TEXAS CENTER for LEARNING DISABILITIES

The Texas Center for Learning Disabilities

University of Houston:
Jack M. Fletcher, PI; David Francis (P1, Core B)

The University of Texas- Austin:
Sharon Vaughn, Co- PI, PI P2,P3 with Jade Wexler; Greg Roberts (Core C)

The University of Texas- Houston:
Andrew C. Papanicolaou (P4);
Carolyn Denton(P2)

Florida State University: Jeanne Wanzek (P3)

www.texasldcenter.org

Reading for success

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

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Teaching Older Students with Reading Difficulties and Disabilities: How Do We Do RTI?

Sharon Vaughn and Jade Wexler

The University of Texas

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Objectives

- Initiate a comprehensive research program that explicitly integrates research on instructional, neurobiological, and cognitive factors that underlie alternative approaches to the classification of LD, focusing on RTI.
- Learn about effective interventions (P2, P3) in the context of classification studies (P1) and neurobiological studies (P4).

Texas Center for Learning Disabilities

Project 1 (Classification)	David Francis- UH
Project 2 (Early Intervention)	Carolyn Denton-UTH
	Jack Fletcher- UH
Project 3 (Remediation)-	Sharon Vaughn- UTA
Project 4 (Magnetic Source Imaging)	Andrew Papanicolaou-UTH
Core A (Administrative)	Jack Fletcher – UH
Core B (Quantitative)	David Francis – UH
Core C (Dissemination)	Greg Roberts- UTA

(Amy Barth, Paul Cirino, Jennifer Hooker, Jenifer Juranek, Terri Kurz, Deborah Reed, Melissa Romain, Karla Stuebing, Jeanne Wanzek, Jade Wexler)

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Project 3:
Remediation of Older Students with Reading Difficulties: Response to Intervention through Classroom Instruction and Interventions

PI: *Sharon Vaughn*

Jack Fletcher, Carolyn Denton, David Francis, Greg Roberts, Jeanne Wanzek

Jade Wexler, Paul Cirino, David Francis, Melissa Romain, Amy Barth

Year 2: Specific Aims

- Examine response of students to more intensive interventions over time
- Vary systematically whether students in more intensive interventions respond to standard or individualized intervention protocols
- Identify and describe the response to intervention of various subgroups of students

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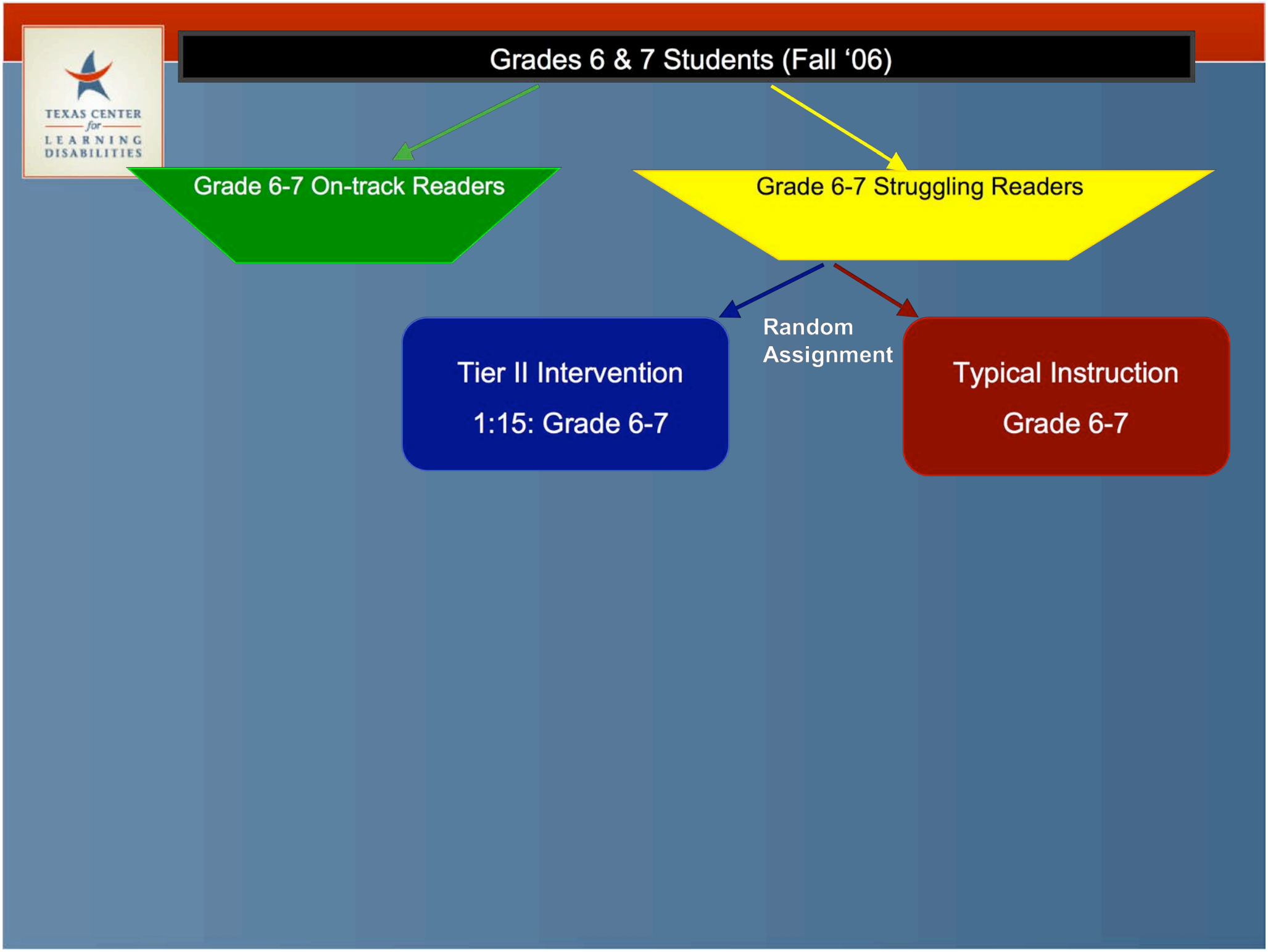
Grades 6 & 7 Students (Fall '06)

Grade 6-7 On-track Readers

Grade 6-7 Struggling Readers


TEXAS CENTER for LEARNING DISABILITIES
Grades 6 & 7 Students (Fall '06)
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Random Assignment
Tier II Intervention
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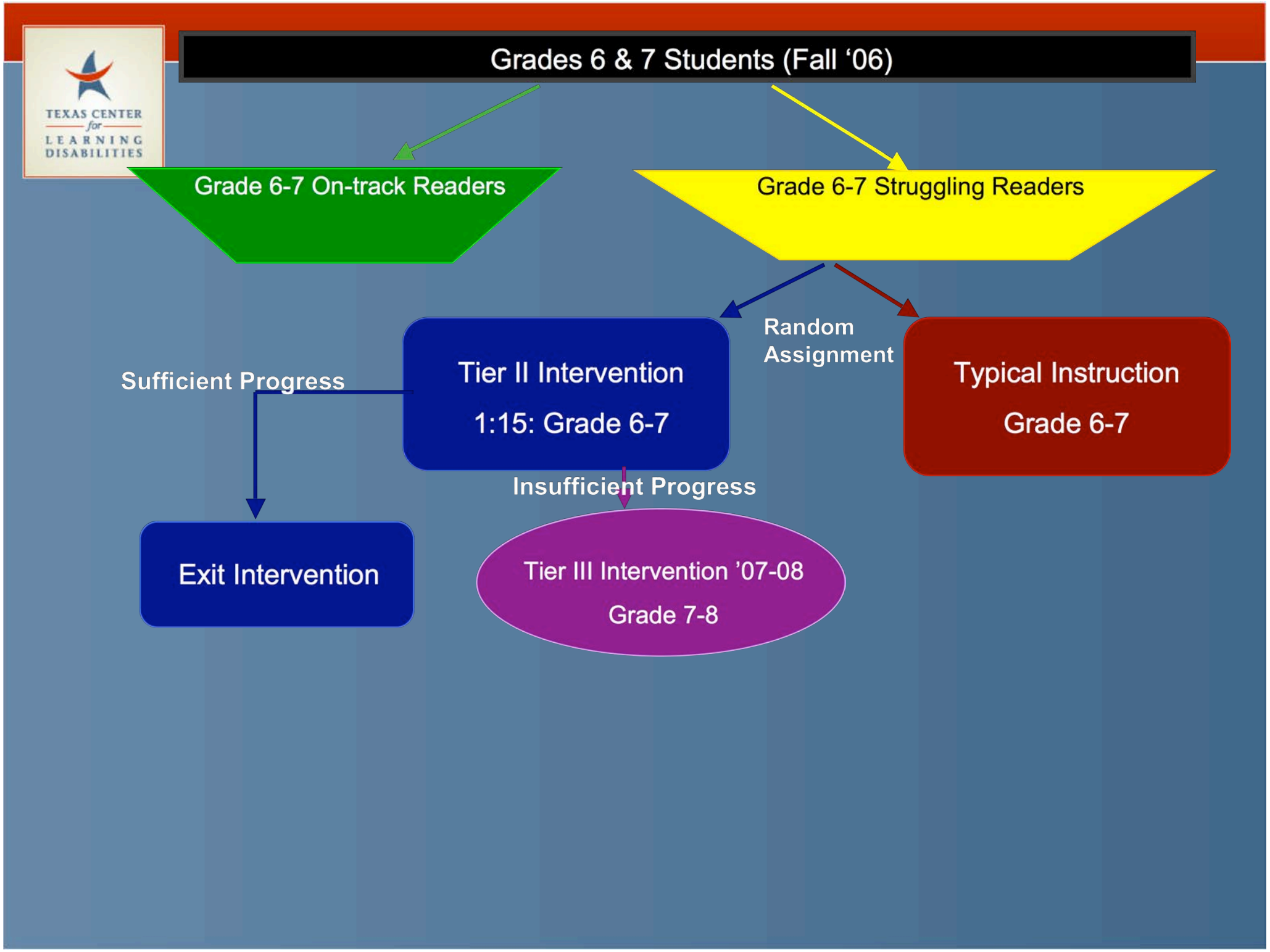
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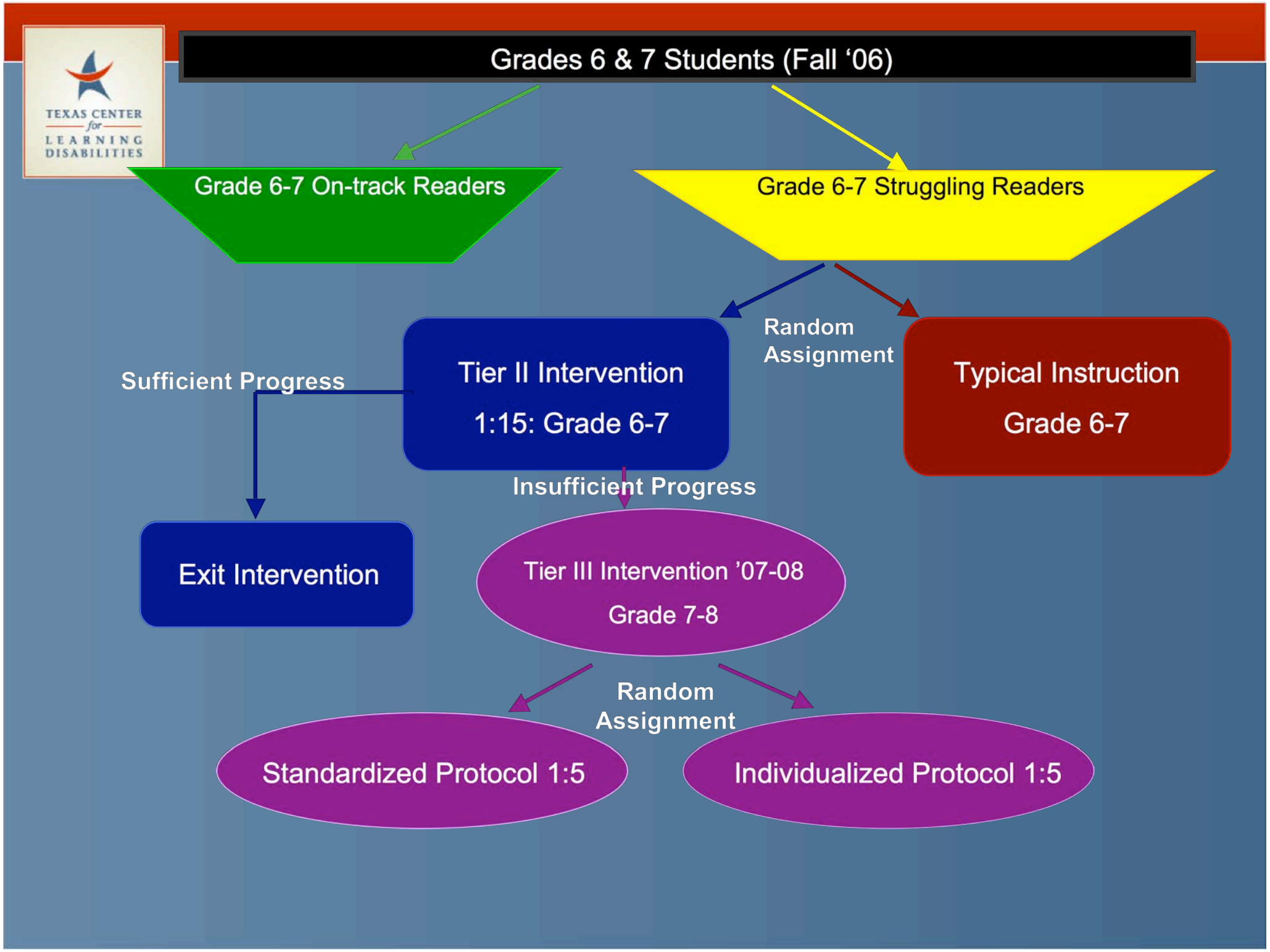
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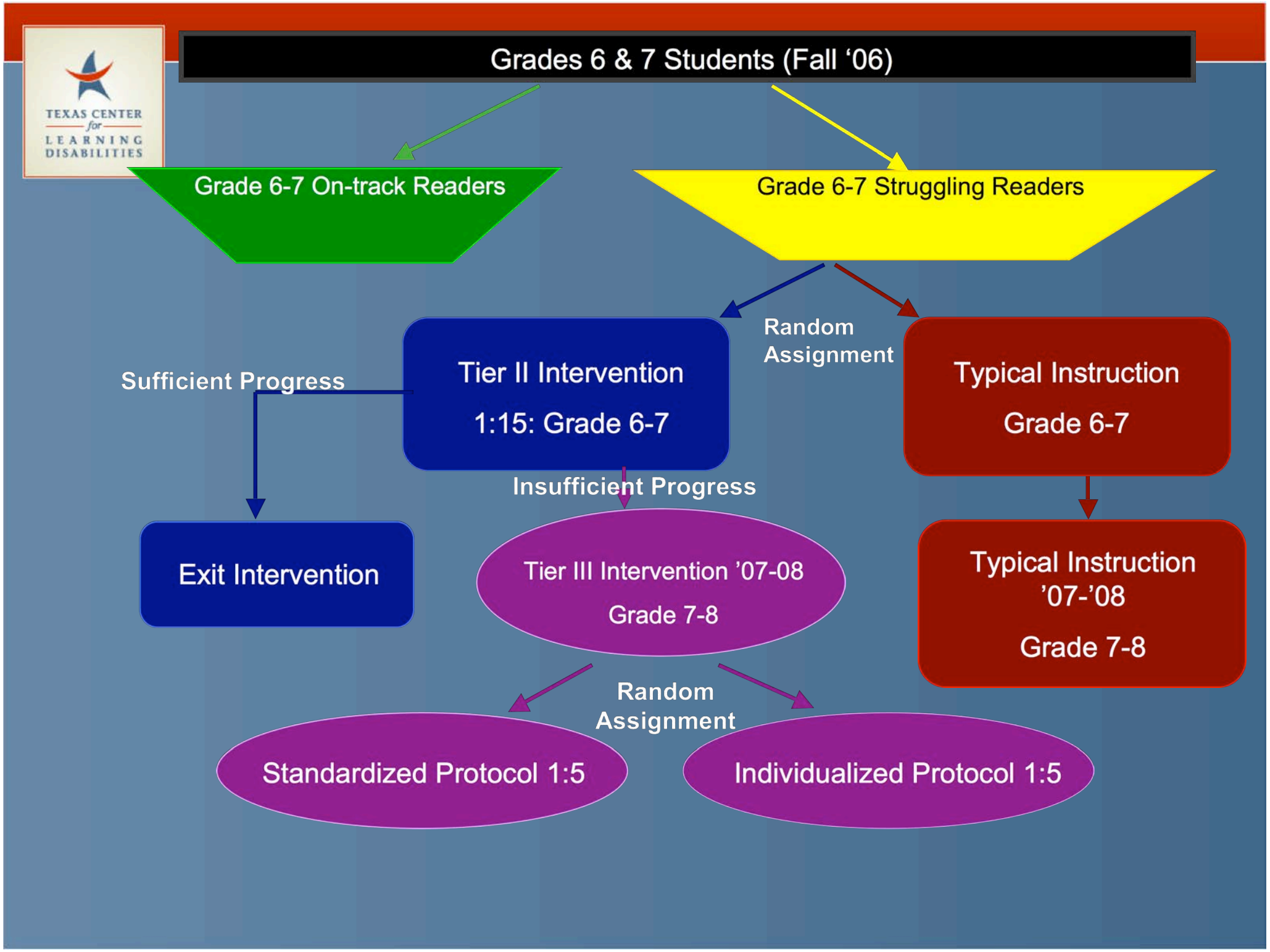
Individualized Protocol 1:5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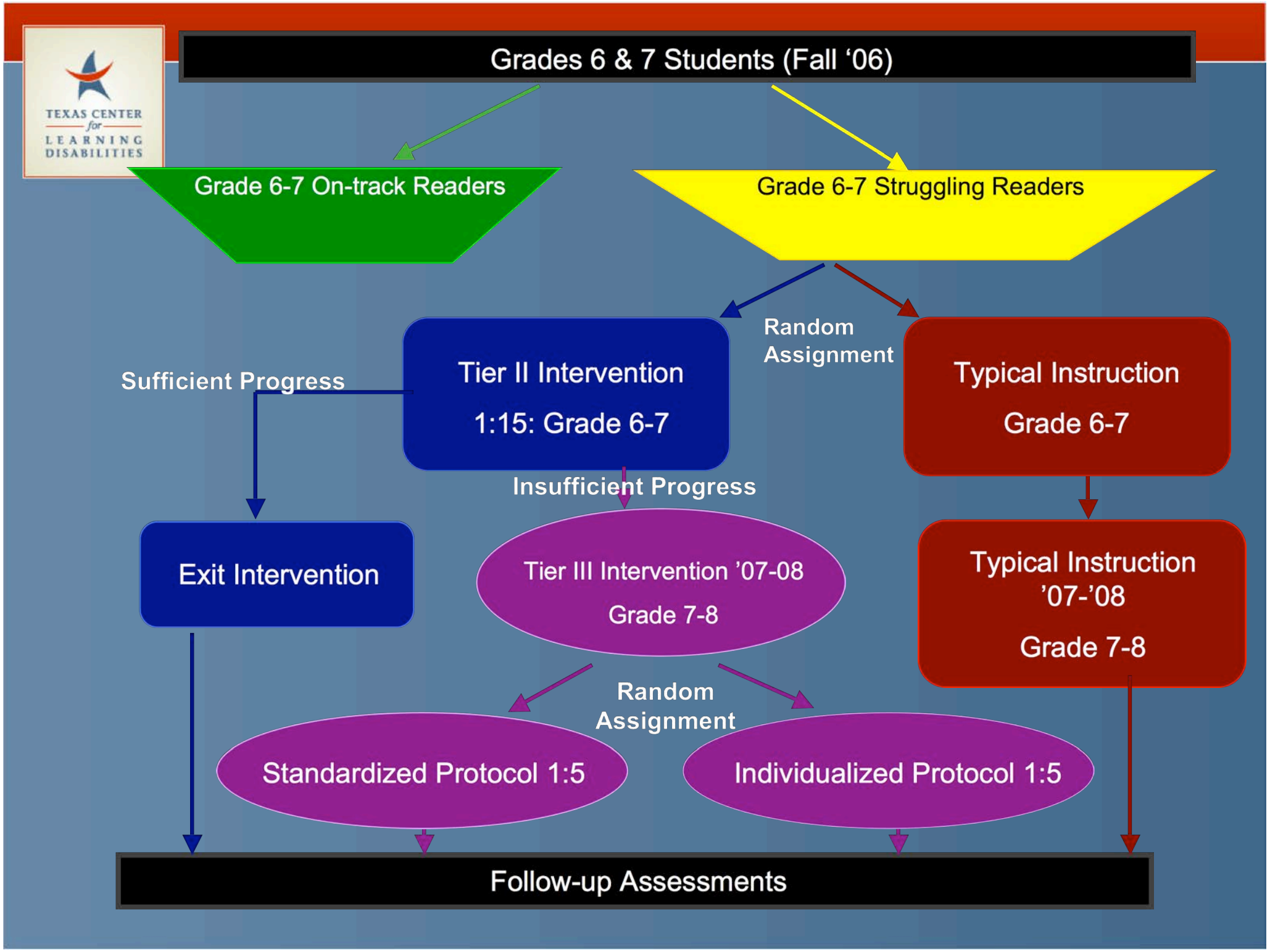
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Follow-up Assessments

