A teacher walked into my speech therapy room with a concerned look on her face. “Can I ask you a question? Not about a student, but about my son?”

I agreed and she proceeded to tell me that her 3½ year-old son was starting to stutter. She demonstrated what he sounded like and showed me how he was physically struggling to get his words out. “What should I do?” she asked.

As a speech-language pathologist assigned to elementary schools, I have conversations like this at least two to three times during a school year. Often the children of concern are between the ages of 3 and 5. Boys seem to have this issue more than girls. Many of these children are intelligent and often come from stimulating and language-rich households. What the teacher described is called developmental stuttering.

What is stuttering?

People generally expect to be able to express their ideas easily and smoothly. Fluency refers to the flow with which sounds, syllables, words, and phrases are connected together when someone is speaking (Nicolosi, Harryman, and Kresheck 1989). Fluent speech flows freely without any breaks, hesitations, or repetitions.

A break in the flow of speech is called a dysfluency. Stuttering is a pervasive pattern of repeated persistent dysfluencies.

Everyone has breaks in the flow of speech at some time or another. These are called normal dysfluencies. We have all had times when we say “uh, uh” when we are trying to formulate a thought or remember a word. We may repeat a word or phrase or stop in the middle of a sentence and start over again.

Stuttering, in contrast, involves atypical dysfluencies such as part-word repetitions (“Duh-duh-duh-dog”) and prolongations (“Mmmmmmmommy”). Sometimes the words get stuck in the throat and nothing at all comes out. This is called a block or block of airflow. These dysfluencies usually happen at the beginning of the sentence. The stutterer often struggles to get a message out and may show secondary characteristics such as averting the eyes or showing excessive tension in the lips, jaw, neck, and shoulders. The stutterer may gasp for air or wave

Adult stuttering: An inherited metabolic disorder

Researchers have long known that adult stuttering tends to run in families. A recent study, led by researchers at the National Institutes of Health, has identified three genes as a source of stuttering, providing further evidence that stuttering is not a behavioral disorder but rather an inherited disorder that arises from abnormal neuronal activity.

For more information about stuttering, see the website of the National Stuttering Association, www.nsastutter.org, the largest self-help support organization in the United States for people who stutter. Its mission is to bring hope and empowerment to children and adults who stutter, their families, and professionals through support, education, advocacy, and research.
the hands around. It’s as if there is a glitch or malfunction between the signals the brain sends out and what happens at the level of the speech mechanisms.

It can be frustrating both for the stutterer, who has something wonderful to say, and for the listener, who wants to know what it is. If it gets too frustrating, the stutterer may give up and the message will remain locked up inside. Stutterers go to speech therapy to learn techniques to help their speech become smooth and less effortful.

**What is developmental stuttering?**

Developmental stuttering is the most common form of dysfluency, with an onset generally between the ages of 2 and 5 years. Preschool children often experience a temporary period of dysfluency. According to the American Speech-Language-Hearing Association, 75 percent of preschool children who begin stuttering will eventually stop.

Developmental stuttering is a temporary break in the fluency of speech that occurs when the child has a giant spurt in language development but lacks the motor coordination to keep up with increasingly complex verbal messages. Tommy’s mouth can’t keep up with all his ideas, and so he stutters.

Children who have developmental stutters are often bright and have a lot of energy and enthusiasm. They have a lot to say and they want to say it as fast as they can. But their neurological motor planning systems have not matured enough to let them do that fluently. It is much like the initial awkwardness in learning to walk and run (Ainsworth and Fraser 1989).

**What can caregivers do?**

Unlike persistent stuttering, developmental stuttering often clears up over time. Once the child becomes coordinated enough to speak clearly at a rapid rate, the atypical dysfluencies and struggling behaviors will diminish. In the meantime, the caregiver can use some simple techniques to calm the interaction and assure the child that the adult cares more about the message than how it is delivered. The key is to change the environment, not the child.

