

LENA Grow's Impact on CLASS[®] Scores

The Classroom Assessment Scoring System[®] (CLASS) observation tool evaluates teacher-child interactions to improve classroom quality in early childhood education settings. Many states have integrated CLASS[®] into their quality improvement systems, as has Head Start, using it to determine star ratings and guide program self-assessment.

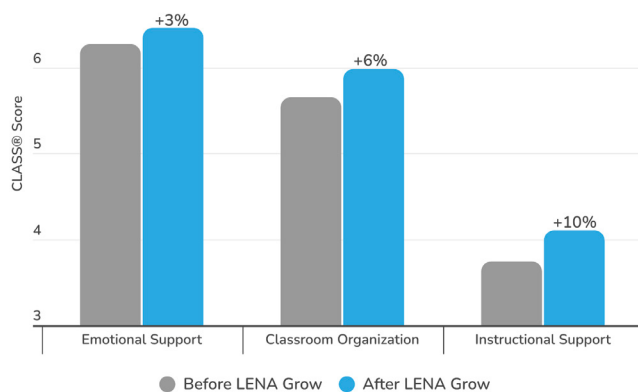
This report answers an important question: How does participating in LENA Grow impact CLASS scores? Data from five different evaluations spanning 2018-2025 show a clear, positive answer.

LENA Grow + CLASS in Pre-K Classrooms

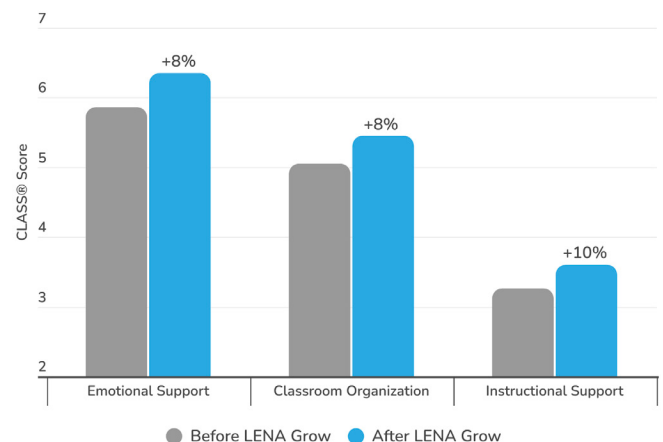
Evaluation Partner: Early Learning Coalition of Sarasota County, Florida

The Challenge: 13 pre-K classrooms with low Instructional Support scores

Why It Worked: Instructional coach Kathy Cestaro said, "Actually seeing the [LENA] numbers on the paper was eye-opening. The idea that 'you can't improve what you don't measure' has really rung true for me, and it's rung true for our teachers."



LENA Grow is a data-driven professional development program for early childhood educators. The program focuses on improving language environments and increasing teacher-child conversational turns. Conversational turns, also known as serve-and return interactions, have previously been linked to brain structure¹ and function,² healthy social skills,³ higher IQ scores,⁴ literacy skills,⁵ and preschool vocabulary.⁶



Evaluation Partners: Six sites in Florida, Ohio, and Wisconsin. Samples were matched based on setting, site-level SES, and pre-period CLASS scores.

The Challenge: Would LENA Grow maintain a comparable impact on CLASS scores across a larger, more diverse sample?

Why It Worked: LENA Grow's data reports and coaching strategies worked well across different settings, including Head Start programs, private child care networks, and public/private partnerships.

LENA Grow classrooms —
+10% in Instructional Support

An Emphasis on Instructional Support

Some domains naturally improve with experience and basic training. Others require a different approach. The more challenging domains, especially Instructional Support, share one thing in common:

They all require real-time, responsive interaction with children.

Evaluation Partner: The Primary School, California

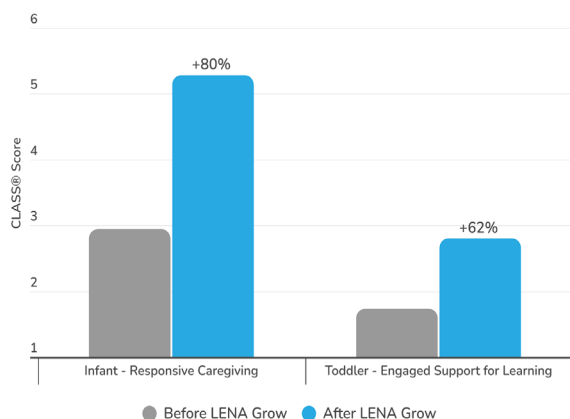
The Challenge: Three preschool classrooms serving children with identified language needs, requiring improved instructional quality.

