

Center for Dyslexia, Diverse Learners, and Social Justice

Engaging Educators to Improve Reading Instruction and Intervention: Towards Early Differential Reading Intervention (TEDI) Study

February, 2024

Laura Rhinehart and Sohyun An Kim



OVERVIEW



What we did & why

What we found

Challenges & Successes

**Next steps &
Recommendations**

RESEARCH AIMS

1

Determine the ability of a digital screener to identify students with, or at-risk, of dyslexia in early elementary grades

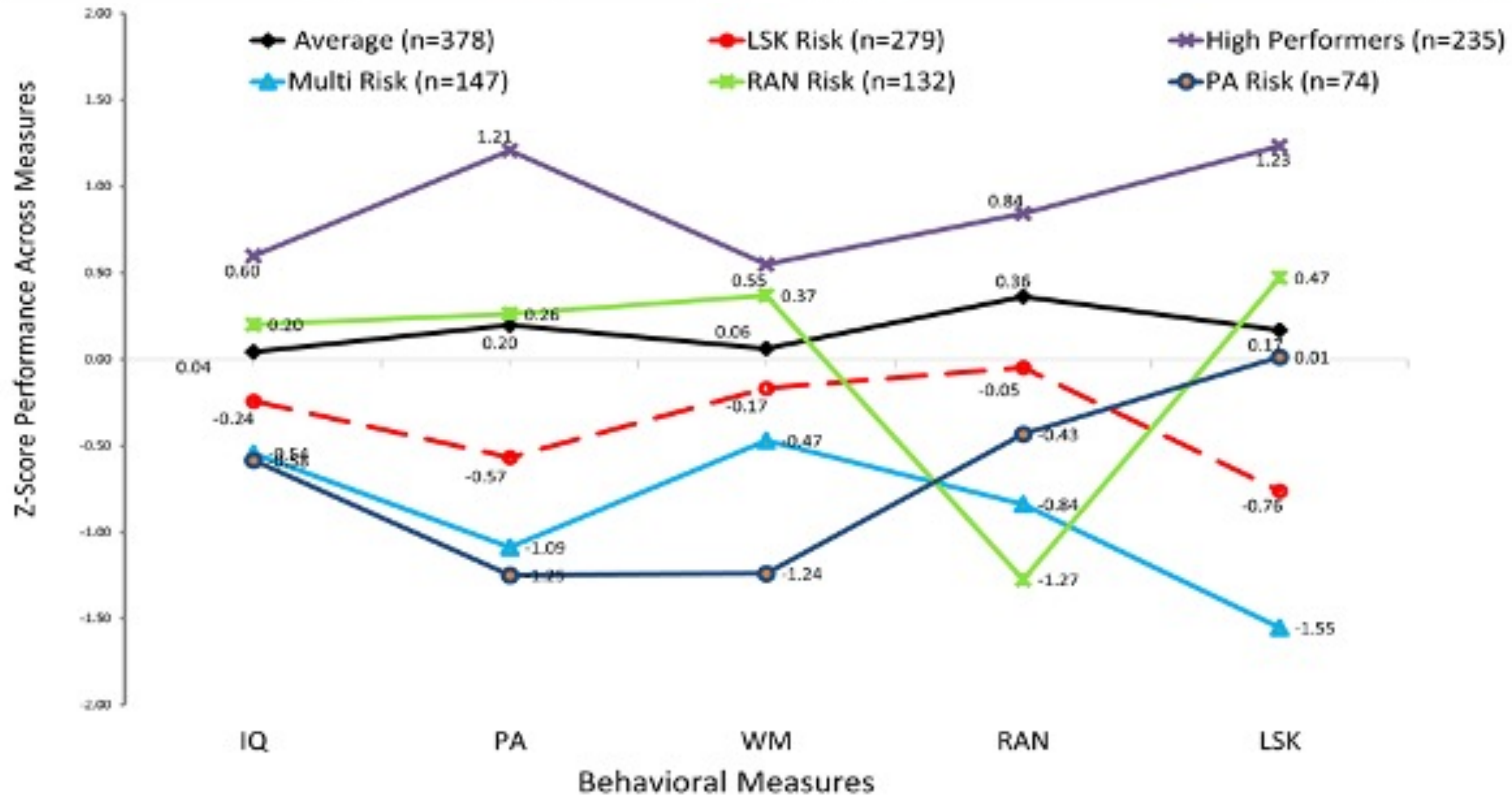
2

Train teachers in multiple, evidence-based literacy interventions

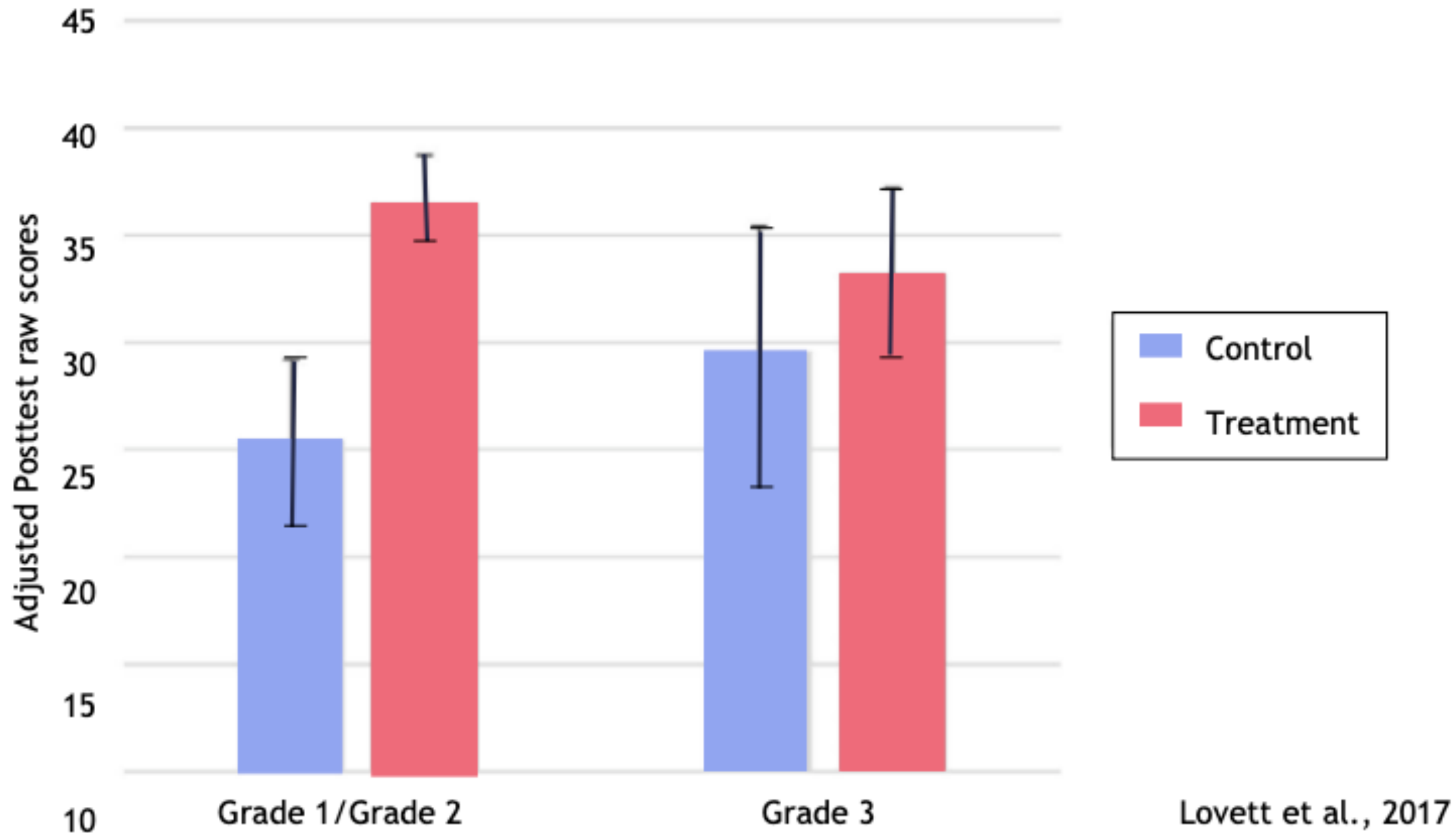
3

Examine the efficacy of early, differentiated dyslexia intervention programs for students in 1st and 2nd grade

