



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

Presented by
Dr. Greg Roberts and Dr. Jade Wexler
Texas Center for Learning Disabilities

January 12, 2011



Welcome!

- Texas Center for Learning Disabilities Podcast Series
 - #1: TCLD Website Tour
 - #2: Identifying Students with Specific Learning Disabilities in a Response to Intervention Model
 - #3: Implementing Tier 2 and Tier 3 Reading Interventions: What Can Research Tell Us?
 - #4: Teaching Older Students with Reading Difficulties and Disabilities: How Do We Do RTI?
- More to come covering other TCLD research topics!



Texas Center for Learning Disabilities

- Located across three organizations
 - University of Houston
 - The University of Texas at Austin
 - The University of Texas Health and Science Center at Houston
- Project Investigators include:
 - Jack Fletcher
 - David Francis
 - Carolyn Denton
 - Sharon Vaughn
 - Andrew Papanicolaou



TCLD Research Projects

- Project I (Classification)
 - Project II (Early Identification)
 - Project III (Remediation)*
 - Project IV (Magnetic Source Imaging)
-
- For more information, see www.texasldcenter.org



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

Greg Roberts and Jade Wexler

The University of Texas



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).



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

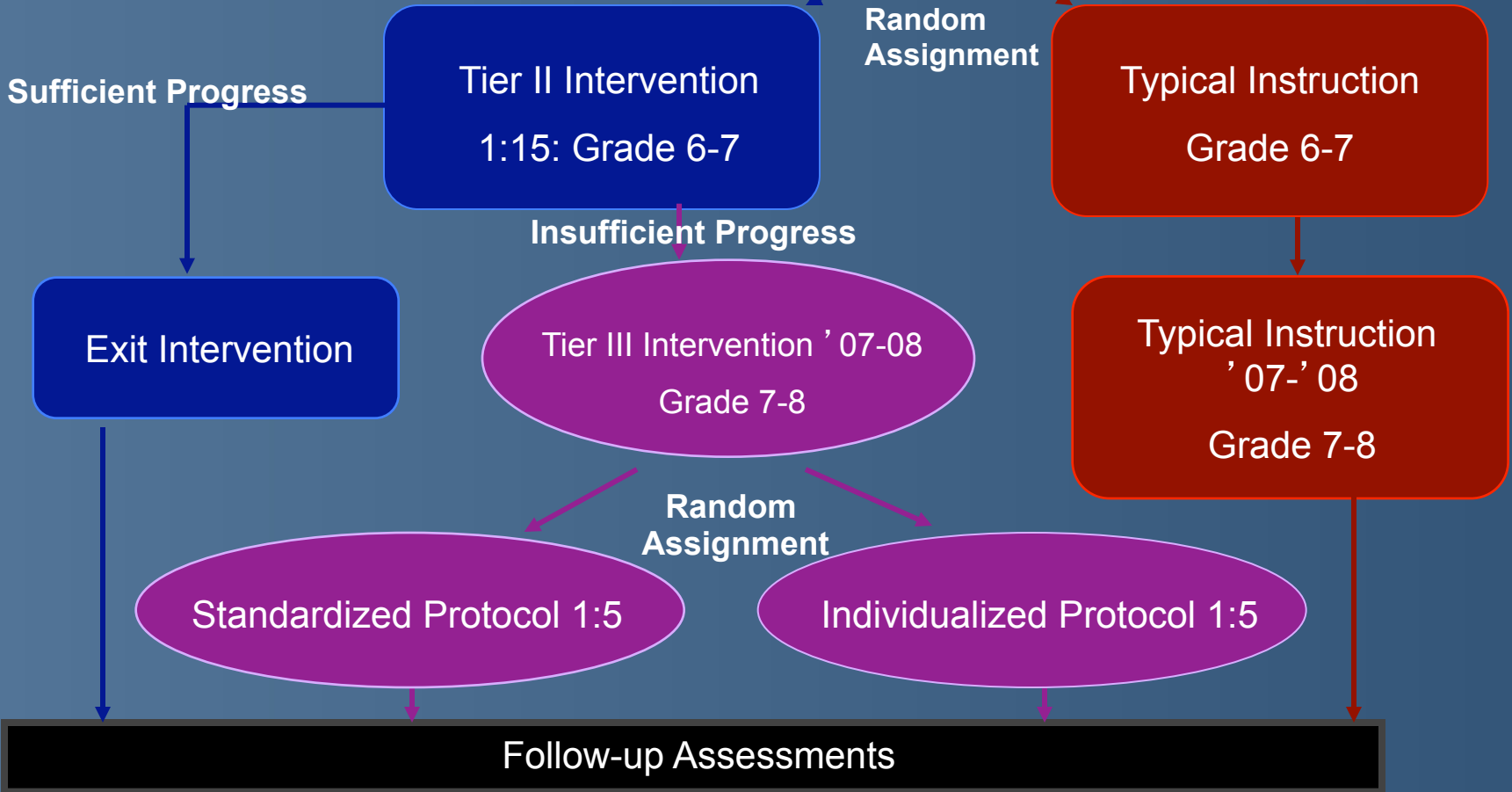
- Examine response of students to more intensive interventions over time
- Vary systematically whether students in more intensive interventions respond to standard or individualized intervention protocols
- Identify and describe the response to intervention of various subgroups of students



Grades 6 & 7 Students (Fall '06)

Grade 6-7 On-track Readers

Grade 6-7 Struggling Readers





Who are these Students?

- Failed TAKS (<2151) ****Very low bar test****
- Took SDAA (>2.3)
- If no TAKS data available, <95 on the GRADE and <90 on TOWRE
- **Students had to also be in Tier II classes in Year 1**



KBIT: What about LANGUAGE?

	Treatment	Control
K-BIT Verbal Knowledge Standard Scores	2006–2007	2006–2007
	88.1 (11.12)	86.9 (13.1)

Language Deficits



WORD
Knowledge



WORLD Knowledge



SYNTAX

Instantly, the fire Sam lit, leaped into the air!



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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)



Tier III Intervention: Year 2

Standardized Intervention

Specified use of time (3 phases of intervention)

High control of curriculum and materials

Modifications made at the group level

Motivation through success only

Individualized Intervention

Flexibility in use of time

Low control of curriculum and materials

Modifications made in response to individual student need

Motivation through text selection, conferences, goal setting, positive calls home

-systematic and explicit
-fast paced instruction
-ongoing progress monitoring
-instruction in same components of reading (word study, comprehension, vocabulary, fluency)



Standardized Intervention Phases

Phase 1 (approx 5 weeks)	Phase 2 (approx 13-15 weeks)	Phase 3
<p>Decoding/ Advanced Word Study</p> <p>Fluency: Repeated reading or wide in peer pairing arrangement</p>	<p>Vocabulary/ Comprehension Emphasis in social studies and science text (3 days)</p> <p>Novel Unit (2 days)</p>	<p><u>Year 1:</u></p> <ul style="list-style-type: none">-Expository Text-TAKS + Fluency-Novel Unit <p><u>Year 2:</u></p> <ul style="list-style-type: none">-Sound fluency-Phrase fluency-Silent timed read with comprehension practice at the sentence level



Phrase Fluency

in a jar in a jam in a rage in a jar
for a letter from a leader for a letter for a debtor
to his sister to his sibling toward a sister to his sister
to the ball at the hall to the balloon to the ball
on the wing on the swing for the win on the wing



Does it Make Sense?

“The fish blows in air bubbles and goes limp.”

“It was easily startled by noises, such as the smell of a fire.”

“We were always a loving family, very angry with each other.”

“By 4:00 PM, the wind had intensified. The gusts slowed down.”

“All in all, tarantulas look quite lovely, so they have been portrayed as aggressive killers.”



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



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 PLAN FORM: WEEK #1

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

Monday	Tuesday	Wednesday	Thursday	Friday							
<p>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</p> <table border="1"> <tr> <td> <p>Comp/Text Reading (20) •Read Supplemental Reading: <i>Microfilm</i> •Highlight clunks & record</p> </td> <td> <p>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)</p> </td> </tr> <tr> <td> <p>Comp/Text Reading (15) •Answer TAKS-aligned comprehensions on Q's •Fluency Drill: <i>Can You Repeat That?</i></p> </td> <td> <p>Word Study (15) •Decoding/Encoding: W.B.5B pg. 2 (5) •Fluency: Fluency (Remaining Time)</p> </td> </tr> </table> <p>Attitude/Motivation (5) •CAP: Award points/cash-in •PRIDE: Turn in tickets •Group Contingency Points</p>	<p>Comp/Text Reading (20) •Read Supplemental Reading: <i>Microfilm</i> •Highlight clunks & record</p>	<p>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)</p>	<p>Comp/Text Reading (15) •Answer TAKS-aligned comprehensions on Q's •Fluency Drill: <i>Can You Repeat That?</i></p>	<p>Word Study (15) •Decoding/Encoding: W.B.5B pg. 2 (5) •Fluency: Fluency (Remaining Time)</p>	<p>Vocab/Morphology (10) •Clunk F.U.S. #5 et. al -Use F.U.S. #5 to figure out yesterday's clunks</p> <p>Comp/Text Reading (20) •Read Supplemental Reading: <i>Slavery in Rhode Island</i> •Highlight clunks & record</p> <p>Comp/Text Reading (15) •Answer TAKS-aligned comprehensions on Q's •Fluency Drill: <i>Can You Repeat That?</i></p> <p>Attitude/Motivation (5) •CAP: Award points/cash-in •PRIDE: Turn in tickets •Group Contingency Points</p>	<p>Vocab/Morphology (10) •Clunk F.U.S. #5 et. al -Use F.U.S. #5 to figure out yesterday's clunks</p> <p>Comp/Text Reading (35) •Review previous reading •Read: 2nd half of Chapter 7 of <i>Something Upstairs</i> -Highlight clunks & record •Introduce/Review/Code 1.30's: <i>Making Connections</i> •Predictor: Check</p> <p>Attitude/Motivation (5) •CAP: Award points/cash-in •PRIDE: Turn in tickets •Group Contingency Points</p>	<p>Vocab/Morphology (5) •Affix Game. Using affixes from previous week's clunks, have students see how many words they can create</p> <table border="1"> <tr> <td> <p>Comp/Text Reading (20) •Read Supplemental Reading: <i>Historical Highlights</i> •Highlight clunks & record</p> </td> <td> <p>Word Study (20) •Sound Cards: digraphs + vowels Review: <i>microfilm</i> •Morphology: SR pg 4 read & spell •Decoding: WB pg 3</p> </td> </tr> <tr> <td> <p>Comp/Text Reading (15) •Answer TAKS-aligned comprehensions on Q's •Fluency Drill: <i>Can You Repeat That?</i></p> </td> <td> <p>Word Study (15) •Decoding/Encoding: •Fluency: #507 <i>calculate!!</i></p> </td> </tr> </table> <p>Attitude/Motivation (5) •CAP: Award points/cash-in •PRIDE: Weekly drawing •Group Contingency Points</p>	<p>Comp/Text Reading (20) •Read Supplemental Reading: <i>Historical Highlights</i> •Highlight clunks & record</p>	<p>Word Study (20) •Sound Cards: digraphs + vowels Review: <i>microfilm</i> •Morphology: SR pg 4 read & spell •Decoding: WB pg 3</p>	<p>Comp/Text Reading (15) •Answer TAKS-aligned comprehensions on Q's •Fluency Drill: <i>Can You Repeat That?</i></p>	<p>Word Study (15) •Decoding/Encoding: •Fluency: #507 <i>calculate!!</i></p>
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Spelling + affix game w/ clunks