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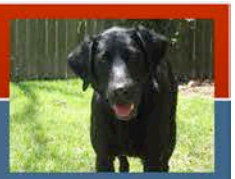
YEAR 2



Tier III Intervention: Year 2

- Students who minimally responded to Tier 2 in Year 1 were randomly assigned to standardized or individualized protocol
  - Standardized protocol: highly specified procedures and practices for implementing intervention (same phases as year 1)
  - Individualized protocol: instructional procedures and practices implemented with adaptations and accommodations to respond to individual student needs
- Approximately 45-50 minutes daily
- Small group instruction (1:5)

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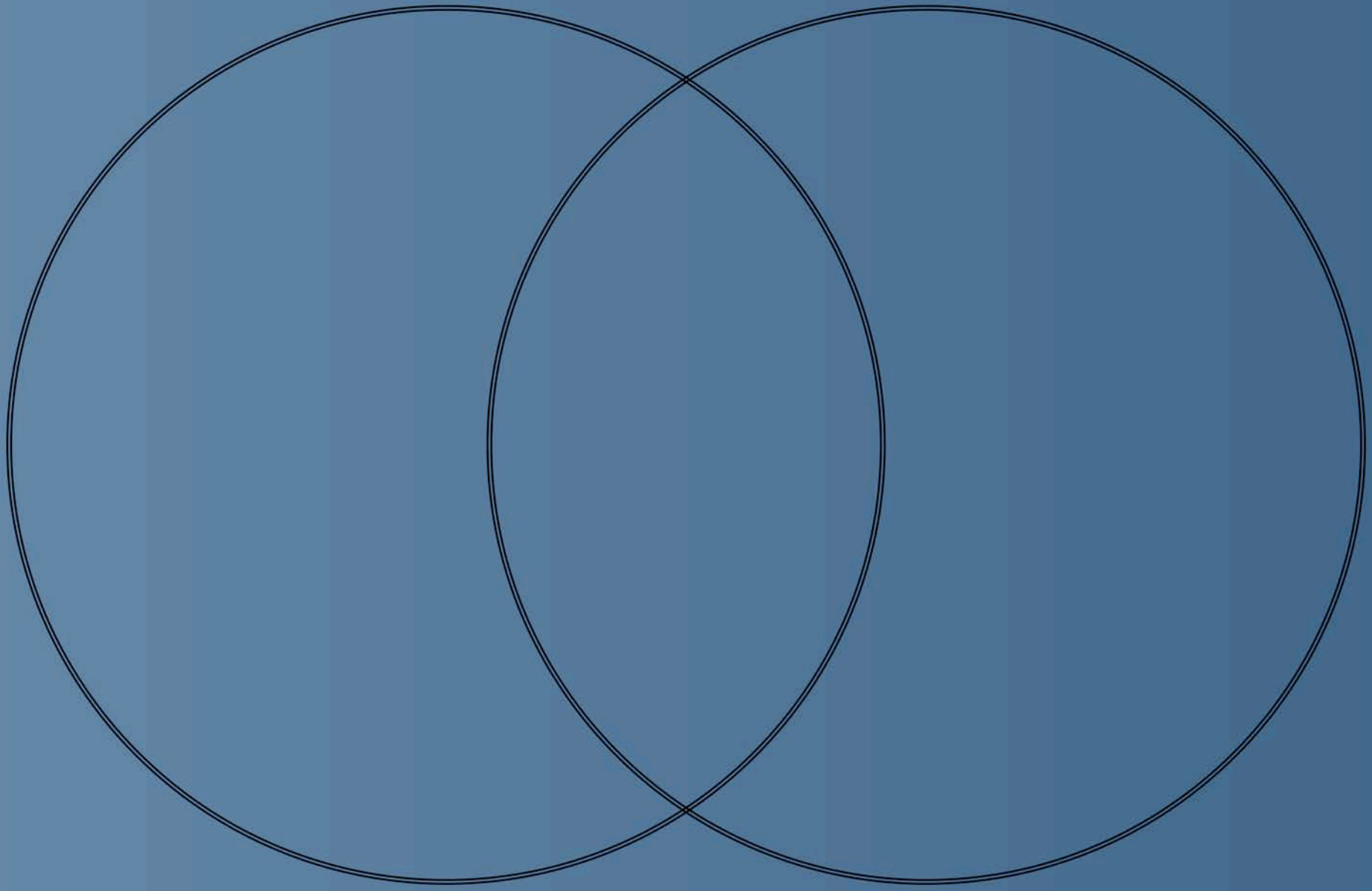
Tier III Intervention: Year 2



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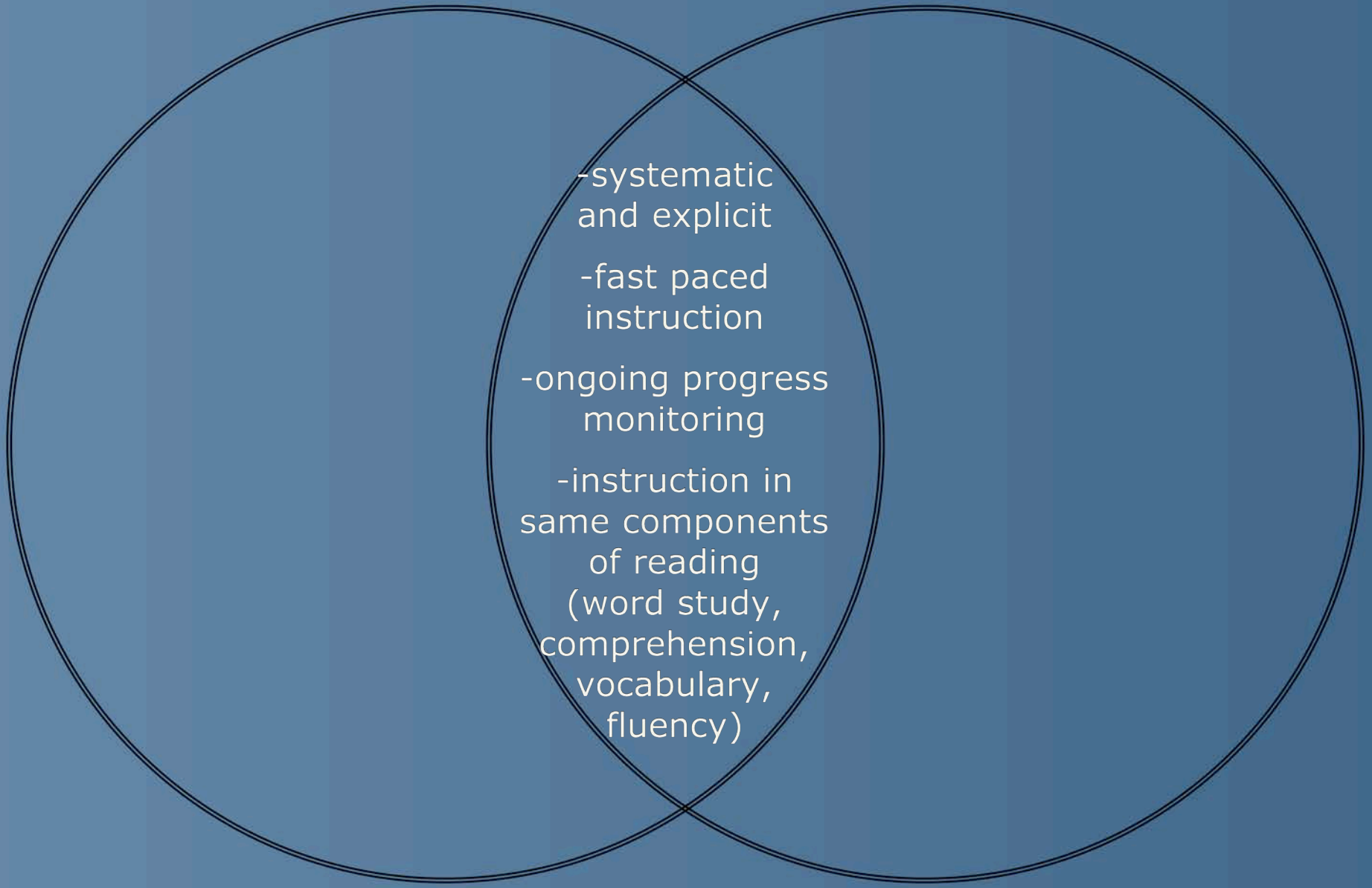