PROFILES OF KINDERGARTEN READERS



THE IMPORTANCE OF EARLY INTERVENTION



OUR SAMPLE & 3 SCHOOLS WE WORKED WITH

164 K students
SY 20–21

202 1st Gr.
students
SY 21–22

170 2nd Gr.
students
SY 22–23



Private school/
school of choice

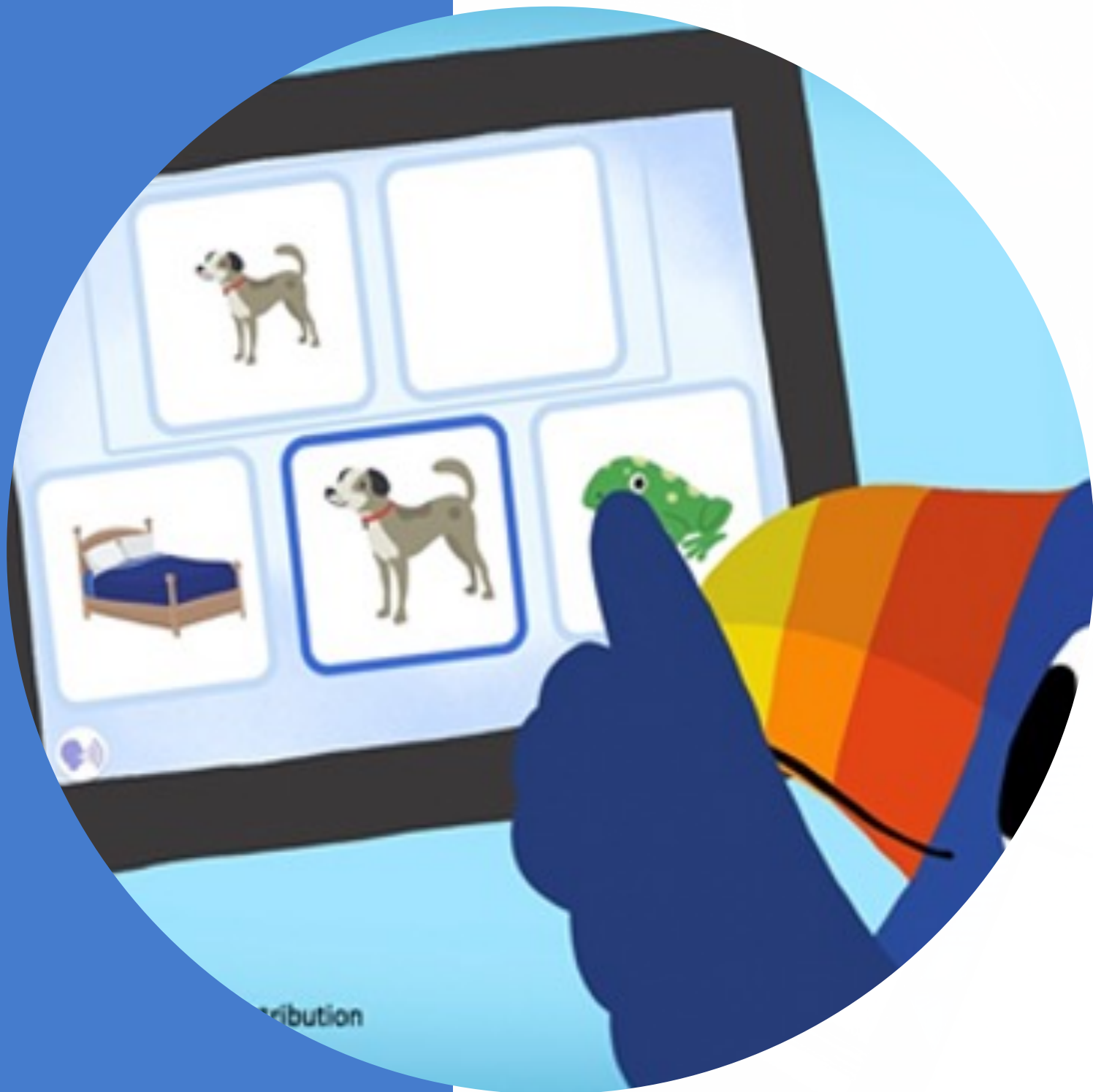


Public Charter School
(full inclusion model)



Traditional Public School
(Title 1 School)
half of students at this
school LEP

ASSESSMENT BATTERY: EARLY BIRD



- Rapid Automated Naming (RAN)
- Letter Naming
- Letter Sound Matching
- Blending
- Oral Sentence Comprehension
- Receptive Vocabulary Match

READING SUBGROUPS & INTERVENTION CORRESPONDENCE

Dyslexia Risk

Phonology Challenge?

Fluency Challenge?

