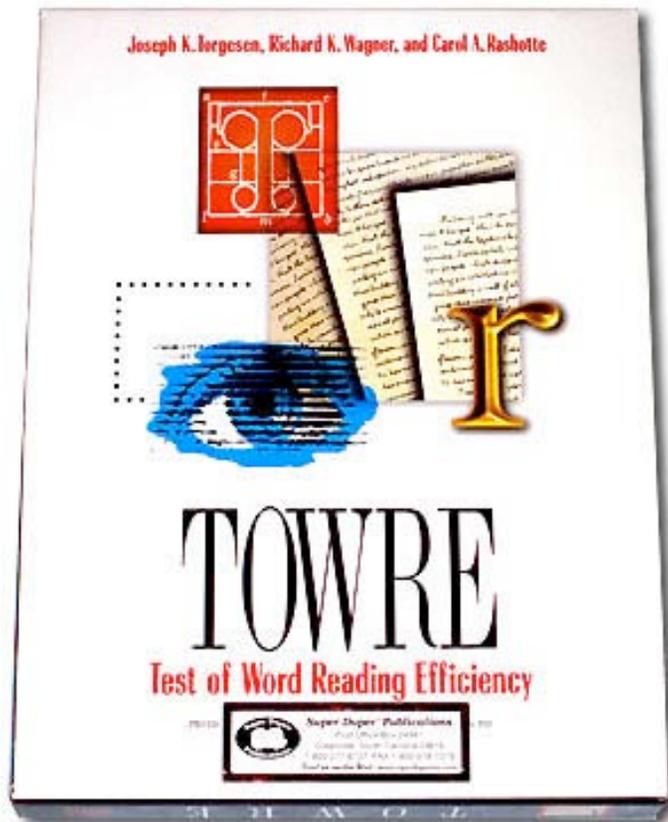- Developmental Spelling Inventory

- *Words their Way*

  (Bear, Invernizzi, Templeton, Johnston)

- *Word Journeys* (Ganske)

Assessments

- Phonological Awareness Tasks
- Phonics Inventory
- Spelling Inventory
- Sight Word Lists
- Multiple Dimensions of Fluency Scale

ASSESSMENT
for READING
INSTRUCTION

second edition

Michael C. McKenna
Katherine A. Dougherty Stahl
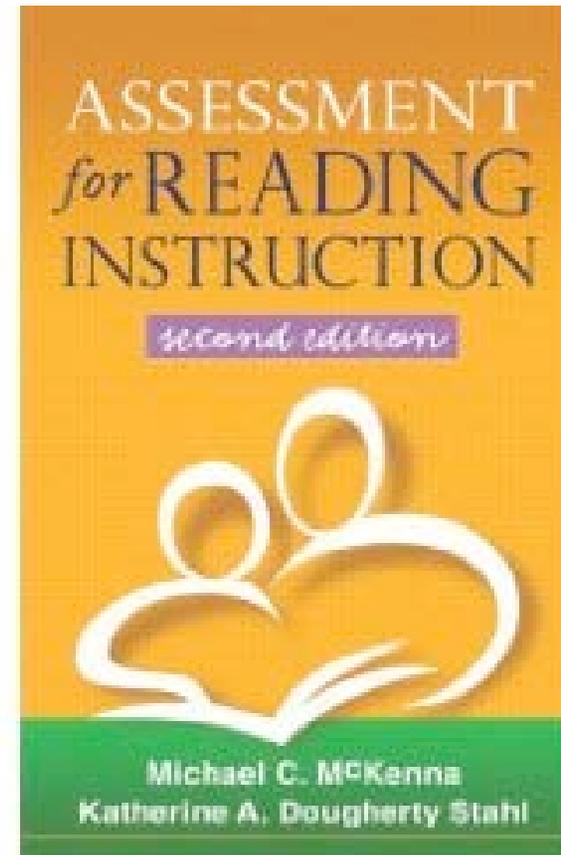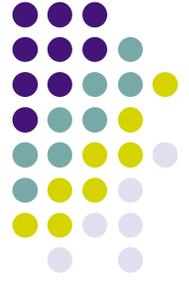
Sight Word Knowledge

- SCREENING
  - TOWRE
  - ORF (only in general way)
- DIAGNOSTIC
  - Fry or Dolch List
- PROGRESS MONITORING
  - Fuchs' Package

More Measures of Fluency

- Timed reading on IRI or other samples of connected text --Words Correct/Minute

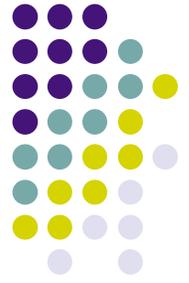- DIBELS (Oral Reading Fluency)-Not retelling/comprehension

Fluency Rate Norms

- 2006 Hasbrouck & Tindal Oral Reading Fluency Data Table

- To raise fluency wcpm, differentiate instruction based on TOWRE, word recognition, and sight word diagnostic information-NOT DIBELS.