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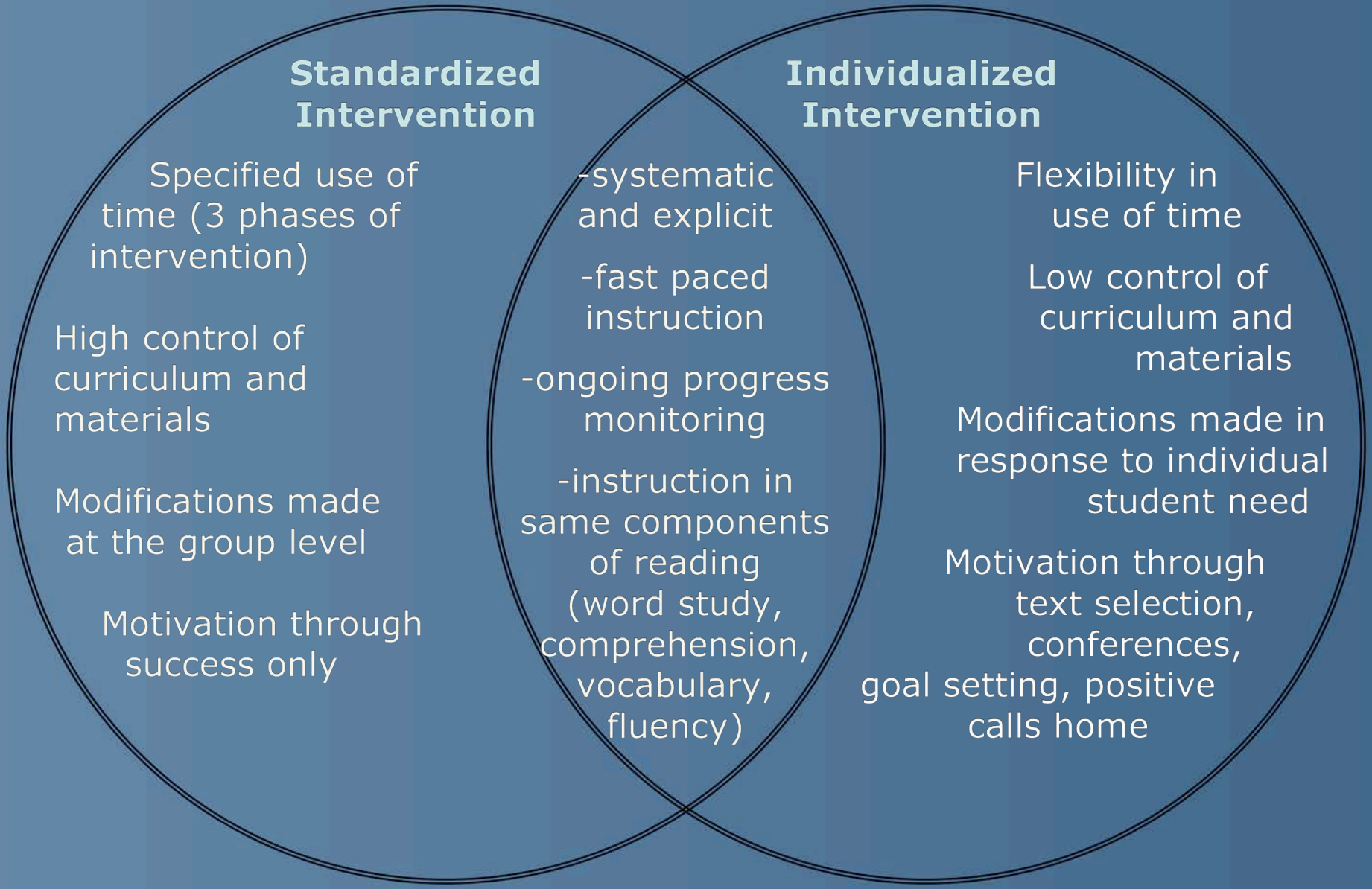

Standardized Intervention Phases

Phase 1 (approx 5 weeks)	Phase 2 (approx 13-15 weeks)	Phase 3
Decoding/ Advanced Word Study Fluency: Repeated reading or wide in peer pairing arrangement	Vocabulary/ Comprehension Emphasis in social studies and science text (3 days) Novel Unit (2 days)	<u>Year 1:</u> -Expository Text -TAKS + Fluency -Novel Unit <u>Year 2:</u> -Sound fluency -Phrase fluency -Silent timed read with comprehension practice at the sentence level

Individualized Placement: Subgroups within Individualized Classes

Score	Type of Reader	Instructional Focus
>94 Word attack	Average word reader	Vocabulary and comprehension with advanced word study
<95	Below average word reader	Intensive word study

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Individualized Placement

	Word attack	Word ID	Pass. comp	GRADE read. comp	TOWRE sight word	TOWRE phon. decod.	TAKS
G1							
S1	**123**	93	86	89	91	97	2019
S2	**115**	109	92	92	98	102	1947
G2							
S3	**88**	82	83	92	85	86	1750
S4	**81**	78	82	92	89	80	1822

Individualized Conceptual Framework: Lesson Focus

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

Individualized Conceptual Framework: Sample Lesson Plan

LESSON PLA ORM: WEEK #1

Date: 11.26-11.30.07
Period: 3 (G1/G2)

Monday	Tuesday	Wednesday	Thursday	Friday
Vocab/Morphology (10) •Introduce Clunk F.U.S. #5: Wild Card Clunk (?). Students can use any additional strategy to fix up their clunks and/or use one of the pre-existing 4 **Comp/Text Reading (20)** **Comp/Text Reading (35)** •Read Supplemental Reading: *Microfilm* •Highlight clunks & record **Word Study (20)** •Sound Cards: All letters; vowels mult. sounds; Digraphs (10) Review: -Digraphs; y & /i/ sound; long vs. short sounds & mark-ups (5) •Morphology: Sound blocks w/ chains (8) •Decoding: Read & Spell 5.1 words (8) **Comp/Text Reading (15)** •Answer TAKS-aligned comprehension Q's •Fluency Drill: *Can You Repeat That?* **Word Study (15)** •Decoding/Encoding: W.B.5B pg. 2 (5) •Fluency: Fluency (Remaining Time) No Time **Attitude/Motivation (5)** •CAP: Award points/cash-in • PRIDE: Turn in tickets •Group Contingency Points	**Vocab/Morphology (10)** •Clunk F.U.S. #5 et. al -Use F.U.S. #5 to figure out yesterday's clunks **Comp/Text Reading (35)** •Review & Preview (T/F) •Prediction •Quick Review of L1/L2 Q's • Read: 1st half of Chapter 7 of *Something Upstairs* -Highlight clunks & record •Create L1/L2 Q's **Attitude/Motivation (5)** •CAP: Award points/cash-in • PRIDE: Turn in tickets •Group Contingency Points	**Vocab/Morphology (10)** •Clunk F.U.S. #5 et. al -Use F.U.S. #5 to figure out yesterday's clunks **Comp/Text Reading (20)** •Read Supplemental Reading: *Slavery in Rhode Island* •Highlight clunks & record **Word Study (20)** •Sound Cards: Digraphs + vowels Review: markings •Morphology: ~~[illegible]~~ + •Decoding: SR pg 5 whiteboards + ~~[illegible]~~ **Comp/Text Reading (15)** •Answer TAKS-aligned comprehension Q's •Fluency Drill: *Can You Repeat That?* NO **Word Study (15)** •Decoding/Encoding: finish WB pg 2 •Fluency: yes **Attitude/Motivation (5)** •CAP: Award points/cash-in • PRIDE: Turn in tickets •Group Contingency Points	**Vocab/Morphology (10)** •Clunk F.U.S. #5 et.al -Use F.U.S. #5 to figure out yesterday's clunks **Comp/Text Reading (35)** •Review previous reading •Read: 2nd half of Chapter 7 of *Something Upstairs* -Highlight clunks & record •Introduce/Review/Create L3Q's: *Making Connections* •Prediction Check **Attitude/Motivation (5)** •CAP: Award points/cash-in • PRIDE: Turn in tickets •Group Contingency Points	**Vocab/Morphology (5)** •Affix Game. Using affixes from previous week's clunks, have students see how many words they can create **Comp/Text Reading (20)** •Read Supplemental Reading: *Historical Highlights* •Highlight clunks & record **Word Study (20)** •Sound Cards: digraphs + vowels Review: markings •Morphology: SR pg 4 read+spell •Decoding: WB pg 3 **Comp/Text Reading (15)** •-Answer TAKS-aligned comprehension Q's •Fluency Drill: *Can You Repeat That?* **Word Study (15)** •Decoding/Encoding: •Fluency: ~~#506~~ #507 calculate!! **Attitude/Motivation (5)** •CAP: Award points/cash-in • PRIDE: Weekly drawing •Group Contingency Points

Spelling + affix game w/ clunk!

Individualized Conceptual Framework: Sample Lesson Plan

GROUP 1 LESSON PLANS Teacher Sayre Period 2 & 5 School Decker/Manor MS

LESSON PLAN FORM: WEEK # 2

Monday: 9/15/08	Tuesday: 9/16/08	Wednesday: 9/17/08	Thursday: 9/18/08	Friday: 9/19/08
C/T: 35 MIN • fluency drill: vowel comb. word set 2 p. 253 • CSR previewing WE DO with "Beat the Bullies" article • preteach concept: cyberbullying ▪ read-aloud with YOU DO click and clunks ▪ gist statements: I DO • comprehension quiz **V/M: 10 MIN** • discuss clunks and use fix-up strategies **A/M: 5 MIN**	**C/T: 35 MIN** • fluency drill: passage 601 p. 201 ▪ CSR strategy with "Robots" article (extended version) • preteach: robot • previewing: YOU DO • click and clunks: YOU DO • gist statement: WE DO **V/M: 10 MIN** • review click and clunks, share clunks and discuss fix-ups for section 1	**C/T: 35 MIN** • fluency drill: vowel comb. words set 4 p. 255 • text: finish reading of "Robots" article **V/M: 10 MIN** • share clunks and fix-up strategies from sections 2 and 3 **A/M: 5 MIN**	**C/T: 45 MIN** • fluency drill: passage 602 p. 202 • gist statement practice with article "A robot to take care of things at home" • sort examples/ nonexamples • create CSR foldable-review steps **A/M: 5 MIN**	**C/T: 25 MIN** • fluency drill: vowel comb. word set 6 p. 257 • finish CSR foldable • CBM test **V/M: 20 MIN** ▪ Intro. to morphology • vocabulary through morphemes p. 5 suffix-y **A/M: 5 MIN**

C	G1	G2	C	G1	G2	C	G1	G2	C	G1	G2	C	G1	G2
V/M	10	0	V/M	10	0	V/M	10	15	V/M	10		V/M	20	25
C/T	35	30	C/T	35	25	C/T	35		C/T	45	25	C/T	25	
A/M	5	5	A/M	5	5	A/M	5	5	A/M	5	5	A/M	5	5
WS/T	0	15	WS/T	0	10	WS/T	0	35	WS/T	0	20	WS/T	0	20

WEEKLY TOTAL:

	V/M	C/T	A/M	WS/T
G1				
G2				

WEEKLY GOAL:

	V/M	C/T	A/M	WS/T
G1	45	180	25	
G2	45	80	25	100

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)

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CBM Informational Guide

CBM INFORMATIONAL GUIDE

Weeks of: 9/17-9/25 GROUP1

Concept	Using clunks fix up strategies	Explaining the purpose of previewing	Generating a Get the Gist statement/ identifying the subject and important details	Word list decoding	Details: words missed
Kevin	D	M	D	D	hawk, hound, wreath, caught
Dontay	E	E	E	M	none
Jesus	E	M	E	E	wreath
Sarah	E	M	E	M	NONE
Rakim	E	M	E	E	haunt, wreath, gown
What/ How did I teach?	-Practice sentences (I do, WE do, YOU do) -clunk logs (independently with class discussion of fix-ups)	Previewing articles and the novel, modeled think-alouds then practice: WE do and YOU do.	-Identifying examples and non-examples of gist statements -Get the Gist practice with expository passages, narrative chapters (I do, WE do, and YOU do)	Fluency drills from 6-minute solutions- words with vowel combinations sets 1-8.	
Next Steps/ Modifications	More guided practice with isolated sentences and then move to clunks within the novel	More think-alouds with various types of text	Re-teach features of a good gist statement. More independent practice with corrective feedback. Have students create their own gist and then discuss which is the best and why.	One-on-one practice with fluency drills; explain the concept and drill with examples:	Kevin: aw, ou, ea, aught Jesus: ea Rakim: vowel combinations au, ow, ea

M=Mastery: They know it; Can move on
E=Emerging: They are getting it but need more practice; Can stretch it
D=Deficient: They don't have it; Re-teach

Tier III Intervention Teachers

	Total # of teachers	Avg. yrs teaching experience	Background /Degree	Teaching certification
7-8th Grade Tier III (Austin and Houston)	6	8.5 (range 0-15 yrs)	All had undergrad degree and Masters in education related field	4 had teaching cert. in reading or reading-related field such as ELA

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Year 2 Results

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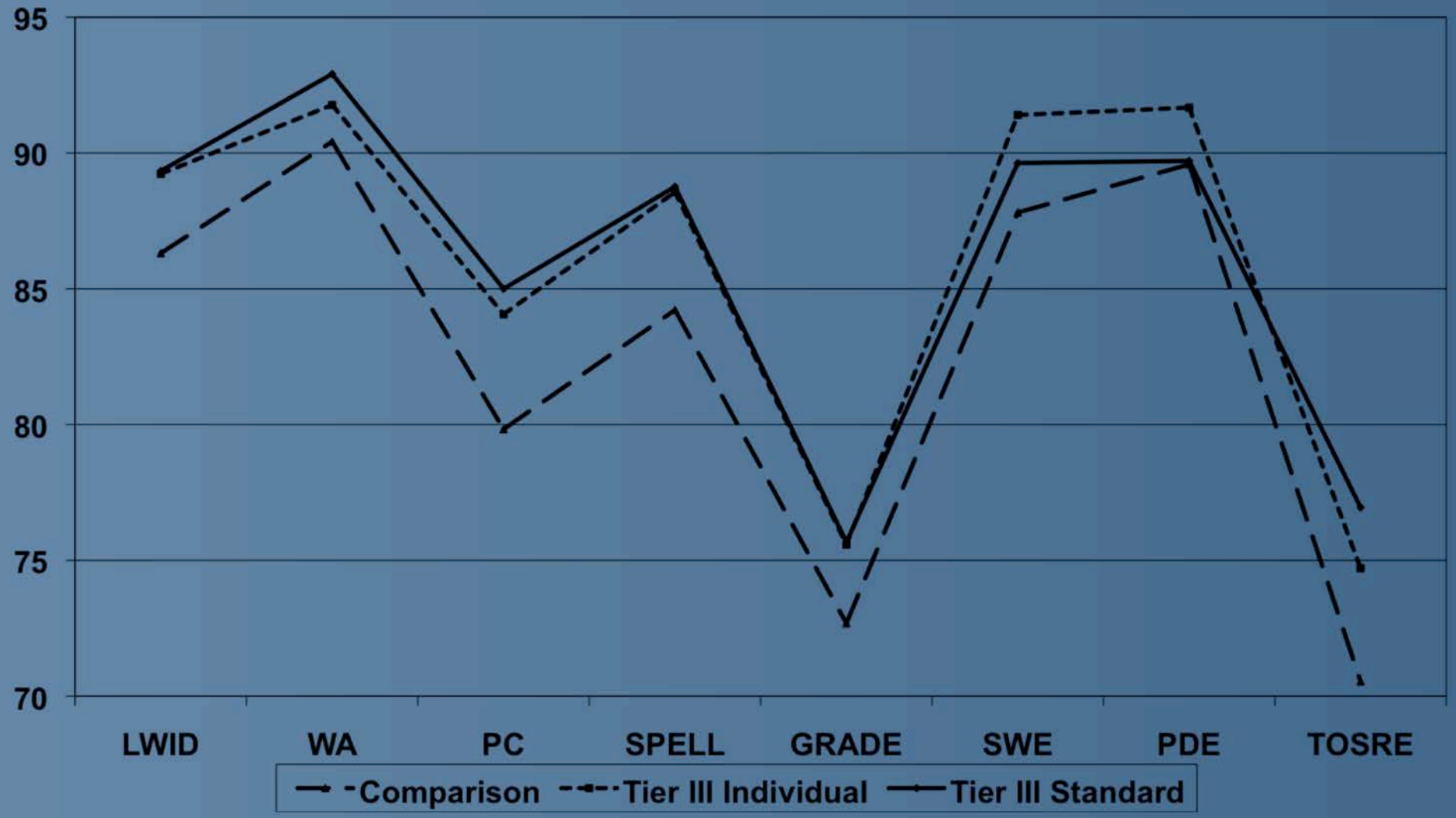
Pretest Scores (SS)