Intervention

Average;
High Average



None at this
time

Phonological
Awareness Risk



Wilson

RAN Risk



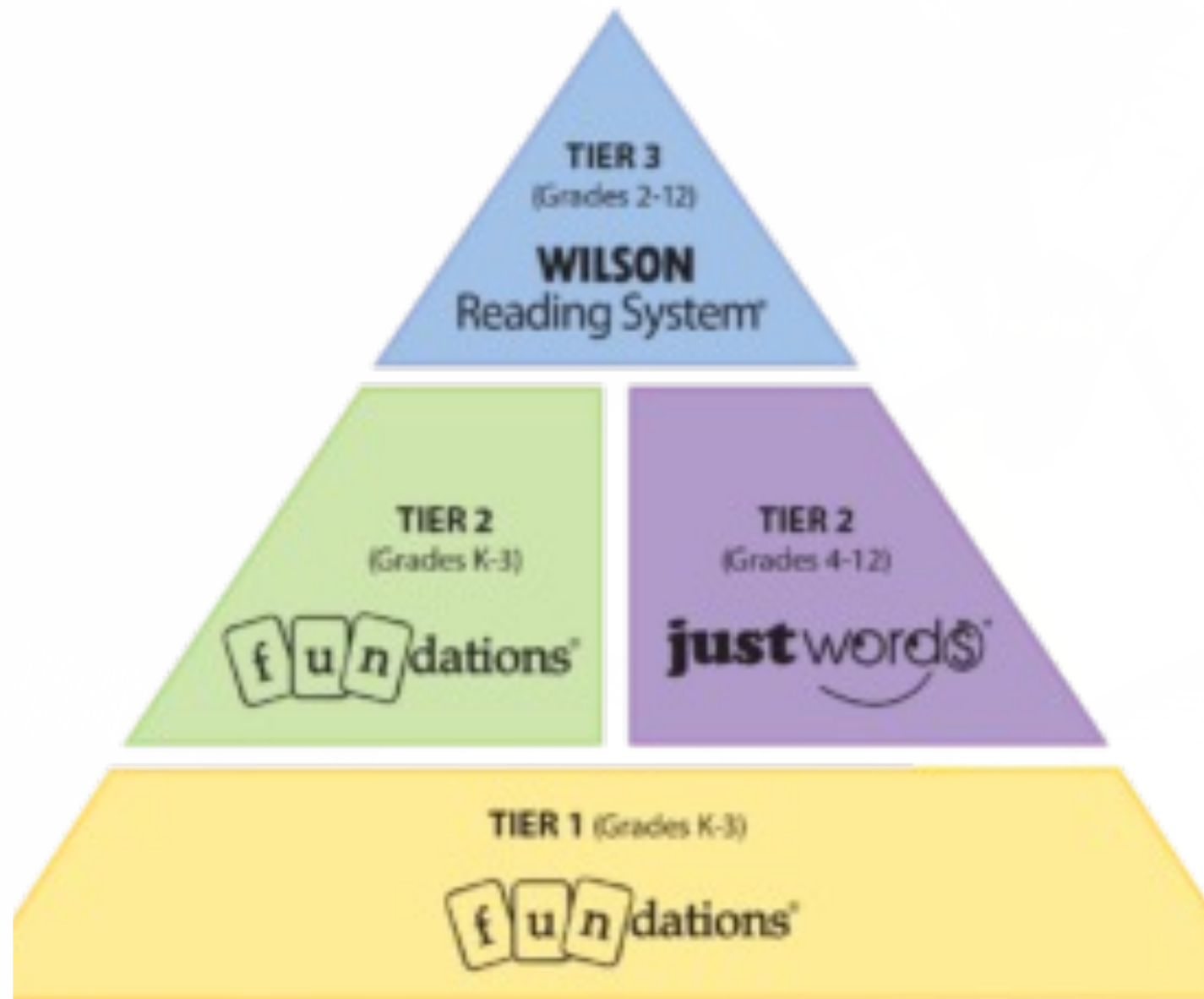
RAVE-O

Multiple Deficit;
Double Deficit



Wilson &
RAVE-O

INTERVENTION: WILSON READING PROGRAM (FUNdations)



Vowel Sounds 1

a apple /ä/ safe /ä/

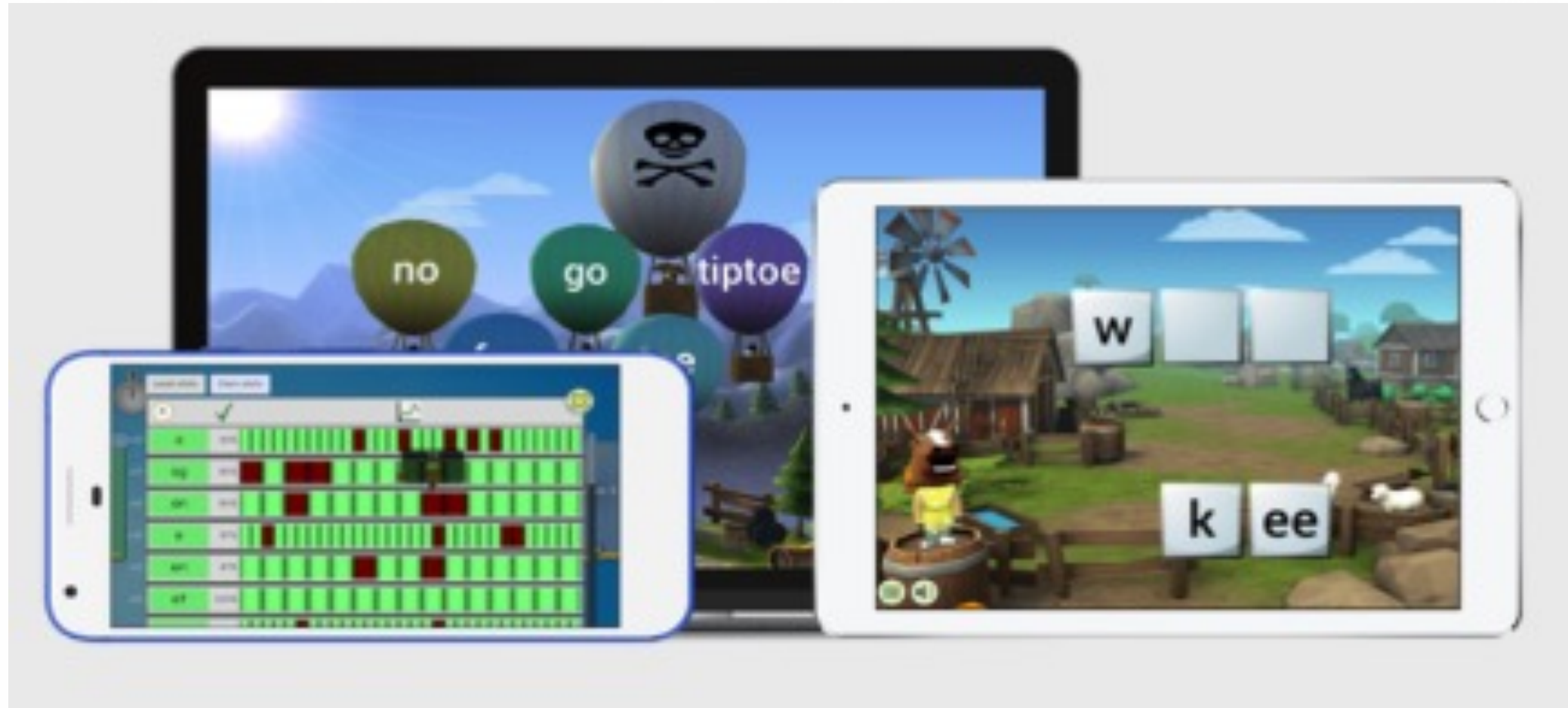
e Ed /ë/ Pete /ë/

i itch /i/ pine /i/

o octopus /ö/ home /ö/

u up /ü/ mule /ü/ rule /ü/

INTERVENTION: GRAPHO GAME



INTERVENTION: RAVE-O

(Reading through Automaticity, Vocabulary, Empathy,
and Orthography)