- Remember, DIBELS is a screening tool.

Prosody

- Expression, pitch, stress

- Use a prosody rating scale (NAEP or Rasinski & Zutell Multidimensional Fluency Scale) in conjunction with oral reading wcpm score.

- Multidimensional Fluency Scale can be used to inform instruction and is sensitive enough for progress monitoring.

Let's Shift Gears

- Constrained abilities are fairly linear and with instruction children develop mastery within a few years.

- Unconstrained abilities are multidimensional, incremental, context dependent and develop across a lifetime.

Paris, S. (2005). Reinterpreting the development of reading skills. Reading Research Quarterly,40, 184-202.

Continuum: Constrained to Unconstrained Abilities
(Paris, 2005)
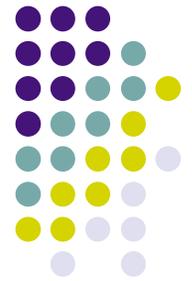
Phonemic Awareness   Fluency   Vocabulary

Phonics   Comprehension

Constrained   Unconstrained

Language Comprehension

- Background Knowledge
- Meaning Vocabulary
- Knowledge of Structure

National Reading Panel: Vocabulary Findings

- Most studies in NRP were conducted in grades 3-6, followed by Pre-K and K.
- Instruction makes a difference in vocabulary learning.
- Standardized assessments only provide global baseline…view results tentatively.
- Teacher-generated assessments that match instruction are recommended. It is critical to use more than a single measure.

Evaluating Vocabulary Measures
(Pearson et al., 2007; Read, 2000; Stahl & Bravo, 2010)
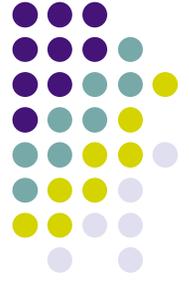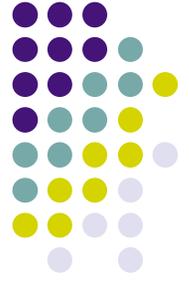
This continua might be used to design and evaluate vocabulary measures.

- Discrete - embedded
- Selective - comprehensive
- Decontextualized- contextualized

Vocabulary and Knowledge
(Stahl & Bravo, 2010)

- Vocabulary Knowledge Rating Scales
- Vocabulary Recognition Tasks
- Anecdotal Notes on Conversations
- Comparative analysis of writing samples
- Cognate charts

Additional Vocabulary Considerations

- If utilizing a multiple choice test, be sensitive to the level of the distractors.

- Be aware of the conceptual load differences by genre.

- Use caution and open-mindedness with ELLs. Be a learner.

- Get comfortable with technology.

- Document conceptual vocabulary development in your class.

Summative Comprehension Measure: IRIs

- Informational and Narrative Forms
- Think-Aloud Opportunities
- Good reliability and validity ratings
- Decent form to form consistency
- More difficult and time consuming to administer
- Threshold indicator: One of the most powerful and useful diagnostic tools

# School-wide Formative Comprehension Assessment

- Instructionally embedded
- Multiple choice questions
  - Individual texts
  - Cross texts
- Written Response to Reading
  - Position taken in response to the prompt question
  - Support from personal experience
  - Support from texts

Common Instructional Texts

(Stahl, Garcia, Bauer, Taylor, & Pearson, 2006)

- Create a school culture

- Benchmark assessment, used 2 to 3 times per year

- Scored in PD sessions, across classrooms and across grades
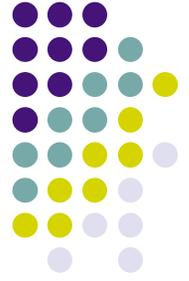
Progress Monitoring

- AIMSweb or other commercially produced Maze measures

- Retelling rubrics that consider both idea units and story grammar elements (Be discriminate, this is time-consuming)

Strategy Interviews

- Burke Reading Interview-Perceptions and purposes of reading
- Index of Reading Awareness (Jacobs & Paris)
- Textbook Interview