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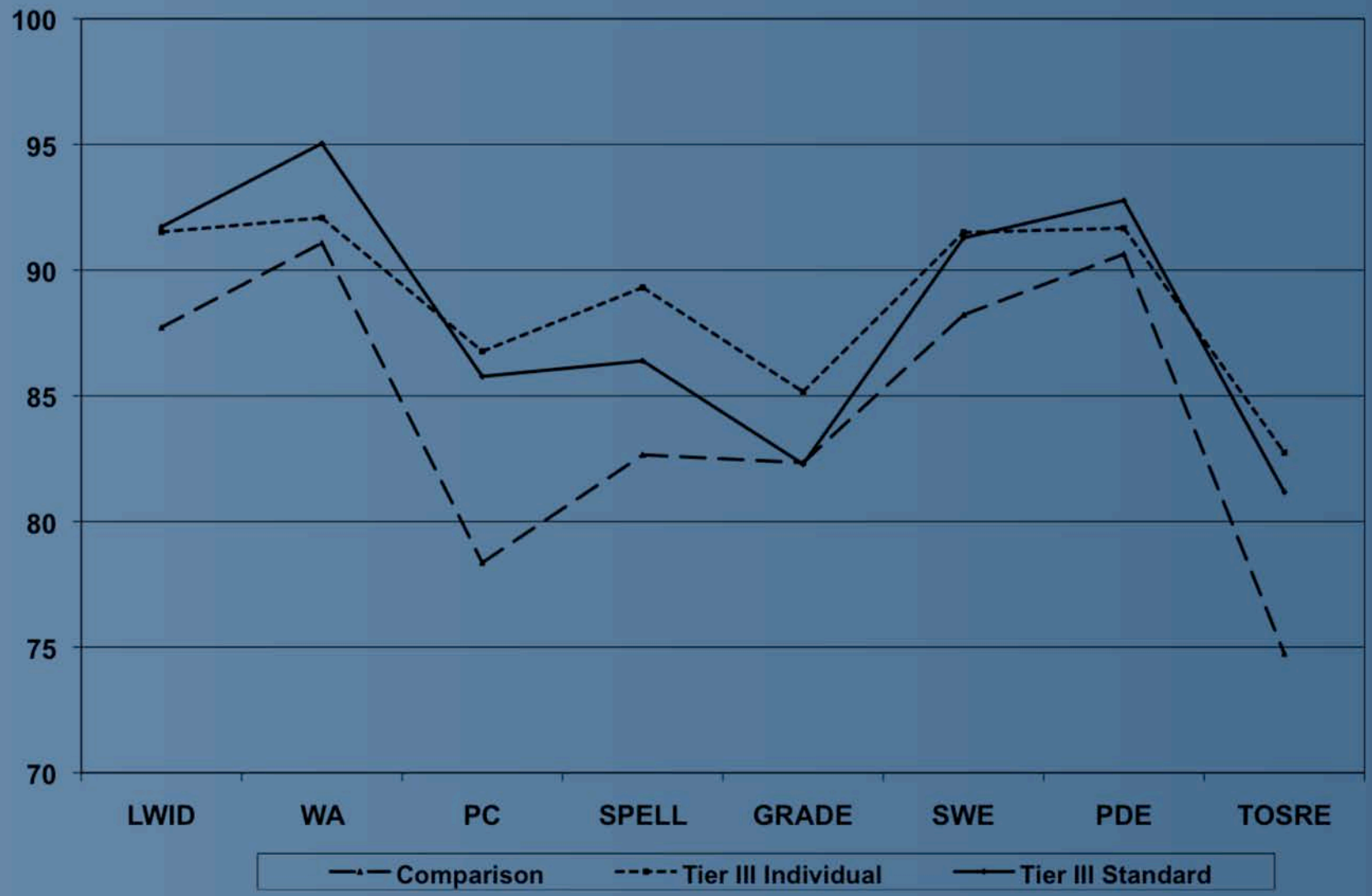
Posttest Scores (SS)



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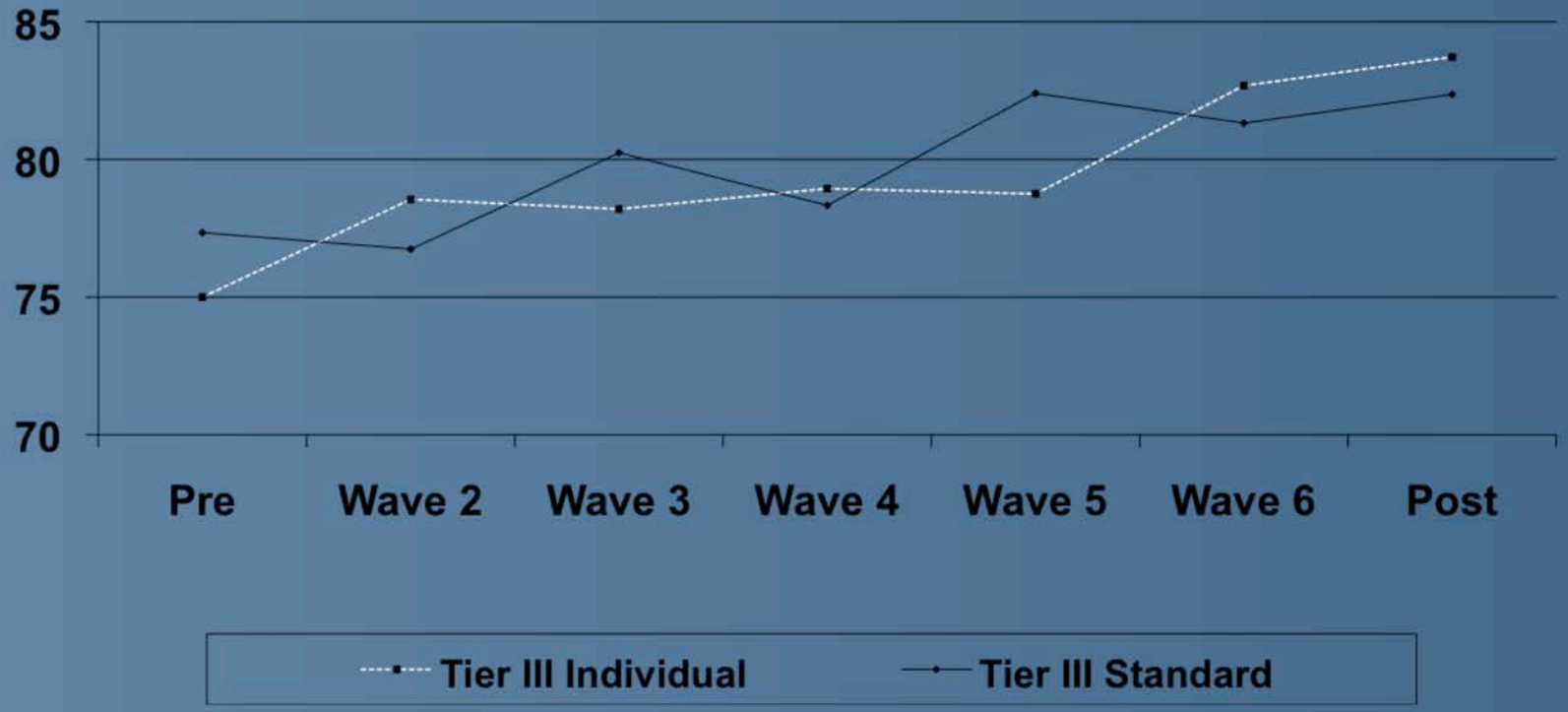
Test of Sentence Reading Efficiency (SS)



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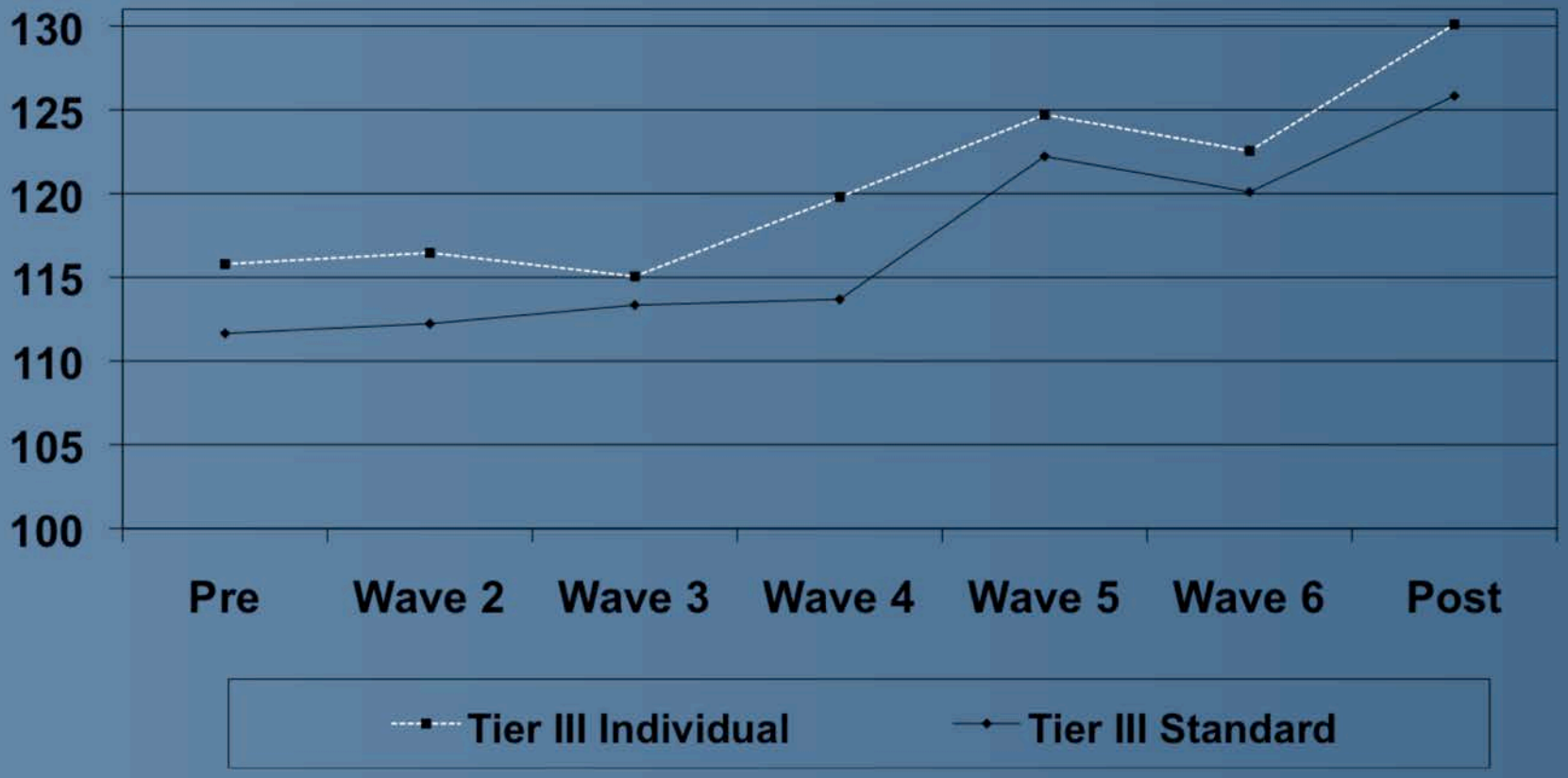
Average MSPMS Passages



Comprehension/Fluency Cluster

	G1	*N*	*M*	*SD*	*N*	*M*	*SD*
WJPC	C	33	79.85	14.64	32	77.69	12.17
	IND	44	84.98	9.76	44	87.00	12.75
	STD	39	86.26	10.75	39	86.49	10.96
GRADE	C	33	79.27	10.25	30	83.07	6.01
	IND	47	83.17	8.13	47	84.96	9.83
	STD	39	80.79	7.93	39	82.31	10.08
TOSRE	C	34	70.38	10.01	28	75.46	9.69
	IND	47	75.94	12.43	45	83.44	12.41
	STD	39	78.21	12.66	39	82.85	15.54

Effect Sizes: Comprehension/Fluency Cluster

Measure	Ind. vs. C	St. vs. C	Ind. vs. St.
WJ PC	.74* (.27 to 1.21)	.76 (.27 to 1.24)	.04 (-.39 to .47)
GRADE	.22 (-.24 to .68)	-.09 (-.56 to .39)	.27 (-.16 to .69)
TOSRE	.70* (.20 to 1.17)	.55 (.05 to 1.04)	.04 (-.39 to .47)

Overall, how did students in the Comparison group fare on fluency/comprehension measures?

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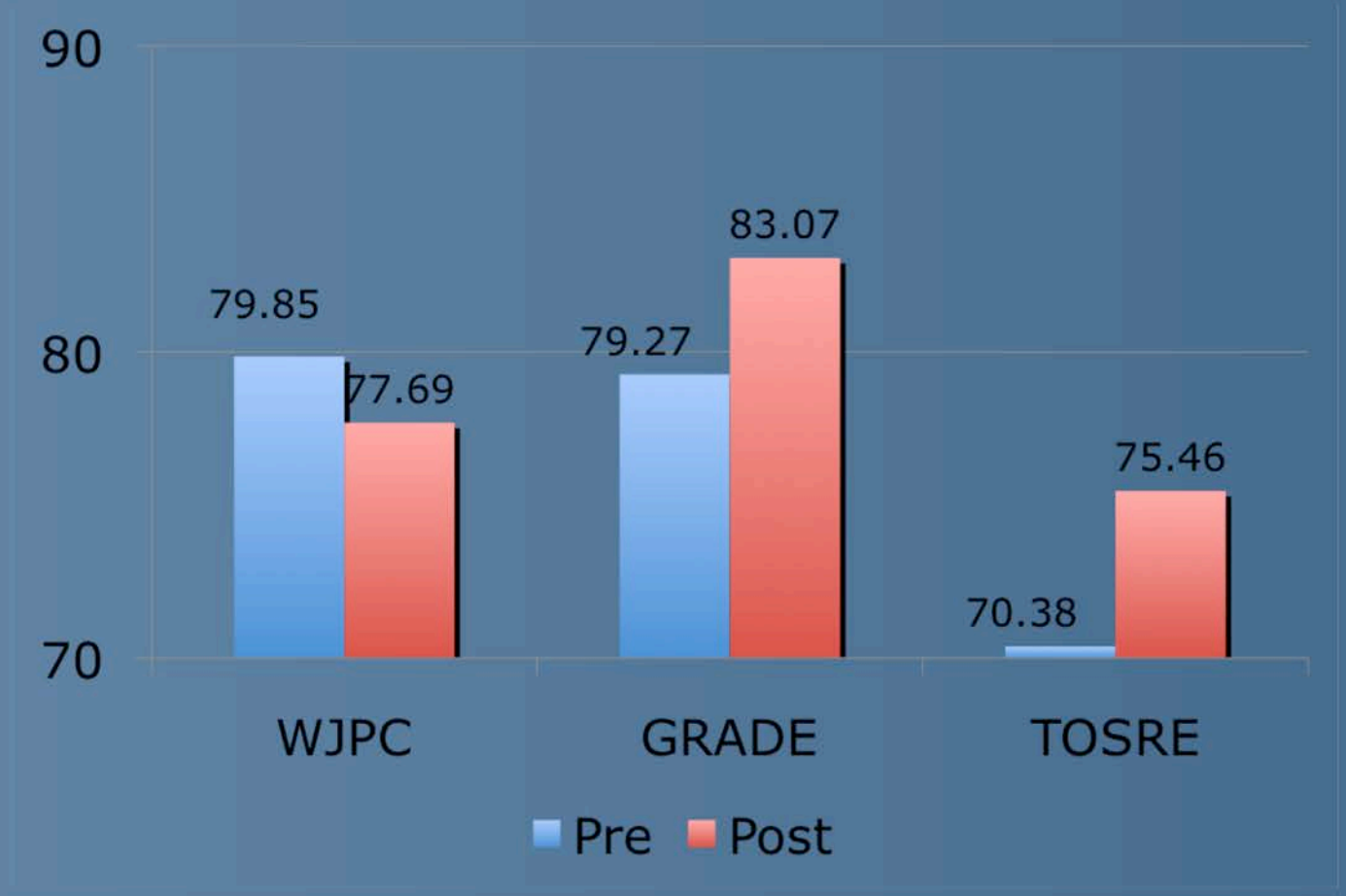
Overall, how did students in the Comparison group fare on standardized comprehension measures?