No Third



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 <ul style="list-style-type: none"> 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 			C/T: 35 MIN <ul style="list-style-type: none"> 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 			C/T: 35 MIN <ul style="list-style-type: none"> fluency drill: vowel comb. words set 4 p. 255 text: finish reading of "Robots" article 			C/T: 45 MIN <ul style="list-style-type: none"> 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 			C/T: 25 MIN <ul style="list-style-type: none"> fluency drill: vowel comb. word set 6 p. 257 finish CSR foldable CBM test 		
V/M: 10 MIN <ul style="list-style-type: none"> discuss clunks and use fix-up strategies 			V/M: 10 MIN <ul style="list-style-type: none"> review click and clunks, share clunks and discuss fix-ups for section 1 			V/M: 10 MIN <ul style="list-style-type: none"> share clunks and fix-up strategies from sections 2 and 3 			A/M: 5 MIN			V/M: 20 MIN <ul style="list-style-type: none"> Intro. to morphology vocabulary through morphemes p. 5 suffix-y 		
A/M: 5 MIN									A/M: 5 MIN			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)



CBM Informational Guide

CBM INFORMATIONAL GUIDE

Weeks of: 9/17-9/25

GROUP 1

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
7-8 th 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

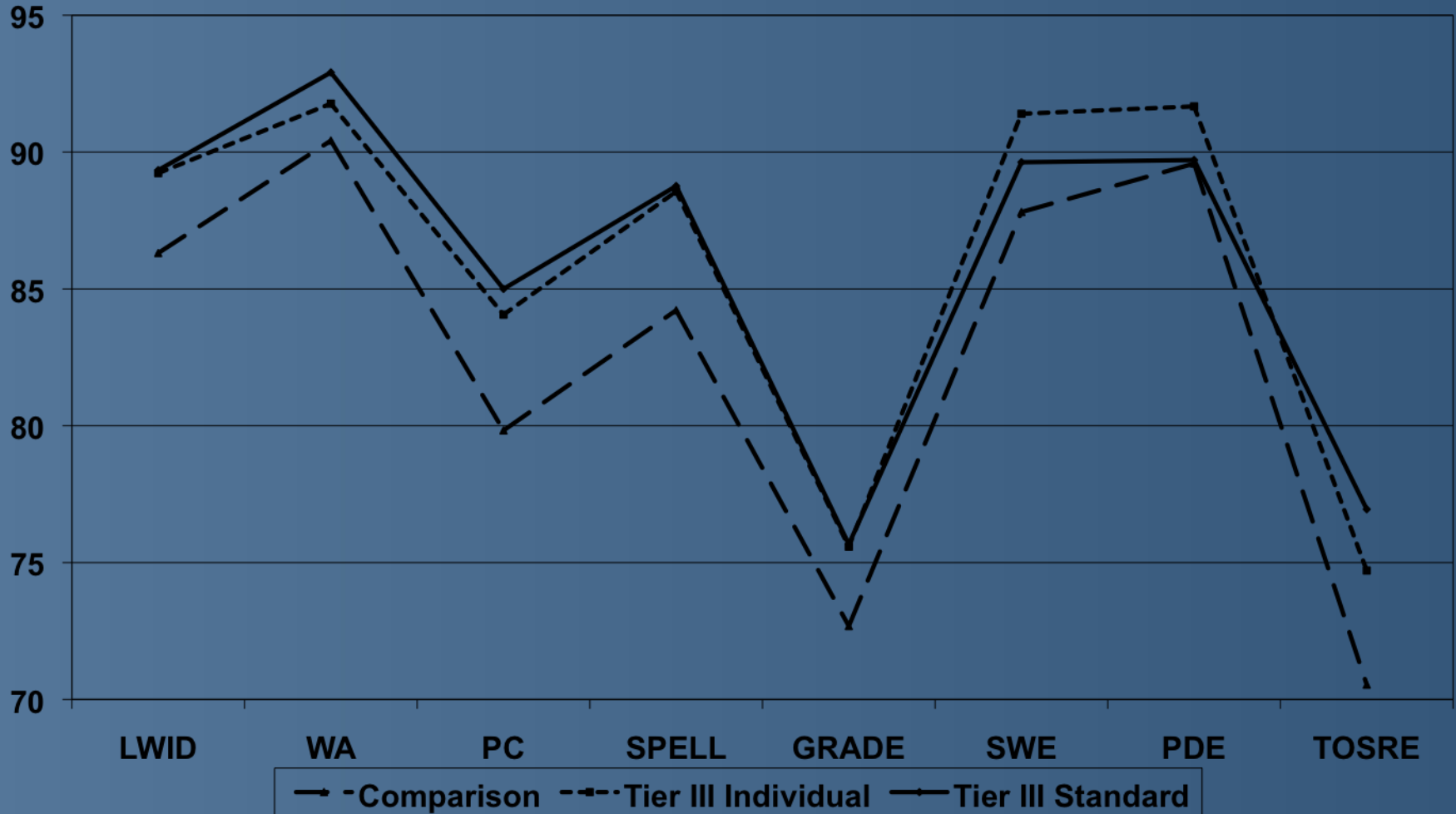


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Year 2 Results

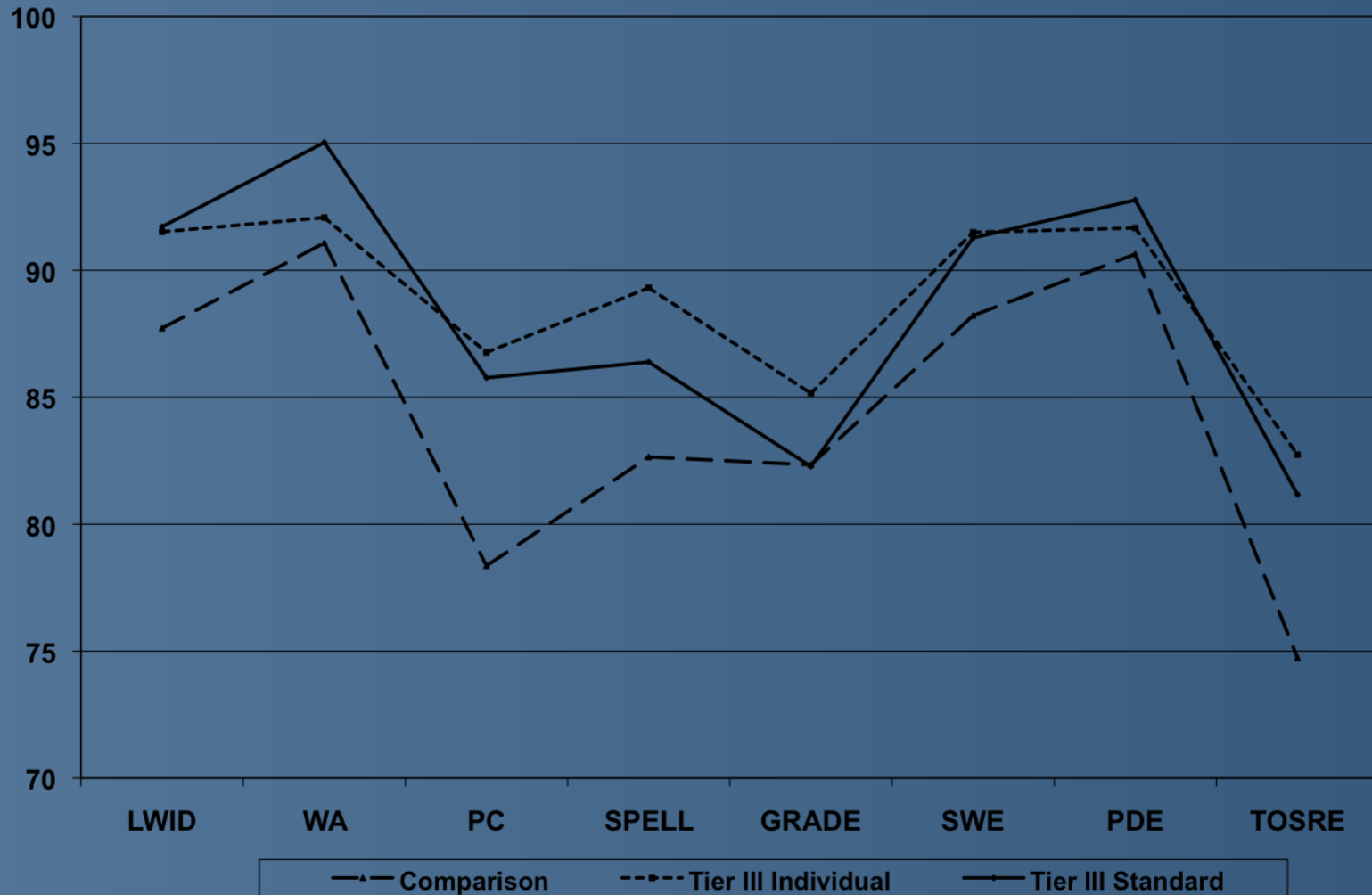


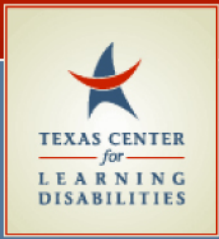
Pretest Scores (SS)