Affective factors

- Journals
- Questionnaires
- Attitude Surveys

- Uninterested
  - Expand student choices
  - Use Book Series
  - Add a social aspect
  - Model enthusiasm
- Poor Decoding
  - Use assisted reading
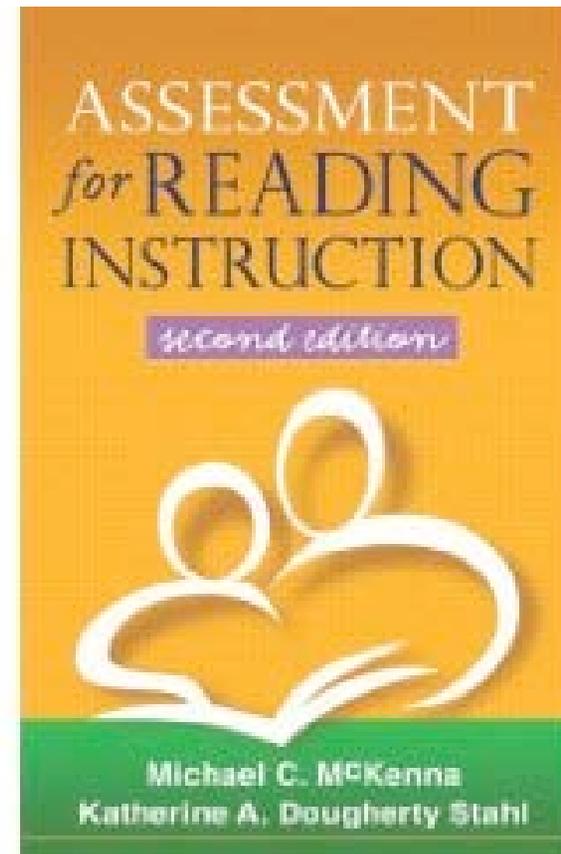
Hypertext and New Literacies

- Coiro & Dobler, 2007, RRQ,42, 214-257.

- Usage, reading in website context, reading in search engine context

More Assessments

- Wordless Picture Book Task
- Strategy Interviews
- Interest Inventories
- Survey of R/W in varied media
- Hypertext abilities

Step One: List & Discuss

- The instruments that you use for each category
- How you currently use each piece of data to inform:
  - Grouping
  - Instruction
  - Summative Evaluation
- What progress monitoring tools do you use to monitor and adjust classroom instruction?
- ADD: How is this info shared in meaningful ways to ALL people involved with each child?

Assessment Survey

	Grade Level ____
Concepts About Print	
Phonological awareness	
Dev. Of Word Rec.	
Spelling Development	
Reading Fluency	

Assessment Survey

	Grade Level ___
Conceptual Vocabulary	
Comprehension	
Hypertext/Internet Facility	
Writing Process	
Motivation/attitudes	
Study Skills	

Assessment Survey

Assessment	Function

Step 2: Who does what?

- Plan at the school level
- Provide for transparency
- Provide for comprehensiveness
- Conduct on-going training and reliability check-ups
- Build in time for data sharing meetings
- Everyone is included; all voices are valued
- **Adjust** the plan as needed over time

Develop a plan on paper.

- See "AssessTiers" or "A Tiered Model of Assessment Roles"

Developing a Tiered Model of Assessment Roles

	Tier 1	Tier 2	Tier 3 and Sp. Ed.
Screening			
Instructional Directives			
Progress Monitoring			
Diagnostic			
Other			

Difficult Conversations

- Training
  - Based on school needs assessment, what kind of PD is needed and for whom.
  - All teachers may not need deep knowledge of all assessments. Consider assessment overview PD for all and separate administration PD for few.
  - Since special ed. teachers are teaching children who need individualization, knowledge of "programs" is inadequate.

Difficult Conversations

- Transparency
  - Planned data sharing for every single child in Tier 2 and Tier 3 with classroom teacher, literacy specialists and special education teachers with others as periodic visitors/viewers.
  - Remember, this is important. Data will be used to determine instructional status.

# Difficult Conversations

What do you believe?

- Can "those kids I love" ever really reach achievement and progress standards?

Literacy Clinic Progress
(Total 23 hours over 12 week period, *N*=12)

| Skill	Average Gains
Reading Accuracy Instructional Level	1.5 grade levels
Reading Comprehension Instructional Level	1.36 grade levels
DRA (optional)	5.6 text levels
Words Their Way Power Score (Words Correct)	3.5
Words Their Way Feature Score (Spelling Features)	7.9
Words Their Way Developmental Stage	1.5
Sight Word Recognition Percentile	14.3
Phonemic Decoding Percentile	16.4
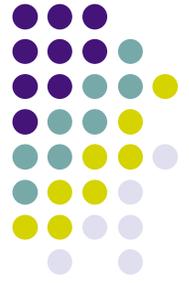
Who were the children?