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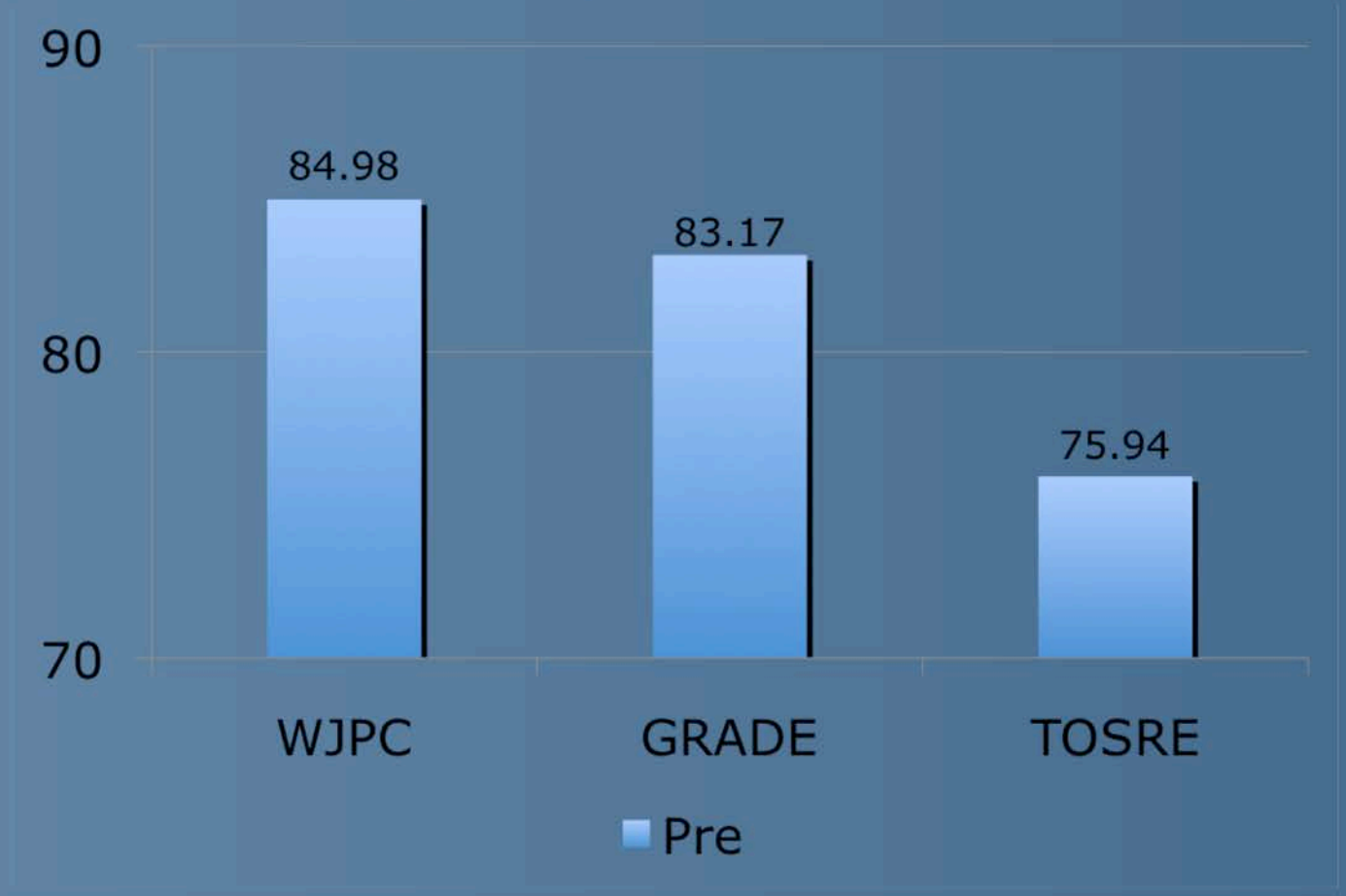
Overall, how did students in the Individualized group fare on fluency/comprehension measures?



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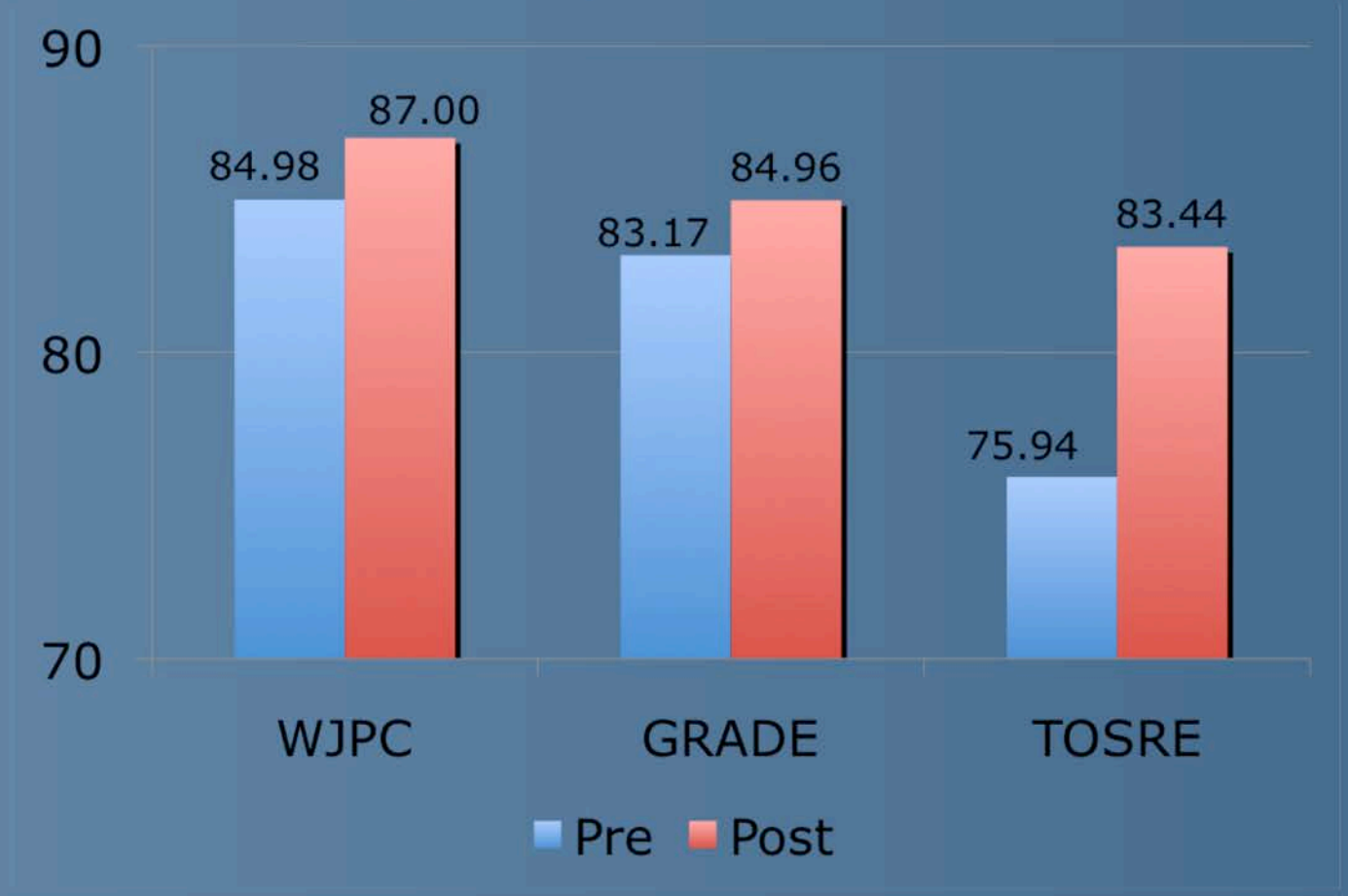

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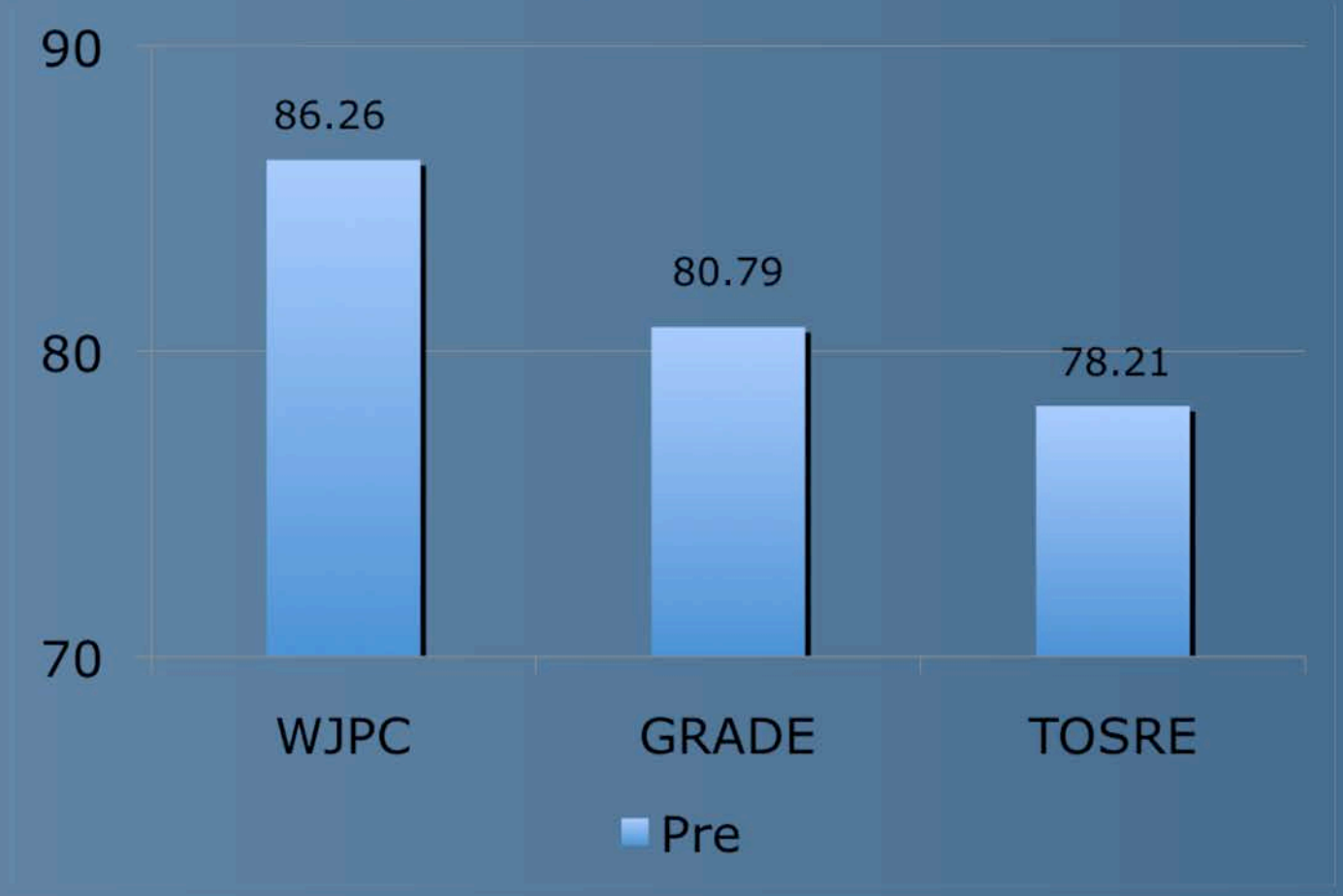

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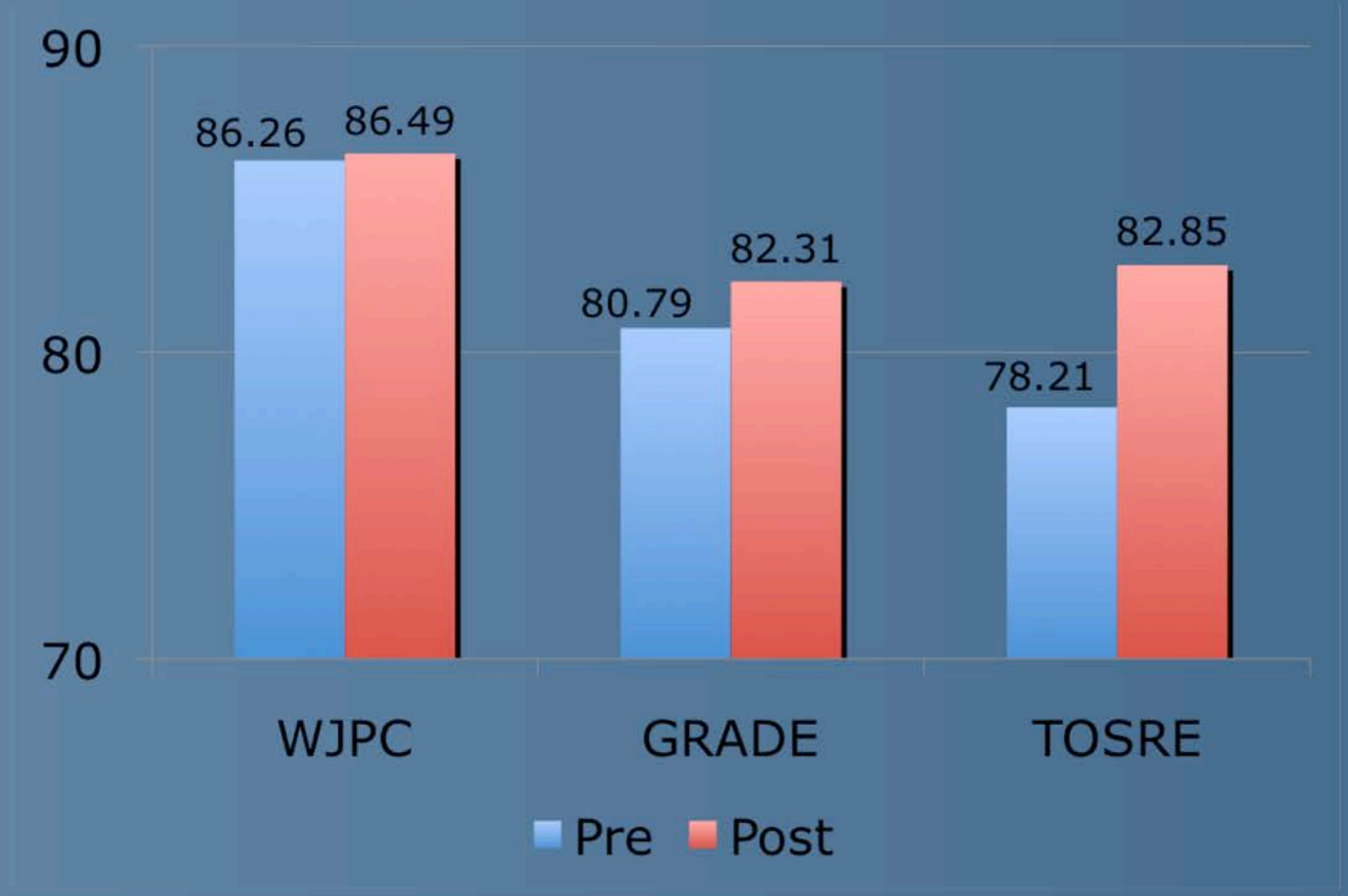

