The Investor's Case: Early Language & Literacy



What the Science and Research Tell Us...

- In our first years of life, our brains form more than <u>1 million new neural connections</u> per second. We experience a "language explosion" between 18 and 24 months, when our neural circuits for communication are exceptionally malleable.
- Our brain pathways for language and literacy <u>become significantly less flexible</u> as we age. It's far more effective to influence a child's brain architecture in its first 5 years than to rewire its circuitry in adulthood.
- Conversations between caregivers and children fuel the brain's biological growth.
 The quality of these exchanges is even more important than the number of words children hear.

Why It Matters...

- Children's exposure to talking and reading by age 3 predicts their academic ability in elementary school and beyond.
- Disparities emerge early and grow with time. Gaps in children's <u>language processing</u> and <u>vocabulary</u> appear before 18 months. By kindergarten, the average middle-class child has engaged in 1,700 hours of <u>picture book reading</u>, while a typical low-income child has experienced only 25.
- 3rd grade reading ability is often considered the most important predictor of high school graduation and career attainment. And yet, only ⅓ of children in the U.S achieve 3rd grade reading proficiency every year.
- The odds are disproportionately <u>stacked against</u> children growing up in dual-language households, who represent more than 1 in 3 U.S. children today.

What "Good" Would Look Like...

- Our goal is to ensure that all children develop healthy language and literacy skills from birth. For babies, this means turning their heads towards sounds and beginning to babble; for toddlers, asking questions and reciting words to favorite books; and for preschoolers, inventing stories and sounding out simple words.
- Language-rich environments offer daily talking, singing, and reading activities, adult responsiveness to children's needs and interests, and access to developmentally and culturally relevant reading materials.
- To help parents and educators create language-rich environments, we must strengthen their capacity to scaffold children's learning and reduce financial stress and other barriers.

Strategies for Scaled Impact...

Low-cost, accessible, tech-enabled tools that facilitate parent, caregiver, & educator engagement across diverse settings Strategies that leverage big data and AI to personalize literacy development, including for children with learning differences Place-based approaches that meet meet families and communities where they are (e.g., doctor's office, grocery store)

Dig Deeper: Early Language & Literacy

Key Terms

- Scaffolding: temporary supports that adults provide to help children develop skills and grow increasingly independent overtime
- Conversational turn: a responsive back-and-forth exchange between a child and an adult that helps build healthy brain architecture; also known as "serve and return"
- Malleability: the brain's ability to change and adapt in response to experience; also called "plasticity"

Key Research Studies

- Hart & Risley's discovery of the <u>30</u> million word gap
- How <u>early language experience</u> strengthens processing and builds vocabulary
- The <u>long-term benefits of</u> <u>bilingualism</u> for working memory and cognitive flexibility
- How reading promotes healthy parent-child relationships

Field Leaders

- <u>Campaign for Grade Level Reading</u> mobilizes cross-sector constituencies to boost reading proficiency in low-income students
- Reach Out and Read incorporates books into pediatric care and encourages families to read aloud
- <u>First Book</u> provides new books and learning materials to children in need
- <u>Teaching Strategies</u> creates digital resources to promote preschool literacy

Promising Innovators

- <u>FIND</u> offers tech-enabled literacy coaching and assessment for parents, and <u>LENA Grow</u> does the same for child care and early ed providers
- Platforms like <u>Caribu</u> and <u>Háblame</u>
 <u>Bebé</u> reduce geographic and linguistic barriers to reading
- Waterford UPSTART and Every Child Reads use behavioral and learning sciences to promote sustainable at-home reading routines
- Visit our <u>Venture Index</u> for more innovators in this space!

Key Funders

- Campaign for Grade Level Reading
- William Penn Foundation's <u>Strong</u> <u>Start, Strong Readers</u>
- W.K. Kellogg Foundation
- To learn more, check out this national database of early language & literacy funders!

Sample Metrics & Tools

METRICS

- Vocabulary size & growth
- Ability to speak clearly with conventional grammar
- Recognition of relationships between letters & sounds at kindergarten entry

ASSESSMENT TOOLS

- Ages & Stages Questionnaire (ASQ-3)
- <u>NIH Toolbox</u> Oral Reading Test (ORT) and Picture Vocabulary Test (PVT)

Want to learn more? Check out Promise's full <u>resource library!</u> Feedback on our materials? <u>Share your thoughts</u> with us!