- 12 students from Grades 1-11
- 7 students already had qualified for special education, but their parents were concerned about lack of progress or their Special Ed teachers identified the kids as not responding to instruction
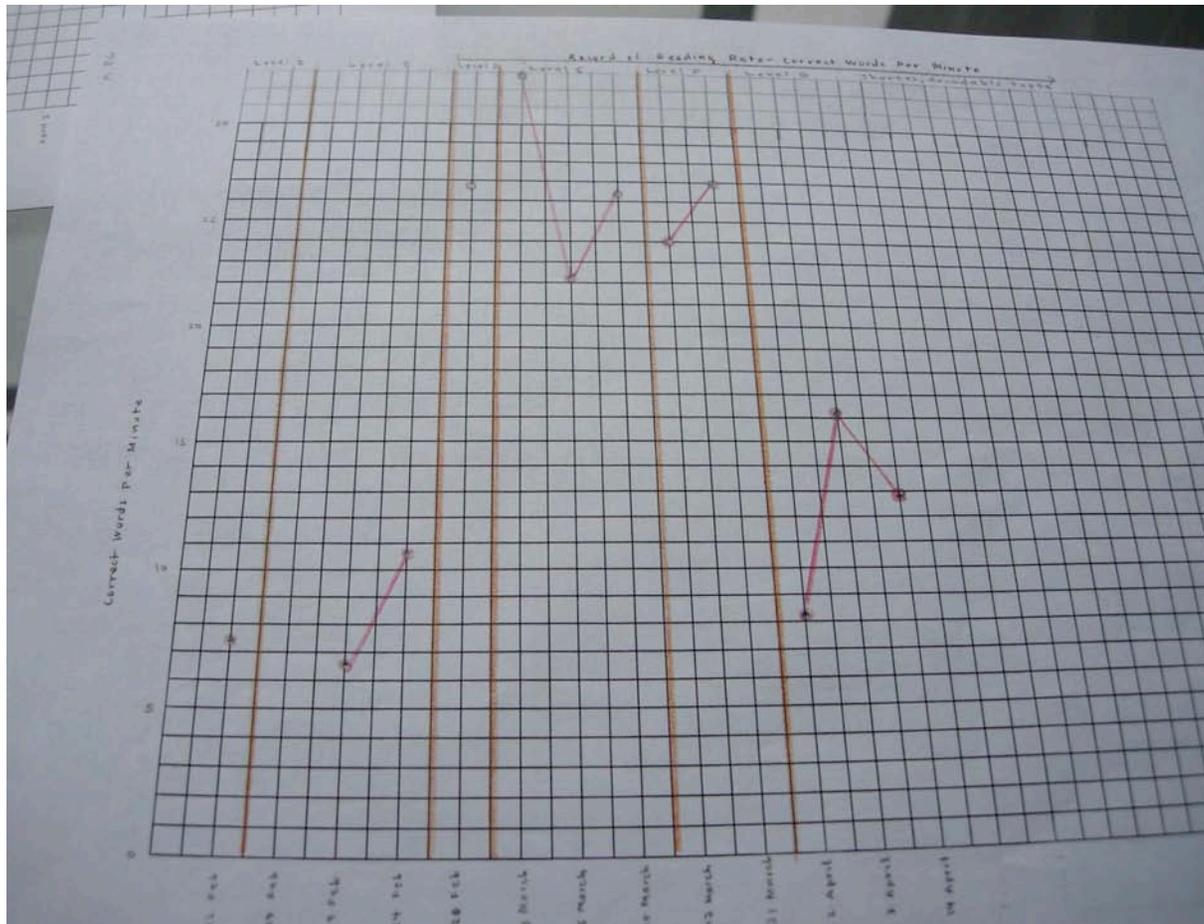- Younger children were at risk for retention

What Did We Do?

