

## Summary of Effects of Cross-Age Tutoring Implementation and Dosage on Reading Outcomes for Tutors and Tutees

Swanson, E., Mauer, E., Vaughn, S., Roberts, G., Wanzek, J., Fall, A-M., Shanahan, E. & Sandmel, K. (2026). Effects of cross-age tutoring implementation and dosage on reading outcomes for tutor and tutees. *Journal of Research on Educational Effectiveness*.

### Study Background and Purpose

Early literacy skills are strongly associated with later reading comprehension and long-term academic success. Afterschool programs like those offered by the YMCA serve many students who benefit from additional literacy support. This study examined whether Reading Buddies cross-age peer tutoring using Sound Partners reading lessons provides an effective, scalable approach to improving the reading outcomes of both tutors (grades 3–5) and tutees (grades K–2). It sought to determine:

- The efficacy of Sound Partners delivered by cross-age tutors vs. adult tutors vs. business-as-usual (BAU)
- The role of dosage (i.e., number of lessons completed) in influencing outcomes for both tutors and tutees

### Design

The study included 69 YMCA afterschool programs across Texas and Tennessee with 770 students in grades K–5. The locations were randomized to one of three conditions: 1) Cross-age tutoring (3rd–5th graders delivering Sound Partners); 2) Adult tutoring (adult delivering Sound Partners); or 3) BAU (regularly scheduled YMCA “homework time”).

In both treatment conditions, students participated in Sound Partners lessons three times per week for 20 minutes over 17 weeks. Cross-age tutors delivered one-on-one instruction to tutees; adult tutors worked with groups of 2–3.

### Measurement

Student reading outcomes were measured using standardized assessments administered at pretest and posttest by trained testers who were blind to condition. Measures included: Test of Word Reading Efficiency (TOWRE), DIBELS Oral Reading Fluency, Woodcock Johnson IV Letter Word Identification and Passage Comprehension, and the Test of Silent Reading Efficiency and Comprehension (TOSREC).

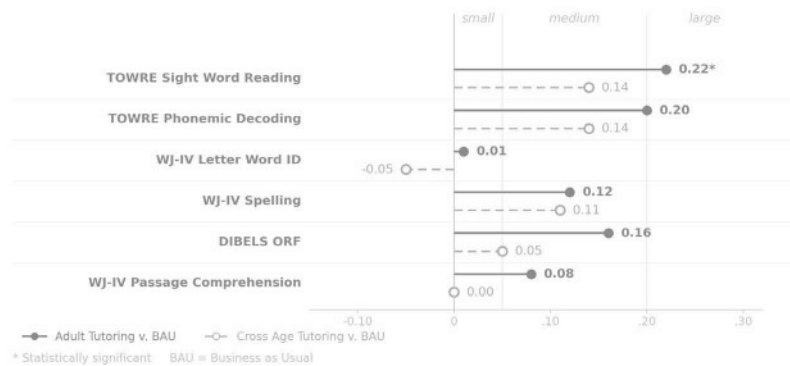
Data were analyzed using actor-partner interdependence models (APIM; Kenny & Ledermann, 2010). APIM recognizes that while the dyad is the conceptual unit of analysis, it is made up of two unique students. We also used complier average causal effect (CACE) models to estimate the impact of receiving a full instructional dose (i.e., 50 lessons or more; Lachin, 2000).

### Results

The tutees in the Adult condition and the Cross-Age Tutoring condition performed equally well on all measures. The effects for the adult tutoring and the cross-age tutoring conditions compared to BAU range from small to large.

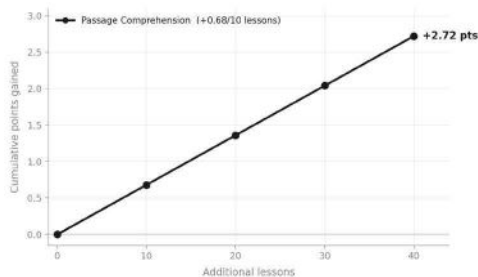
The cross-age tutors also made academic gains on a measure of reading comprehension.

### Effect Sizes for K–2nd Grade Tutees on Key Literacy Outcomes

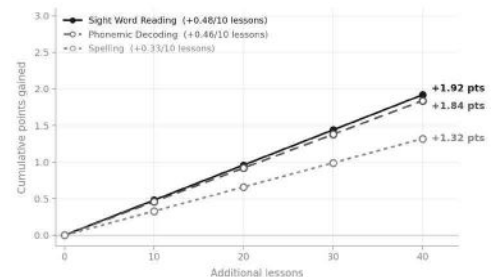


When examining dosage, students who completed a full set of lessons demonstrated stronger outcomes. For every additional 10 lessons, tutors and tutees made increased gains on several measures.

#### Tutor Gains for Every 10 Lessons



#### Tutee Gains for Every 10 Lessons



## Implications for Practice

Findings suggest that Reading Buddies using Sound Partners is a feasible and effective model when implemented with sufficient dosage. Results indicate that consistent participation is a key driver of student outcomes.

This study supports several important implications for Reading Buddies implementation:

- **Both tutors and tutees benefit academically from cross-age tutoring.**
- **Dosage matters:** Students who receive a full or near-full set of lessons make larger gains.
- **Structured programs reduce variability:** Sound Partners scripts enabled cross-age tutors to perform similarly to adult tutors.
- **Cross-age tutoring is scalable:** Cross-age tutoring provides a cost-effective approach without sacrificing efficacy.

### References

- Kenny, D. A., & Ledermann, T. (2010). Detecting, measuring, and testing dyadic patterns in the actor–partner interdependence model. *Journal of Family Psychology*, 24(3), 359–366.  
<https://doi.org/10.1037/a0019651>
- Kraft, M. A. (2020). Interpreting effect sizes of education interventions. *Educational researcher*, 49(4), 241–253.  
<https://doi.org/10.3102/0013189X20912798>
- Lachin, J. M. (2000). Statistical considerations in the intent-to-treat principle. *Controlled clinical trials*, 21(3), 167–189. [https://doi.org/10.1016/S0197-2456\(00\)00046-5](https://doi.org/10.1016/S0197-2456(00)00046-5)

Summary prepared by Lauren Smailes