



Carroll TCI Pilot Program Overview

Presentation to Andover Public Schools

June 1, 2017



+ Agenda



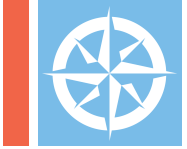
Introductions

Overview of TCI Practice & Outcomes

Overview of TCI Pilot Program

Next Steps

+ Introductions



+ Carroll Student Profile



Generally, the profile includes...

- High Verbal Comprehension
- Strong Fluid Reasoning
- +/- Visual Spatial
- Weaker Working Memory
- Slower Processing Speed
- History of Phonological Struggles
- Series of Notable Strengths
- And always ... Language-based Learning Difficulties

WISC
Profile





A Boy Na

Woodcock - Johnson

Broad Reading
Broad Math
Broad Written Language
Academic Skills
Academic Fluency



Comprehension	115
Reasoning	123
Vocabulary	87
Speed	82

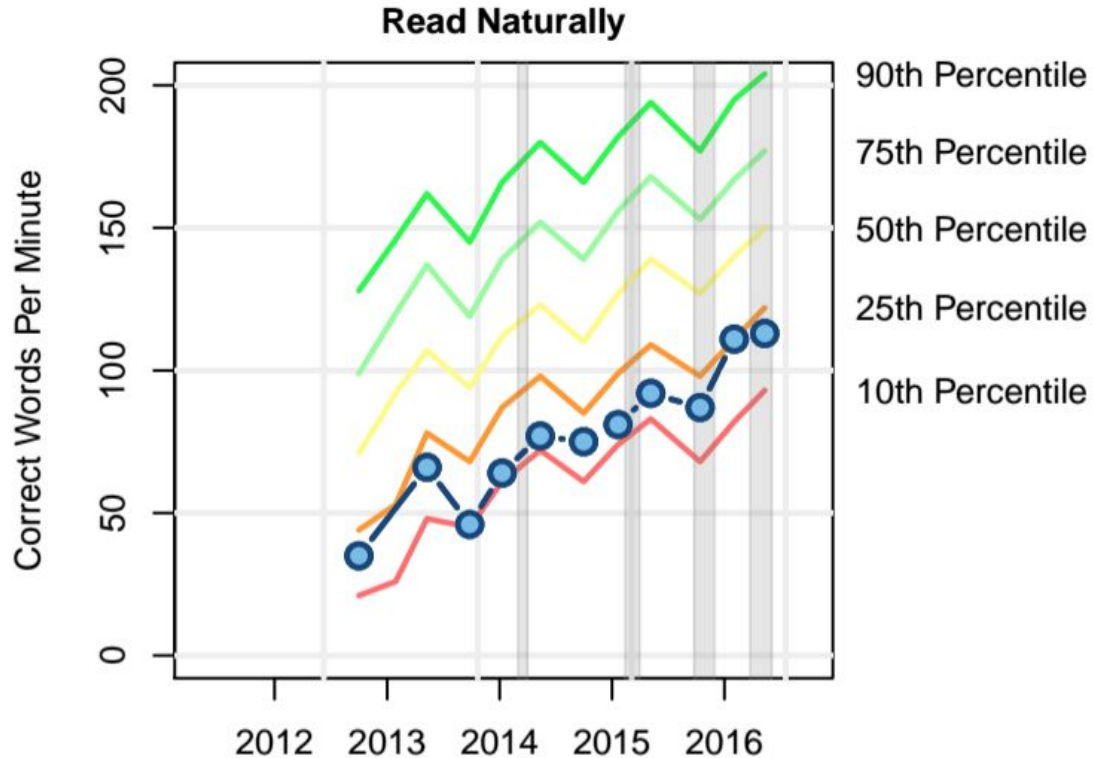
Test was incomplete

*Academic achievement only
Vocabulary*

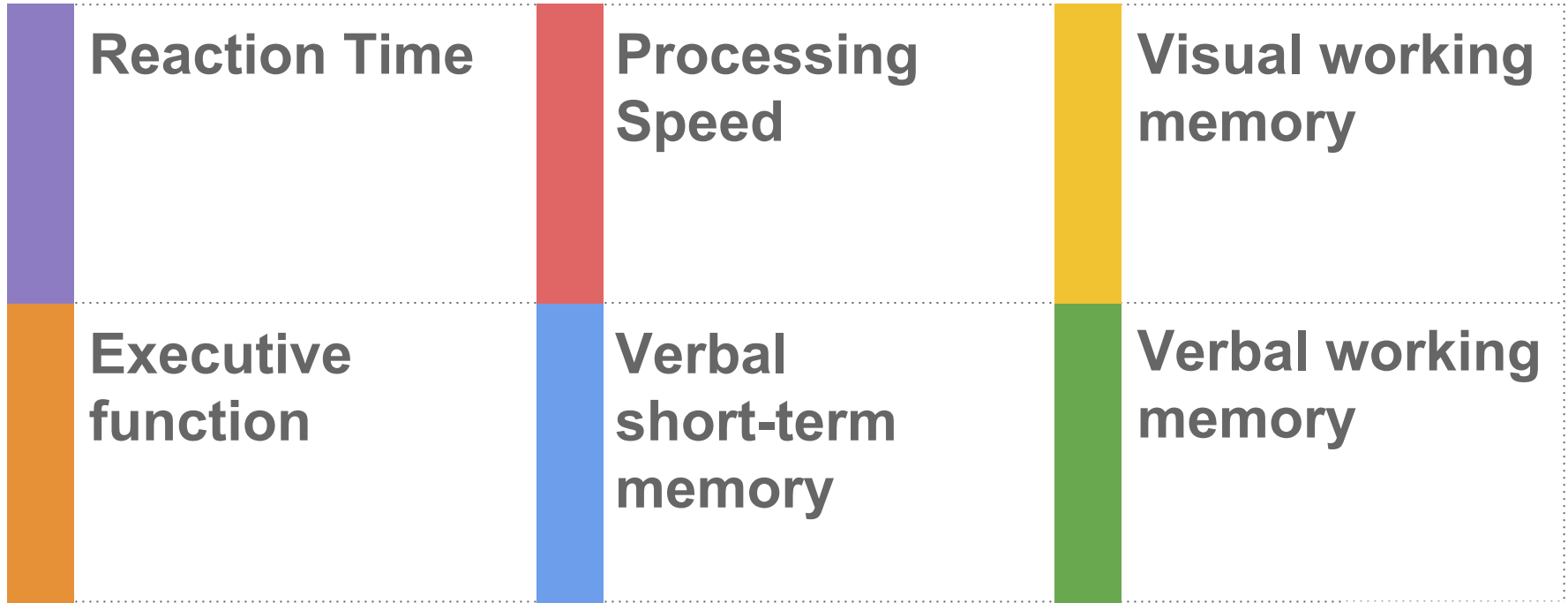


Is what we are doing good
enough?

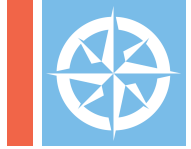
+ Academic Assessments



+ What Lies Beneath the Reading Problem?



+ Common Cognitive Struggles

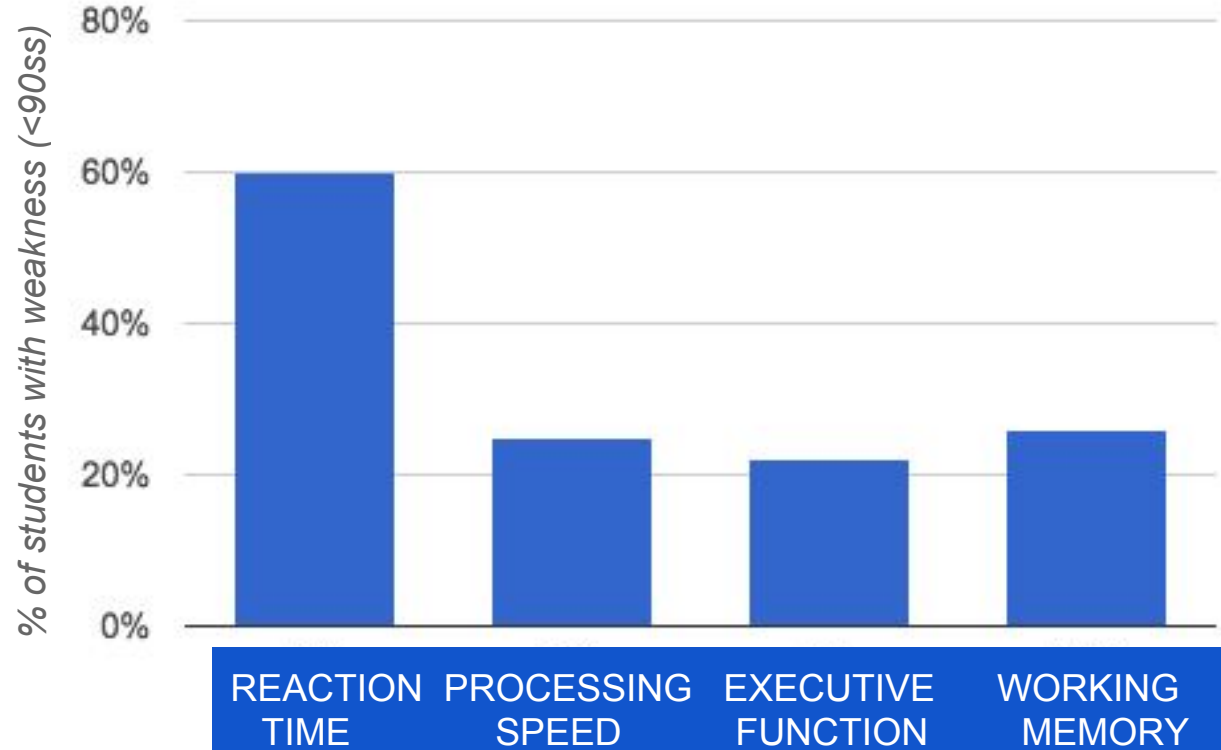


Cognitive Weaknesses Among Carroll School Students

Grades 5-9 before

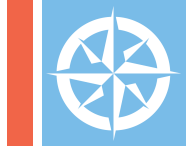
any TCI

(n=386)