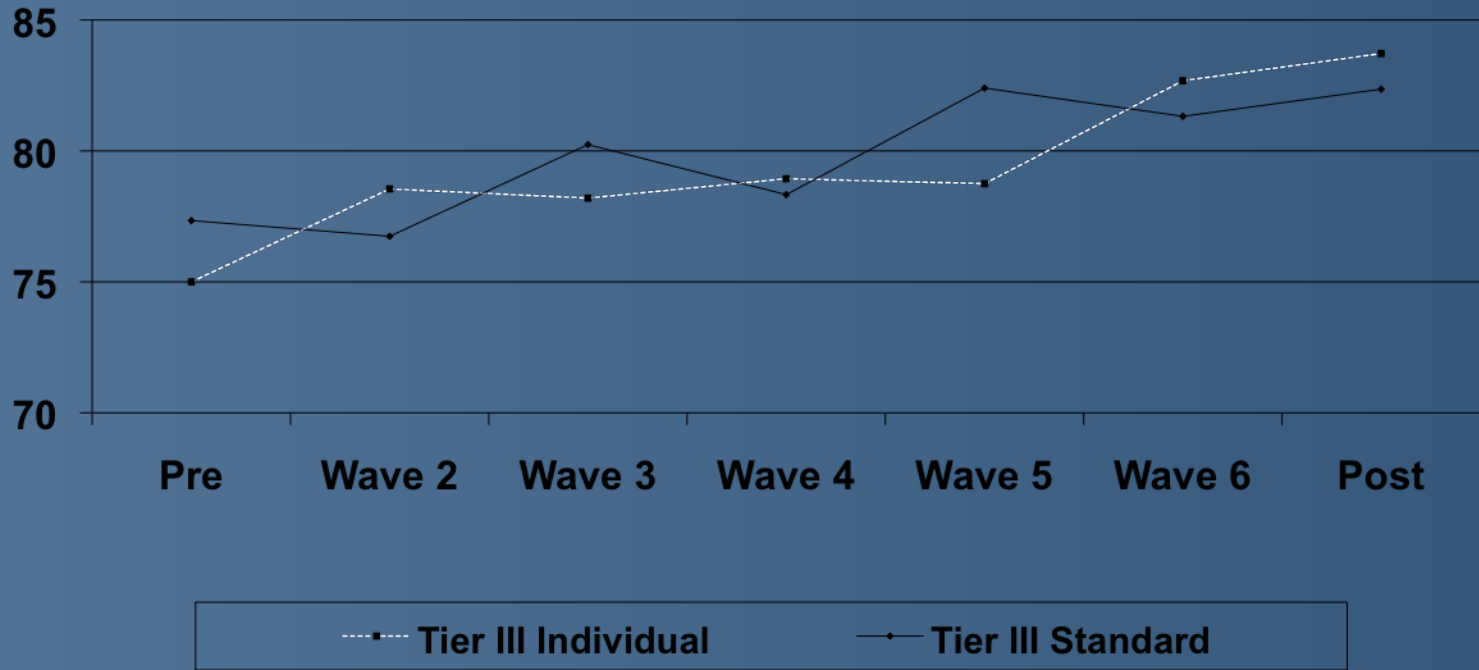


Posttest Scores (SS)



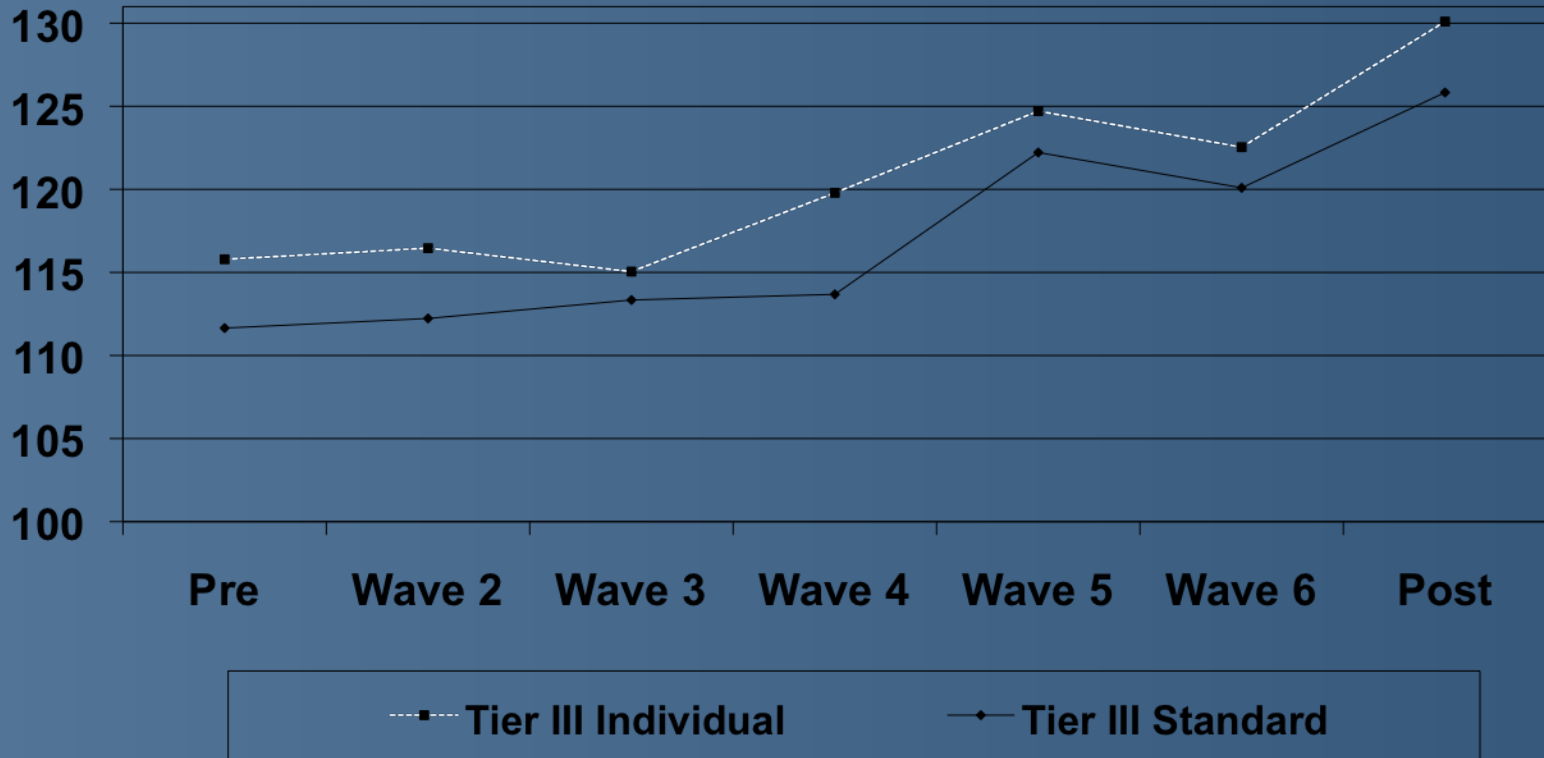


Test of Sentence Reading Efficiency (SS)





Average MSPMS Passages





Comprehension/Fluency Cluster

	<i>G1</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
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

