



Alignment to Ohio Step Up to Quality

About LENA

LENA is a national nonprofit on a mission to transform children's futures through early talk technology and data-driven programs. LENA's early talk technology, sometimes referred to as a "talk pedometer" or a "FitBit for conversation," is the global standard for measuring early language environments, including conversational turns. Visit www.LENA.org or email info@LENA.org to learn more about how LENA Grow supports early childhood educators' professional development.

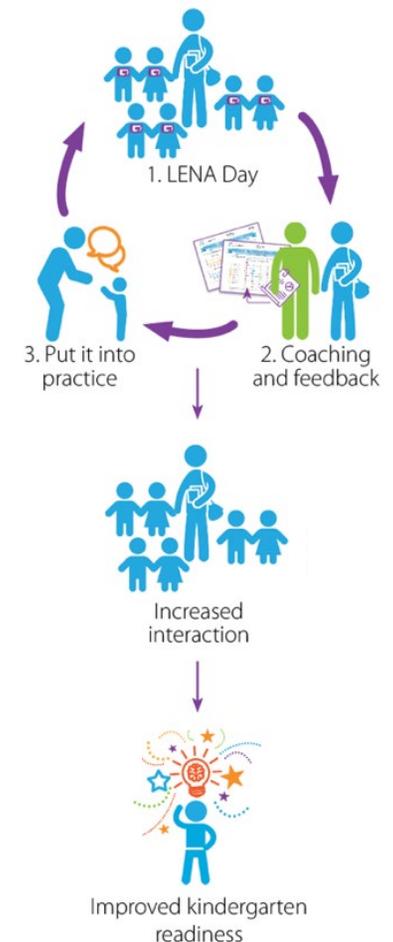
About LENA Grow

[LENA Grow](#) is a practice-based professional development program that helps early childhood professionals equitably improve classroom language environments in early learning settings, complementing **Ohio's Step Up to Quality rating program standards**.¹ LENA's technology measures conversational turns, a metric strongly predictive of child outcomes. Conversational turns are measured at the level of the classroom and individual child alike, providing data-rich feedback reports designed to facilitate a strengths-based coaching framework that gives early childhood professionals the tools they need to provide each and every child with the language support they need. Just as Step Up to Quality serves early childhood professionals across a wide variety of settings, LENA Grow is implemented in a variety of early learning settings throughout the U.S. and Ohio including private/state-funded child care centers, family child care homes, and Early Head Start and Head Start programs.

How LENA Grow Supports Step Up to Quality

LENA Grow professional development program directly supports Step Up to Quality's goal to provide programs with the tools and support needed to improve quality over time. To measurably improve equitable interactions with each child in their care, early childhood professionals participate in LENA Grow's five-week reflective feedback cycle. The cycle employs LENA's "talk pedometer" technology, strengths-based coaching, and early talk strategies to measurably increase conversational turns, one of the most predictive metrics of child outcomes. It aligns with Step Up to Quality's Standards in the following four domains: Learning and Development, Administrative and Leadership Practices, Staff Qualifications, and Family and Community Partnerships.

How LENA Grow Works



Alignment of LENA Grow Core Elements to Ohio's Step Up to Quality Domains

On the following pages, see further explanations of each domain, as well as the core elements of LENA Grow.

Step Up to Quality		LENA Grow Professional Development Program: Core Elements						
Domain	Subdomain	Research Base	Early Talk Strategies	LENA Room Reports	LENA Child Reports	Weekly Strengths-based Coaching	Weekly Goal Setting, Documentation, and Practice	Family Engagement
Learning and Development	Curriculum	√	√	√			√	
	Child Screening and Assessment	√		√	√		√	√
	Interactions and Environment	√	√	√	√	√	√	√
Administrative and Leadership Practices	Staff Management	√				√	√	
Staff Qualifications	Professional Development	√	√		√	√	√	
Family and Community Partnerships	Communication and Engagement	√	√	√	√			√