+ Carroll Students

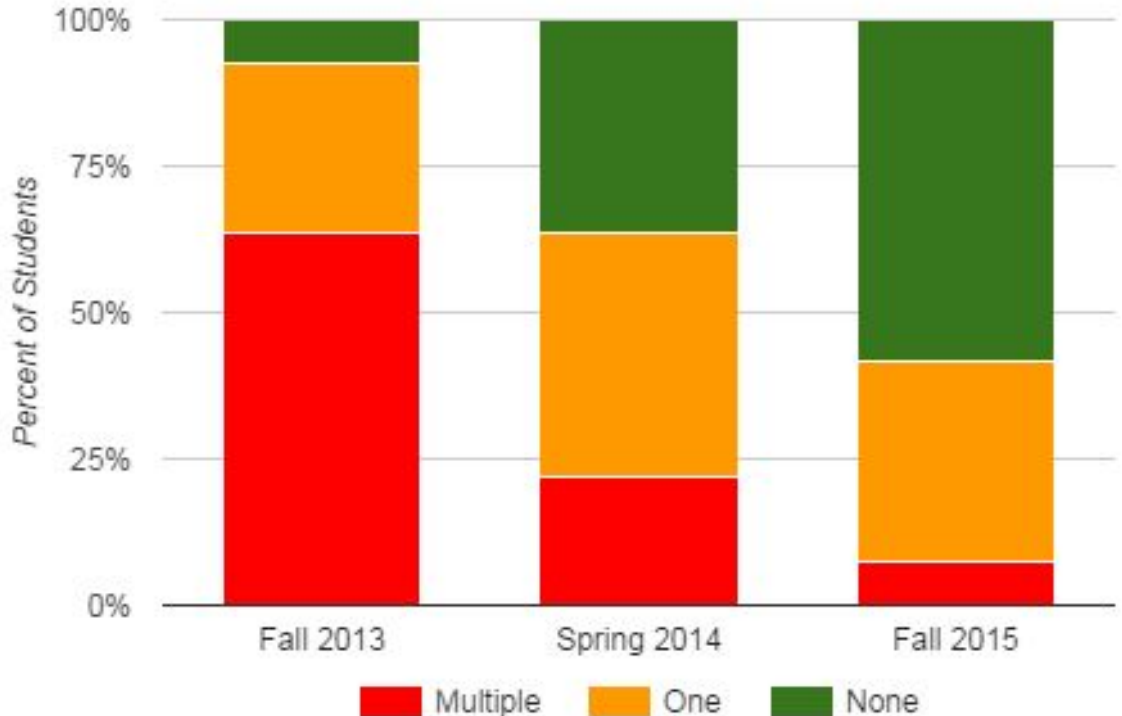
MULTIPLE COGNITIVE WEAKNESSES



Number of Cognitive Weaknesses (SS<90)

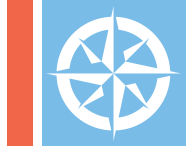
Among CS Class of 2016 as Measured in Fall 2013, Spring 2014 and Fall 2015

(n=55)



+ Highly Correlated

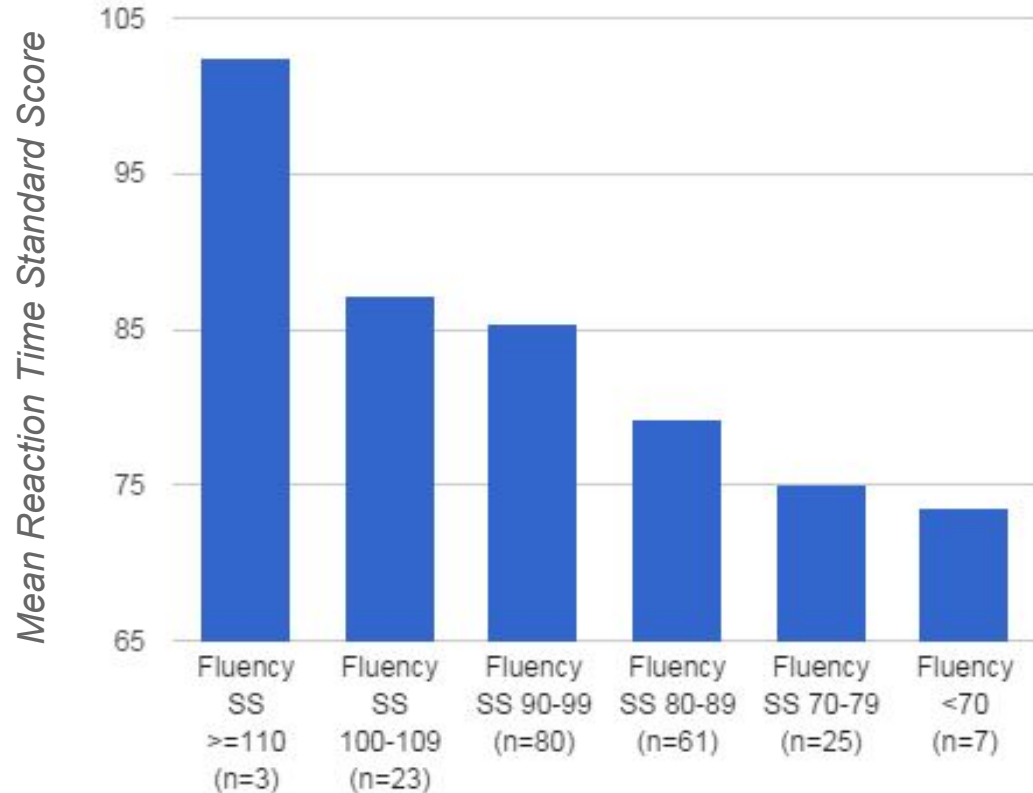
REACTION TIME SCORES AND READING FLUENCY



