



Augmentative Device Helps Max Speak

Four-year-old Max tells his mom when he wants a snack —and what he wants. He tells her if his feelings are hurt, or if his toy train Thomas is missing. He can also recite numbers and the ABCs, say nursery rhymes, and share stories and jokes with other preschoolers, something Max and his family don't take for granted.

Max is affected by global dyspraxia, which makes learning new motor skills — especially speech — quite difficult. For the first years of his life, Max could not say words. Before he and his mother found PACER's Simon Technology Center and learned about assistive devices six months ago, Max struggled to communicate even simple needs, such as wanting a snack or asking to have a friend come over to play. Now with his augmentative communication device and intensive speech therapy, Max is speaking.

The devices offered a new world

"As Max uses his device, he discovers the power and joy of verbal communication. In addition, he is speaking more with his own voice," said his mother, Ann Reilly. "The 'augcom' [augmentative communication] devices from PACER opened a whole new world for Max. He changed dramatically. Finally, he was able to control speech. It didn't matter that I recorded the message. It only mattered that he pressed the button. The device became his voice."

"Max became much more cooperative," Ann continued. "Once he could tell me what he wanted, it was not important whether I gave it to him or not. What was important was that he was able to tell me. The most exciting outcome, though, was that Max became interested in speech. Max had been in speech therapy for an entire year with little progress. Suddenly, with the devices, he started making more sounds and paying attention to speech."

Max quickly learned how to use his communication device. He borrowed several pieces of equipment through PACER's Project KITE (Kids Included through Technology are Enriched), and his skill increased. Last fall, a specialist from the early intervention program told Ann she thought Max was ready for a more sophisticated device that can be programmed to say thousands of words, phrases, and sentences. Max received it in mid-December, following an application process for help from TEFRA (Minnesota's Medical Assistance for children with disabilities living with their families).

Ann programs words and phrases that correspond with icons on the screen of Max's device. Max presses individual icons or combinations of icons to produce audible language. For example, when he wants a bowl of cereal, he presses "I want," "cereal," "milk," "bowl," "spoon," and "napkin," using six buttons from several pages. "Max loves it when I put new pages on his device," said his mother.

Max had been frustrated

Max's recent ability to communicate verbally was preceded by a time of frustration. His mother noticed his difficulty with large motor skills when he was a toddler. While his peers took their first steps and then began walking, Max struggled with the skill.

Likewise, from infancy, Max's communication skills developed slowly. His apraxia of speech is related to motor development and the voluntary motor sequencing that produces understandable language. Ann's first clues that Max might have delays in speech came when he could not do finger play, such as "Itsy Bitsy Spider," and

he could not imitate simple movements like waving, pointing, or blowing. Max has to consciously plan each sound that composes a word, much like he must plan his large motor movements, but Ann said his ability to understand language is normal.

Max's introduction to early intervention for speech disabilities occurred when he was evaluated at age 2, but was denied services because he was considered not far enough behind. "Life" then interrupted his mother's investigations. Shortly after the evaluation, Max had kidney and bladder surgery with complications. Then Max's younger brother, Quinn suffered a significant prenatal stroke that presents additional challenges for the family.

Max and Quinn were both evaluated for early intervention services by St. Paul public schools and both boys qualified for occupational therapy and special education services. Max also qualified for speech services.

Ann said both boys received excellent occupational therapy and special education services, but Max made no progress with his speech. Finally, Quinn's private physical therapist suggested that PACER and augmentative communication devices might help Max. About the same time, Internet research led Ann to conclude that Max needed speech therapy that focused on teaching him to sequence sounds into words. With a new speech therapist and a communication device from PACER's Simon Technology Center, Max's speech began to progress.

Max can now say 20 to 30 words clearly and has many word approximations. He can also say a few two- to three-word phrases. His mother is currently focusing on helping Max learn the social skills that play a large part in communication.

"Max is an active, intelligent, social, and happy little boy who has to work harder than his peers to learn to talk, but it's coming and I'm very proud of him," said Ann. "I will always be grateful to PACER for introducing us to augmentative communication. It has made a huge difference in our lives."

Since 1987, the Simon Technology Center has helped many children and adults, with a variety of disabilities, use assistive technology to enhance learning, work and independence. To learn more, visit: [PACER.org/STC](https://www.pacer.org/stc)