



# Alignment to Colorado Shines QRIS

## 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](http://www.LENA.org) or email [info@LENA.org](mailto:info@LENA.org) to learn more about how LENA Grow supports early childhood educators' professional development.

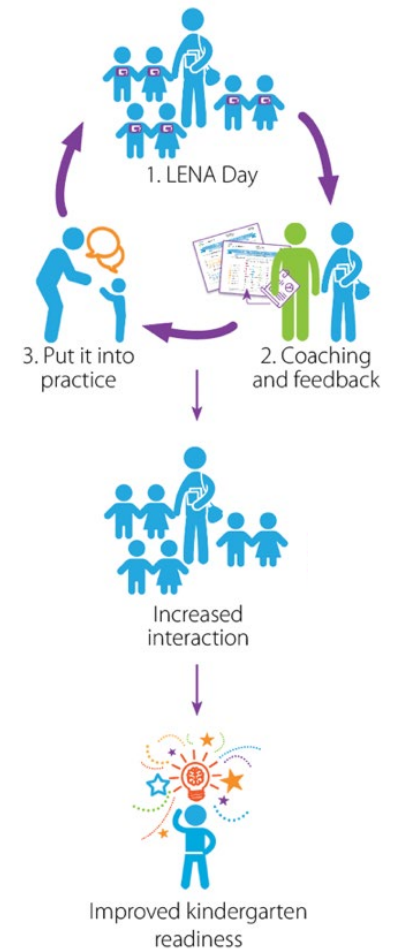
## About LENA Grow

[LENA Grow](#) is an evidence-based professional development program that helps educators equitably improve classroom language environments in early learning settings, complementing [Colorado Shines QRIS](#) standard categories. 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 educators the tools they need to provide each and every child with the language support they need. Just as Colorado Shines serves educators and caregivers across a wide variety of settings, LENA Grow is implemented in a variety of early learning settings throughout the U.S. and Colorado, including private/state-funded child care centers, family child care homes, and Early Head Start and Head Start programs.

## How LENA Grow Supports Colorado Shines QRIS

LENA Grow directly supports Colorado Shines' 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, educators 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. When delivered by Colorado Professional Development Information System (PDIS) credentialed coaches, LENA Grow supports the Colorado Shines QRIS Standard Categories.

### How LENA Grow Works



## Alignment of LENA Grow Core Elements to Colorado Shines QRIS Standard Categories

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

Colorado Shines QRIS Framework		LENA Grow Professional Development Program: Core Elements						
Standard Categories	Criteria	Research Base	Early Talk Strategies	LENA Room Reports	LENA Child Reports	Weekly Strengths-based Coaching	Weekly Goal Setting, Documentation, and Practice	Family Engagement
Workforce and Professional Development	Early Childhood Teacher Qualifications		√	√		√	√	
	Reflective Practice		√	√	√	√	√	
Family Partnerships	Communicating with Families		√		√		√	√
	Building Community Among Staff & Families		√		√		√	√
	Equity-Focused Inclusion of Family Voice in Children's Learning & Development	√		√	√			
	Partnering with Families to Meet Children's Special Needs		√		√		√	√
Leadership, Management and Administration	Staff Development			√		√	√	
Learning Environment	Developmentally Appropriate Curricula	√	√	√			√	
	Child Assessment to Inform Individuation			√	√		√	
	Supporting of Children's Home Language		√	√	√			

## 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. More than 400 researchers and clinicians in over 40 countries have used LENA technology to study early language development.<sup>1</sup>
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 Colorado Shines QRIS Standard Categories

### Workforce and Professional Development

**Early Childhood Teacher Qualifications** LENA Grow has been approved in the Colorado PDIS training alignment process for early educators to earn professional development hours. LENA supports the development of teacher competency in 5 of the 7 domain areas of Colorado's Competencies for Early Childhood Educators. 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.

**Reflective Practice** The LENA Grow Feedback Cycle is based on best practices from the Practice-Based Coaching Framework. LENA Grow helps staff form a reflective practice habit that improves responsive caregiving and promotes continuous improvement. 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. 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 Partnerships

**Communicating with Families / Building Community Among Staff & Families** LENA Grow offers the opportunity for early childhood professionals to engage families in two-way communication at 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 a family engagement plan and track progress. Family engagement materials highlight the classroom's weekly focus, encouraging families to extend 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 12 languages. The LENA Child Report provides a window into the child's language experience in the classroom and can be shared to deepen ongoing school-home communication.

**Equity-Focused Inclusion of Family Voice in Children's Learning & Development** LENA Grow provides directors/administrators quantitative data that can help increase equity for all children and promote 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.<sup>2</sup> 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 an average increase in conversational turn rates of greater than 50% by the end of the program.<sup>3</sup>

**Partnering with Families to Meet Children's Special Needs** LENA Grow provides individual Child Reports with data on adult word count, child vocalizations, and conversational turns that can support IEP goal setting and tracking. LENA recordings and coaching sessions happen over a period of five weeks. Objective data reports provide hourly counts as well as daily averages that support teachers in creating and achieving intentional, measurable goals for increased conversation.

## Leadership, Management and Administration

**Staff Development** LENA Grow, approved in PDIS, is designed to support not only teachers, but also center directors, coaches, and other leaders and administrators. LENA Grow has the potential to reduce teacher turnover through increased teacher self-efficacy,<sup>4</sup> making it a helpful retention tool for leaders. 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 it to other early childhood professionals.<sup>5</sup>

## Learning Environment

**Developmentally Appropriate Curricula** 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.<sup>6</sup> Three research-based "active ingredients" power the 14 Talking Tips: creating joint attention, increasing conversational turn-taking, and then recasting. LENA's 14 Talking Tips are used throughout the LENA Grow program.

LENA's Conversation Starters, differentiated by skill level for infant, toddler, and preschool, focus on various classroom routines, including personal care routines, transitions, mealtimes, and 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,<sup>7</sup> brain function,<sup>8</sup> and executive functioning<sup>9</sup> 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.

**Child Assessment to Inform Individualization** 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, support teachers in setting goals for lasting positive behavior change.<sup>10</sup> This results in positive outcomes for the young children they are supporting. LENA Grow classrooms have shown increases in TS Gold scores<sup>11</sup> and LENA Developmental Snapshot scores.<sup>12</sup> In addition, peer-reviewed research has shown a link between increased conversational turns in preschool settings and improved vocabulary scores.<sup>13</sup> 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. Peer-reviewed research has established a causal link between increased conversational turns and improved social-emotional competencies in the first three years of life.<sup>14</sup> Further, research has shown that LENA Grow has positive impacts on children's social and emotional health, including improved DECA (Devereux Early Childhood Assessment) scores.<sup>15</sup>

**Supporting of Children's Home Language** Since it measures phonemes and syllables, LENA technology accurately measures interaction in any language. The LENA counts of vocalizations and conversational turns are accurate even when multiple languages are being spoken in the same classroom. LENA supports dual language teachers by measuring interactions for each individual child, providing a clear picture of the amount of conversation dual language learners are receiving. In addition, LENA's 14 Talking Tips are available in 12 languages.

## References

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