Mean Reaction Time
Scores of Carroll
School 5th - 7th Grade
Students

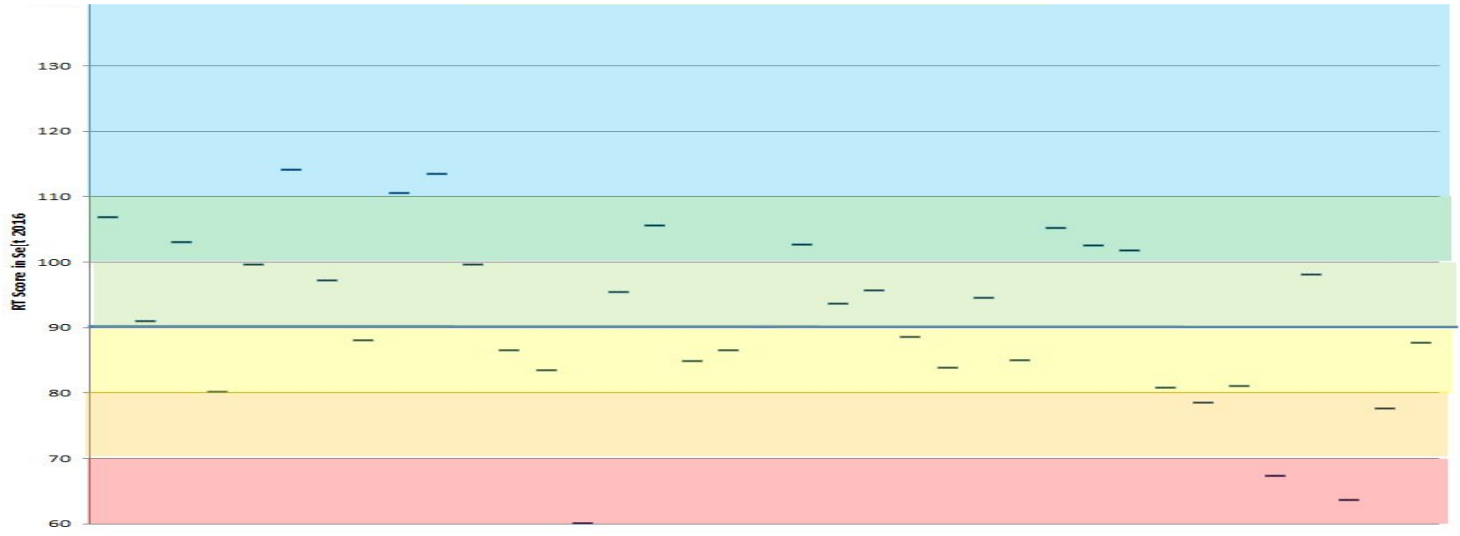
By Reading Fluency
Bands

(n=199)