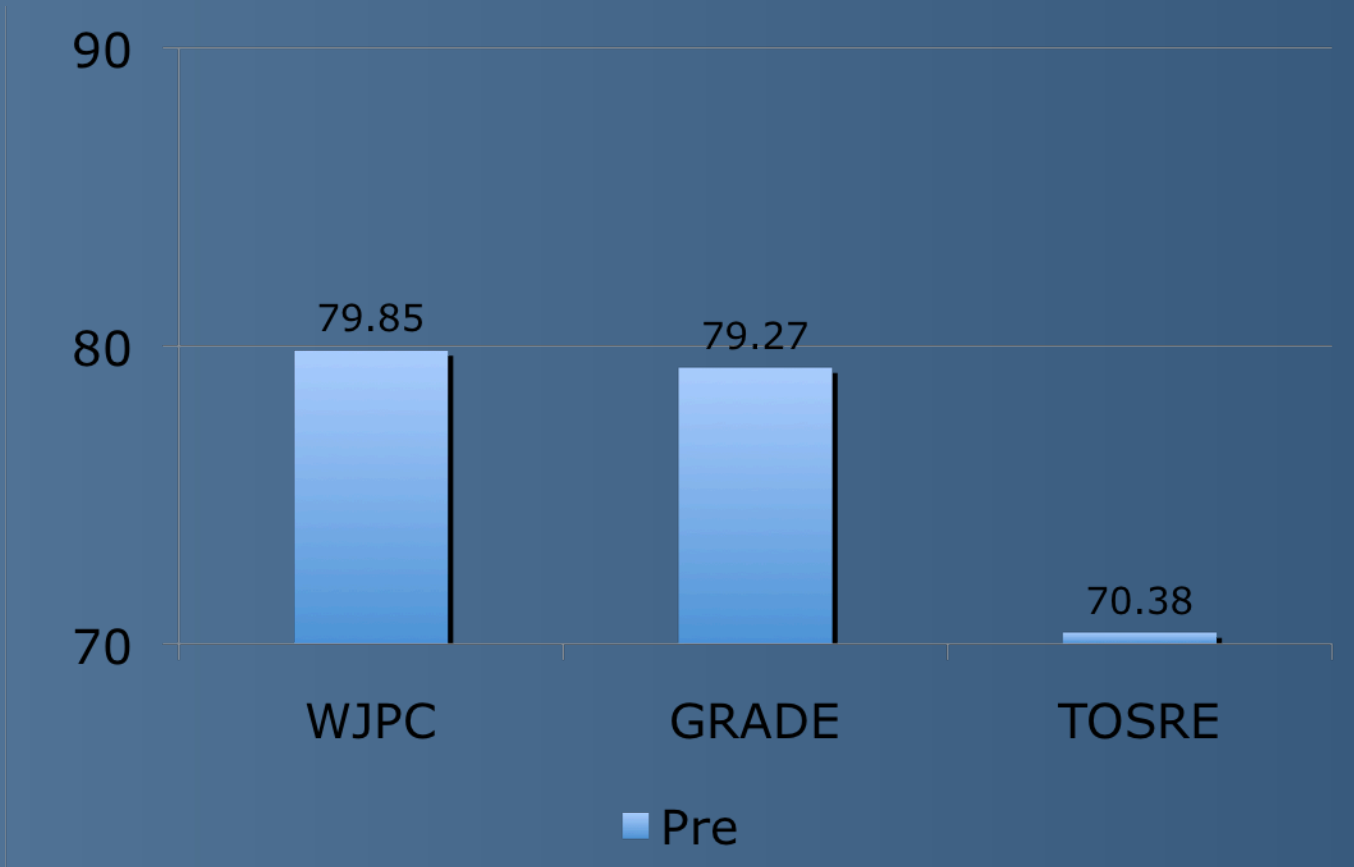


Effect Sizes: Comprehension/ Fluency Cluster

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)

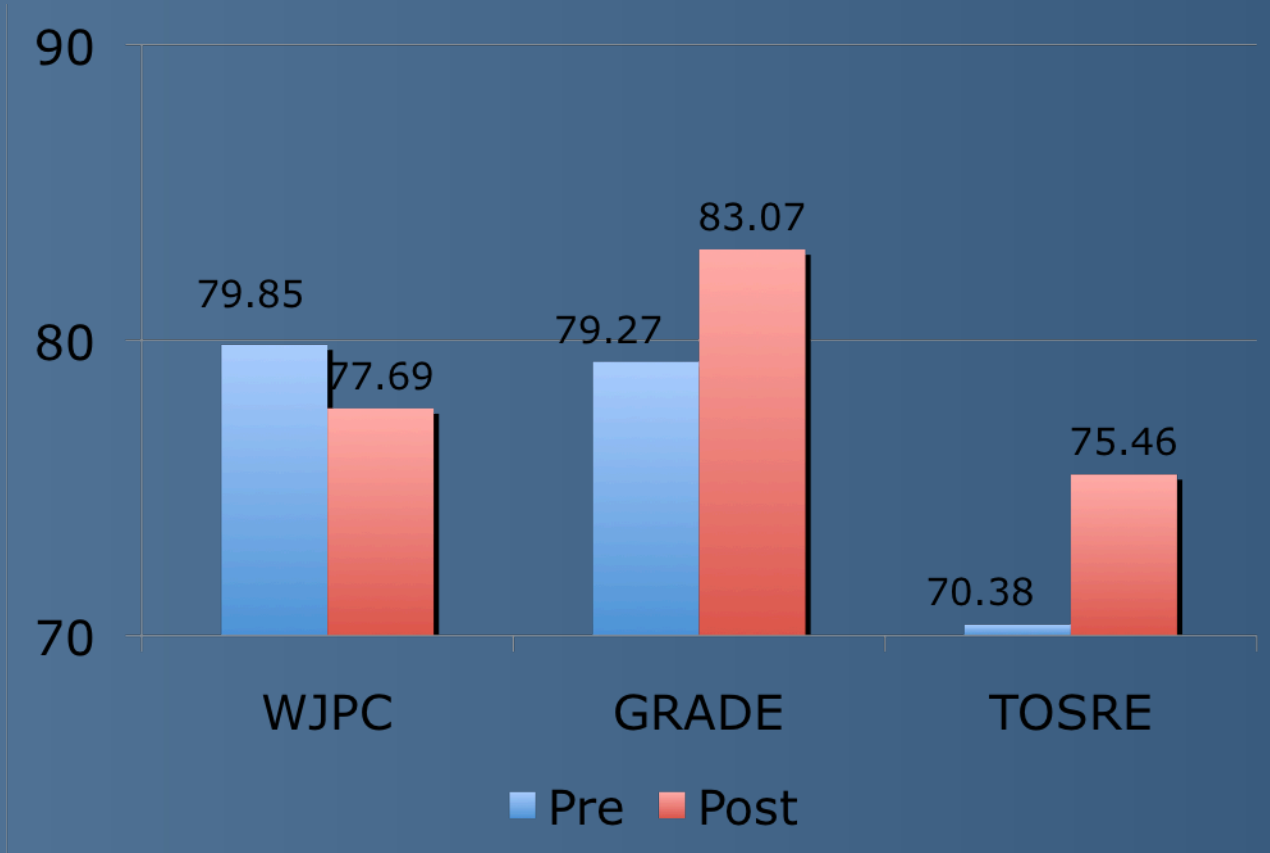


Overall, how did students in the Comparison group fare on fluency/comprehension measures?



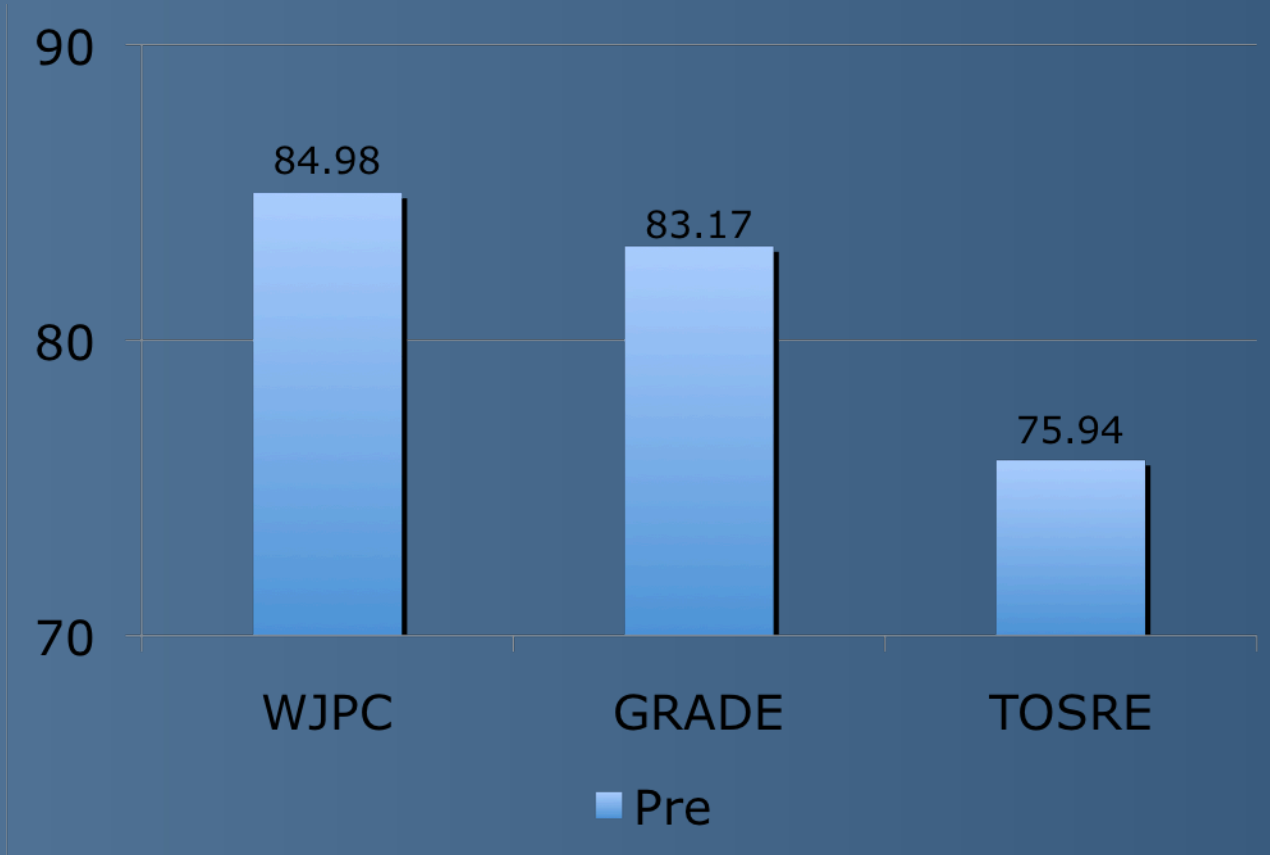


Overall, how did students in the Comparison group fare on standardized comprehension measures?



