LENA HOME A Guide to Adding an Early-Language Focus to Your Home Visiting Program

Introduction

LENA Home is designed to add an early-language focus to home visiting and parent education programs serving children in their earliest years. It employs LENA's "talk pedometer" technology and targeted, strengths-based coaching content to help parents and caregivers increase interactive talk with their children.

Currently serving communities in the U.S. and internationally, LENA Home consists of up to 13 sessions for parents and primary caregivers. Session content includes videos, practical techniques, and regular feedback from LENA to help parents talk more with their children. **All materials are available in both English and Spanish, and coaching content can be delivered virtually or in person**.

This guide is intended for organizations exploring implementation of LENA Home, and covers the following topics:

- Overview of LENA
- Why LENA Home is unique
- Effectiveness: the evidence behind LENA Home
- Adopting LENA Home: components, requirements, and costs
- Sample implementation timeline

Who is using LENA Home?

LENA Home is implemented in partnership with trusted community organizations including school districts, Head Start and Early Head Start programs, and other organizations providing home visiting and support services to families.



For a complete list of LENA Home sites, please see our program map at <u>www.LENA.org/where-are-LENA-programs</u>.

Overview: The Opportunity Gap and How LENA Helps Close It

During a child's first three years, interactive talk is one of the biggest factors driving brain growth and kindergarten readiness (see "Effectiveness," page 6). Low levels of adult-child verbal interaction in these earliest years are a key reason too many children enter school significantly behind their peers.

A rich talk environment is critical for building not only a child's language and literacy skills, but also socialemotional development. When we ensure children have a chance to gain these competencies before they enter school, they begin their academic careers ready to succeed, more likely to read proficiently by the end of third grade, and more likely to graduate from high school and go on to more successful life outcomes.

That's why LENA developed wearable technology that delivers detailed, reliable feedback to adults on how much they're talking and, even more importantly, how many back-and-forth interactions they are having with the children in their care. LENA technology has become the gold standard for measuring talk in early childhood, and partner sites around the world are implementing LENA programs to boost early talk and close opportunity gaps.

We emphatically believe three things:

- 1. Early talk is key.
- **2.** Parents (and other conversational partners) are the secret sauce.
- **3.** You can't improve what you don't measure.

All of LENA's programs spring from these core values. LENA Home focuses on the critical earliest years. Measurement feedback to parents — is essential. Even though parents know they should talk with their children, they generally lack any objective way of determining how much they are actually talking. In fact, research indicates that the lowest-talking parents are most likely to over-estimate how much they talk (see graph at right).

With proper feedback and modeling of techniques to increase interactive talk, parents are the key to enriching their children's language environments and building their brains. Parents care about their children more than anyone else and are eager to do what it takes to ensure a brighter future for them. That's what's behind the success of LENA Home.

Parent Talk: Subjective Belief vs. Objective Measurement



Why LENA Home Is Unique

Launched in 2013 through Providence Talks, a citywide initiative in Providence, Rhode Island, LENA Home has been adopted by a variety of implementers, from school districts to community organizations seeking a broad-based early-language program. LENA Home stands apart from other early childhood intervention programs in a number of respects:

- 1. Emphasizes laser-focus on interactive talk.
- 2. Leverages parents as a child's first teacher, with a special emphasis on growth.
- 3. Integrates easily into existing programs and complements content by enhancing language focus.
- 4. Supplies rich data to fuel self-reflection by parents and easy results monitoring by implementers.
- 5. Underscores the importance of shared reading with the child.
- 6. Integrates best practices for adult behavior change.
- 7. Provides practical, research-based strategies to increase talk via our "14 Talking Tips."
- 8. Offers engaging videos to help instruct and model parent behavior.
- 9. Tracks ongoing child language development with our validated Developmental Snapshot assessment.

10. Provides flexible program implementation, with options for virtual delivery for families and easy-to access training modules for staff.

Before each coaching session, LENA Home families complete a "LENA Day" with their child. Then, they receive a feedback report to help them see how much they're interacting and identify opportunities for growth. The report (shown below) measures adult word count, interactions between the child and adults (conversational turns), self-reported reading minutes, and minutes of electronic/TV sound that may interfere with conversations.