Core Elements of LENA Grow

1. **Research base:** LENA Grow is rooted in over a decade of peer-reviewed research linking conversational turns to improved language, brain, and social-emotional development. Over 400 researchers and clinicians in over 40 countries have used LENA technology to study early language development.²
2. **Early talk strategies:** At each coaching session, teachers receive research-based curriculum materials that provide strategies for increasing interactive talk. Areas of focus include personal care, transitions, indoor play, outdoor play, mealtimes, shared reading, early math, early literacy, and songs & rhymes.
3. **LENA Room Report:** At each coaching session, teachers review the Room Report, which provides objective interaction data on overall room averages and child-specific averages. It quantifies the number of conversational turns in the classroom across the day.
4. **LENA Child Report:** At each coaching session, teachers review the Child Report, which provides a detailed view of each individual child's experience across the day, including hourly counts of interactions and child vocalizations that highlight further engagement opportunities for teachers. This report is also used to engage families in a conversation about their child's early talk experiences and language development.
5. **Weekly strengths-based coaching:** LENA Grow coaches provide 30-60 minutes of coaching each week. The Coach Guide supports them in bringing a strengths-based lens to the data analysis and goal setting conversation with teachers.
6. **Weekly goal setting, documentation, and practice:** At each coaching session, the teacher sets a specific and measurable goal for the coming week. The teacher then documents progress toward that goal as they practice integrating early talk strategies throughout the week, including the next LENA Day.
7. **Family Engagement:** A Family Talk handout is provided each week for teachers to send home. Teachers also spend one coaching session developing a family engagement strategy and making plans for how they will engage families in extending quality interactions into the home setting.

These elements work together to provide a cohesive, empowering professional development experience for teachers that drives meaningful and lasting increases in interaction. This change leads to more equitable language environments, higher CLASS® scores, accelerated language development, and increased teacher job satisfaction and self-efficacy.

How LENA Grow Supports the Step Up to Quality Domains

Learning and Development Domain

Curriculum Subdomain LENA's Conversation Starters focus on various classroom routines, including personal care routines, transitions, mealtimes, indoor and outdoor play, as well as shared reading, math, literacy, and songs & rhymes. These practical strategies enhance the implementation of a variety of curriculum models. LENA Grow's coaching sessions, room-level data reports, and individual child reports help teachers focus on increasing the quantity of conversational turns in their classrooms. The reports show hour-by-hour data, helping teachers focus on specific times of day to better understand how engaged children are during different activities. Teachers can then make adjustments to curricula, materials, and facilitation to enhance child engagement, optimizing cognitive development through the course of regular daily activities.

LENA's strengths-based approach to improving language environments provides early childhood professionals a deeper understanding of the connections between language interaction and early brain development. Peer-reviewed research from scholars at Harvard University, Columbia University, and other institutions has linked

conversational turns not just to language development, but also to brain structure,³ brain function,⁴ and executive functioning⁵ early in life. fMRI imaging technology has visually shown the relationship between interactive language experiences and brain activity. For instance, one study drew a correlation between conversational turns and activation in Broca's area of the brain, a well-known language center. They also support children's developmental progression in emerging language and literacy. Children in LENA Grow classrooms have shown increases in TS Gold® scores⁶ and LENA Developmental Snapshot scores.⁷ In addition, peer-reviewed research has shown a link between increased conversational turns in preschool settings and improved vocabulary scores.⁸ They also support children's developmental progression in emerging language and literacy.

Child Screening and Assessment Subdomain Program evaluations have shown LENA Grow to support child assessment outcomes and increase the ability of early childhood professionals to individualize curriculum and set developmental goals that focus on promoting interaction and language development. Objective data on each child's language environment, along with individualized feedback sessions on how to interpret the data, supports teachers in setting goals for lasting positive behavior change. This results in positive outcomes for the young children they are supporting. LENA Grow classrooms have shown increases in TS Gold,⁹ DECA, and LENA Developmental Snapshot scores.¹⁰ Objective data reports provide both hourly counts and daily averages to support early childhood professionals in creating and achieving intentional, measurable goals for increased interactive conversation with individual children.

Interactions and Environment Subdomain Through the reflective feedback cycle, LENA Grow strengthens teacher-child interactions, which are a foundation for classroom quality. The LENA Room Report and LENA Child Report provide a clear, hour-by-hour picture of how classrooms compare to national adult word count and conversational turn benchmarks. Using an accurate measure of adult words and conversational turns for a classroom, administrators can make decisions on how best to distribute staff resources to ensure optimal talk environments for all children across the day. Following best practice principles of adult learning, the LENA Grow feedback cycle provides opportunities for early childhood professionals to learn strategies to increase talk with children, set measurable goals and practice strategies in their own classroom, and reflect on their own performance and each child's experience through objective feedback reports.

LENA's early talk strategies, the 14 Talking Tips, are research-based techniques for increasing early talk and supporting healthy language and social-emotional development.¹¹ Three research-based "active ingredients" power the 14 Talking Tips: creating joint attention, increasing conversational turn-taking, and then recasting.