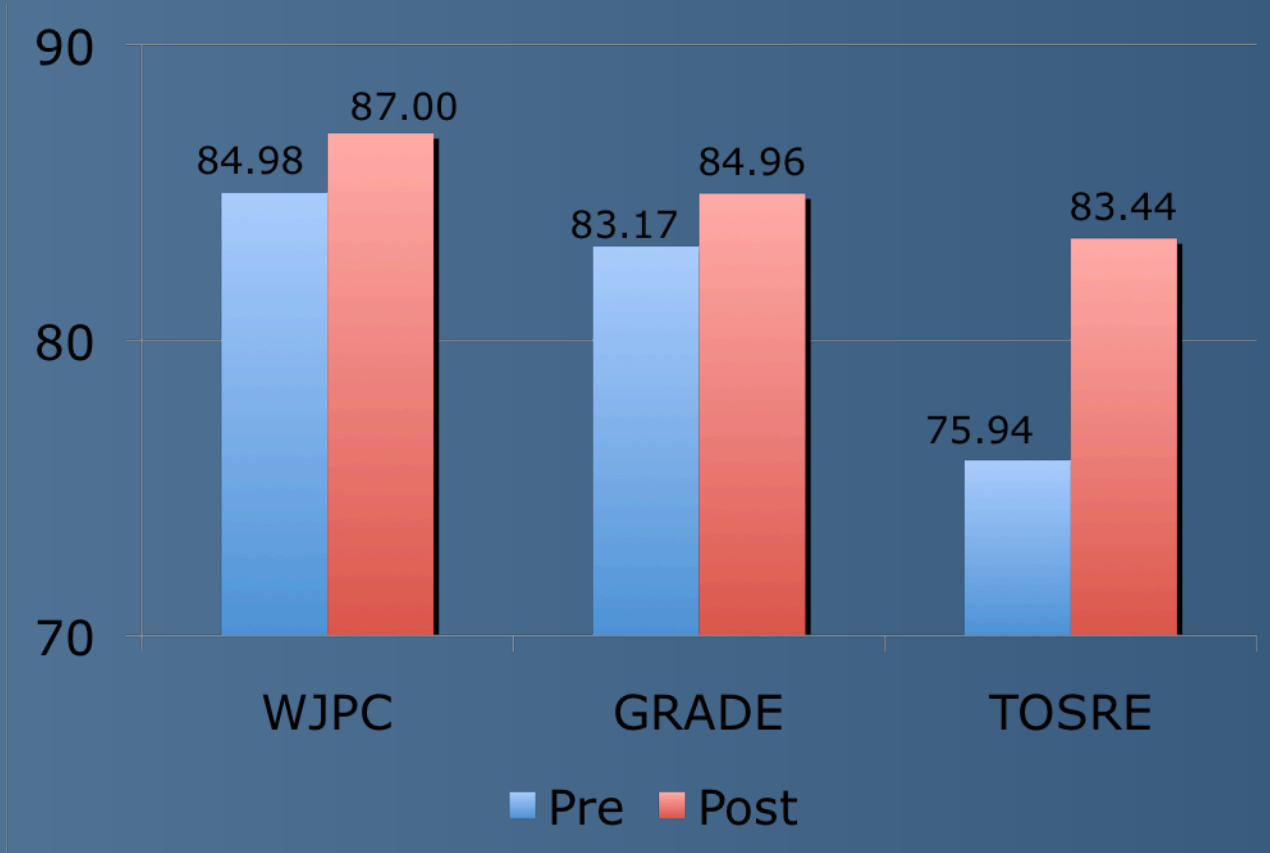


Overall, how did students in the Individualized group fare on fluency/comprehension measures?



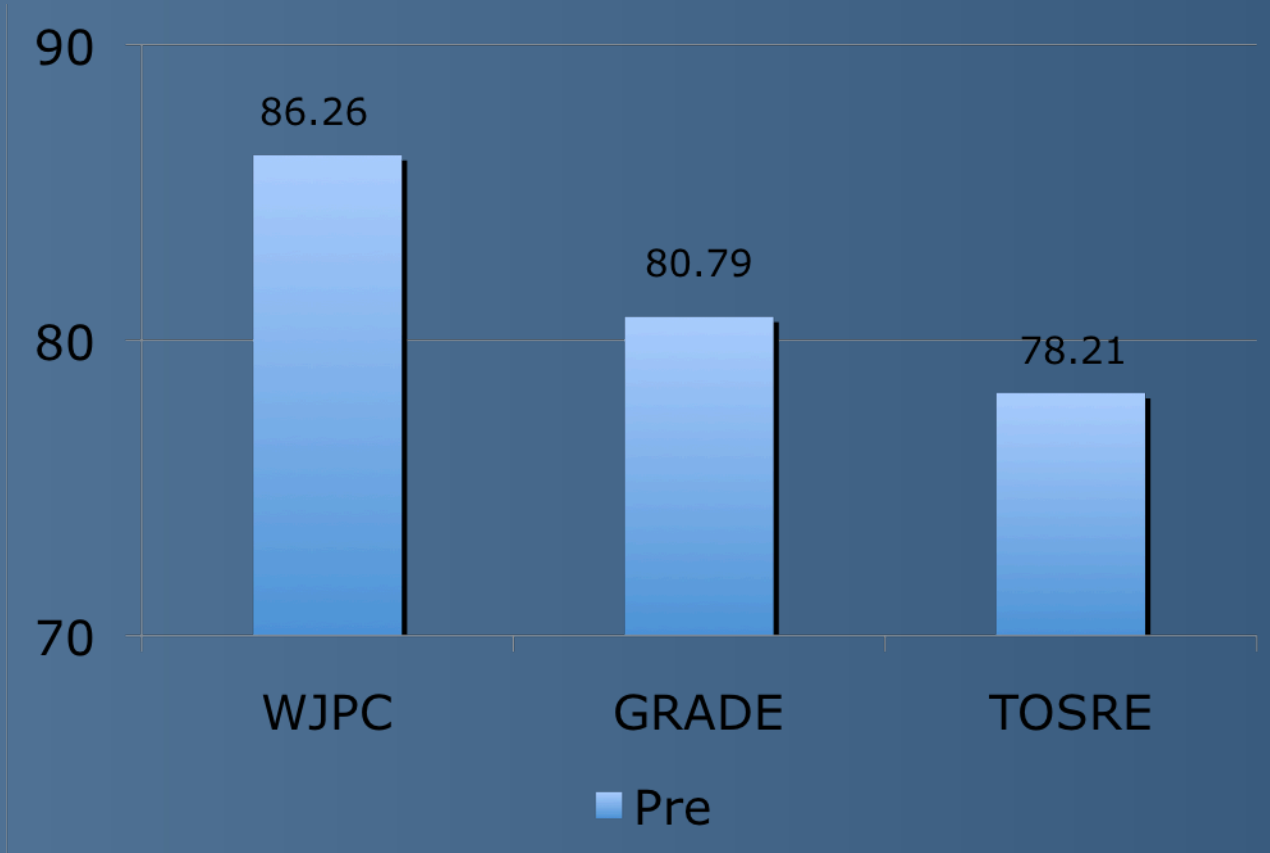


Overall, how did students in the Individualized group fare on fluency/comprehension measures?



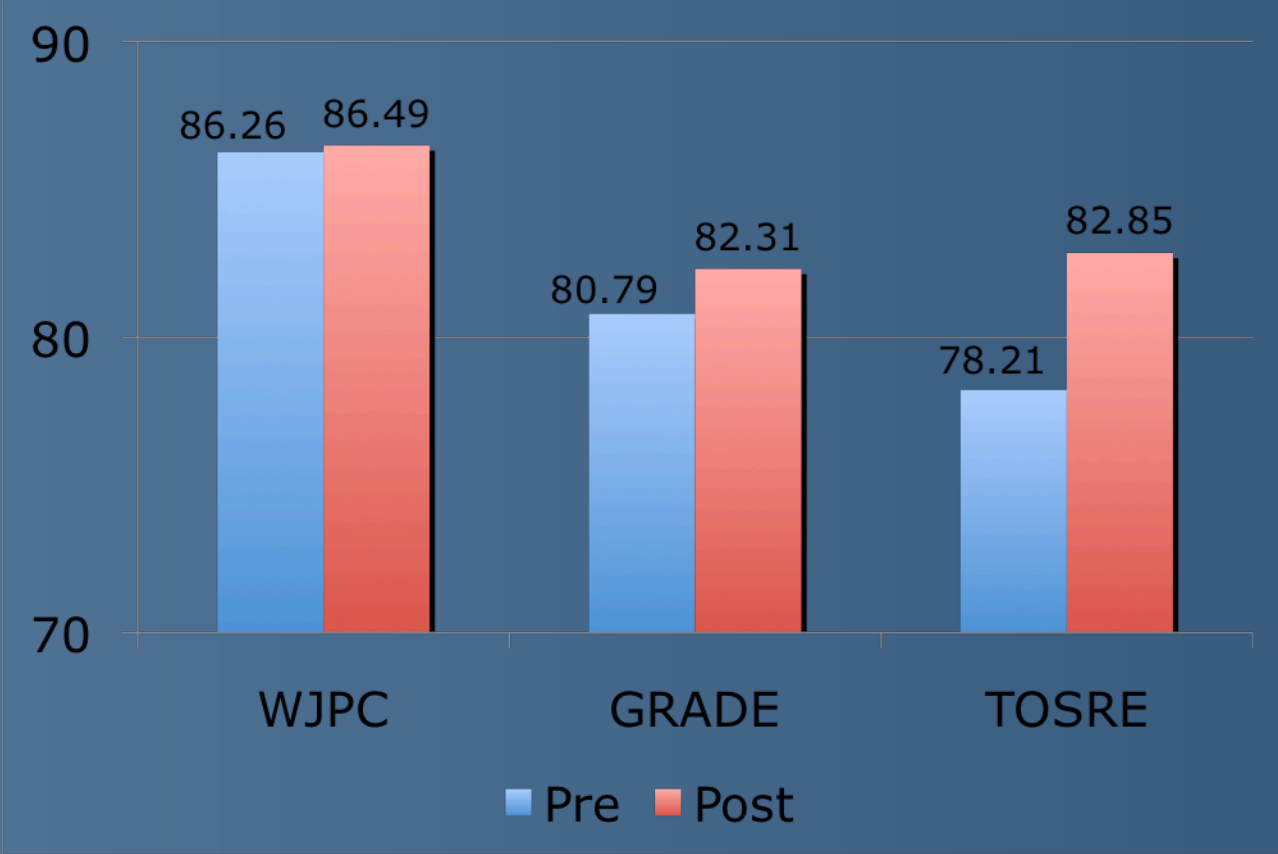


Overall, how did students in the Standardized group fare on fluency/comprehension measures?