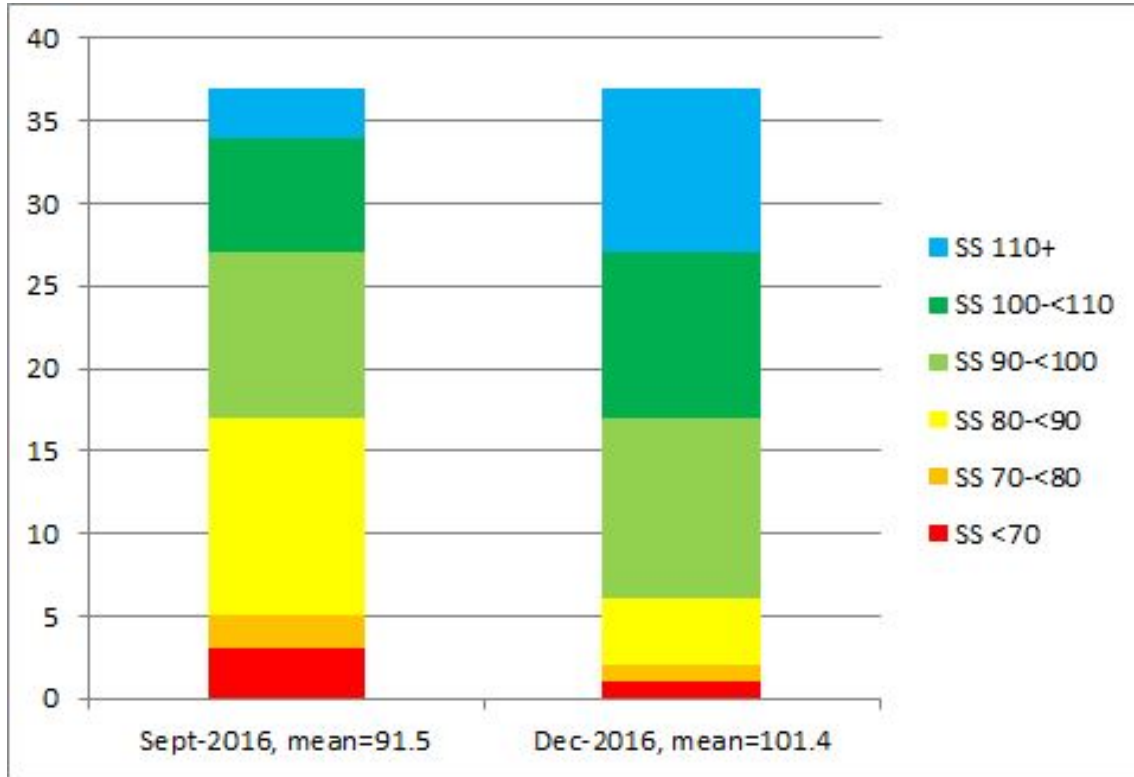


4th Grade Reaction Time





Reaction Time

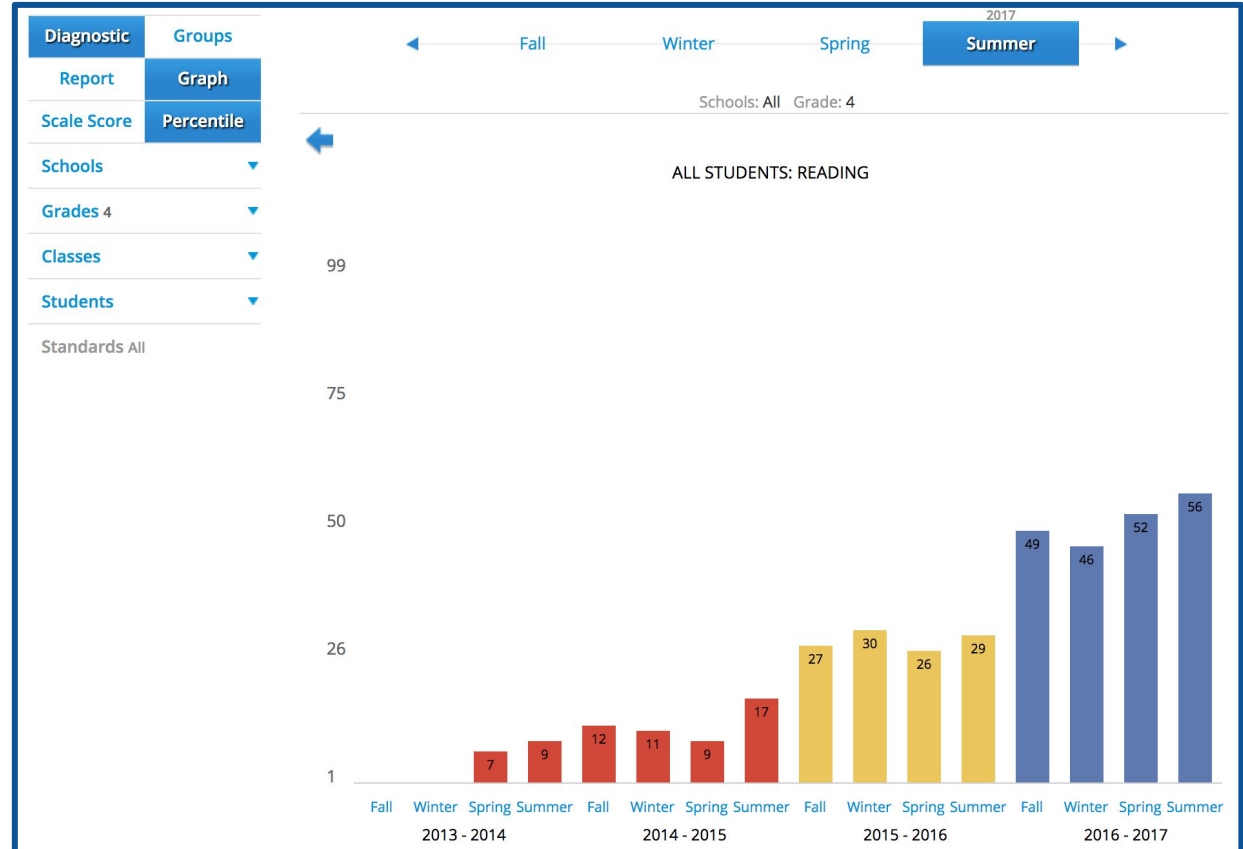




Fourth Grade