- *CLASS* LENA's 14 Talking Tips used throughout the program aligns with the domains and dimensions of the Infant, Toddler, and Pre-K CLASS. Analysis shows LENA Grow helps improve CLASS® scores, especially within the domains of Responsive Caregiving, Engaged Support for Learning, and Instructional Support.
- *Environmental Rating Scales (ERS)* LENA's 14 Talking Tips used throughout the program aligns with the ERS items and indicators in the subscales Language and Books/ Language and Literacy/Listening and Talking and Interactions. Additionally, the weekly Conversation Starter Posters align with and support the attainment of the interaction indicators in the ERS subscales: Space and Furnishings, Personal Care Routines, Activities, and Program Structure.
- *Ohio Classroom Observation Tool (OCOT)* *Ohio 4 and 5 Star Verification Tool* LENA's 14 Talking Tips utilized throughout the program aligns with and supports early childhood professionals' progression in Element I.1 Staff are responsive to children; I.2.1 Staff support children's learning by using varied instructional strategies; and Element I.3 Staff support children through positive guidance and behavior management strategies.¹²

Peer-reviewed research has established a causal link between increased conversational turns, the core metric LENA measures, and improved social-emotional competencies in the first three years of life.¹³ Further, research has shown LENA Grow has impacts on children's social and emotional health, including improved DECA (Devereux Early Childhood Assessment) scores.¹⁴

Administrative and Leadership Practices Domain

Staff Management Subdomain LENA Grow has been shown as a responsive and effective professional development program. LENA Grow has the potential to reduce teacher turnover through increased teacher self-efficacy.¹⁵ Survey data consistently verifies 90+ percent of early childhood professionals report an increase in confidence and job satisfaction after completing LENA Grow, and 95+ percent either like or love the program and would recommend the program to other early childhood professionals.¹⁶

Staff Qualifications Domain

Professional Development Subdomain LENA Grow directly supports the development of early childhood practice and skill in 4 of the 6 areas of professional practice in Ohio's Early Childhood Core Knowledge and Competencies. LENA Grow helps staff form a reflective practice habit that improves responsive caregiving and promotes continuous improvement. LENA Grow motivates staff to be active participants in their professional development. It helps them not only understand the how but also the *why* of what they practice, building skills in data literacy, goal setting, and child observation. Upon completion, staff consistently report greater confidence and job satisfaction. The LENA Grow program sequence is designed with the flexibility to support a program's goals, as well as those of individual staff members. Two stackable five-week sequences can be delivered in a variety of ways, depending on the program and classroom needs: as a standalone five-week sequence, with both sequences back-to-back, or months apart. Completion provides 4.5 hours for LENA Grow 1 Essentials and 3.5 hours for LENA Grow 2 Insights.

LENA Grow program outcomes include the following:

- A deeper understanding of the important connection between language interaction and early brain development.
- Strategies to increase quality interactions equitably, achieved through the reflective feedback cycle.
- Objective data on which times of day promote the most/least amount of interactive talk and which children experience the most/least amount of interaction.
- Guidance on how to interpret data and apply it toward setting goals for lasting positive behavior change.

The LENA Grow Coach Guide provides week-by-week guidance for each coaching session, including weekly coaching intentions, teacher learning objectives, "caring coaching" callouts to enhance a focus on equity and inclusion, and checklists for facilitating each session.

Family and Community Partnerships Domain

Communication and Engagement Subdomain LENA Grow supports early childhood professionals/programs in accomplishing Ohio's Family Engagement goals: communicate clearly and regularly with families, assist families to access available resources within the community, and guide families to have positive interactions with their children. LENA Grow offers the opportunity for early childhood professionals to engage families in two-way communication in each step of the program.

The LENA Grow Teacher Guide embeds a family engagement component into each week of the program, including an activity to help teachers establish and track a family engagement plan. Family engagement materials highlight the classroom's weekly focus, encouraging families to extend similar interactive talk strategies into the home. Additional resources to introduce the program to families and to support family self-efficacy and confidence include a shareable slideshow and social media toolkit. Resources are available in both English and Spanish, and the 14 Talking Tips are available in twelve languages. The LENA Child Report provides a window into the child's language experience in the classroom and can serve as a tool to aid in ongoing school-home communication. LENA Grow's individualized Child Reports provide data that can support IEP goal setting and tracking.

LENA Grow provides directors/administrators quantitative data that can help increase equity for all children as well as provide inclusive techniques that support children of all learning abilities and languages. LENA data indicate that even in classrooms and environments that are highly interactive, many children spend large portions of the day in relative silence or language isolation.¹⁷ Even in settings that are considered high quality overall, assumptions cannot be made about each individual child's experience or about equity of access to interaction and learning opportunities. LENA's data shows the importance of seeing both child-level measurements and classroom-level measurements to ensure equitable outcomes. Children who begin the program in relative isolation see the greatest gains in interaction. LENA data shows that children who start the program experiencing fewer than 15 conversational turns per second experience a 58% average increase in conversational turn rates by the end of the program.¹⁸

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