Key Elements for Consistent Delivery

Every LENA Home session introduces new concepts (see figure below) while maintaining consistent, repeatable elements to set expectations and facilitate learning. LENA Home's guided coaching sessions use an interactive, strengths-based approach that includes reflective discussion, report sharing, techniques and tips to increase talk, and goal setting. The pedagogy relies on instructional videos to convey key concepts. Short video 'vignettes' are used to show parents modeling interaction with an infant or toddler. Parents assess and discuss the vignettes and evaluate which of the 14 Talking Tips (see page 5) were employed, as well as where there may have been missed opportunities for talk and interaction. All videos and materials are available in both English and Spanish.

Each 15-20 minute session can be delivered virtually or in person and can be used either as part of a longer home visit covering other topics or as a stand-alone program. If used as a stand-alone program, the home visitor may take more time with the material and add supplemental content.

Topic Sequence

LENA Home sessions are designed to be flexible for home visitors and participants. In order to meet the criteria for completing the program, each family is expected to complete four "Core Sessions," a minimum of four "Language Enrichment Sessions," and a final celebration session. After the core requirements are met, home visitors can extend the number of sessions up to 13, if desired, by including up to four more Language Enrichment topics. Therefore, the session sequence may be anywhere from nine to 13 sessions, based on a family's needs and home visitation schedule. The figure at right shows the sessions home visitors can choose from when planning a sequence, including all eight Language Enrichment topics.

Session Number	Title
1	Core Session 1: Introduction to
	LENA Home
2	Core Session 2: How to Measure Talk
	with LENA
3	Core Session 3: Introduction to the
	14 Talking Tips
4	Core Session 4: Understanding Your
	LENA Report



Language Enrichment Sessions (pick at least four, or up to eight):

- Shared Reading
- Songs & Rhymes
- Clothing Changes
- Playtime
- Mealtimes
- Out and About
- Small Moments
- Bath Time



The 14 Talking Tips

Each session leverages LENA's 14 Talking Tips. These research-based tips are concrete, easy to understand, and easy to work into the ordinary activities of a parent's busy day. Think of them as the building blocks for creating joint attention, recasting vocalizations, fostering child initiations, building vocabulary, and increasing language complexity.

LENA Online

The secure LENA Online portal serves as the central tool that facilitates management of LENA data and implementation of LENA programs. Program managers and home visitors can track frequency of LENA Days, individual family performance, and other metrics, as well as quickly generate reports for individual families, groups, or a site's program as a whole. LENA Online also houses a robust and growing library of digital resources to support recruitment, enable session delivery, and connect sites to further information.





Privacy

LENA takes confidentiality and data security seriously. We have implemented physical, electronic, and managerial procedures to safeguard the personal information we collect and to prevent unauthorized access to and use of such data. No one listens to LENA Home audio recordings, and the audio is deleted once processed into data. We are System and Organization Controls (SOC) 2 Type II compliant. While not all customers require this level of data security and protection, we operate to the most stringent requirements in our systems, technology, and processes. More information can be found at **www.LENA.org/Privacy**.

Effectiveness: The Evidence Behind LENA Home

It is well proven that early language is one of the strongest predictors of brain development.¹ The amount of language a child hears affects brain processing speed, later vocabulary acquisition, and reading skills.² Interaction early in life has been linked to accelerated social-emotional development, as well as higher IQ scores and language skills in adolescence.³



During the program, LENA wearable technology provides parents with regular feedback on the language environment, which has been shown to increase interactive talk and child language ability.⁴ Practical techniques for applying that information and increasing adult-child interactions are presented in a series of engaging lessons.

Data-rich reports tell parents how much they are talking with their children — often over-estimated in the absence of objective measurement.⁵ Techniques for increasing talk are designed to produce a responsive parenting style, which, the research tells us, is associated with accelerated language development and cognitive growth.⁶ Throughout the program, research-based strategies are the driving force: following the child's lead and creating joint attention⁷, as well as recasting child vocalizations⁸ and reading books together⁹. Reducing the amount of time spent on passive involvement with television and electronics makes up another important ingredient. This passive involvement has been shown to be detrimental to language development.¹⁰ More than 6,000 families have participated in LENA Home, and many have shown significant increases in how much they talk to their children (adult words) — and, more importantly, how much they talk *with* them (conversational turns).

