## The Texas Center for Learning Disabilities

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University of Texas- Austin:
Reading for SUCCESS

The Texas Center for Learning Disabilities (TCLD) investigates the classification, early intervention, and remediation of learning disabilities.

## Project 3:

Remediation of Older Students with Reading Difficulties:
Response to Intervention through Classroom Instruction and Interventions

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## Participants

- 7 Middle Schools 2006-2007 Academic Year
- Diverse sample: full range of ethnicities, lunch status, school placements (special ed, etc.)
- At-Risk Process:
- Those failing prior years' TAKS/SDAA on first attempt.
- Cut-point is Lexile associated with the TAKS cut-off
- includes "bubble" kids
- Not at-risk sample selected from those passing TAKS.



## Tier I

- All students
- Ongoing professional development for all content area teachers
- Application of reading strategies to assist students in comprehending content area instruction provided in the general education setting
- Assessments to screen students and plan instruction


## Tier I Intervention

| Content | Training focusing on reading <br> components (word study, vocab., <br> comp., fluency) essential to reading <br> success across content areas |
| :--- | :--- |
| Time <br> Involvement | One 6hr intro PD <br> Study teams (typically <br> interdisciplinary) met once a month <br> throughout year (approx 9 times) |
| Coaching | Research team trainers provided in <br> (lass coaching as requested during <br> spring semester |

## Tier II

- Intervention for students struggling with reading
- Provided in addition to content area instruction

Instruction designed to accelerate student reading achievement

## Tier II Intervention

- Approximately 45-50 minutes daily
- Class size 1:15

Word analysis/phonics, vocabulary, text reading, comprehension, fluency, spelling

## Tier II Intervention Content

- Phase 1: Decoding/Advanced word study emphasis
- Phase 2: Vocabulary/Comprehension Emphasis in social studies text and novel units
- Phase 3: Application of strategies to independent level text (science, social studies, narrative)


## Tier II Intervention Teachers

|  | Total \# of <br> teachers | Avg. yrs <br> teaching <br> experience | Background <br> /Degree | Teaching <br> certification |
| :--- | :--- | :--- | :--- | :--- |
| 6th Grade Tier <br> II (Austin and <br> Houston) | 9 | 14.2 (range <br> $2-39$ yrs) | All had <br> undergrad <br> degree; 7 <br> had Master's <br> in education <br> related field | 7 had <br> teaching cert. <br> in reading or <br> reading- <br> related field <br> such as ELA |

## Alignment of Key Skills and Strategies in Tier I and Tier II

- Strategy for decoding multisyllabic words
- Introduction of relevant vocabulary words using Frayer model
- Generating Questions while reading
- Main Idea/Summarizing


## Tier III Intervention: Year 2

- Approximately 45-50 minutes daily
- Small group instruction (1:5)
- Word analysis/phonics, vocabulary, text reading, comprehension, fluency, spelling,
- Strong attitude/motivation component
- Emphasis on meeting weekly time criteria dedicated to specific reading components based on student need


## Individualized Placement: Subgroups within Individualized Classes

| Score | Type of Reader | Instructional <br> Focus |
| :--- | :--- | :--- |
| $>94$ Word <br> Attack | Average word <br> reader | Vocabulary and <br> comprehension <br> with advanced <br> word study |
| $<95$ | Below average <br> word reader | Intensive word <br> study |

## Individualized Placement

|  | Word <br> attack | Word <br> ID | Pass. <br> Comp | GRADE <br> read. <br> comp | TOWRE <br> sight <br> word | TOWRE <br> phon. <br> Decod. | TAKS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| G1 |  |  |  |  |  |  |  |
| S1 | $\mathbf{1 1 5}$ | 93 | 86 | 89 | 91 | 86 | 2019 |
| S2 | $\mathbf{1 2 3}$ | 109 | 92 | 92 | 98 | 102 | 1947 |
| G2 |  |  |  |  |  |  |  |
| S3 | 88 | 82 | 83 | 92 | 85 | 97 | 1750 |
| S4 | $\mathbf{8 1}$ | 78 | 82 | 92 | 89 | 80 | 1822 |

## Individualized Conceptual Framework Time Requirements

## Group 1:

- 50 minute periods (weekly):
- Vocabulary/Morphology: 35-45 minutes
- Comprehension/Text Reading: 170-180 minutes
- Attitude/Motivation: 15-25 minutes

Group 2:

- 50 minute periods (weekly)
- Word Study/Text Reading: 100-110 minutes
- Vocabulary/Morphology: 35-45 minutes
- Comprehension/Text Reading: 70-80 minutes
- Attitude/Motivation: 15-25 minutes


## Tier III Intervention: Individualized

- Individualized protocol: instructional procedures and practices implemented with adaptations and accommodations to respond to individual student needs

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Consider:
-Cycling Strategies
-Level of support (I do, We do, You do)
-Time components
-Responsiveness to Instruction
-Data from CBMs (ever other week)
-PM data
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## Individualized Conceptual Framework Persistence and Relentlessness

- Precision teaching with dynamic assessment and instruction
" "Teaching on purpose"
- Be reflective and responsive
- Ask yourself: "What does this data mean about what/how I have been teaching this child?"


## Lesson Components and Materials

- Scope and sequence
- Materials- research based reading components/strategies, expository and narrative text, manipulatives, resource books


## Individualized Conceptual Framework: Word Study

- Instructional model:

1. Teach Word Study technique
2. Apply in sentence
3. Apply in paragraph

- Incorporate fluency when necessary


## Individualized Conceptual Framework: Word Study

## Word Study / Text Reading

Date: $\qquad$ Period: $\qquad$ Time allotted: $\qquad$

| Teach the Concept | Time: |  |
| :--- | :--- | :--- |
|  | notes, materials |  |
| Apply Concept to Sentences | Time: |  |
|  |  | notes, materials |
| Apply Concept to Text | Time: |  |
|  |  | notes, materials |

## Individualized Conceptual Framework: Fluency

- Teachers use a variety of methods to improve fluency:
- Sound and phrase fluency
- Connected text fluency: repeated reading and wide reading


## Individualized Conceptual Framework: Morphology

- The bridge between word study and vocabulary
- Breaking words into their meaningful parts
- Learning and analyzing word parts
- Multiple meaning words


## Individualized Conceptual Framework: Vocabulary

- Should be all about word consciousness
- Keep clunk list during text reading AND clunk fix up strategies
- Examples and non-examples
- Don't spend a lot time introducing wordsteach or tell them necessary words (Tier 3 words)


## Individualized Conceptual Framework: Comprehension

- Don't talk about strategies (limited "teacher talk"):
- "Get on the slopes!"
- Activate Prior Knowledge (Teachers should incorporate automatically-don't spend a lot of time on it)
Comprehension should be linked to text reading
3 main strategies: Question Generation, Get the Gist/Main Idea, Summarization


## Individualized Conceptual Framework: Question Generation

- Level 1: "Right There"
- Level 2: "Putting it Together"
- Level 3: "Making Connections"


## Individualized Conceptual Framework: Get the Gist and Summarization

- What is the most important person, place, or thing in this section?
What is the most important idea about the person, place, or thing?
Write the information in a sentence that contains 10 or fewer words


## Individualized Conceptual Framework: Comprehension

Recommended Sequence:

- -Question Generation: What, who, when, where, (5 weeks)
- Get the Gist/Main Idea and weave in question generation (3 weeks)
- -Question Generation: how or why and compare/contrast (5 weeks)
- -Get the Gist/Main Idea with Question Generation to build to summarization (5 weeks)


## Individualized Conceptual Framework: Attitude/Motivation

- Support student autonomy!
- Monthly conference:
-Involve students in academic goal setting
-Discuss steps to achieve goals
-Allow students to chart their own progress
- Positive phone calls home



## Individualized Conceptual Framework: Student Progress and Lesson Modification

- Use scope and sequence of research based strategies to guide instruction
Lesson modification and decisions to progress are based on data and teacher judgment.
- Teachers decide mastery and have to justify decisions (based on work samples, CBM results and CBM informational guide, and observations)