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





Word Reading Cluster

	<i>G1</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
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

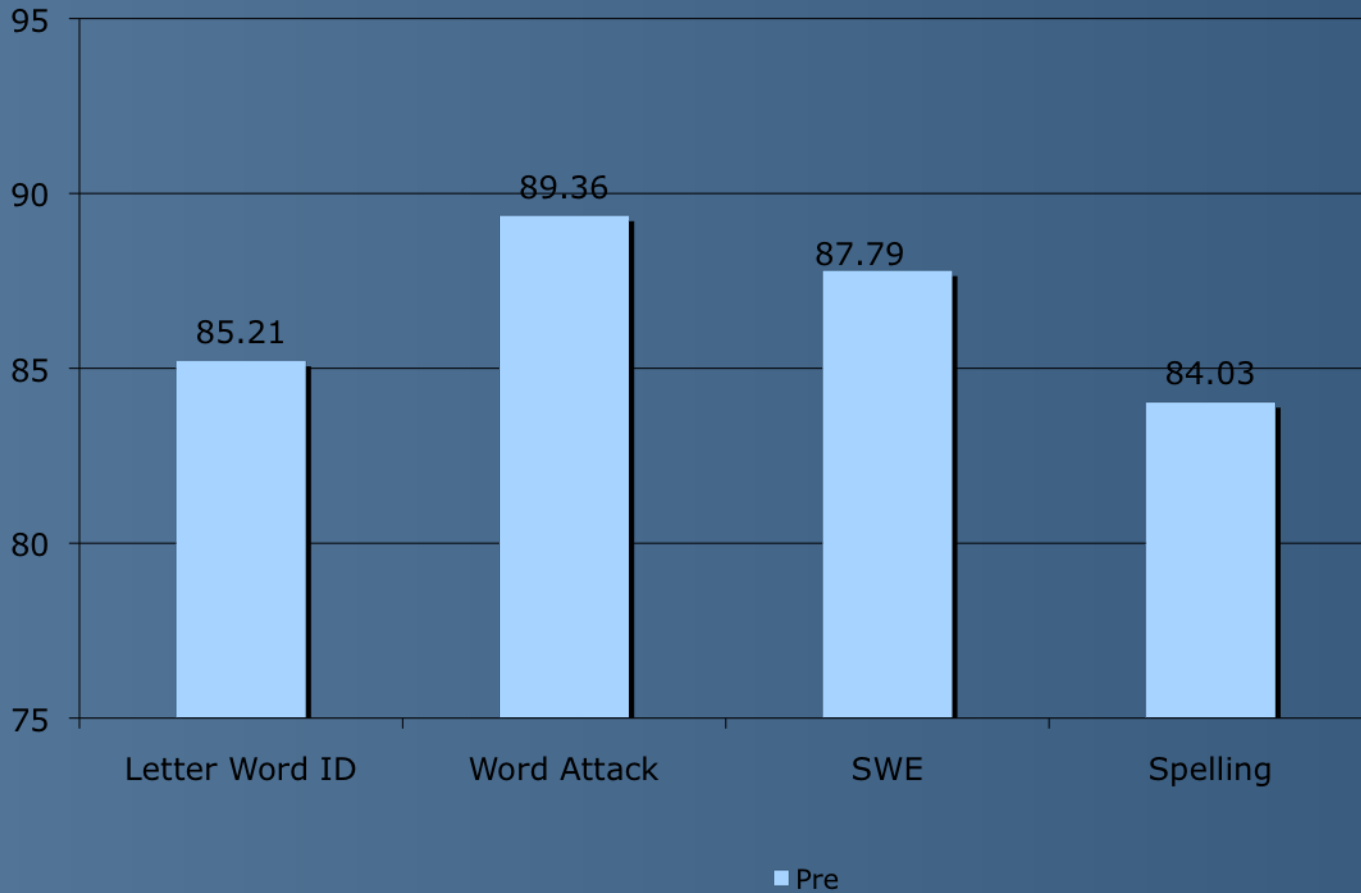


Effect Sizes: Word Reading Cluster

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)

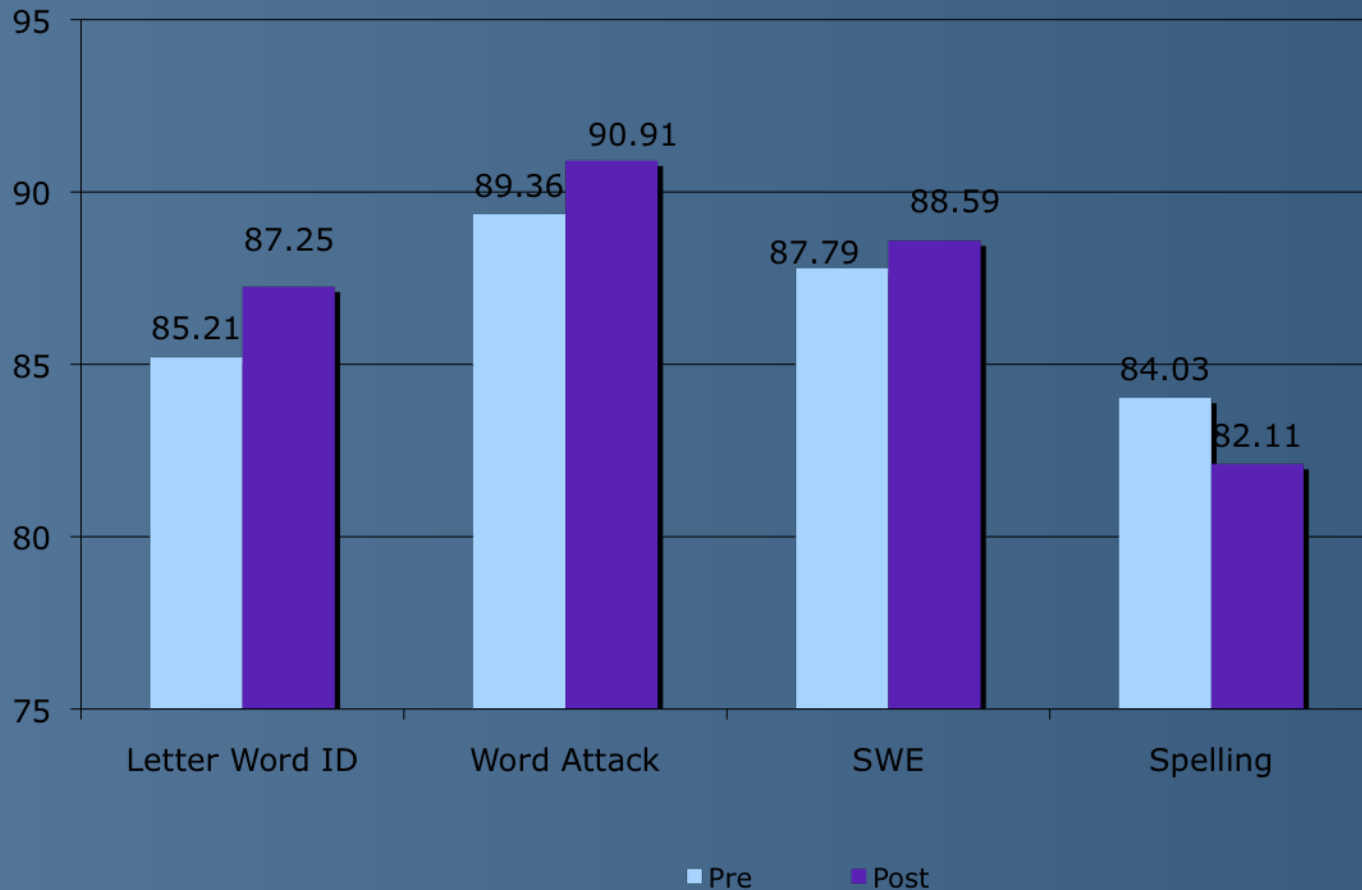


Overall, how did students in the Comparison Group fare on standardized word reading measures?