**Metacognitive
Strategies
Embodied in
Characters for
Each Component
of a Reading
Circuit**

OVERVIEW



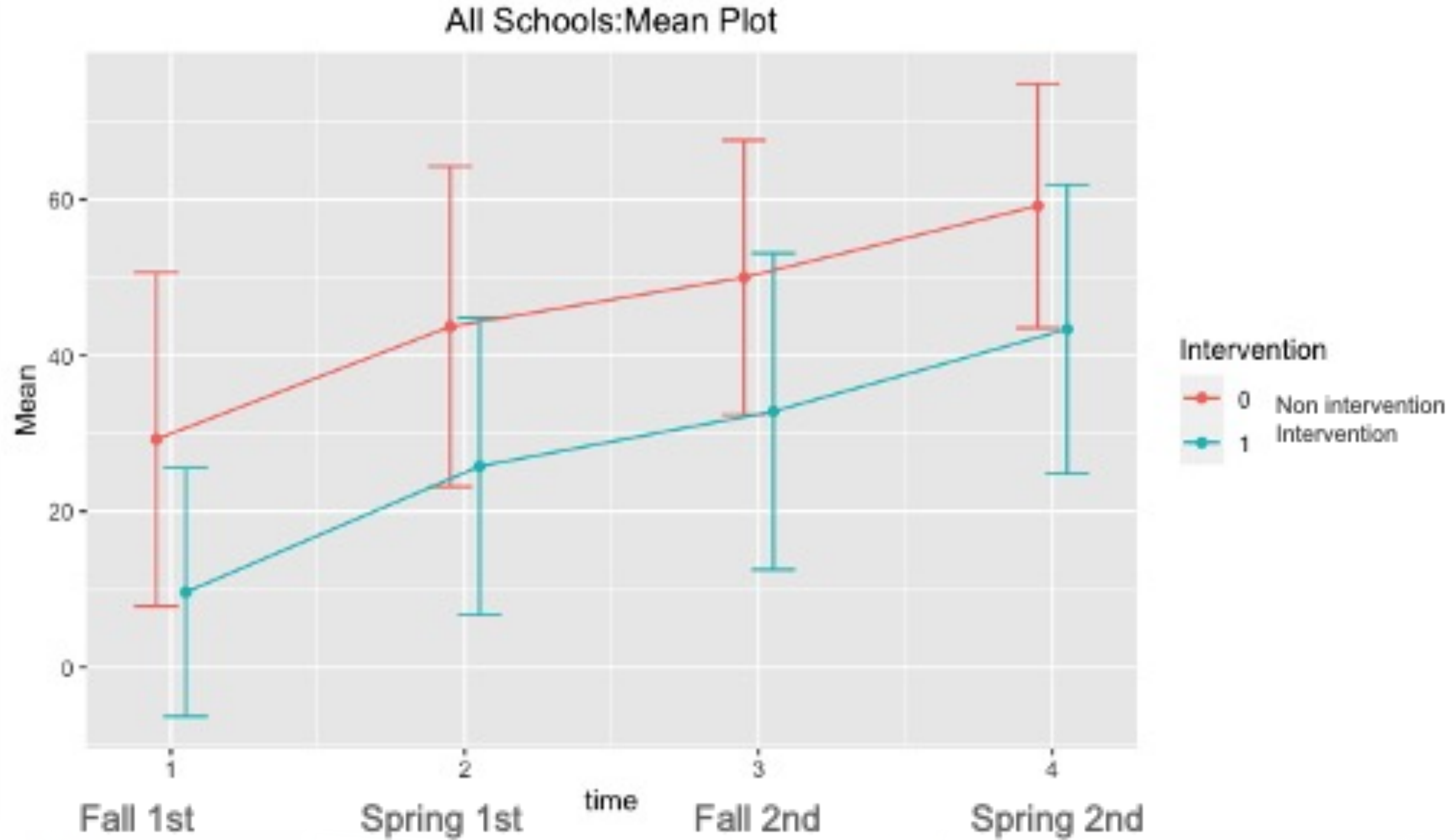
What we did & why

What we found