Track My Progress Reading Scores

Longitudinal View



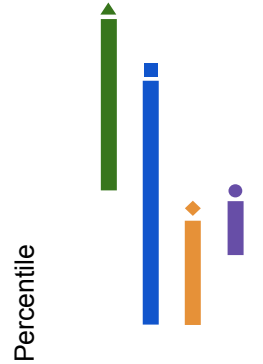
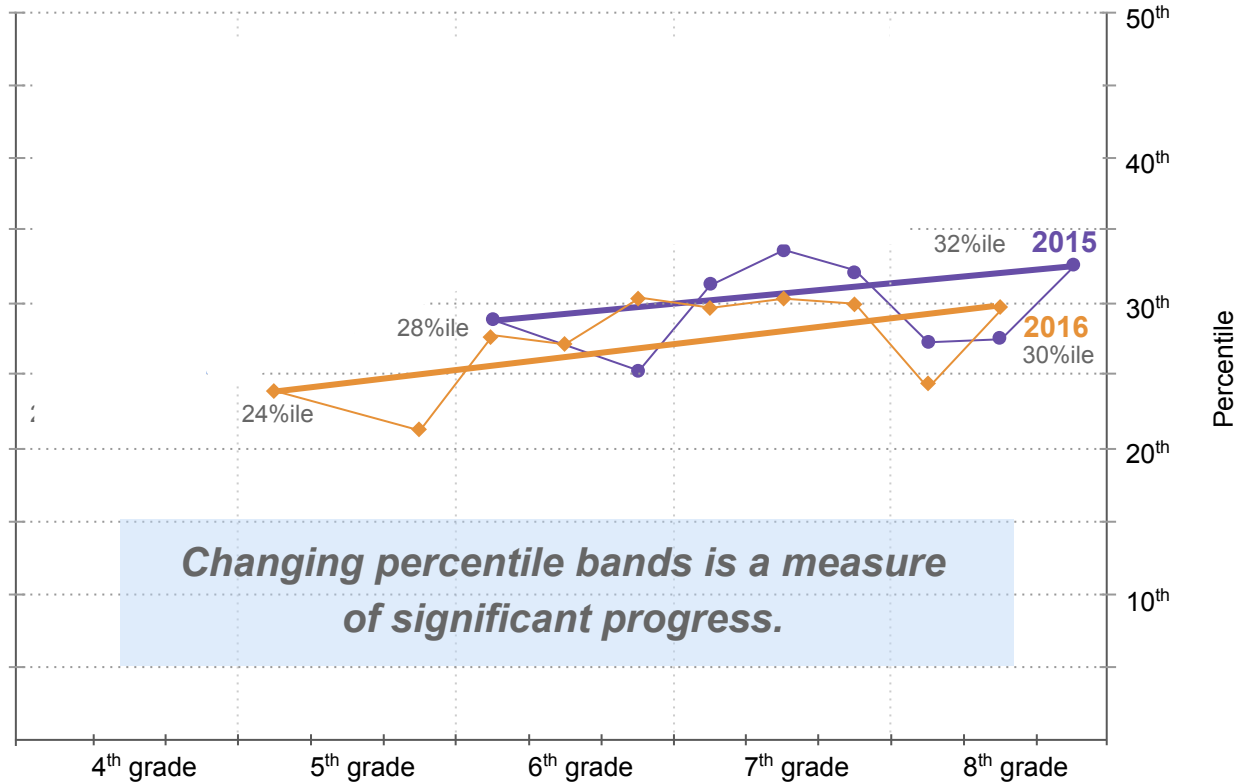
+ Mean Oral Fluency Reading Scores