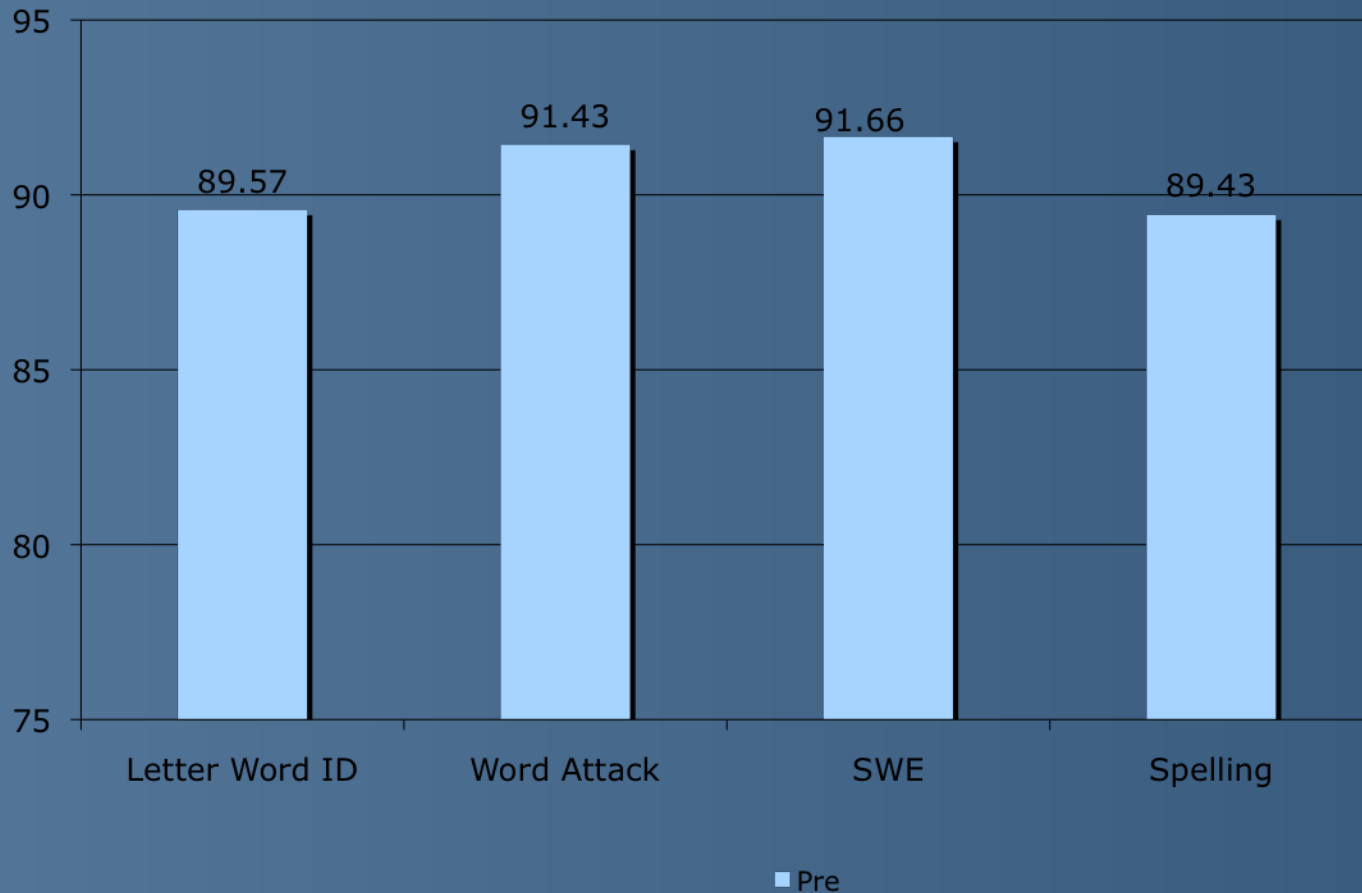


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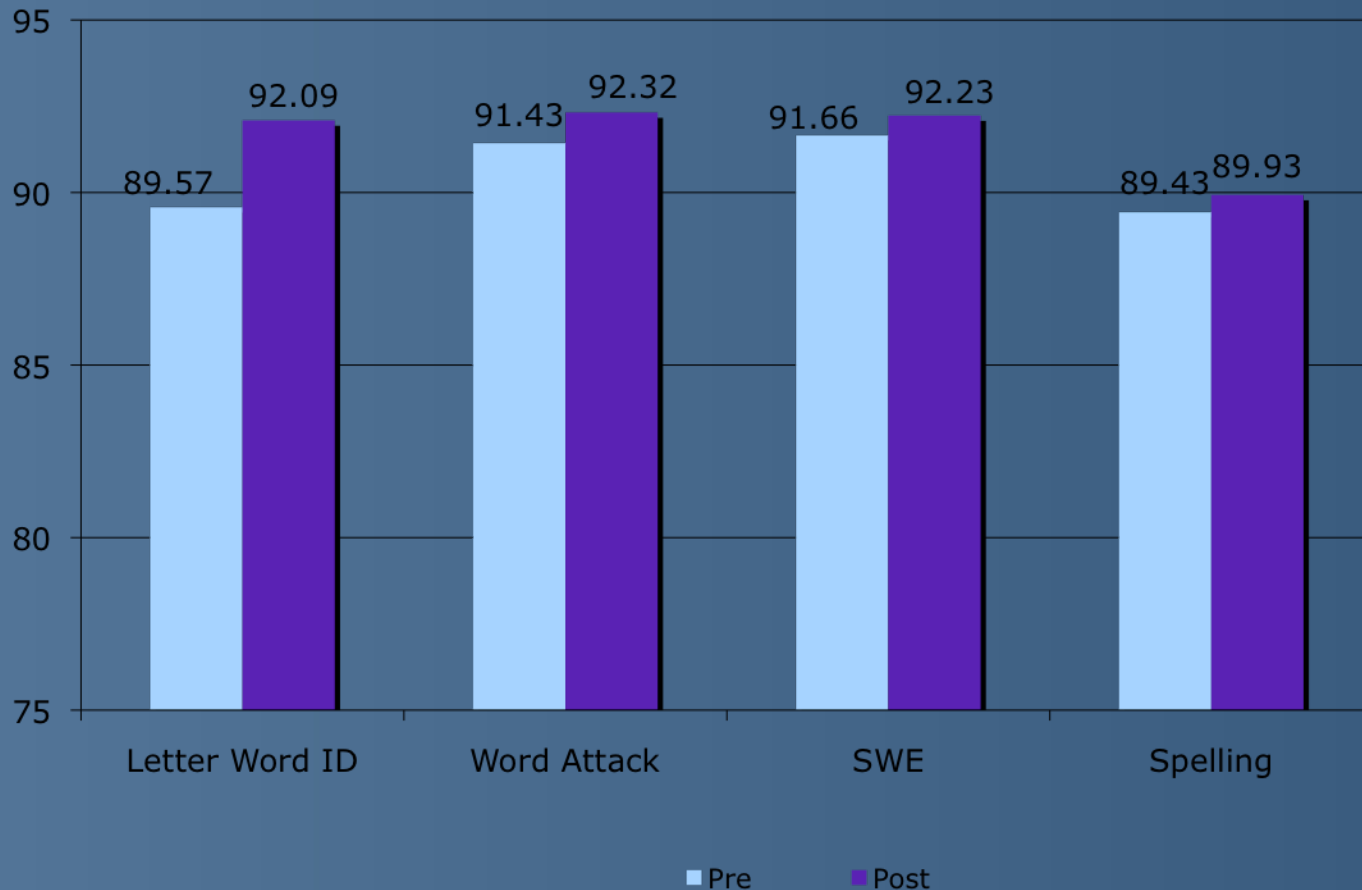


Overall, how did students in Individualized fare on standardized word reading measures?