Challenges & Successes

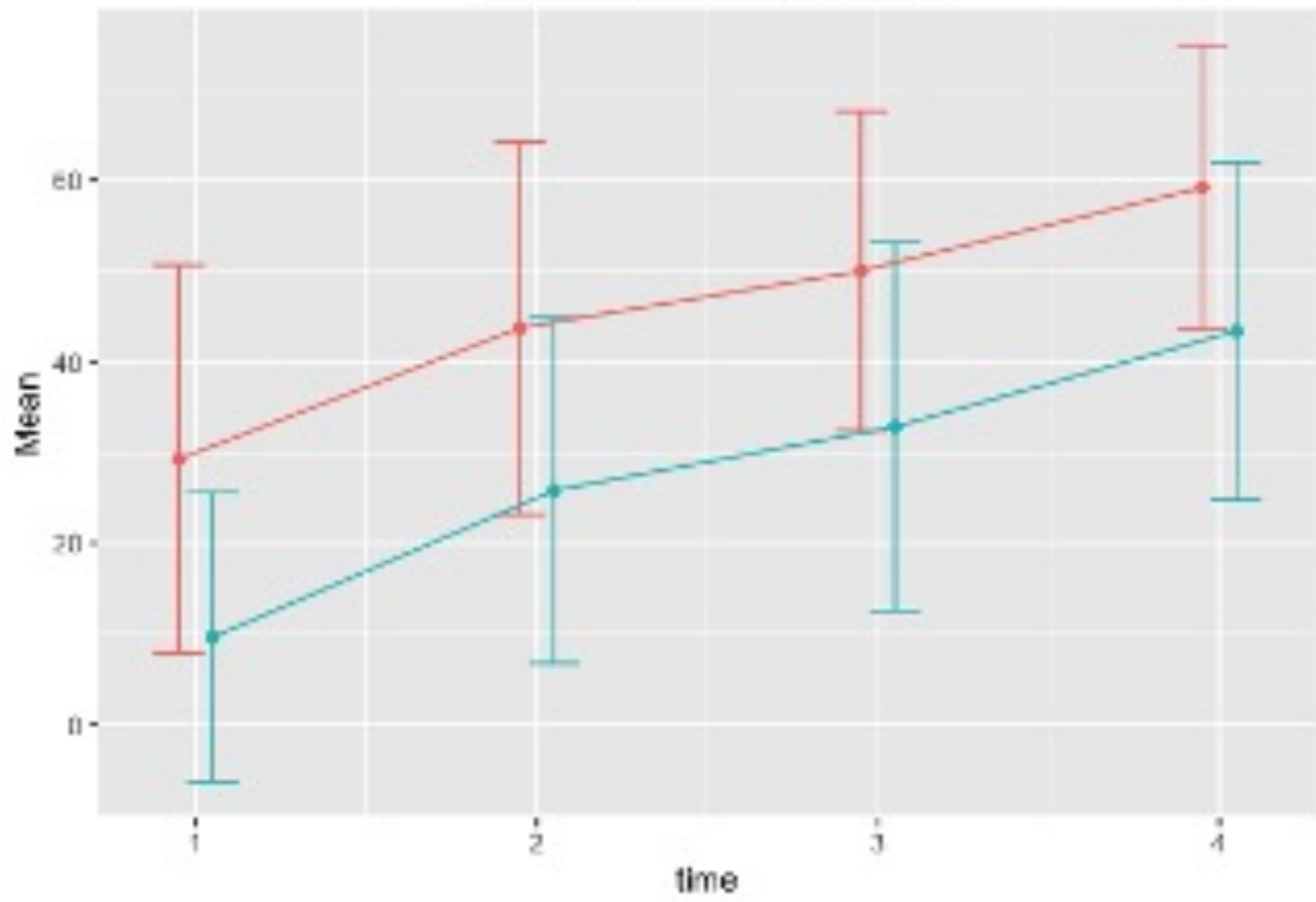
Next steps &
Recommendations

EFFECTS OF INTERVENTION

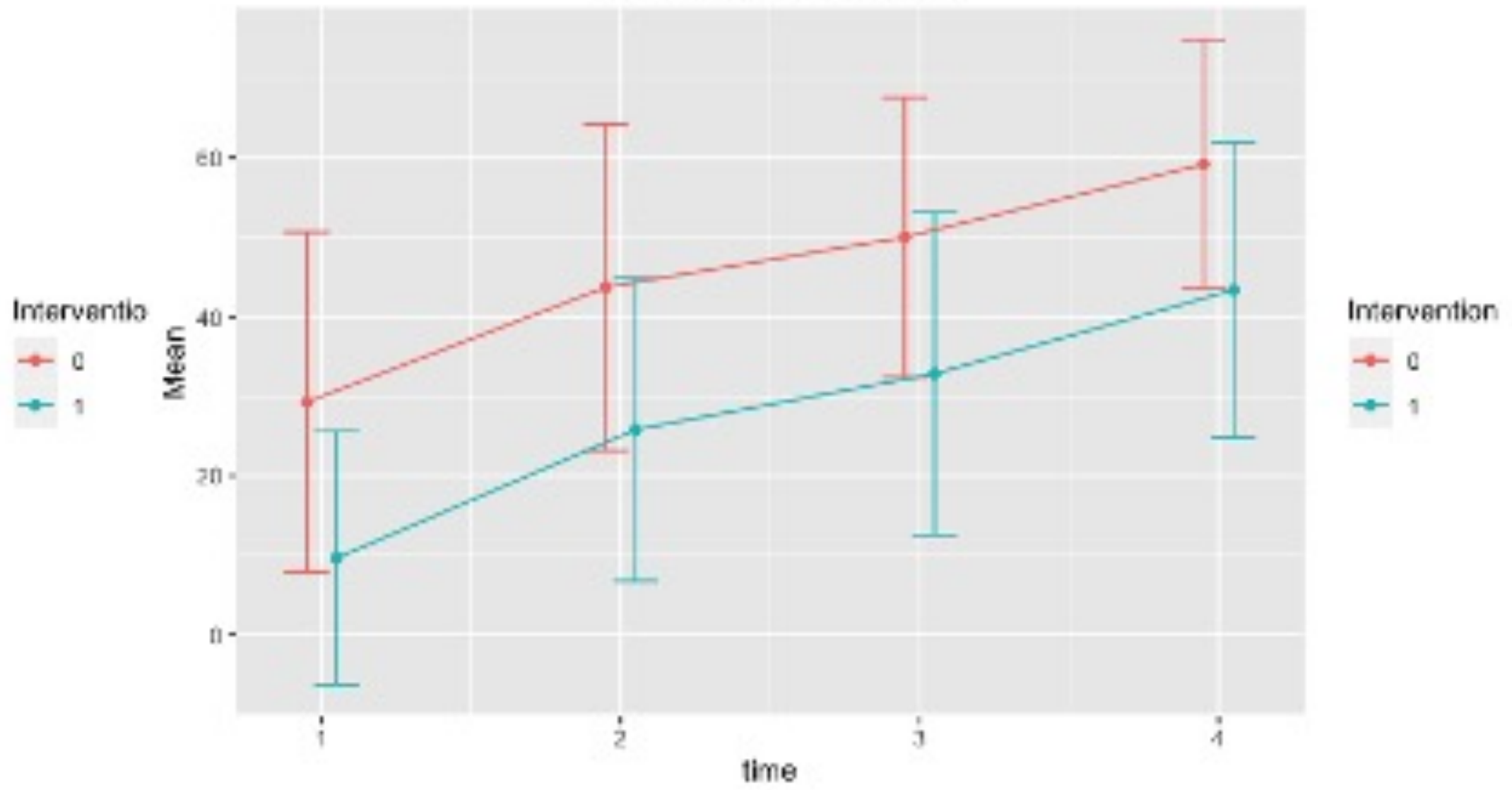


EFFECTS OF INTERVENTION