CARROLL SCHOOL READ NATURALLY ASSESSMENT



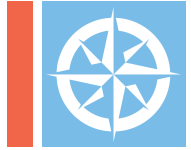
n = 58
CLASS OF 2016
TCI in grades 7, 8

n = 67
CLASS OF 2015
TCI in grades 7, 8



+ Mean Oral Fluency Reading Scores

CARROLL SCHOOL READ NATURALLY ASSESSMENT



n = 46

CLASS OF 2018

TCl in grades 4, 5, 6

n = 53

CLASS OF 2017

TCl in grades 5, 6, 7

n = 58

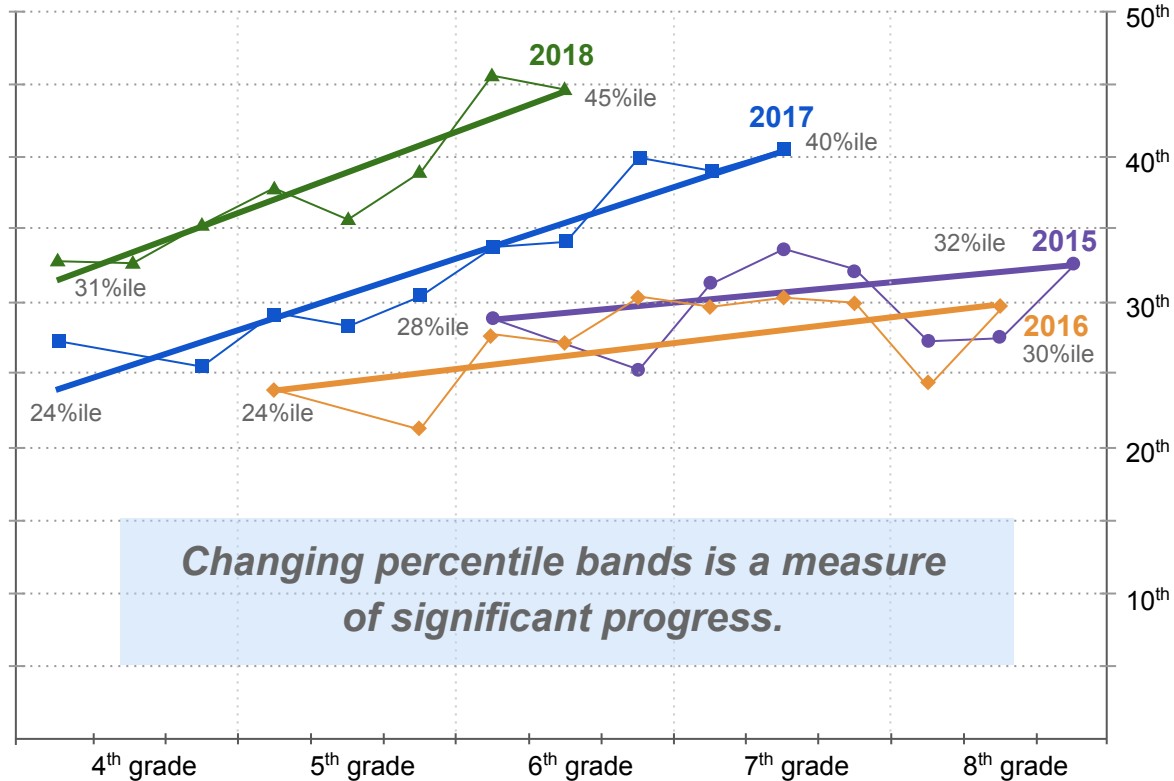
CLASS OF 2016

TCl in grades 7, 8

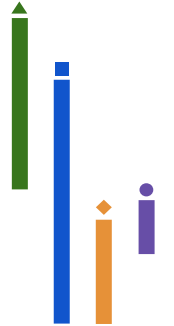
n = 67

CLASS OF 2015

TCl in grades 7, 8

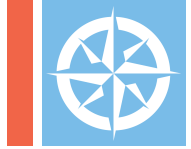


Percentile



+ Mean Oral Fluency Reading Scores

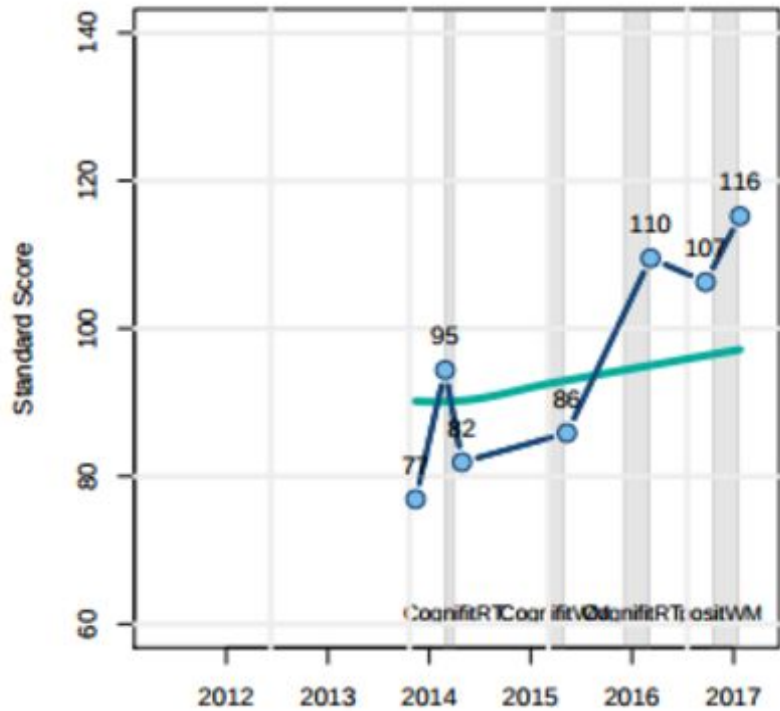
CARROLL SCHOOL READ NATURALLY ASSESSMENT



	4 th GRADE	5 th GRADE	6 th GRADE	7 th GRADE	8 th GRADE	GAIN PER GRADE
CLASS OF 2015 TCL in 7 th , 8 th grade n = 67			28 %ile	31 %ile	32 %ile	2 %ile
CLASS OF 2016 TCL in 7 th , 8 th grade n = 58		24 %ile	27 %ile	28 %ile	30 %ile	2 %ile
CLASS OF 2017 TCL in 5 th , 6 th , 7 th grade n = 53	24 %ile	28 %ile	35 %ile	40 %ile		5.3 %ile
CLASS OF 2018 TCL in 4 th , 5 th , 6 th grade n = 46	31 %ile	42 %ile	45 %ile			7 %ile