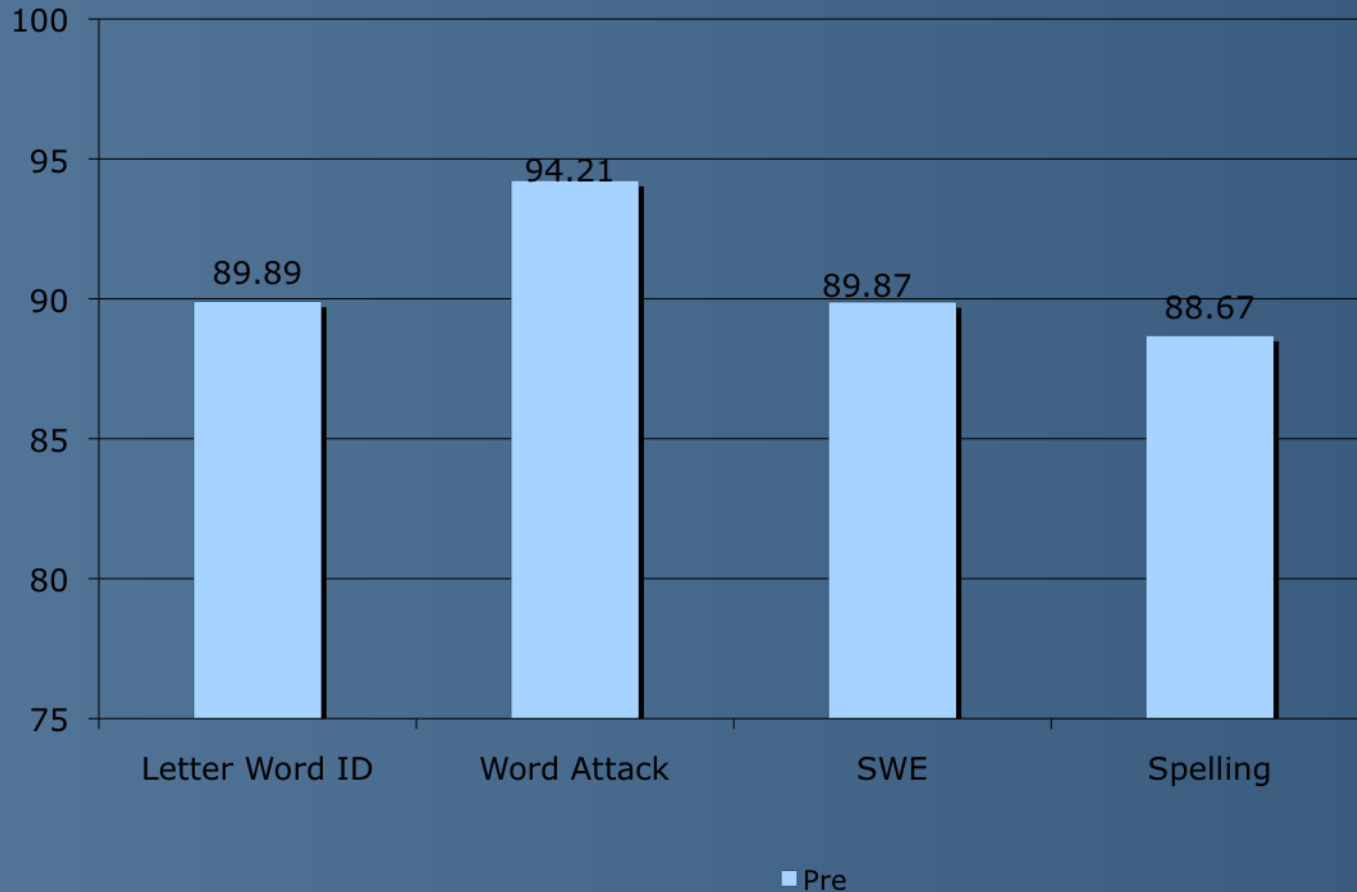


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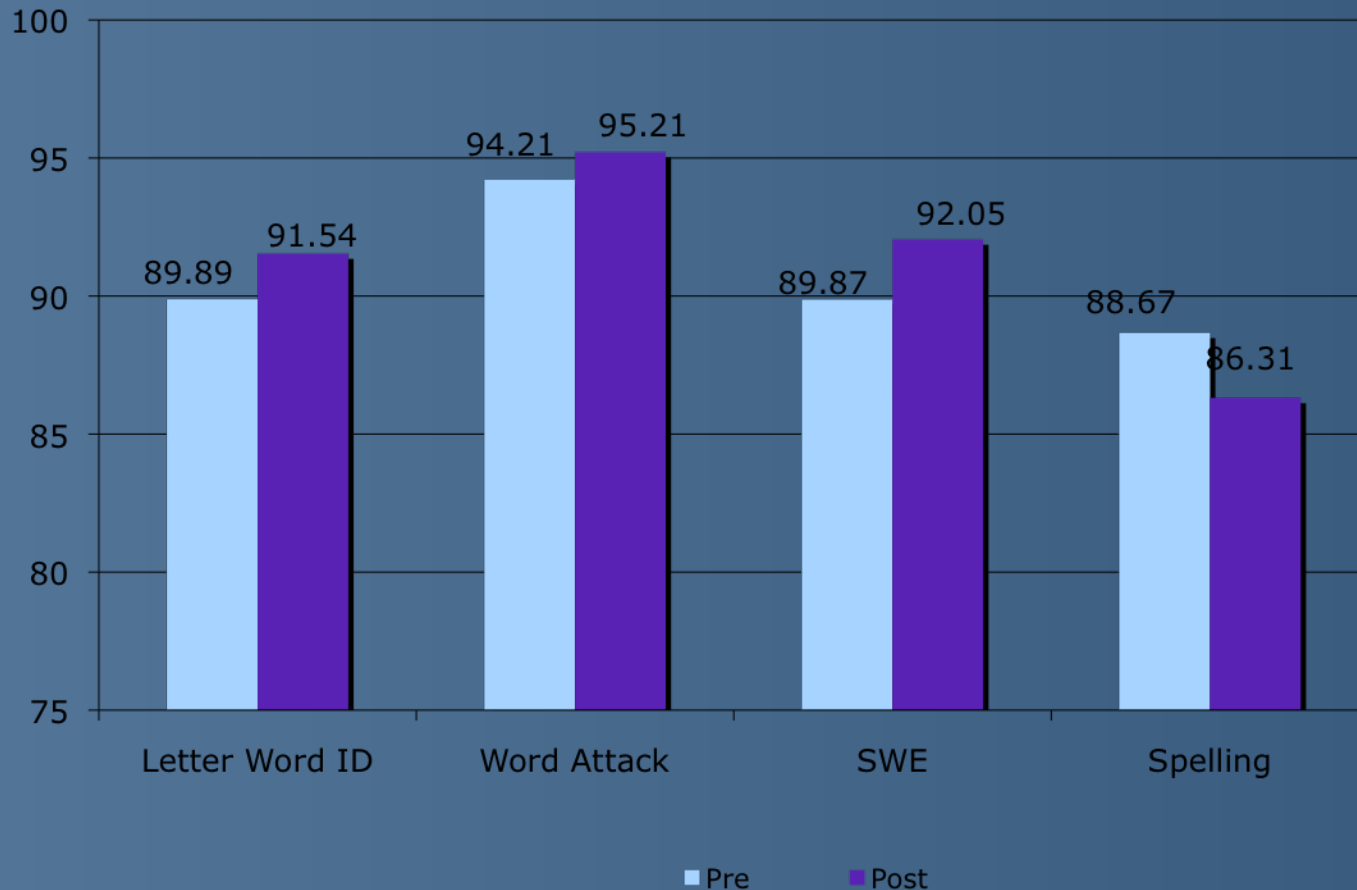


Overall, how did students in Standardized fare on standardized word reading measures?





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





Perspectives

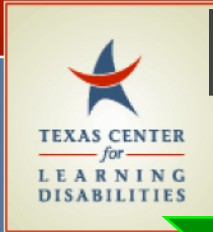
- A comparable study: The Enhanced Reading Opportunities Study
- Two supplemental literacy programs designed as full year courses to replace a ninth grade elective class
- When analyzed jointly, the ERO programs produced an increase of 0.9 standard score point on the GRADE reading comprehension subtests.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

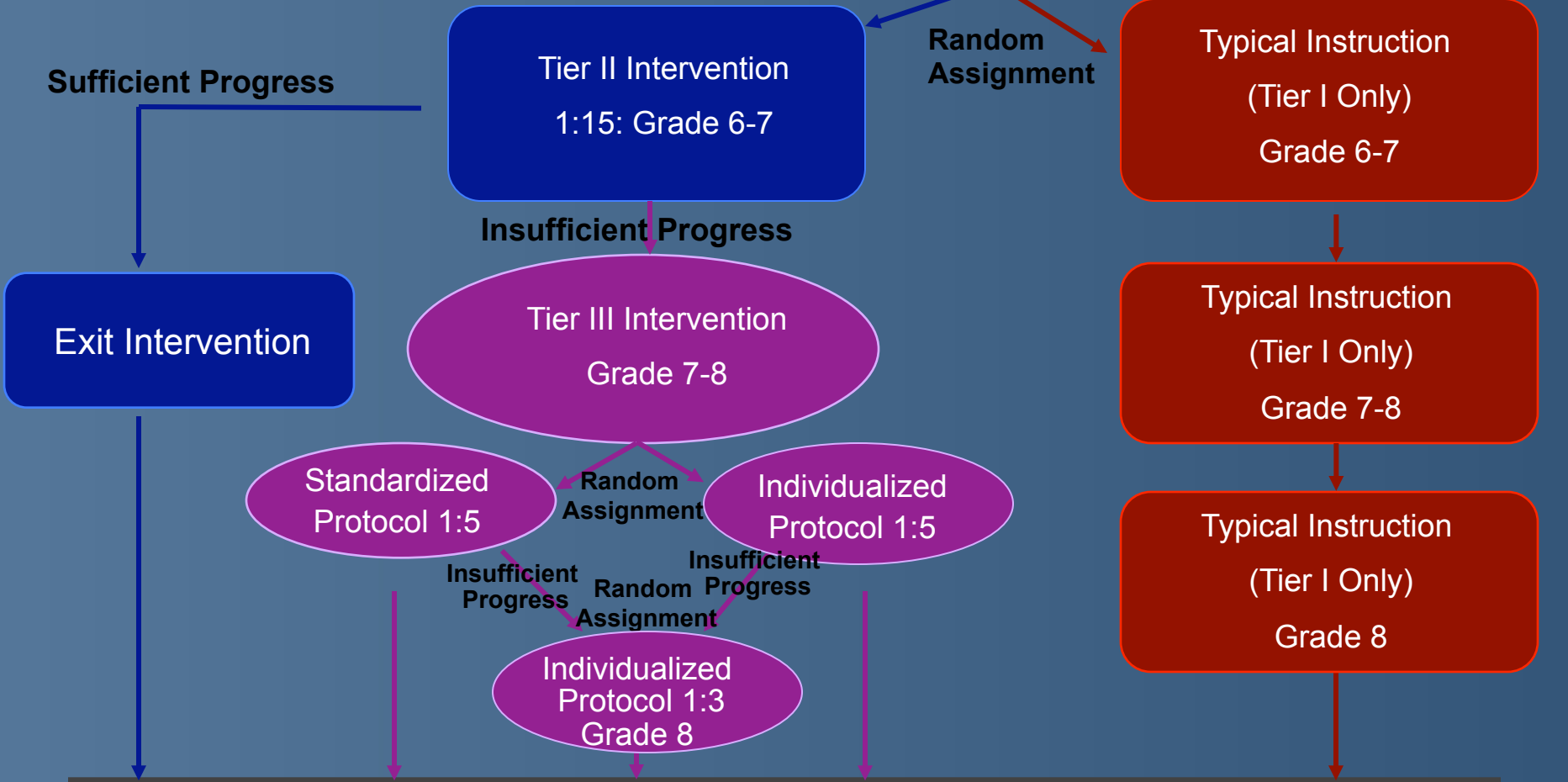
All Schools	ERO (n=1,408)	Non ERO (n=1,005)	Est. Impact	ES	P- Value
Reading Comprehension Avg. Standard Score	90.1	89.2	.9	.09	.019
Reading Vocabulary Avg. Standard Score	93.4	93.2	.3	.03	.472



Grade 6-7 Students (Fall '06)

Grade 6-7 On-track Readers

Grade 6-7 Struggling Readers



Follow-up Assessment



Lessons Learned

- “Standardize” aspects of the Individualized: Use a research based “program” with a systematic scope and sequence to ensure word study is taught systematically with repetition (for students needing word study)
- Use a great deal of expository text to increase world knowledge
- Infuse intensive language and vocabulary instruction daily
- Use data to make instructional decisions and use data you already have (state tests)



Lessons Learned

- Secondary struggling comprehenders need intensive language/vocabulary/background knowledge instruction and support.
- Secondary struggling readers need *instruction*-not just more practice. They have been practicing ineffective strategies for years.



- What is RTI with Secondary Students?
- How do we make up for such low language and background knowledge in a 50 min. period?
- Is there a need for a Tier 2 intervention in secondary grades or is there only Tier 3?
- Do we think that secondary students with reading disabilities can meet grade level reading expectations?

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Thank you!

- Online Q&A
- Evaluation

[https://surveystation.austin.utexas.edu//
TakeSurvey.aspx?SurveyID=74MImn9M](https://surveystation.austin.utexas.edu//TakeSurvey.aspx?SurveyID=74MImn9M)