## Lesson Plans and Decision Making:Sample Lesson Plan

| Monday | Tuesday |  | Wednesday |  | Thursday |  | Friday |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vocab./Morphology <br> (10 min.) <br> Whole Group <br> -Text: expository passage related to novel -intro key words -ex./non-ex., tell tier 3 words | Vocab./Morphology <br> ( 10 min .) <br> Whole Group <br> -Intro/model Frayer Model with clunk words from day 1: 1 as model; 1 by themselves |  | Comp./Text Reading <br> ( 25 min .) <br> Whole Group <br> -QuickReads: each pair gets gist of their passage and clunk log -Groups shares and comes up with main idea of whole passage |  | Vocab./Morphology <br> ( 10 min .) <br> Whole Group <br> -Review Frayer model |  | Vocab./Morphology <br> ( 15 min .) <br> Whole Group <br> -Morphology work: sort word parts (incorporate clunk cards) |  |
| ```Comp./Text Reading (35 min.) Whole Group -Intro passage: Chapter 4``` | Comp./Text Reading (35 min.) Group 1 only independent -Read again and clunk $\log$ -Get the Gist and weave in questioning | Word Study/Text Reading (35 min) Group 2 only with teacher -WS technique: Syllable division -WS technique in sentences -WS technique in paragraphs -Read whole passage | Comp./Text Reading (20 min) Group 1 only -New passage and repeat above | Word Study/Text Reading (20 min) Group 2 only with teacher -WS practice: Syllable division | Comp./Text Reading <br> (20 min.) <br> Whole Group <br> -Chapter 5 and 6 main idea of <br> whole passage |  | Comp./Te <br> xt <br> Reading <br> (30 min.) <br> Group 1 <br> only <br> -Read <br> expository <br> text related <br> to novel <br> and do <br> clunk $\log$ | Word Study/Flu ency <br> (30 min.) Group 1 only with teacher |
| -Read passage <br> -Intro strategy: Get the <br> Gist (weave in questioning and clunks) |  |  |  |  | Comp./Text Reading (15 min.) Group I only -Generate questions for chapters | Word Study/Text Reading ( 15 min .) Group 2 only with teacher |  |  |
| Attitude/Motivation (5 min.) Whole Group | Attitude/Motivation (5 min.) Whole Group |  | Attitude/Motivation (5 min.)Whole Group Whole Group |  | Attitude/Motivation (5 min.) Whole Group |  | Attitude/Motivation (5 min.) <br> Whole Group |  |

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vocab./Morphology <br> (10 min.) <br> Whole Group <br> -Text: novel -intro key words -ex./non-ex, tell tier 3 words. | Vocab./Morphology <br> (5 min.) <br> Whole Group <br> -Review words from <br> Monday <br> -Review clunks | Vocab./Morphology <br> (15 min.) <br> Whole Group <br> -Frayer model with clunk words |  | CBM: <br> (15 min.) Whole Group <br> -Get the Gist of a paragraph <br> -Who, what when, where questions <br> -Clunks <br> --WS concepts: Morphology or syllabication |  | Vocab./Morphology <br> (15 min.) <br> Whole Group <br> -Morphemic Analysis with clunks |  |
| Comp./Text Reading <br> (35 min.) <br> Whole Group <br> -Review Get the Gist <br> -Read Chapter 7 (partner reading) <br> -Get the Gist with partners and share -Do clunk log | Comp./Text Reading <br> (40 min.) <br> Whole Group <br> -Read chapter 8 and Get the Gist in partners <br> -Do clunk log <br> -Get the gist questions | Comp./Text Reading (30 min) Group 1 only -Give supplemental related expository text and do same routine | Word Study/Text Reading (30 min) Group 2 only -Word Study Concept: Syllabication -WS Concept in Sentences |  |  | Comp./Text Reading (15 min.) Group 1 only -Anita Archer game "Would a $\qquad$ be a $\qquad$ ?" with clunks with teacher | Word Study/Text Reading <br> ( 15 min .) <br> Group 2 only with teacher <br> Directions/modelin g for independent WS activity |
|  |  | as Tuesday | -WS Concept in paragraphs | Comp./Text Reading (35 min.) Group 1 only -Read chapter 9 with partners and at end of each paragraph do a Get the Gis $t$ | Word <br> Study/Text <br> Reading <br> (35 min.) <br> Group 2 only with teacher <br> -Read chapter 9 | Comp./Text Reading (15 min) Group 1 with teacher -Review game | Word Study/Text Reading (15 min.) Group 2 only independently |
| Attitude/Motivation (5 min.) Whole Group | Attitude/Motivation (5 min.) <br> Whole Group | Attitude/Moti Whole Group | tion (5 min.) | Attitude/Moti Whole Group | tion (5 min.) | Attitude/Moti Whole Group | $\text { ion }(5 \mathrm{~min} .)$ |

## Lesson Plans and Decision Making: CBM <br> CBM EXAMPLE GROUP 1

1. Read pgs. 56-57 of The Watsons go to Birmingham. As you read, record your clunks below:
2. C hoose one of your clunks above and tell which fix-up strategy you used to figure out the meaning of the clunk
3. W rite a get the Gist Statement for page 56-57
4. C ontinue to think about what you just read. Choose 3 of the following question stems and generate questions about pg. 56-57.