Inclusive Charter: Mean Plot

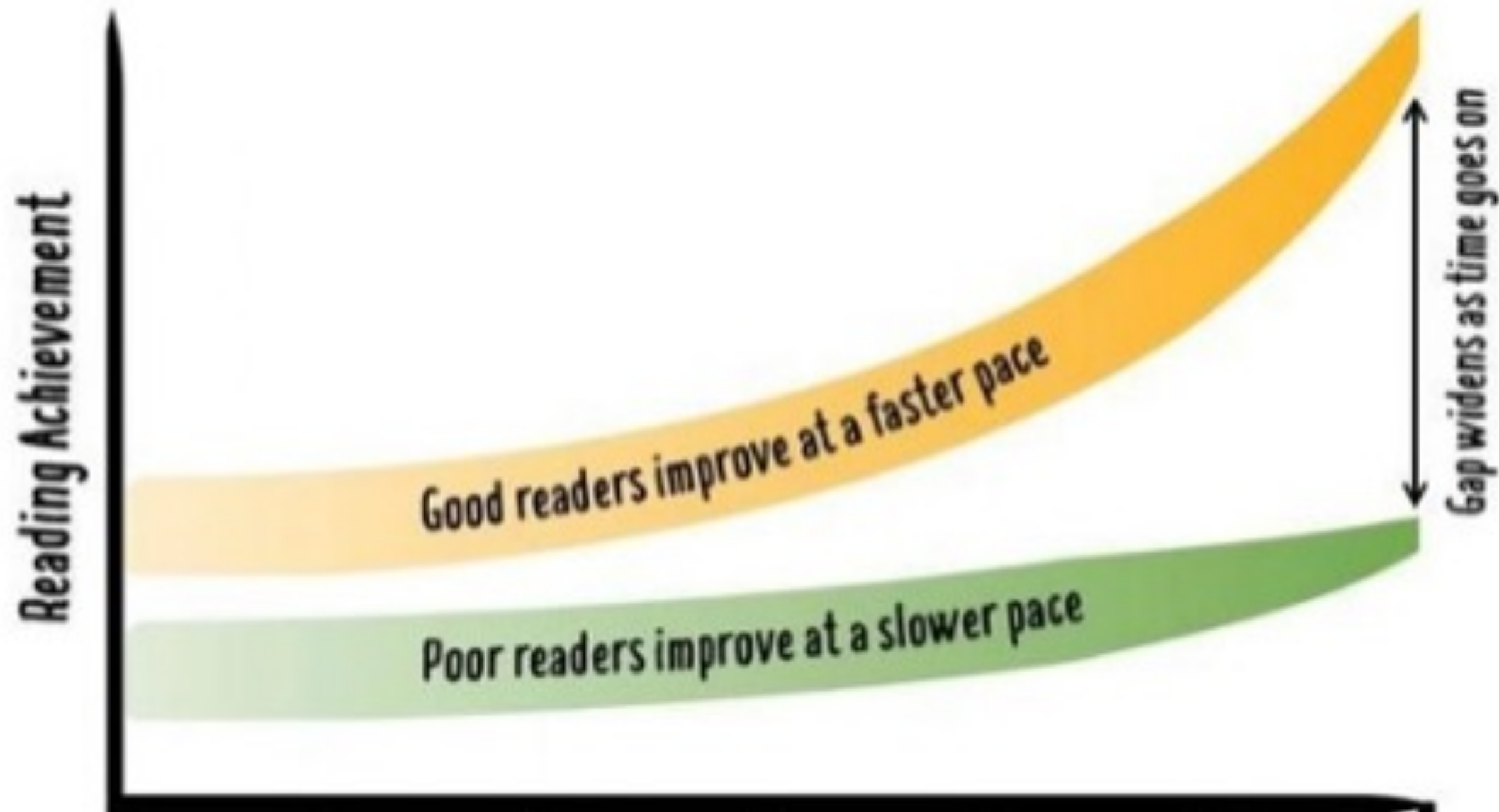


Title 1 School: Mean Plot



THE MATTHEW EFFECT

"The rich get richer and the poor get poorer"