COGNITIVE SCORES RELATED TO ACADEMIC OUTCOMES

Reaction Time





Targeted Cognitive Intervention



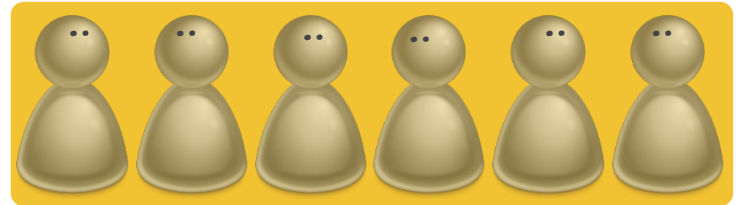
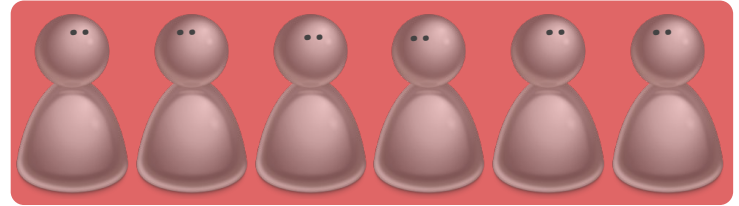
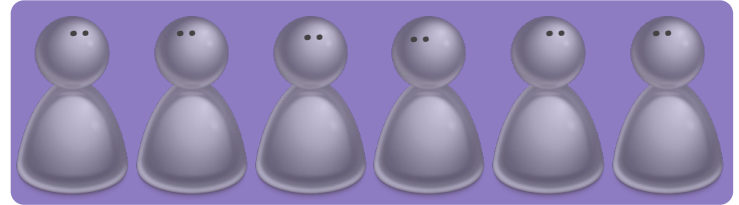
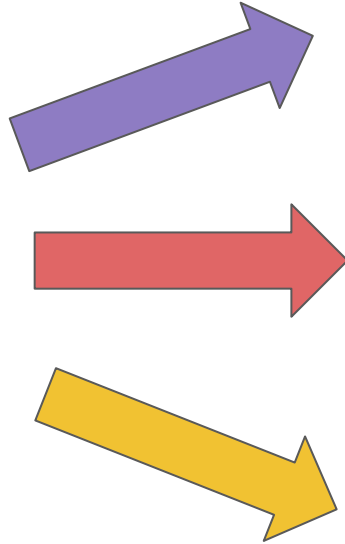
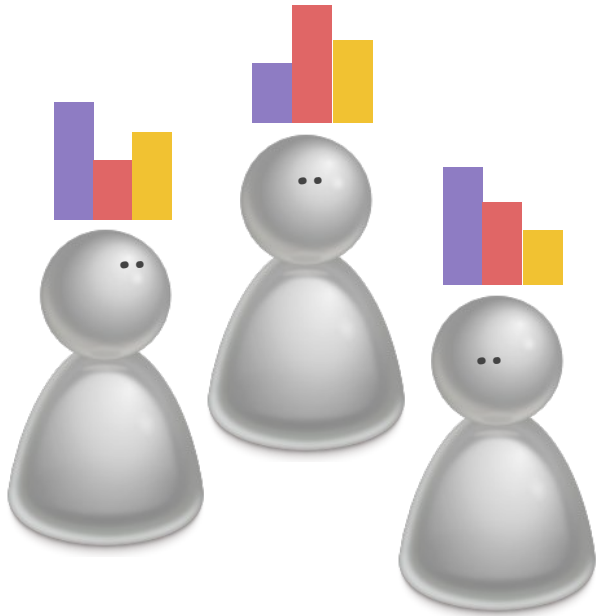
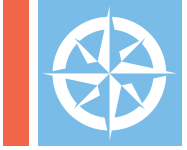
Computer-based exercises that **strengthen specific connections** in the brain among rich hubs

Neuroplasticity in action!





TCI Practice

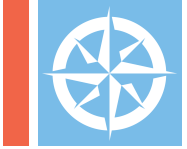




TCI Practice



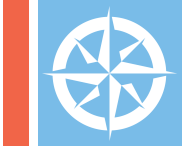
+ TCI Pilot Program Goals



Three goals:

1. Generate cognitive profiles for non-Carroll student population
2. Validate cognitive response to intervention
3. Deliver TCI outside of Carroll

+ TCI Pilot Program Benefits



Why should you participate?

- Improve student outcomes in reading and reading fluency
- Provide individualized cutting edge intervention programs to your high-need students
- Help shape TCI practice for use in your school and other schools
- Access to experts in the neuroscience of reading for training and consultation
- Contribute to development of TCI curriculum
- Contribute to efficacy research around TCI



THANK YOU

