

# Crosswalk with the Florida Early Learning and Developmental Standards Birth to Kindergarten

#### **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 <a href="https://www.LENA.org">www.LENA.org</a> or email <a href="mailto:info@LENA.org">info@LENA.org</a> to learn more about how LENA Grow supports early childhood teachers' professional development.

### How LENA Grow Supports the Florida Early Learning and Developmental Standards (FELDS)

<u>LENA Grow</u> is an evidenced-based professional development program that helps teachers equitably improve classroom language environments in early learning settings, complementing Florida Early Learning and Developmental Standards' goals for children's early learning and development. To measurably improve equitable interactions with each child in their care, teachers 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.

LENA Grow helps teachers form a reflective practice habit that supports language development and builds responsive relationships. As teachers begin to talk *with* each child rather than *to* the children, they learn how to adapt their interactions to support each child's learning and development. This change leads to more equitable language environments, higher TS GOLD®1 and CLASS® scores,² accelerated language development, and increased teacher job satisfaction and self-efficacy. Just as Florida Early Learning and Developmental Standards' serve teachers across a wide variety of settings, LENA Grow is implemented in a variety of early learning settings throughout the U.S., including private/state-funded child care centers, family child care homes, and Early Head Start and Head Start programs.



#### **Core Elements of LENA Grow**

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, accelerated language development, and increased teacher job satisfaction and self-efficacy. These elements help teachers scaffold learning and individualize instruction in the FELDS domains.

- 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>3</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.

## How LENA Grow Supports Florida Early Learning and Developmental Standards Birth to Kindergarten

LENA Grow supports the following domains of the Florida Early Learning and Developmental Standards by improving the early talk environment for children, focusing specifically on the quantity and quality of adult-child interaction. Peer-reviewed research has linked conversational turns to brain structure, <sup>4</sup> brain function, <sup>5</sup> reading skills, and executive functioning early in life, as well as IQ scores and language skills in adolescence. LENA Grow's detailed child-level data helps teachers individualize instruction.

Early Learning and Developmental Standards		How LENA Grow Supports
Domain	Components	
I. Physical Development	A. Health and Well Being	LENA Grow helps teachers build interactive talk into care routines. Teachers receive research-based curriculum materials that provide ideas on how to effectively engage young children during times of the day that include physical health and self-care. Utilizing the 14 Talking Tips, teachers support children in communicating about basic needs. Areas of focus include personal care routines, transitions, mealtimes, and outdoor play.
II. Approaches to Learning	A. Eagerness and Curiosity	LENA Grow supports interactive talk among teachers and children by providing strategies that promote curiosity, creativity, and inventiveness. During coaching sessions, teachers review classroom- and child-level data and set individualized goals that support children's approaches to learning. Teachers receive research-based curriculum materials that provide ideas for supporting children's planning and reflection during indoor and outdoor play.
	B. Persistence	
	C. Creativity and Inventiveness	
	D. Planning and Reflection	
III. Social and Emotional Development	A. Emotional Functioning	LENA Grow helps teachers foster positive, responsive adult-child relationships. Teachers receive research-based curriculum materials that provide ideas on how to effectively engage young children during times of the day that may be stressful for them, including personal care routines and transitions. They also practice strategies for promoting socialization during mealtimes.
	B. Managing Emotions	
	C. Building and Maintaining Relationships with Adults and Peers	As children begin to vocalize more during LENA Grow, they are better able to express their emotions and needs. 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>10</sup> Furthermore, research has shown LENA Grow to have impacts on children's social and emotional health, including improved DECA (Devereux Early Childhood Assessment) scores. <sup>11</sup>
	D. Sense of Identity and Belonging	

Early Learning and Developmental Standards		How LENA Grow Supports
Domain	Components	TIOW LEIVA GIOW Supports
IV. Language and Literacy	A. Listening and Understanding	LENA Grow supports interactive talk among teachers and children, promoting language and literacy. Teachers receive research-based curriculum materials that provide strategies on how to increase interactive talk by creating joint attention, increasing conversational turn-taking, and recasting. Areas of focus include shared reading, early literacy, and songs & rhymes.  Children in LENA Grow classrooms have shown increases in TS GOLD® language and literacy scores 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>
	B. Speaking	
	C. Vocabulary	
	D. Sentences and Structure	
	E. Conversation	
	F. Emergent Reading	
V. Mathematical Thinking Domain	A. Number Sense	Teachers receive research-based resources that provide strategies for increasing interactive talk focusing on indoor play, outdoor play, mealtimes, and early math, presenting examples of opportunities to increase engagement around math concepts throughout the day. Teachers receive strengths-based coaching, review classroom and child level data, set measurable goals, and practice new strategies, promoting teachers' ability to scaffold children's math skills.
	B. Numbers and Operations	
	C. Patterns	
	D. Geometry	
	E. Spatial Relations	
	F. Measurement and Data	
VIII. Creative Expression Through the Arts	B. Music	Teachers receive research-based curriculum materials that provide strategies for increasing interactive talk through songs & rhymes and during indoor and outdoor play. The LENA Grow Room Report and Child Report highlight further engagement opportunities to aid teachers in targeting the times of the day and/or children to focus on interactive talk during dramatic play as well as in the form of songs and rhymes.
	C. Creative Movement	
	D. Imaginative and Creative Play	