What ?
Who ?

When
Where ?
5. Break down each word into its morphemes. The first one is done for you:

Governorship govern + or + ship
Fortunately
Massively
Endurance
Pleasantly
Helpfully

## Individualized Conceptual Framework: CBM Informational Guide

- Concepts taught
- What/How did I teach?
- M=mastered
- E=emerging
- D=deficient
- Next steps/modifications


## Lesson Plans and Decision Making: CBM Informational Guide

CBM INFORMATIONAL GUIDE

| Concept | Identifying clunks and fix up strategies | Get the Gist | Question generation: Who, what when, where | WS/Morphology Group 1: breaking words into morphemes Group 2: underlining/dividing syllables | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jose | E | M | E-needs when? | D |  |
| Maribel | M | M | M | E |  |
| George | E | M | E-needs when and where? | D |  |
| Cody | E | E | M | E |  |
| Jorge | D | E | E-needs when and where? | D |  |
| What/How did I teach? | -Clunk Log (independently and together) -Frayer model with clunk words <br> -Morphemic <br> Analysis with clunks | -Get the Gist with paragraphs, chapters (with novel and supplementary text), whole group and with partners | -Weaved in with getting the gist -whole group | -Sort word parts incorporating clunks -underlining <br> syllables, <br> -WS concepts in sentences, paragraphs |  |
| Next Steps/ Modifications | -review and practice clunk fix up strategy -Practice identifying appropriate fix up strategiesadd to clunk log- clunk + id strategy used | -Group 2 needs practice with Get the Gist | -More focus on question generation (specifically when and where) | -Re-teach breaking words into morphemes -Re-teach syllabication rules |  |

## websites

- http://www.texasIdcenter.org
- http://www.centeroninstruction.org
*Interventions for Adolescent Struggling
Readers: A Meta-Analysis with Implications for Practice
*Academic Literacy Instruction for
Adolescents: A Guidance Document from the Center on Instruction


## Year 1 Results

(Completion of Tier I and Tier II only)

## P3 6th Grade Participants Year 1

$3416^{\text {th }}$ grade struggling readers

- 203 students received Tier II Treatment in addition to Tier I
138 students served as a struggling reader comparison group and received Tier I only
- 250 Typical readers


## Preliminary Analyses

- Age was negatively related to all measures at both pretest and posttest (even on standard scores)
- Site was a relevant factor at both pretest and posttest for most measures; performances in smaller site (Austin) generally higher than those in the larger site (Houston)
- The factors of age and site, where relevant, were included as covariates along with pretest when analyzing posttest results
$6^{\text {th }}$ Grade Decoding and Word Reading

| Measure | Group | Pre | Post | P |
| :---: | :---: | :---: | :---: | :---: |
| WJ-III Letter Word ID | Tier I $\mid(n=110)$ | $\begin{aligned} & 91.82 \\ & (13.5) \end{aligned}$ | $\begin{aligned} & 93.44 \\ & (13.3) \end{aligned}$ | . 11 |
|  | Tier II $\mid(n=198)$ | $\begin{aligned} & 92.49 \\ & (12.0) \end{aligned}$ | $\begin{aligned} & 95.51 \\ & (12.3) \\ & \hline \end{aligned}$ |  |
|  | Typical ( $n=223$ ) | $\begin{aligned} & 106.22 \\ & (12.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 107.31 \\ & (12.3) \\ & \hline \end{aligned}$ |  |
| WJ-III Word Attack | Tier I ( $n=109$ ) | $\begin{aligned} & 96.34 \\ & (11.0) \\ & \hline \end{aligned}$ | $\begin{aligned} & 96.06 \\ & (9.7) \\ & \hline \end{aligned}$ | $0006 .$ <br> (Typical > Tier II > Tier I) |
|  | Tier II ( $n=197$ ) | $\begin{array}{r} 95.72 \\ (10.5) \\ \hline \end{array}$ | $\begin{aligned} & 97.81 \\ & (10.8) \\ & \hline \end{aligned}$ |  |
|  | Typical $\mid(n=223)$ | $\begin{aligned} & 103.74 \\ & (10.4) \end{aligned}$ | $\begin{aligned} & 105.65 \\ & (11.6) \end{aligned}$ |  |