Word Reading Cluster

	G1	*N*	*M*	*SD*	*N*	*M*	*SD*
LWID	C	33	85.21	13.12	32	87.25	12.97
	IND	44	89.57	13.10	44	92.09	14.24
	STD	39	89.89	10.45	39	91.54	12.16
WA	C	33	89.36	12.56	32	90.91	11.80
	IND	44	91.43	12.45	44	92.32	12.08
	STD	39	94.21	9.95	39	95.21	9.24
SWE	C	33	87.79	12.76	32	88.59	12.34
	IND	47	91.66	11.01	44	92.23	12.30
	STD	39	89.87	10.59	39	92.05	11.58
Spelling	C	33	84.03	15.43	28	82.11	19.18
	IND	44	89.43	11.49	42	89.93	15.39
	STD	39	88.67	13.18	39	86.31	16.89

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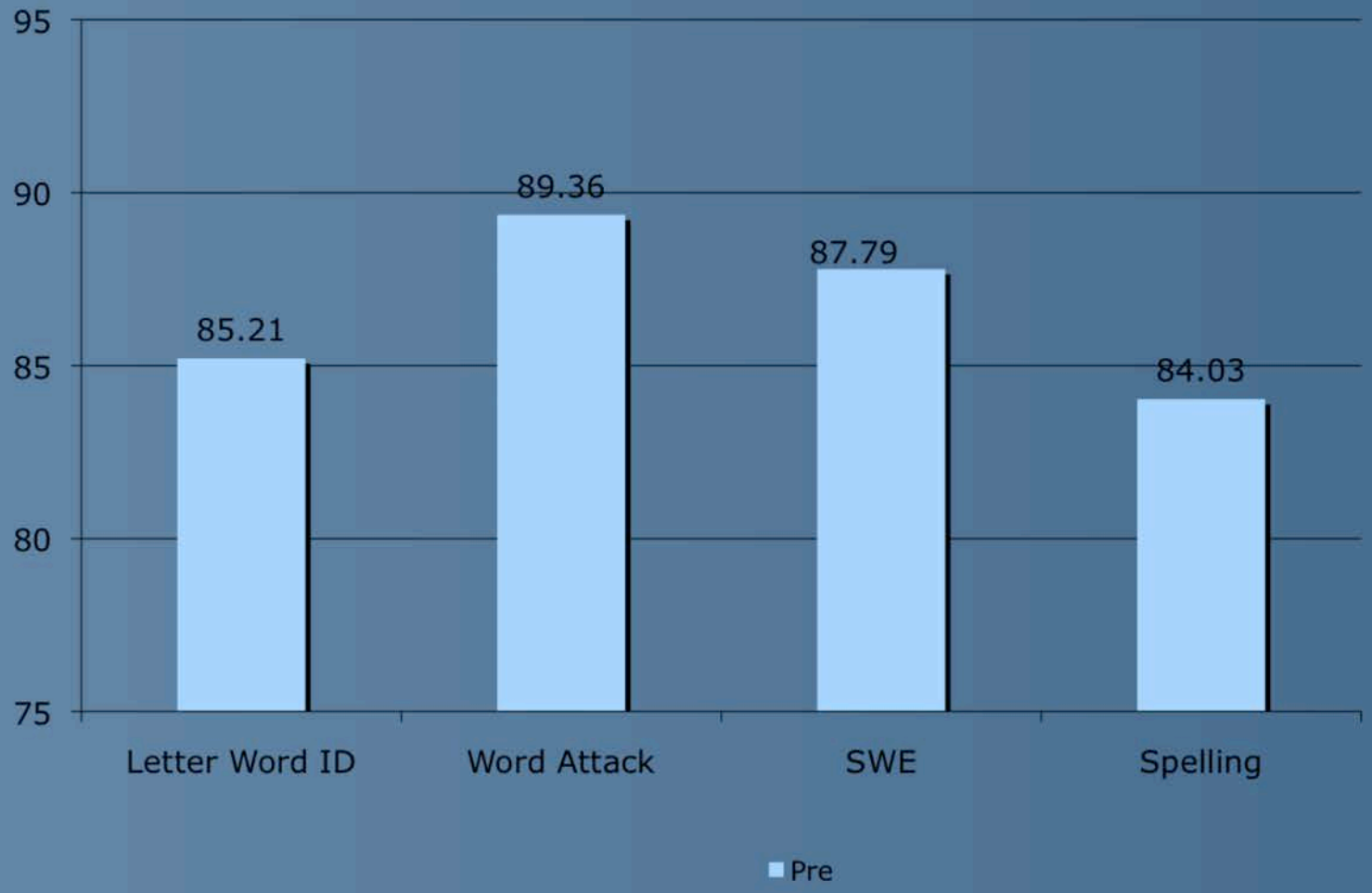
Effect Sizes: Word Reading Cluster

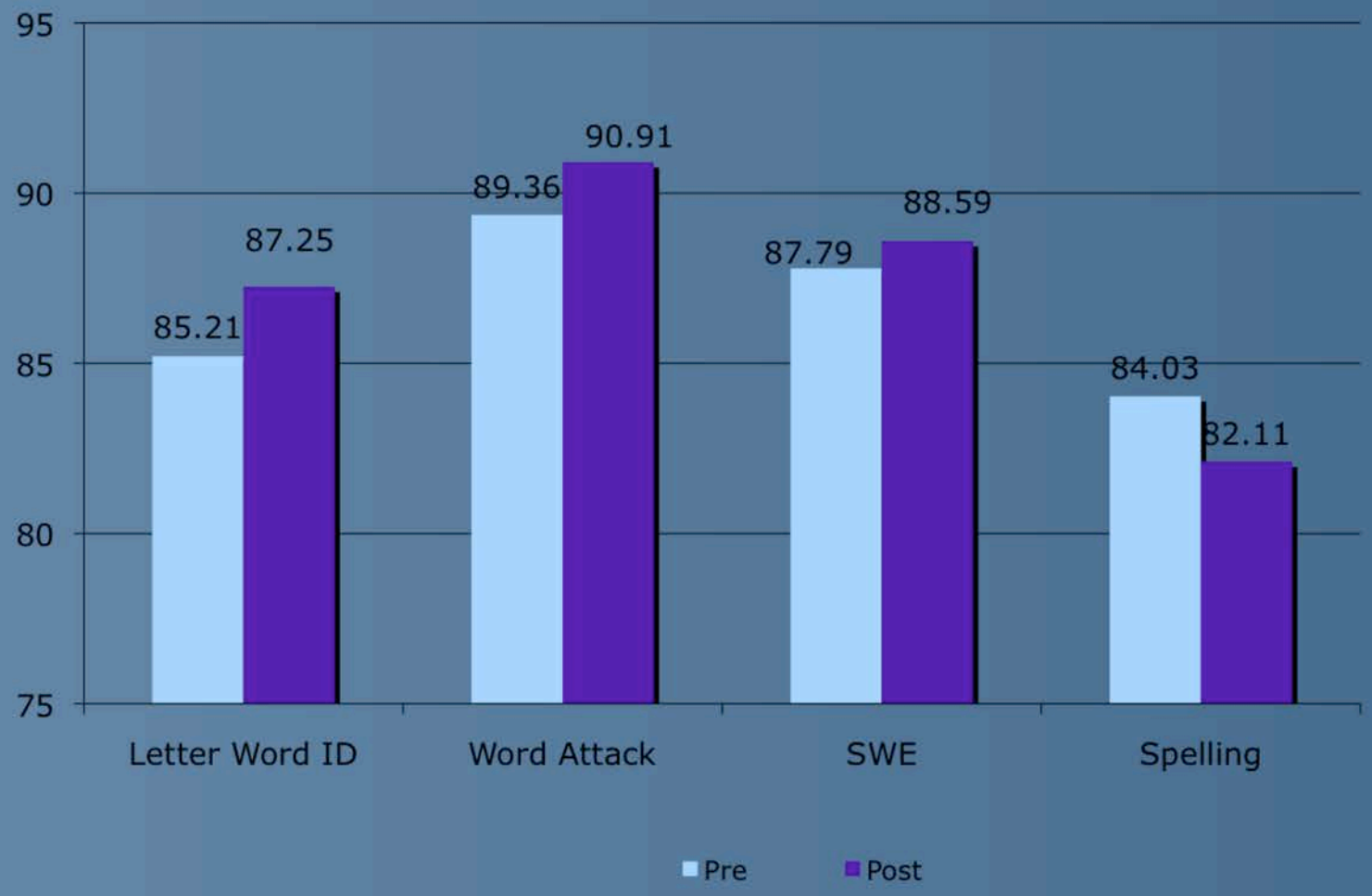
Measure	Ind. vs. C	St. vs. C	Ind. vs. St.
LWID	.35 (-.11 to .81)	.34 (-.13 to .81)	.04 (-.39 to .47)
Word Attack	.12 (-.34 to .57)	.41 (-.07 to .88)	-.27 (-.70 to .17)
Sight Word Efficiency	.30 (-.17 to .75)	.29 (-.18 to .76)	.02 (-.42 to .45)
Spelling	.46 (-.03 to .94)	.23 (-.25 to .72)	.22 (-.21 to .66)

Overall, how did students in the Comparison Group fare on standardized word reading measures?



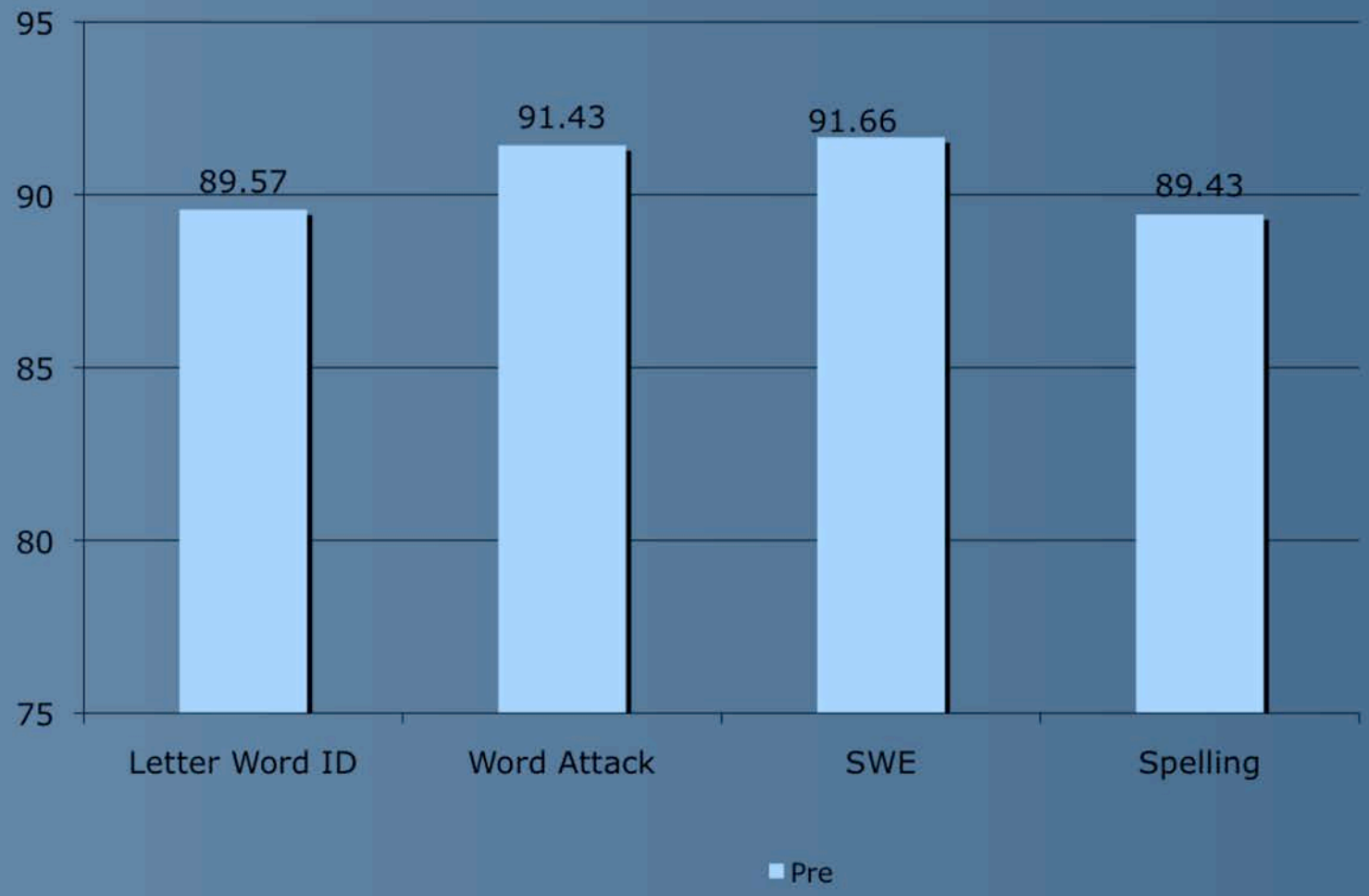
TEXAS CENTER for LEARNING DISABILITIES

Overall, how did students in the Comparison Group fare on standardized word reading measures?