- ¹Capute, Shapiro, and Palmer, 1987; Gilkerson and Richards, 2008; Romeo 2018a; Romeo 2018b.
- ² Saffran, Aslin, and Newport 1996; Fernald 2009; Weiss 2022.
- ³ Gilkerson 2018; Gómez 2021.
- ⁴Gilkerson, Richards, and Topping, 2017a.
- ⁵ Richards, Gilkerson, and Topping, 2017b.
- ⁶ Warren and Walker, 2005; Landry, Smith, and Swak, 2006; Bornstein, Tamis-LeMonda, Hahn, and Haynes, 2008.
- ⁷ Tamis-LeMonda, Kuchirko, and Song, 2014; Goldstein and Schwade, 2008; Dunham and Dunham, 1992; Landry, Smith, Swank, and Guttentag, 2008; Charlop-Christy and Carpenter, 2000; Alpert and Kaiser, 1992.
- ⁸ Nelson, 1977; Baker and Nelson, 1984; Clark, 2007; Nelson, Welsh, Trup, and Greenburg, 2011.
- ⁹ Karrass and Braungart-Rieker, 2005; Aktar, Carpenter, and Tomasello, 1996; Bus, van IJzendoorn and Pellegrini, 1995; Mol, Bus, de Jong, and Smeets, 2008; Huebner and Meltzoff, 2005.
- ¹⁰ Zimmerman, Gilkerson, Richards, Christakis, Xu, Gray, and Yapanel, 2009; Payne, Whitehurst, and Angell, 1994.

Planning Ahead: Sample Implementation Timeline

The figure below outlines a general program schedule to launch LENA Home, from the initial signing of the Program Agreement to completion of the first home visiting session with families.



Adopting LENA Home: Components, Requirements, and Costs

Organizations adopting LENA Home require enough LENA devices for each participant to complete one LENA Day between each session. Depending on your program logistics, you may need one or two devices per active participant. Your LENA representative can help determine the amount needed to be successful. While purchased up front, LENA device costs can be spread over an expected life of five years for planning purposes.

LENA clothing must also be purchased for participants. LENA recommends providing each participant with at least two new, or like new, LENA clothing items. Clothing may be reused with multiple participants, if deemed appropriate by the implementing agency. LENA clothing is required to ensure proper placement of the device in relation to the child's mouth, and is made from material that minimizes fabric noise that can interfere with recording fidelity.

An annual subscription fee (minimum of 30 children/month) includes use of LENA's cloud-based software, which enables processing of recordings, delivery of reports, and program management. The fee also covers regular check-ins with LENA and ongoing support and assistance. The software can be used by any number of LENA devices, with cloud-based processing available through any secure, high-speed internet connection. Processing may also be done locally, if required by data-protection policies.

There is a one-time \$6,500 startup fee to cover software configuration, initial training, curriculum resources, and launch support. The provider supplies home visiting/parent coaching staff and any incidental costs, such as possible participant incentives.

Next Steps

• **Get buy-in:** Depending on the scale of your initiative, implementing LENA Home may require buy-in from multiple leaders, catalyzers, and organizations. These partners can support recruitment efforts, promote awareness of the need for interactive talk, and share the successes of the program. Key stakeholders such as agency directors, program managers, home visitors, and parents may also need to be involved in the early planning stages.

Representatives from LENA are happy to lead or join calls, webinars, or in-person presentations to support partner engagement. We can also provide presentation decks and shareable resources that explain the importance of closing the talk gap and give background on LENA and LENA Home.

- **Determine and solidify funding:** LENA will provide you with a budget template to help assess your funding needs for the program. We've worked with partners using a variety of funding sources.
- Formalize partnership: LENA will provide a formal quote and program agreement with a mutually agreedupon effective date.
- **Get started:** Following the signing of your contract, LENA's Partner Success Team will contact you to set up the first planning meeting and connect you to other LENA staff as needed. Our team will provide ongoing support through launch and implementation, both in terms of planning logistics and providing training resources for staff.