

Is Structured Linguistics Phonics an Efficacious Approach to Teaching Phonics in Older Students?

Preliminary Findings Overview

The first phase of an unprecedented, randomized control trial of a speech-to-print decoding instruction in upper elementary and middle school, run by SRI International and supported by Reading Reimagined, shows promising results.

Structured linguistic phonics (SLP), also known as synthetic phonics or speech-to-print, differs from traditional print-to-speech decoding pedagogies by centering instruction on the sounds (phonemes) in children’s oral language and how the sounds in real words are represented by letters (graphemes). The approach also deviates from traditional print-to-speech instruction by explaining from the outset that in English the sounds in words can be represented in print in more than one way, and by more than one letter or set of letters; traditional methods initially teach a 1:1 sound-letter correspondence that is then modified by an expansive set of “exceptions” governed by a complicated set of rules. The structured linguistic phonics approach encompasses the entire span of decoding and encoding challenges in English, from simple CVC words like “dog,” to abstract, multisyllabic words like “dogmatic.”

Program Implementation and Study Design

The study recruited 18 teachers across two US districts for either SLP or Business-As-Usual (BAU) conditions. SLP teachers underwent a carefully designed asynchronous training, received ongoing coaching, and delivered an average of 33 hours of SLP instruction, mainly via daily 30-minute sessions in Tier I, or three weekly sessions in Tier II settings. Teachers faced minor logistical challenges (e.g., scheduling, resource access), but training and coaching quality were notable strengths. Program fidelity was high, with instruction generally adhering to the SLP logic model.

Teachers across both conditions were experienced, certified, and largely held master’s degrees. Baseline surveys indicated most teachers already employed evidence-based reading practices. Post-intervention surveys demonstrated the SLP teacher group’s marked increase in recognizing how phonemic awareness, phonics knowledge, and fluency help their students’ reading proficiency, confirming successful instructional change. Knowledge for teaching reading did not change significantly due to both groups’ preexisting expertise.



18

teachers
across two
US districts

33

hours of SLP
instruction



Teacher Experience

- Teacher interviews **overwhelmingly favored the SLP approach** compared to other phonics or word reading programs they had used.
- Teachers found the **SLP methodology, scripted lessons, and the clarity of conceptual knowledge particularly beneficial.**
- The SLP curriculum's **scripted lesson format helped streamline** delivery and accentuated phonemic focus.
- **High-quality coaching and resources** facilitated **successful onboarding** and sustained **teacher engagement.**
- Teachers reported the curriculum was **most beneficial as an intervention**, especially for multilingual learners, but felt it was less challenging for higher-achieving students, who needed less support for decoding.
- **Teachers believed that all their students would have benefited from Tier I instruction using SLP in earlier grades.**

Student Experience

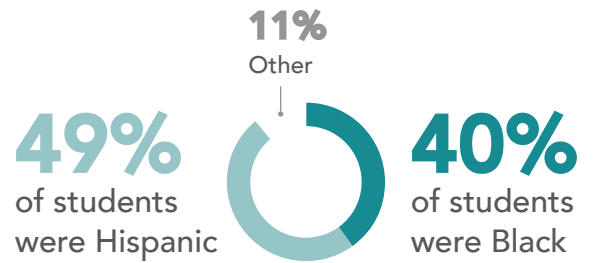
- Students described SLP instruction as **appropriately challenging, engaging, and supportive of their learning.**
- Focus groups **revealed improvements** in pronunciation, decoding, spelling, vocabulary, and comprehension.
- **Multilingual learners** particularly **benefited** from the **systematic teaching of sounds and spelling**, though some spelling errors persisted, highlighting cross-linguistic transfer challenges (e.g., confusion around digraphs or certain vowel sounds).
- These students also reported **increased confidence and willingness to participate.**
- However, as their teachers had observed, some older or more advanced students found introductory SLP content too easy, with greater gains seen as content advanced.

Impact Findings

Student outcomes were assessed via the Rapid Online Assessment of Reading (ROAR), which measures word recognition and sentence reading efficiency, and Elementary-/Upper-Level Spelling Inventories (ESI/USI). The study sample was almost evenly split between boys and girls, and included a high proportion of historically underserved students:

82%
eligible for free/
reduced lunch

47%
English learners



0.19
Tier 1 students
effect size

Sentence Reading Efficiency: SLP instruction delivered a statistically significant benefit to students' ROAR Sentence scores compared to their BAU peers, with an effect size of 0.13 across all student groups. This corresponds to, on average, an SLP student increasing 5 percentile points more than a similar student in the BAU group. The effect was stronger for Tier 1 students, with an effect size of 0.19, or about 8 percentile points of additional growth.

0.24
Tier 1 students
effect size

Word Reading: Effects on single-word reading were positive for SLP students compared to BAU peers, but not statistically significant for all students. Still, results for Tier I SLP students showed meaningful and statistically significant improvement in word reading compared to BAU peers, with an effect size of 0.24. A typical SLP student made about 9 percentile points of additional growth beyond a similar BAU peer.

Further analyses found no significant differences in program impact by student demographic characteristics, and the pattern of stronger Tier 1 effects may reflect greater dosage and instructional intensity.

Implications and Looking Ahead

SRI is currently conducting the second phase of the study with middle school students in Tier II settings. SLP instruction shows robust impact for fourth and fifth grade students in Tier I settings, particularly for students who need foundational reading support and for multilingual learners. Its efficacy as a Tier I curriculum for middle school or higher-achieving students warrants further exploration, particularly regarding content challenge and differentiation to support students with various levels of need.

SLP offers teachers and students an alternative path to improved decoding ability and may be particularly efficacious for students who have struggled to learn from traditional print-to-speech methods. The promise of increased reading gains using SLP methods makes it an important component of Reading Reimagined's mission to improve foundational literacy skill instruction for students in grades K-8.

If you're interested in learning more about Structured Linguistic Phonics please contact Reading Reimagined's Associate Director of Research, Rebecca Sutherland at rsutherland@aerdf.org