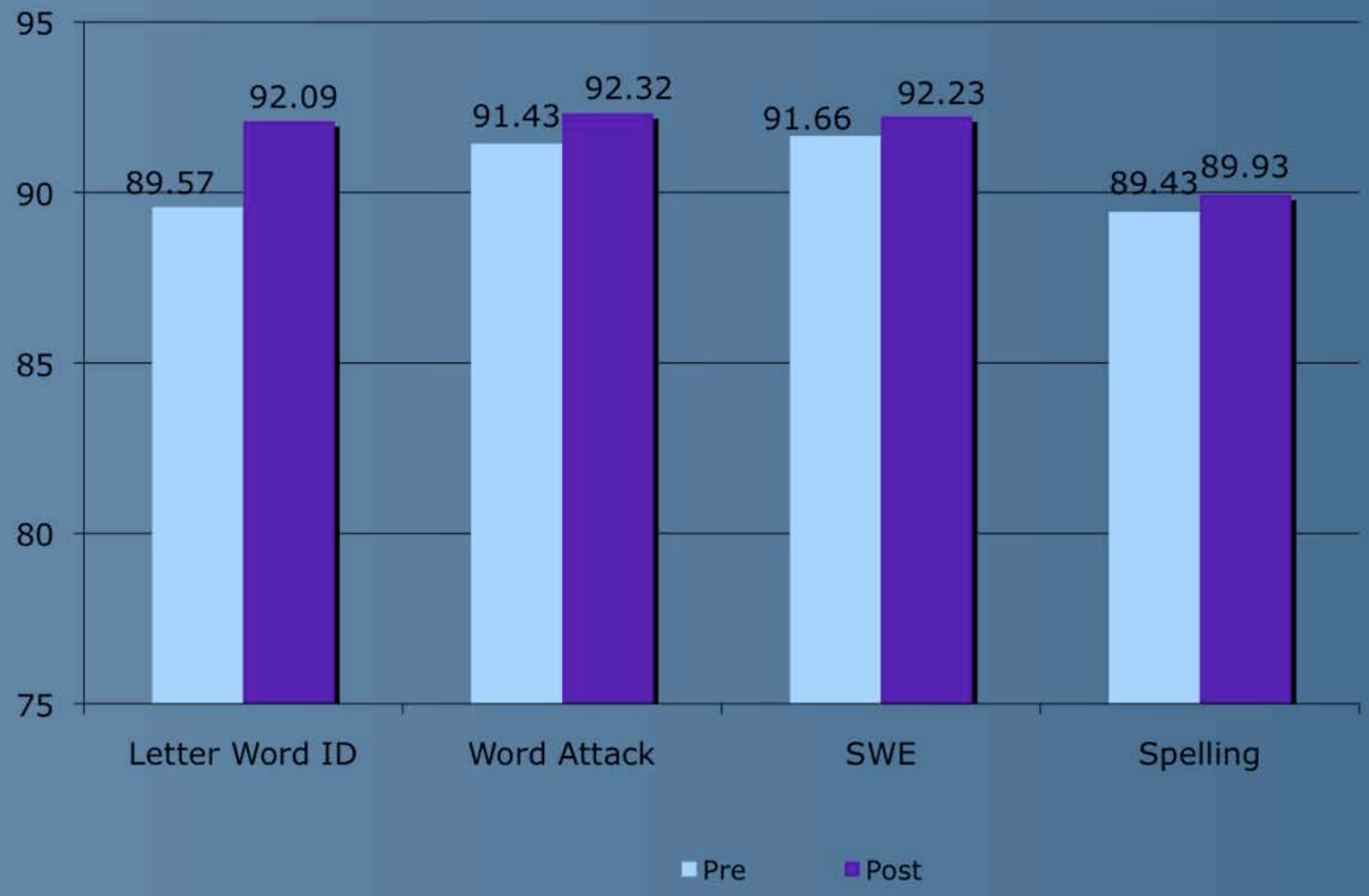
TEXAS CENTER for LEARNING DISABILITIES

Overall, how did students in Individualized fare on standardized word reading measures?



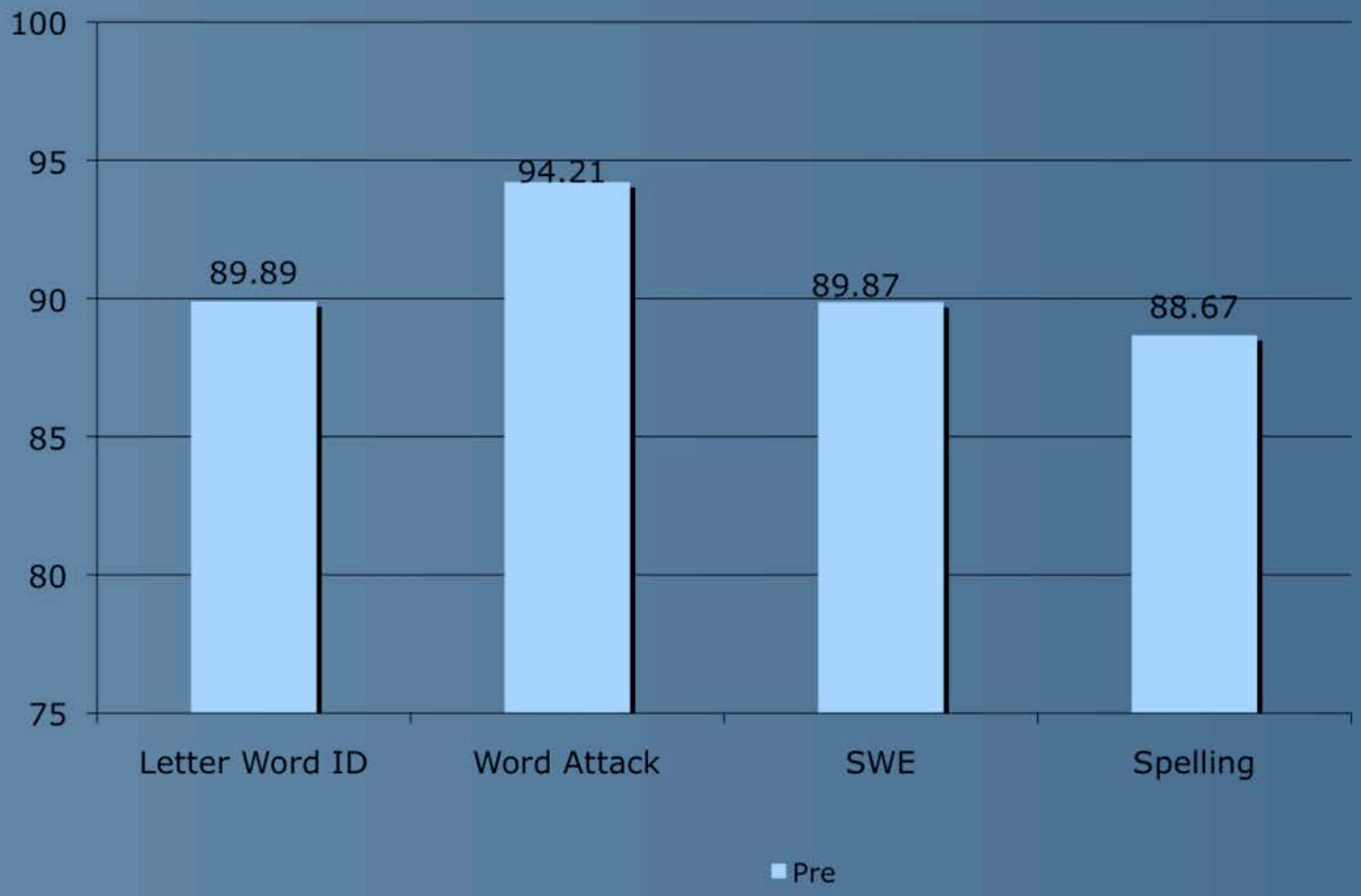
TEXAS CENTER for LEARNING DISABILITIES

Overall, how did students in Individualized fare on standardized word reading measures?



TEXAS CENTER for LEARNING DISABILITIES

Overall, how did students in Standardized fare on standardized word reading measures?



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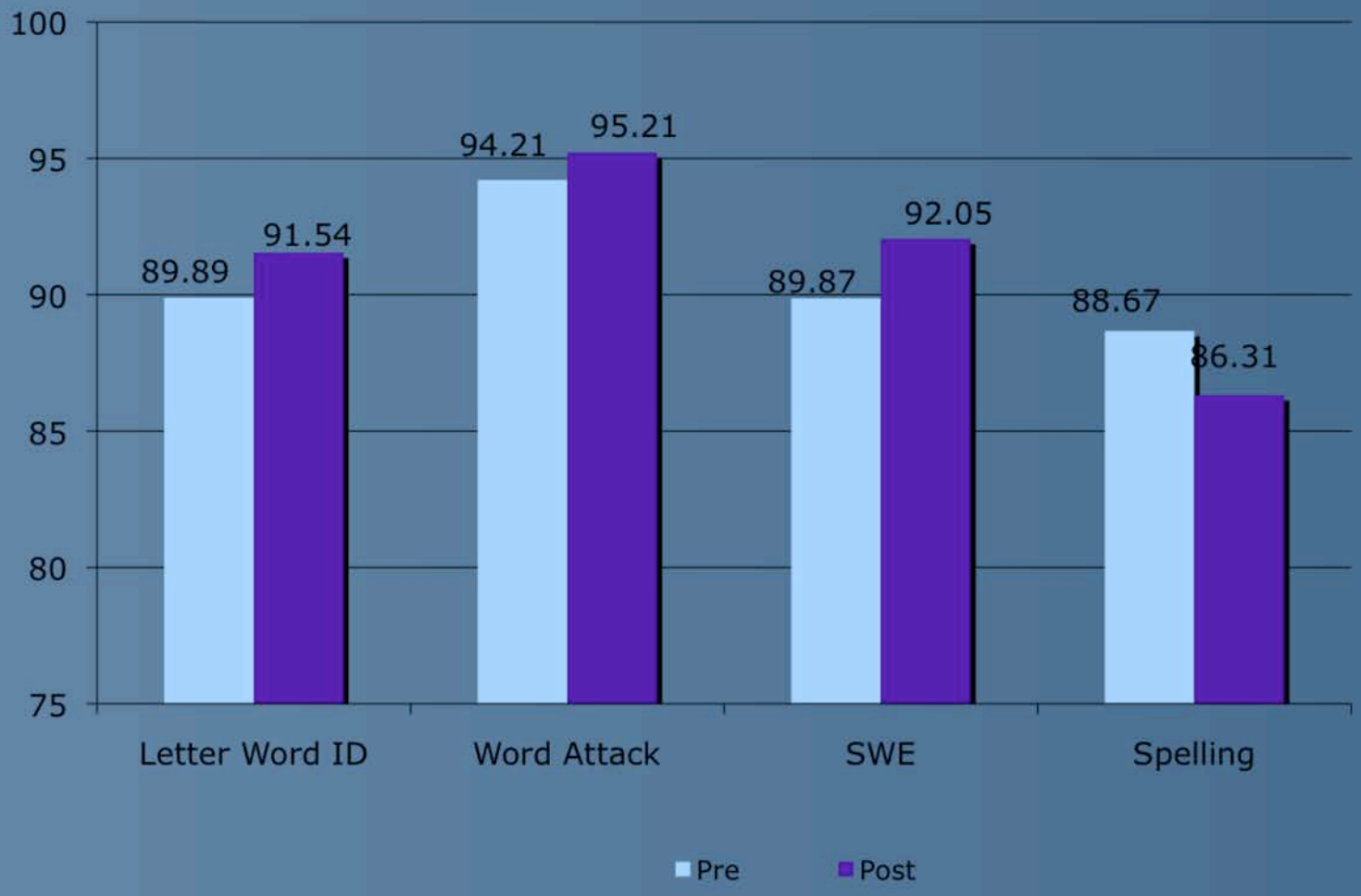
Overall, how did students in Standardized fare on standardized word reading measures??



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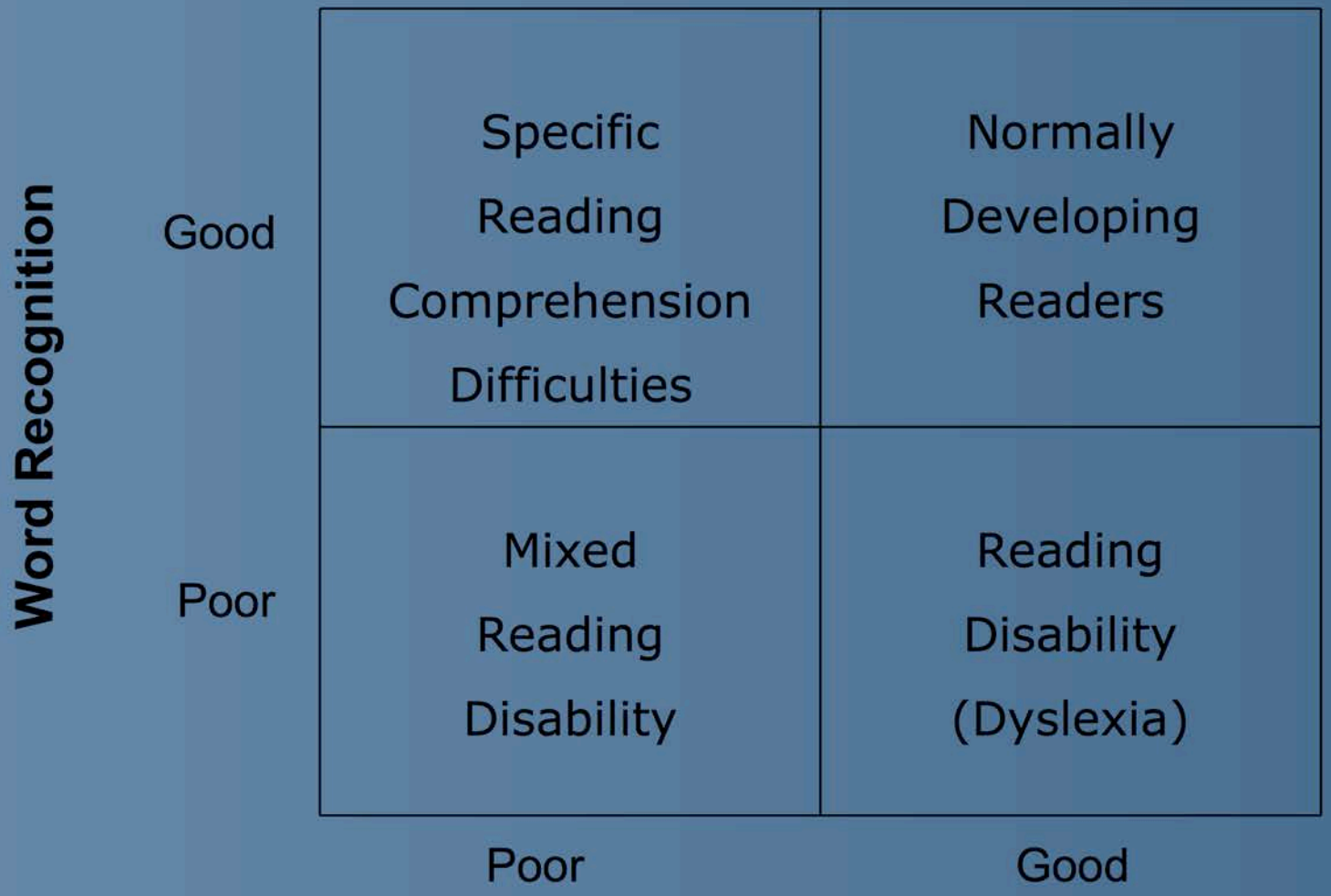
Framework for Conceptualizing Three Categories of Reading Difficulties



William E Tunmer,
Massey University

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Perspectives

- A comparable study: The Enhanced Reading Opportunities Study
- Two supplemental literacy programs designed as full year courses to replace a ninth grade elective class
- When analyzed jointly, the ERO programs produced an increase of 0.9 standard score point on the GRADE reading comprehension subtests. This corresponds to an effect size of 0.09 standard deviation and is statistically significant