- Individualized-NO PROGRAMS!!!!!
- Common assessments and particular diagnostic assessments.
- Targeted 2-3 priorities of need
- 50% time explicit instruction and practice in specific need, 50% reading connected text
- Followed by Progress Monitoring

Book Level

High Frequency Words
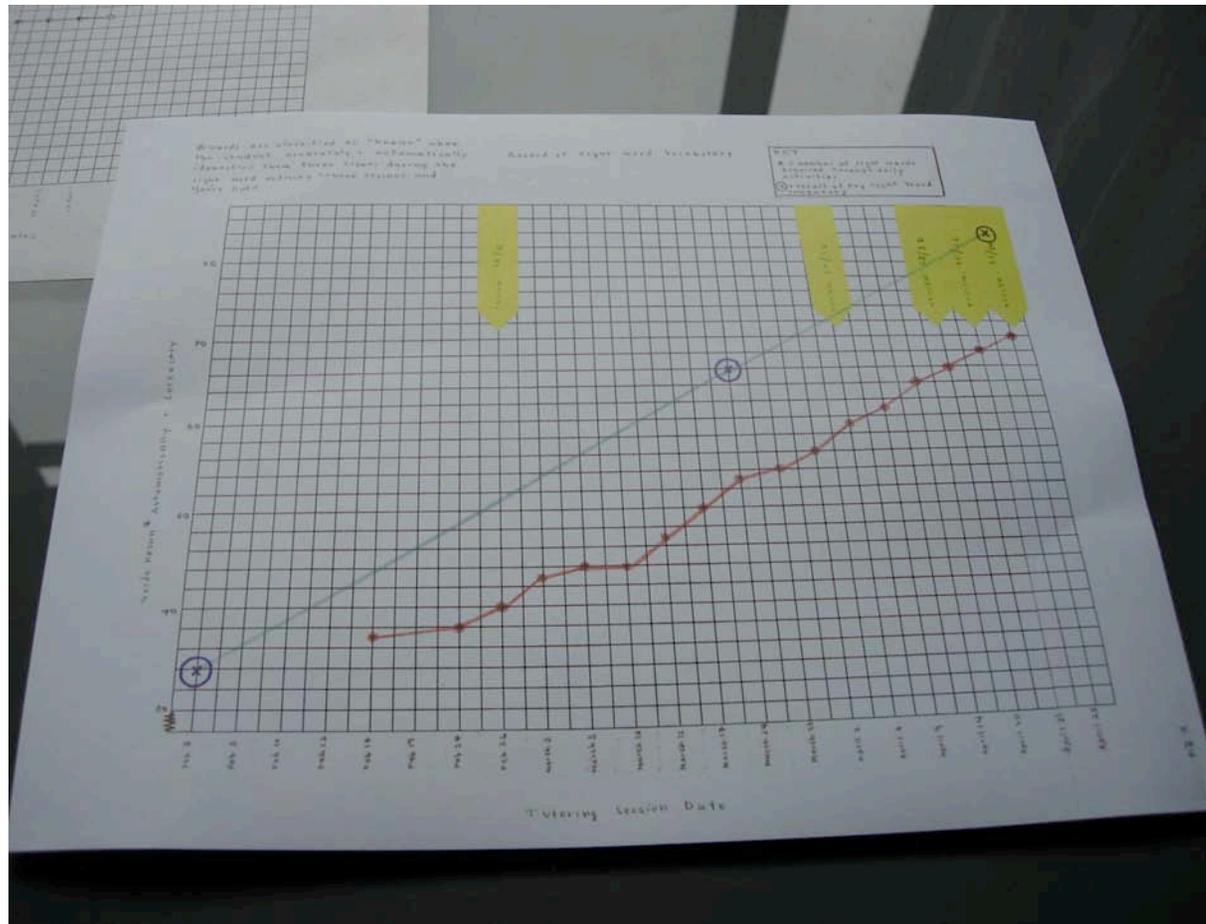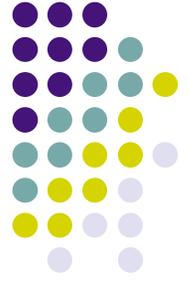
Fluency on Leveled Text
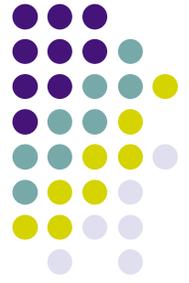
Clinic Case Studies: Amari
First Grader

	February	April
DRA Ins Level	4	10
TOWRE-SWE	16th %	45th %
TOWRE-PDE	36th %	55th %
ESI	12/56	19/56
Stage	ELN	LLN

Case Study: Beltran
Third Grader

	February	April
QRI Ins Level	Grade 2	Gr 4: Expos Gr. 5: Narr
TOWRE	73rd %	77th %
TOWRE	45th %	48th %
ESI	15/25 words Syllable/Jun	21/25 words Derivative
Written Response	34 words	385 words

Fall in love with data

- Use it to help you know your students
- Use it to help you become the teacher that you intended to be…the joyful, fulfilled teacher who your students need and…
- Become that teacher who policymakers, administrators, and researchers want to clone, but don't quite know how.
- You know that teacher…you are that teacher!