<sup>\*</sup>The Domains of Scientific Inquiry and Social Studies are not explicitly addressed in the LENA Grow program.

#### References

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<sup>&</sup>lt;sup>2</sup> LENA Foundation (2023, March 14). Coaching for impact in Sarasota County: Increased TS GOLD® and CLASS® scores. *LENA Blog*. <a href="https://www.lena.org/lena-grow-evaluation">https://www.lena.org/lena-grow-evaluation</a> One teacher's story behind an evaluation of LENA Grow in Milwaukee. *LENA. Blog*. <a href="https://www.lena.org/lena-grow-evaluation-next-door-teacher-story/">https://www.lena.org/lena-grow-evaluation-next-door-teacher-story/</a>

<sup>&</sup>lt;sup>3</sup> LENA Foundation (2023). LENA's impact is powered by partnerships. <a href="https://lena.org/where-are-LENA-programs">https://lena.org/where-are-LENA-programs</a>

<sup>&</sup>lt;sup>4</sup> Romeo, R., et al. (2018). Language Exposure Relates to Structural Neural Connectivity in Childhood. *Journal of Neuroscience* 38(36): 7870-7877. https://doi.org/10.1523/JNEUROSCI.0484-18.2018. Huber, E., et al. (2023). Language Experience During Infancy Predicts White Matter Myelination at Age 2 Years. *Journal of Neuroscience* 43(9): 1590-1599. https://doi.org/10.1523/JNEUROSCI.1043-22.2023

<sup>&</sup>lt;sup>5</sup> Romeo, R., et al. (2018). Beyond the 30-Million-Word Gap: Children's Conversational Exposure Is Associated with Language-Related Brain Function. *Psychological Science* 29(5). https://doi.org/10.1177/0956797617742725

<sup>&</sup>lt;sup>6</sup> Weiss, Y., et al. (2022). Language input in late infancy scaffolds emergent literacy skills and predicts reading related white matter development. *Frontiers in Human Neuroscience* 16. https://doi.org/10.3389/fnhum.2022.922552

<sup>&</sup>lt;sup>7</sup> Romeo, R., et al. (2021). Neuroplasticity associated with changes in conversational turn-taking following a family-based intervention. *Developmental Cognitive Neuroscience* 49. <a href="https://doi.org/10.1016/j.dcn.2021.100967">https://doi.org/10.1016/j.dcn.2021.100967</a>

<sup>&</sup>lt;sup>8</sup> Gilkerson, J. et al. (2018). Language experience in the second year of life and language outcomes in late childhood. *Pediatrics* 142(4). https://doi.org/10.1542/peds.2017-4276

<sup>&</sup>lt;sup>9</sup> LENA Foundation (2023). The 14 Talking Tips. *LENA Website*. <u>https://info.lena.org/14-talking-tips</u>

<sup>&</sup>lt;sup>10</sup> Gómez, E., & Strasser, K. (2021). Language and socioemotional development in early childhood: The role of conversational turns. *Developmental Science*, 24(5). https://doi.org/10.1111/desc.13109

<sup>&</sup>lt;sup>11</sup> LENA Foundation (2022, September 2). Research shows links between LENA Grow participation and social-emotional growth. *LENA Blog.* <a href="https://www.lena.org/research-shows-links-between-lena-grow-participation-and-social-emotional-growth/">https://www.lena.org/research-shows-links-between-lena-grow-participation-and-social-emotional-growth/</a>

<sup>&</sup>lt;sup>12</sup> LENA Foundation (2022, February 1). Preliminary findings suggest LENA Grow accelerates language development. *LENA Blog*. <a href="https://www.lena.org/lena-grow-developmental-snapshot-preliminary-results/">https://www.lena.org/lena-grow-developmental-snapshot-preliminary-results/</a>

<sup>&</sup>lt;sup>13</sup> Duncan, R., et al. (2022). Predictors of preschool language environments and their relations to children's vocabulary. *Infant and Child Development* 32(1). https://doi.org/10.1002/icd.2381