FIDELITY OF IMPLEMENTATION

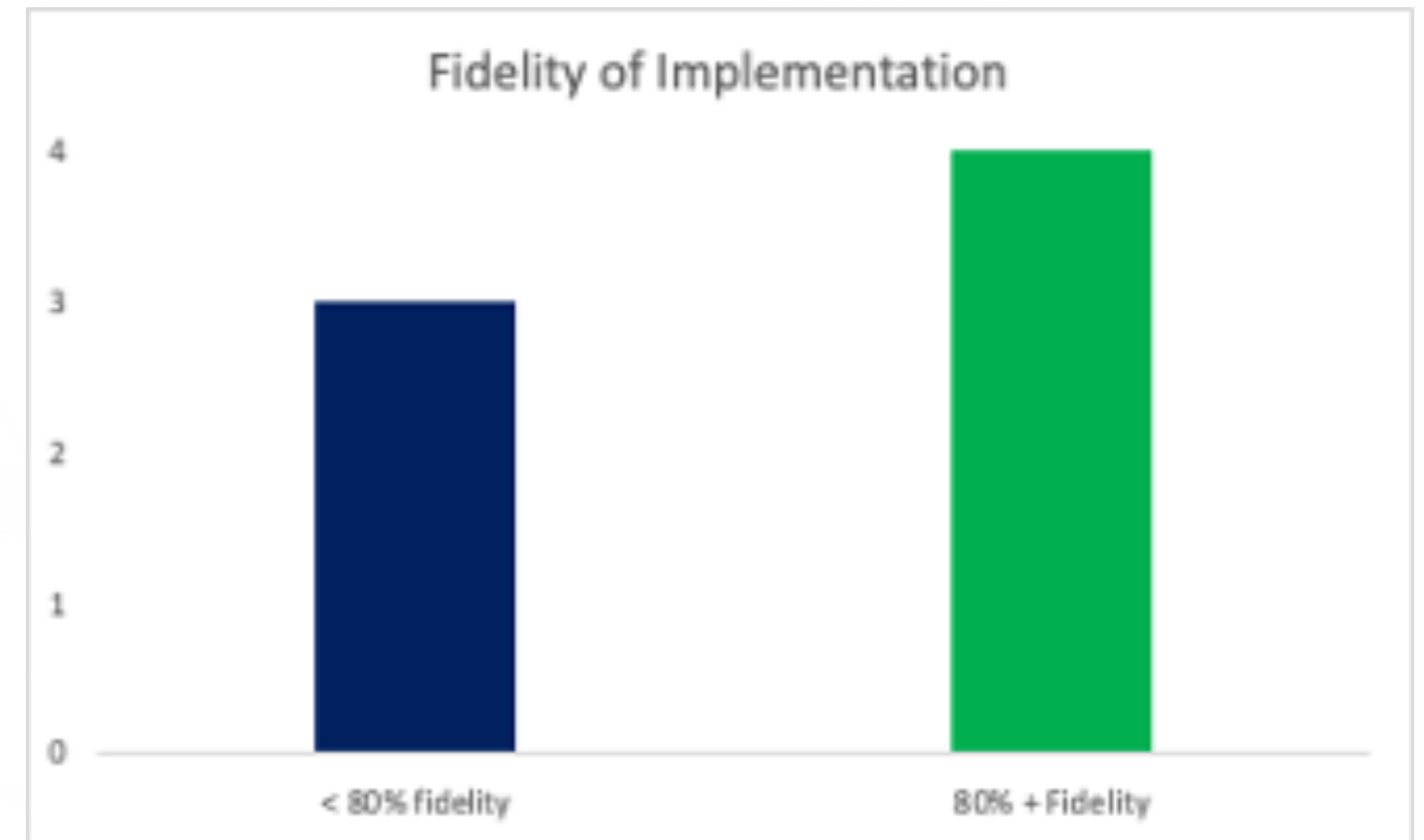
Seven observations
/ fidelity checks



4 out of the 7 were at
or above 80%



The Title 1 school had the
highest fidelity of the
three schools



OVERVIEW



What we did & why

What we found

Challenges & Successes

Next steps & Recommendations

EXPERIENCE IMPLEMENTING DIFFERENTIAL INTERVENTION: CHALLENGES



Staff for multiple interventions



Training challenges (multiple delays, COVID-19)



Small sample size due to differential intervention;
difficult to show effectiveness



Time for intervention as recommended
is difficult, esp. for the “double/multi deficit” group



EXPERIENCE IMPLEMENTING DIFFERENTIAL INTERVENTION: SUCCESSSES

Screening was successful, and students enjoyed it!



The gap between the two groups' trajectories did not widen (compared to Matthew Effect)



Schools are more interested in discussing identifying dyslexia, not just LD, even at lower SES schools



Engaged teachers in discussions and thinking around types of reading challenges



OVERVIEW



What we did & why

What we found

Challenges & Successes

**Next steps &
Recommendations**

OUTSTANDING QUESTIONS FOR UCLA RESEARCHERS



Who gets Tier 2 intervention (i.e., do moderately struggling students receive intervention) in schools where most students are not proficient at reading?

Are computer adaptive reading interventions addressing the heterogeneity of reading challenges?

RECOMMENDATIONS

Screen for dyslexia (will be required in CA)

- All K–2nd graders will be screened for risk of dyslexia annually using screening instrument(s) identified by the State Board of Education

Work with school psychologists and parents to improve dyslexia identification

- may be under-identified, esp. in Title 1 schools



PUBLICATIONS

Gotlieb, R., Rhinehart, L., & Feuerman, R. (2023). Towards implementation of differentiated reading interventions: Lessons learned from a research–practice partnership. *The Reading League Journal*, 23–29.



Rhinehart, L. V., & Gotlieb, R. J. M. (2023). English Learners' Performance on a Measure of Dyslexia Risk. *Learning Disabilities Research & Practice*, 38(3), 199–208. <https://doi.org/10.1111/ldrp.12316>



Wolf, M., Gotlieb, R.J.M., Kim, S.A. et al. Towards a dynamic, comprehensive conceptualization of dyslexia. *Ann. of Dyslexia* (2024). <https://doi.org/10.1007/s11881-023-00297-1>



Kim, S. A., Gotlieb, R., Rhinehart, L. V., Pedroza, V., & Wolf, M. (2023). A Validity Study of the Digitized Version of the Rapid Automated Naming Test. *Journal of Psychoeducational Assessment*, 0(0). <https://doi.org/10.1177/07342829231218582>





**THANK
YOU**

