Clarke uses LENA technology to bridge home and school environments

Providing a rich language environment for a child who is deaf or hard of hearing and has recently begun to use hearing aids or a cochlear implant is crucial.

That's why Clarke Schools for Hearing and Speech, a listening and spoken language program for children who are deaf or hard of hearing, has recently incorporated LENA technology as a "standard of care" for all children enrolled in their early intervention program.

Every family with a child between the ages of 0-3 who receives services via teletherapy or in person at one of Clarke's five east coast campuses will be encouraged to use LENA to understand their home language environment.

"We spend so much time talking with families about their role in creating the language environment that having a tool like this adds a lot," Angela Watters, a speech-language pathologist at Clarke Jacksonville said. "It fits in with our coaching goals for this age range and provides parents with valuable information they wouldn't otherwise have access to."

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Using LENA technology, parents and teachers can understand key aspects of a child's language environment. Feedback reports show the amount of adult words and conversational turns, and how much time a child experienced near and clear voices during a LENA Day.

"We want parents to develop what we call a listening and language lifestyle, where everything that they do with a child is an opportunity to build their listening and language skills," Jeana Novak, who coordinates Clarke's early intervention program in Philadelphia, said.

Bringing coaching to life

Creating a bridge between the home and school environments allows parents and staff to unify their efforts to support children's development.

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Seeing the data helps parents to understand how well they're doing at putting recommendations from Clarke professionals into practice.

For example, teachers often encourage parents to increase the amount of back-and-forth interaction they have with children. These "conversational turns" have been proven to be linked to better brain development and longitudinal outcomes. But a child who is just discovering his voice through new assistive listening technology may not vocalize regularly, leading the parent to become discouraged and to stop trying to initiate conversations.

"By using LENA over the course of months or years, we can look at the 'Daily Child Vocalizations' section to see that the child is discovering their voice and starting to use it more purposefully. It's reinforcing for parents to see the child responding to what they're putting into action, and that feedback keeps them talking more," Novak said.

Another section of the reports the professionals focus on is the audio environment, which shows how much clear "meaningful" speech a child experienced, compared to the amount of silence or electronic, overlapping, or distant sounds.

"Children who are just learning to listen with their hearing aid or cochlear implants, their brains haven't developed the ability to separate the sound of the television from the sound of mom's voice," Novak explained. "So we're trying to identify the best listening environment that will give children the ability to build listening — and subsequently language — skills."

Seeing the audio environment report helps to identify times of day when a child would benefit from the TV being turned off, or a parent stepping closer. Conversely, it helps parents to understand which activities fostered the most interaction.

LENA technology shows parents and teachers key aspects of a child's language environment.

"The environmental piece is the most exciting, because it seems like the most powerful, most attainable place for parents to make changes," Watters said.

Technology to support expanding impact

The team is particularly interested in expanding the use of LENA technology with families who are receiving teleservices.

"We have several families across the state of Florida receiving only teleservices," Watters said. "LENA is one of the most beneficial tools for that, because it's providing information we don't normally have the opportunity to access. It gives us a better picture of what families' days look like than T-Visits or in-person sessions can, and that allows us to help them maximize the language opportunities throughout their days."

Clarke staff are also working with the Grossman Family Foundation to use LENA to help parents optimize children's language learning environments.

Learn more about LENA SP!

LENA SP provides a richly detailed picture of a child's language environment, for researchers, speech-language pathologists, professionals working with children who are deaf or hard of hearing (DHH), and others who need detailed, scientifically reliable speech-language measurements of children 2 months to 48 months old.

Visit www.lena.org for more information.