Why It Worked: Teacher Jessica Pablo said, "LENA Grow and CLASS merge well together. It came together beautifully. LENA backed up that we weren't talking enough. Then when it came time to identify strategies, our coaching teams brainstormed what tier two or three words we were going to use for the upcoming week."

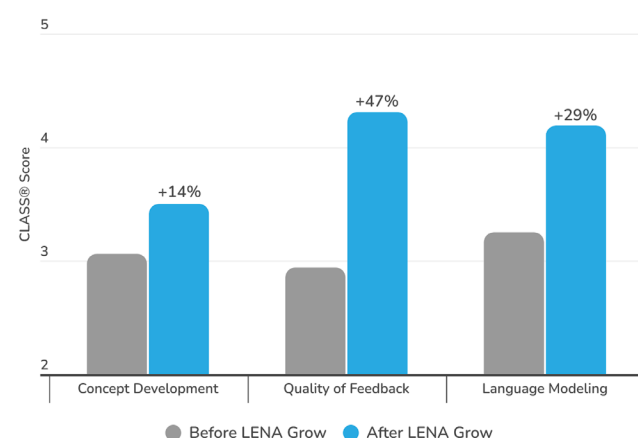
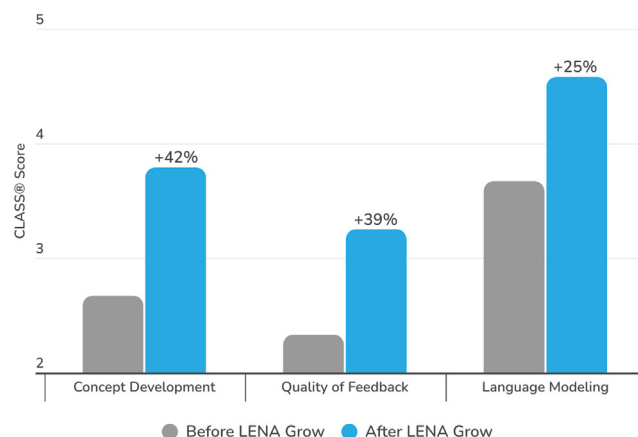
Evaluation Partner: Fort Worth Independent School District, Texas

The Challenge: Four pre-K classrooms with low Instructional Support scores, particularly struggling with Quality of Feedback and Language Modeling, two of the dimensions teachers find hardest to improve.

Why It Worked: Teachers could see their interaction data almost immediately, allowing them to identify and target specific changes. As one administrator noted, "Because the LENA Grow reports provided instant results that teachers could see, they gained more of an understanding of some of the CLASS dimensions and indicators."



These results underscore LENA Grow may be **key to driving improvements** in classroom quality.



LENA Grow + CLASS in Infant/Toddler Classrooms

Evaluation Partner: Early Learning Coalition of Escambia County, Florida

The Challenge: Improving quality in 14 infant and toddler classrooms, where interaction is harder to observe and measure

Why It Worked: LENA technology made the invisible visible. Educators could finally see how much they were talking with infants and toddlers throughout the day, and coaching helped them embed more conversational turns into routines such as diapering, feeding, and transitions.

Citations

- ¹ Romeo, R. R., Segaran, J., Leonard, J. A., Robinson, S. T., West, M. R., Mackey, A. P., Yendiki, A., Rowe, M. L., & Gabrieli, J. D. E. (2018). Language exposure relates to structural neural connectivity in childhood. *The Journal of Neuroscience*, 38(36), 7870–7877. <https://doi.org/10.1523/jneurosci.0484-18.2018>
- ² Romeo, R. R., Leonard, J. A., Robinson, S. T., West, M. R., Mackey, A. P., Rowe, M. L., & Gabrieli, J. D. (2018). Beyond the 30-million-Word Gap: Children's conversational exposure is associated with language-related brain function. *Psychological Science*, 29(5), 700–710. <https://doi.org/10.1111/sode.70019>
- ³ Gómez, E., & Strasser, K. (2025). Conversational Turns at Early Childhood Predicts Socioemotional Development at School Age. *Social Development*, 34(4). <https://doi.org/10.1111/desc.13109>
- ⁴ Gilkerson, J., Richards, J. A., Warren, S. F., Oller, D. K., Russo, R., & Vohr, B. (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>
- ⁵ Weiss, Y., Huber, E., Ferjan Ramírez, N., Corrigan, N. M., Yarnykh, V. L., & Kuhl, P. K. (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>
- ⁶ Duncan, R. J., Anderson, K. L., King, Y. A., Finders, J. K., Schmitt, S. A., & Purpura, D. J. (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>