The Early Learning Library: Advancing Early Literacy Access in Wilmington

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Abstract

Early language and literacy experiences are critical for later academic success, yet many children enter school without strong foundational oral language and literacy skills. Families and educators often need accessible, engaging, and evidence-based tools to support literacy development outside of school settings. The Early Learning Library (ELL) is a digital mobile library designed to support shared reading, oral language interaction, and literacy engagement through narrated children's books and interactive reading experiences.

This study examined the feasibility, usability, and perceived impact of the ELL among Head Start and Early Head Start families. Approximately 120 families across four Head Start and five Early Head Start classrooms were provided access to the app and invited to participate in workshops and feedback sessions. Parent survey data (N = 56) included Likert-scale ratings and open-ended responses related to usability, engagement, language interaction, and reading behaviors.

Results suggest high levels of usability and engagement. Most families reported using the app multiple times per week, with sessions typically lasting between 5–20 minutes. Parents described increased child interest in reading, stronger shared reading routines, and greater language interaction during reading activities. Findings suggest the Early Learning Library may serve as a promising tool for supporting home literacy engagement and strengthening home–school connections in underserved communities.

Introduction

Research consistently demonstrates that early oral language and literacy experiences are critical for later academic success. Shared reading interactions support vocabulary development, listening comprehension, oral language growth, background knowledge, and early literacy development (e.g., Dowdall et al., 2020; Whitehurst & Lonigan, 1998). Research on the home literacy environment further suggests that interactive parent-child reading experiences positively support children's language and literacy development (e.g., Mol et al., 2008).

Despite the importance of early literacy experiences, many families face barriers to accessing engaging and high-quality literacy resources. Families and educators often need flexible, accessible, and easy-to-use tools that support literacy learning beyond school settings.

The Early Learning Library is a digital mobile library curated for children from birth to age eight and includes:

- Over 300 e-books with culturally diverse content, genres and topics
- All books have human voice narration option with word highlighting
- Books can work offline (stable internet not needed)
- Teachers can provide book recommendations and monitor usage

The project was guided by a simple theory of change:
More access to books → more reading time → more interaction → more language → stronger literacy

Purpose & Research Question

The purpose of this pilot study was to examine the feasibility, usability, and perceived impact of the Early Learning Library among Wilmington Head Start and Early Head Start families.

Research Questions
How frequently and in what ways do families use the app?
How do parents perceive the usability and feasibility of the app?
What changes do parents report in children's reading engagement and language behaviors?
What themes emerge from parent feedback?

Design & Methods

Community Partnership
This pilot study was developed through a collaboration between:

- University of Delaware
- Smart Kidz Club, Delaware based Ed. Tech Company
- New Castle County Head Start & Early Head Start
- Wilmington families and educators

The project emphasized community partnership, family voice, and iterative feedback to support meaningful home literacy engagement opportunities.

Participants included families from:

- 4 Head Start classrooms
- 5 Early Head Start classrooms
- 120+ families received access to the app and participated in workshops and feedback sessions.

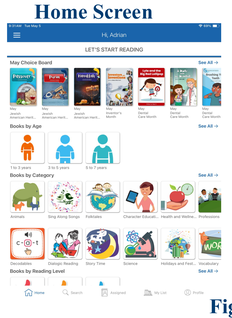
94 Parents created accounts.
56 caregivers responded to attended workshops and completed the feedback survey.

Measures
Parent survey administered during focus groups

- 15 Likert Scale items on feasibility, engagement, early language
- 5 open ended questions

Usage data (currently analyzing)
Focus group data (currently analyzing)