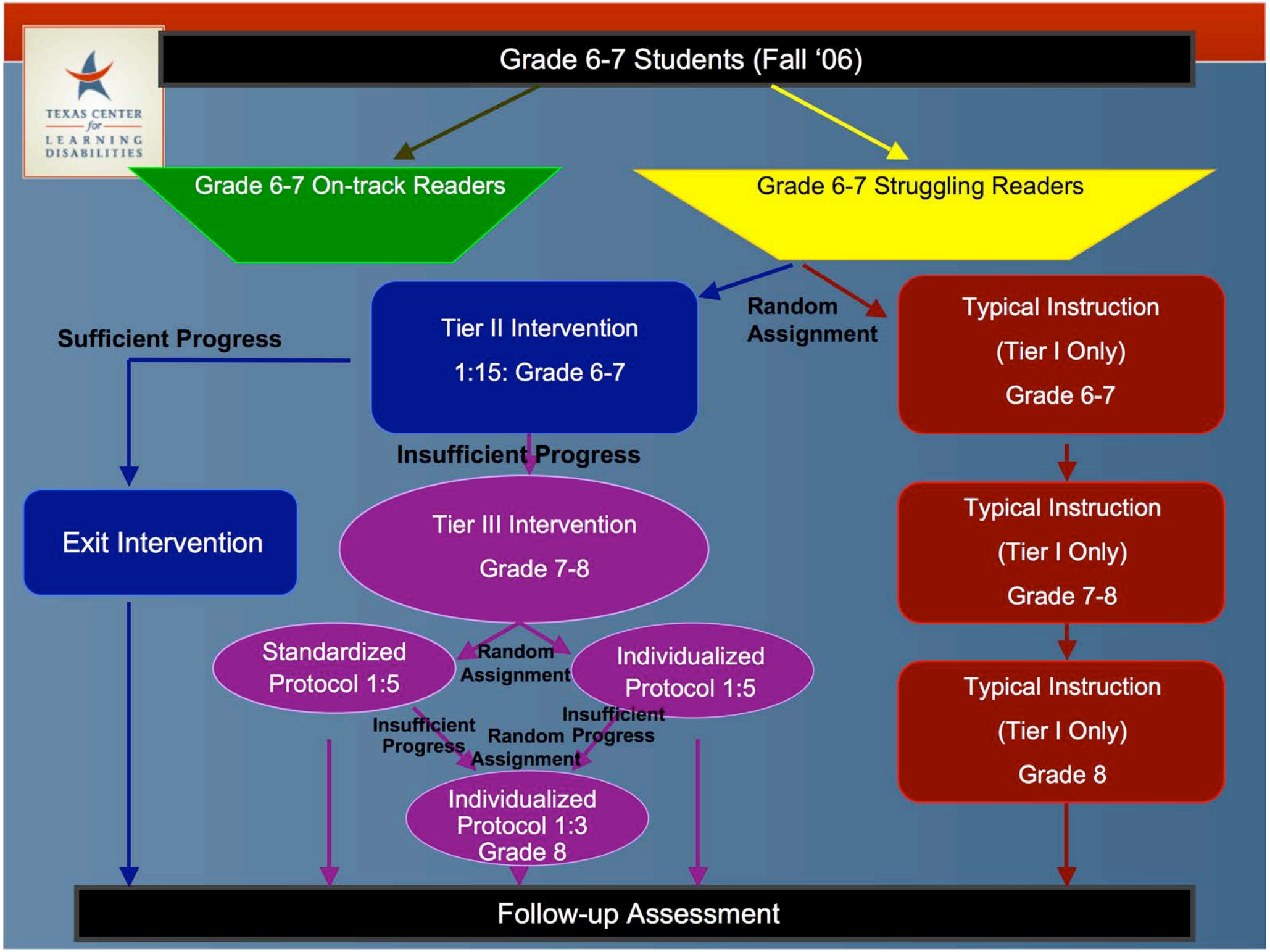
Kemple, J., Corrin, W., Nelson, E., Salinger, T., Herrmann, S., and Drummond, K. (2008). *The Enhanced Reading Opportunities Study: Early Impact and Implementation Findings* (NCEE 2008-4015). Washington, DC National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Perspectives

All Schools	ERO (n=1,408)	Non ERO (n=1,005)	Est. Impact	ES	P-Value
Reading Comprehension Avg. Standard Score	90.1	89.2	.9	.09	.019
Reading Vocabulary Avg. Standard Score	93.4	93.2	.3	.03	.472

Currently 2008-2009

- Minimal responders from 2007-2008 Tier III (Standardized or Individualized) Intervention are assigned to ANOTHER year of more intense Tier III Intervention
- Group size decreased: approx 1:3
- Highly individualized and responsive intervention
- Greater emphasis on word study and sentence level comprehension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Grade 6-7 Students (Fall '06)
Grade 6-7 On-track Readers
Grade 6-7 Struggling Readers
Tier II Intervention
1:15: Grade 6-7
Random Assignment
Typical Instruction
(Tier I Only)
Grade 6-7
Sufficient Progress
Insufficient Progress
Exit Intervention
Tier III Intervention
Grade 7-8
Typical Instruction
(Tier I Only)
Grade 7-8
Standardized
Protocol 1:5
Random Assignment
Individualized
Protocol 1:5
Typical Instruction
(Tier I Only)
Grade 8
Insufficient Progress
Random Assignment
Insufficient Progress
Individualized
Protocol 1:3
Grade 8
Follow-up Assessment

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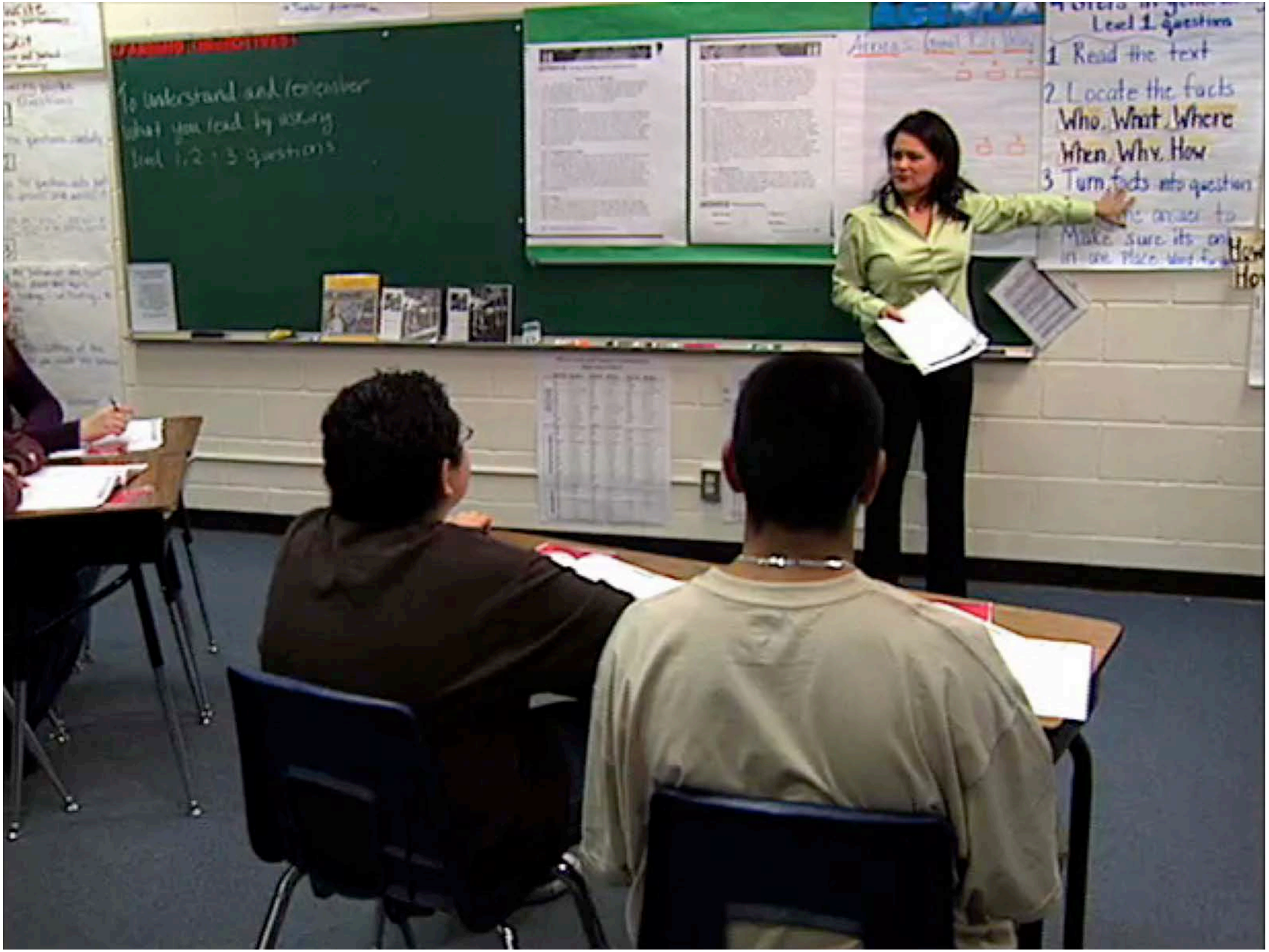
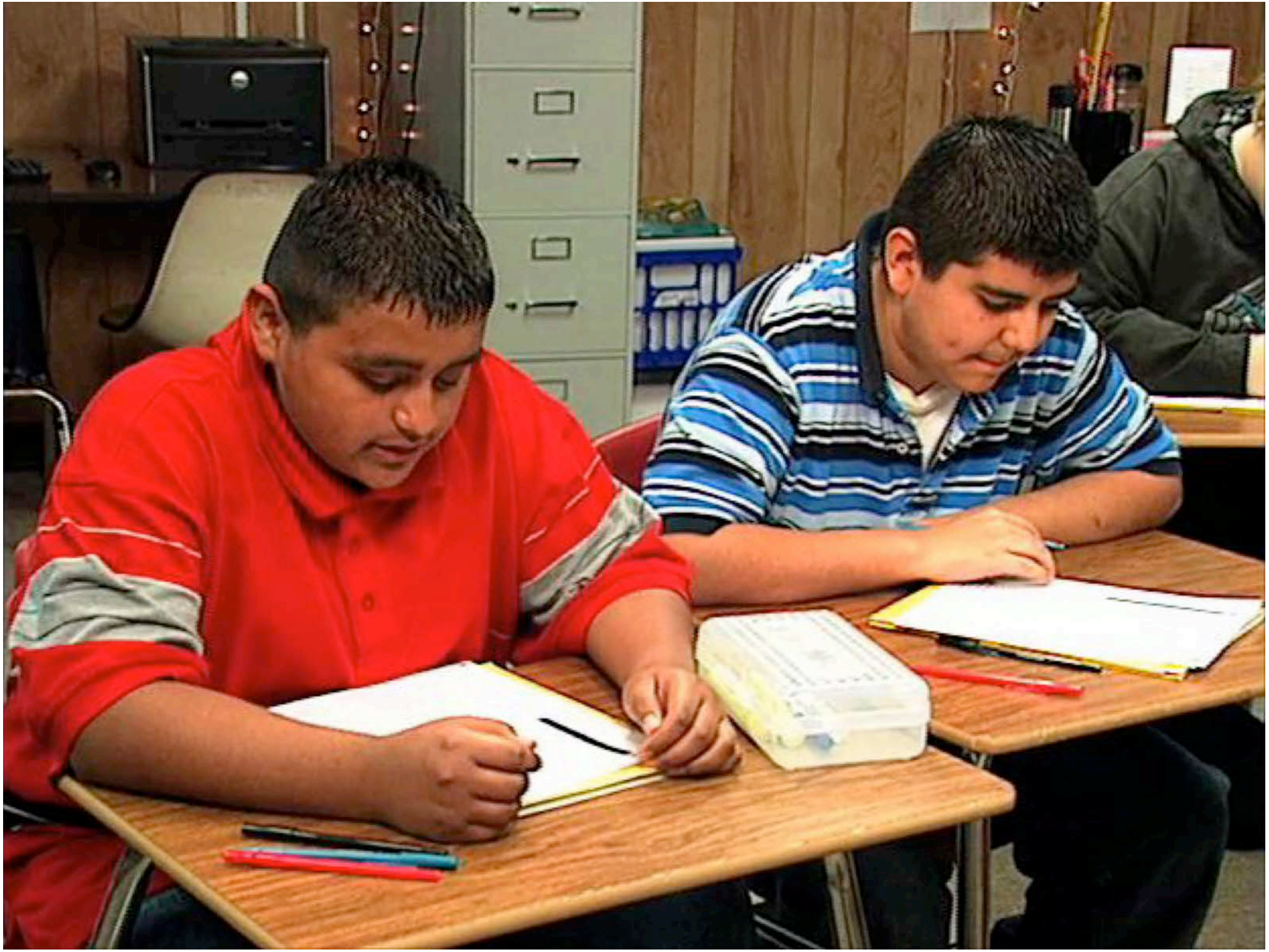
What is RTI with Secondary Students?

How can we make a significant impact with students?

www.texasldcenter.org


Level 1 questions
1 Read the text
2 Locate the facts
Who, What, Where
When, Why, How
3 Turn facts into question



Building Words with Prefixes and Suffixes
Parts of Speech
AGENDA
Review Vocabulary
Predictions
Chapter Reading
Level 1 & 2 Questions
Check Predictions
Closure

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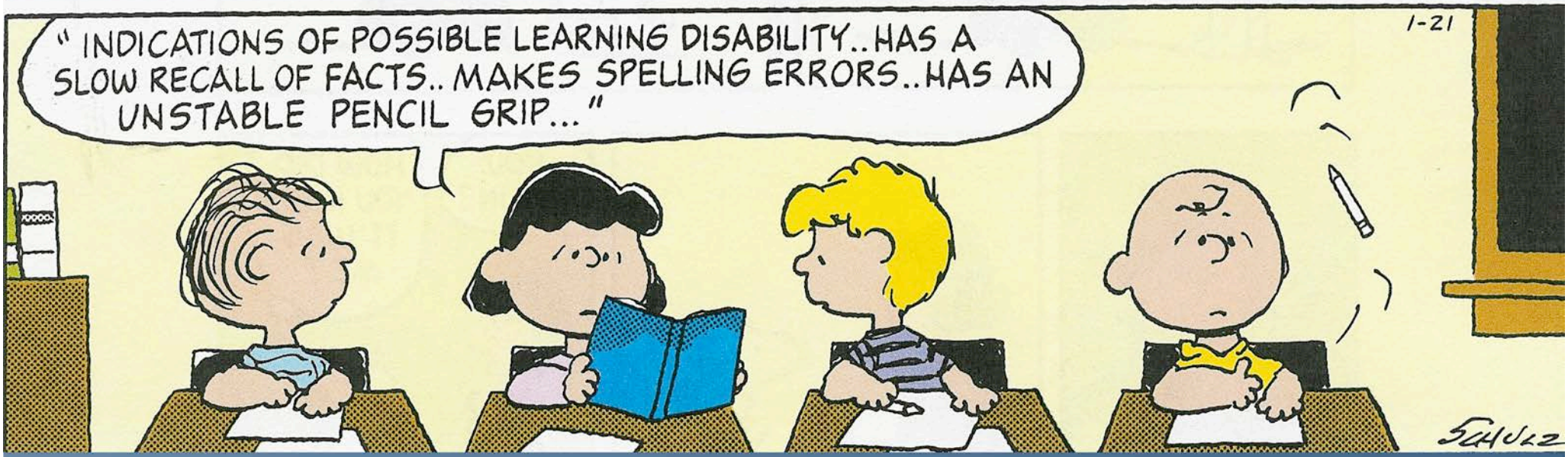
FROM "PEANUTS"