## 6th Grade Comprehension

| Measure | Group | Pre | Post | p |
| :---: | :---: | :---: | :---: | :---: |
| GRADE | $\begin{aligned} & \text { Tier I } \\ & (n=115) \end{aligned}$ | $\begin{aligned} & 87.42 \\ & (9.2) \\ & \hline \end{aligned}$ | $\begin{aligned} & 87.19 \\ & (8.3) \\ & \hline \end{aligned}$ | . 06 |
|  | $\begin{array}{\|l} \hline \text { Tier II } \\ (n=211) \end{array}$ | $\begin{aligned} & 89.14 \\ & (9.4) \end{aligned}$ | $\begin{aligned} & 88.64 \\ & (8.5) \end{aligned}$ |  |
|  | $\underset{(n=238)}{\substack{\text { Typical }}}$ $\mid(n=238)$ | $\begin{aligned} & 100.87 \\ & (11.4) \end{aligned}$ | $\begin{aligned} & 101.21 \\ & (12.3) \end{aligned}$ |  |
| WJ-III Passage Comp | $\begin{aligned} & \hline \text { Tier I } \\ & (n=107) \end{aligned}$ | $\begin{aligned} & 87.13 \\ & (10.6) \\ & \hline \end{aligned}$ | $\begin{array}{r} 87.45 \\ (10.6) \\ \hline \end{array}$ | .0001 (Typical > Tier I and Tier II) |
|  | Tier II ( $n=195$ ) | $\begin{aligned} & 87.73 \\ & (9.2) \end{aligned}$ | $\begin{aligned} & 89.06 \\ & (9.3) \end{aligned}$ |  |
|  | $\begin{array}{\|l\|l\|} \hline \text { Typical } \\ (n=221) \end{array}$ | $\begin{aligned} & 99.25 \\ & (9.8) \end{aligned}$ | $\begin{gathered} 100.18 \\ (9.7) \end{gathered}$ |  |

## 6th Grade Fluency and Comprehension

| Measure | Group | Pre | Post | p |
| :---: | :---: | :---: | :---: | :---: |
| TOSRE | $\begin{aligned} & \text { Tier I } \\ & (n=115) \end{aligned}$ | $\begin{aligned} & \hline 84.71 \\ & (11.8) \end{aligned}$ | $\begin{aligned} & 89.97 \\ & (12.8) \end{aligned}$ | $\begin{aligned} & \text {. } 0001 \\ & \text { (Typical > Tier } \\ & \text { I and Tier II) } \end{aligned}$ |
|  | Tier II ( $n=210$ ) | $\begin{array}{r} 86.61 \\ (10.3) \\ \hline \end{array}$ | $\begin{aligned} & 92.57 \\ & (13.3) \\ & \hline \end{aligned}$ |  |
|  | $\underset{\substack{\text { Typical } \\(n=236)}}{ }$ ( $n=236$ ) | $\begin{aligned} & 99.81 \\ & (12.4) \end{aligned}$ | $\begin{aligned} & 109.01 \\ & (16.8) \end{aligned}$ |  |
| AIMSweb Mazes | $\begin{aligned} & \hline \text { Tier I } \\ & (n=115) \\ & \hline \end{aligned}$ | 14.87 (6.0) | 24.09 (8.6) | .008 (Typical $>$ Tier I and Tier II) |
|  | Tier II ( $n=210$ ) | 15.92 (6.5) | 25.14 (9.4) |  |
|  | Typical ( $n=237$ ) | 23.24 (8.5) | $\begin{array}{r} 33.89 \\ (10.5) \\ \hline \end{array}$ |  |

## 6th Grade Posttest Results



## Summary of Results

No significant posttest differences between Typicals, Tier I, or Tier II on letter word identification, or GRÁDE comprehension

- Typicals outperformed Tier I and Tier II at posttest on WJ-III word attack and passage comprehension, AIMSweb mazes, and TOSRE (however no differences in slope between groups on mazes or TOSRE)
- Tier II outperformed Tier I at posttest on WJ-III word attack
- Instructional time was positively related to word attack performance of students in Tier II
- Group size was negatively related to word attack performance of students in Tier II


## What is RTI with Secondary Students?

Is it likely to contribute to diagnosis?

- How might it influence Tier I instruction?
- How might it influence Tier II instruction?
- How might it influence Tier III instruction and/or special education?