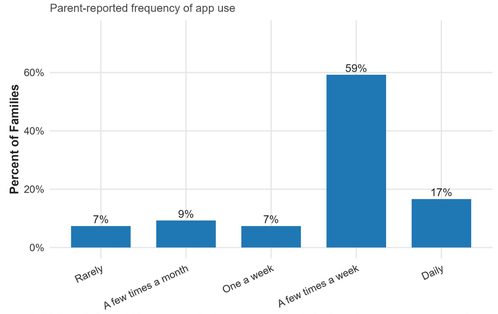
The App:
Home Screen



Category Tiles



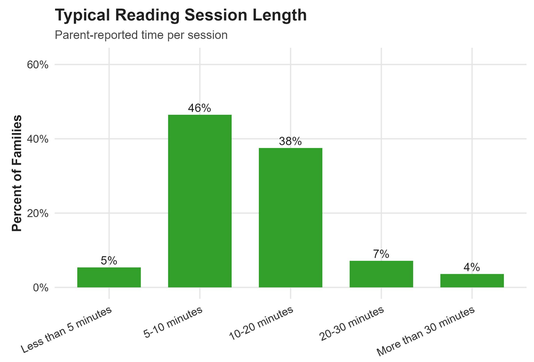
Figure 1



- 76% of families used the app multiple times per week

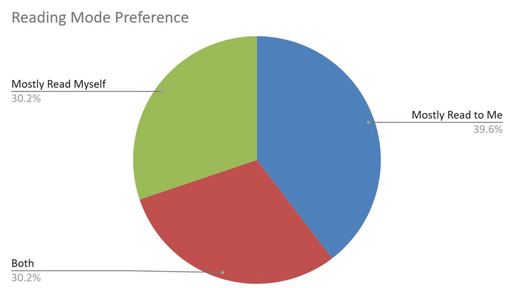
Results

Figure 2



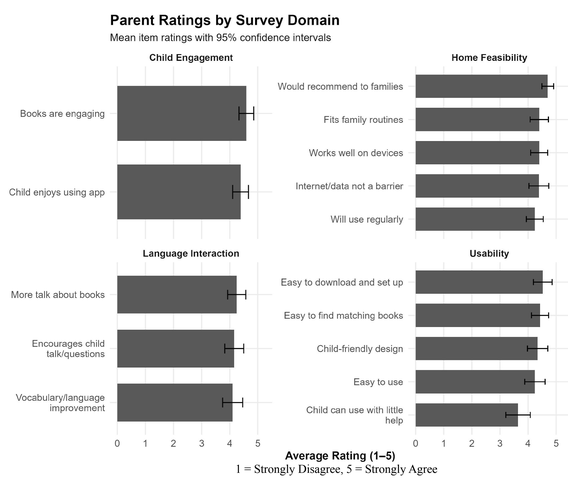
- Most sessions are 5–20 minutes

Figure 3



- About 70% of families rate Voice Narration as a reading preference
- Multilingual families reported voice narration narration supported parents and children learning English together

Figure 4



Key Themes and Quotes

Increased Reading Engagement

- Children were excited to read more often
- Many parents described stronger interest in books and stories

Shared Reading & Family Interaction

- Families valued reading together and discussing stories
- Reading became part of bedtime and daily routines

"My child looks forward to reading and will actually sit still!"
"Now at bedtime she wants me to read her a book."
"The books are very illustrative and the narration audio is great."
"We love that we can use the app anywhere we go."

Parents Reported Early Positive Changes

- Increased Interest in Reading
- Children requested books more frequently
- Greater attention and persistence during reading

More Language & Interaction

- More discussion during reading
- Increased vocabulary and expressive language
- Parents perceived growth in learning and curiosity

"Yes, he wants to read more."
"Yes, now he asks many more questions."
"It helps her learn and recognize words more."
"Spending time together and building more vocabulary."

Preliminary Insights and Next Steps

What we have learnt so far…

- Families will engage with accessible literacy tools
- Short, interactive reading experiences can support engagement
- Technology and digital books may help strengthen home literacy routines

Next Steps

- We are expanding to include more centers in Delaware and surrounding area
- We are continuing research and development towards an evidence-based, impactful and sustainable tool

References

Dowdall, N., Melendez-Torres, G. J., Murray, L., Gardner, F., Hartford, L., & Cooper, P. J. (2020). Shared picture book reading interventions for child language development: A systematic review and meta-analysis. *Child Development, 91*(2), e383–e399.

Mol, S. E., Bus, A. G., de Jong, M. T., & Smeets, D. J. H. (2008). Added value of dialogic parent–child book readings: A meta-analysis. *Early Education and Development, 19*(1), 7–26.

Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development, 69*(3), 848–872.