Here are some methods that have proven successful in increasing speech fluency in preschool children with developmental stuttering.

**Give the child your full attention.** Easier said than done. I remember when my own son went through developmental stuttering. I was in such a panic that I consulted my fellow speech pathologists who were doing summer testing for the school district. I called them during their lunch break, and they put me on speakerphone.

As I was working myself up into a frenzy describing how my son was struggling to get his messages out, I could hear my co-workers shouting, “Calm down! He’s going to be all right!” When they told me that I needed to stop what I was doing and give
him my full attention, I was incredulous. My son was 3 and my daughter was 5 and I had a very hectic life. How was I supposed to give him my full attention? I was so busy multi-tasking that I wasn’t giving anyone my full attention.

But my fellow speech pathologists reminded me that my son needed to know that I was interested in what he had to say, that he had all the time in the world to get his message out, and there was no need to hurry. As I said, easier said than done. But it is do-able.

I learned to keep looking at my son with my eyes while my body was doing other things, like cooking and laundry. I also changed my conversational style so that I commented more and asked fewer questions. Lots of questions or interruptions may seem more confrontational and make the child feel under pressure to speed things up. Comments encourage elaboration and show you are listening.

Model a calm, relaxed state. Parenting, teaching, and caregiving are demanding jobs. When the adult is tense and frantic, the child will feed off this energy and respond in kind. If the child is overly nervous and excited, speech will be impacted. Adults need to model the behavior they want to see in the child.

So take slow, deep breaths. Pause and wait. I silently say a poem or song to myself to help me achieve a calmer state when I am giving pause time to the children in my speech therapy sessions. I also use relaxation techniques I learned in my childbirth and yoga classes. Young children intuitively imitate adults, and it is amazing to see how quickly they will relax when you do.

Model slow, easy speech. Remember Mr. Rogers? Talk like Mr. Rogers. Talk more slowly. Pause more often. If you habitually talk too rapidly, the child may be trying to imitate you. Because Audrey does not have the coordination to talk as fast as you do, she will naturally start to stumble and hesitate. The slower the child speaks, the easier it is for the developing speech system to keep pace with the message. Show what slow speech sounds like so the child can try that as well.

What should the adult listener avoid?

Basically, everything we are naturally inclined to do when a child struggles to speak turns out to be more detrimental than facilitating. At least that was how it seemed to me. We love our children and want to help them. So we tell them to take a breath or calm down. We tell them to slow down and try again. Or we try to finish their sentences for them so they don’t have to struggle anymore.

For young children, this means the adult is not listening to what they have to say. The adult is listening only to how they say it. So they may actually

Did you know?

The world has seen some famous stutterers, including the following:

**Athletes**
- Bill Walton
- Tiger Woods

**Actors**
- Emily Blunt
- James Earl Jones
- Harvey Keitel
- Marilyn Monroe
- Sam Neill
- Jane Seymour
- Jimmy Stewart
- Bruce Willis

**TV personalities**
- Tim Gunn
- Mike Rowe

**Government officials**
- Prince Albert of Monaco
- King George VI of England
- Vice President Joseph Biden
- Prime Minister Winston Churchill
- Treasury Secretary Henry M. Paulson, Jr
- Congressman Frank Wolf

**Musicians**
- John Lee Hooker
- B.B. King
- Carly Simon
- Andrew Lloyd Webber
- Bill Withers

**Writers**
- Lewis Carroll
- Robert A. Heinlein
- John Updike

**Scientists**
- Charles Darwin
- Sir Isaac Newton

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IF THE CHILD IS OVERLY NERVOUS AND EXCITED, SPEECH WILL BE IMPACTED.
Back to the beginning
A month after I gave the teacher the tools to change her behavior, she returned and said, “Guess what! It worked. My son doesn’t stutter anymore!”

I had been correct in thinking it might be a developmental stutter. Had she said that her son’s stutter had become worse, I might have talked to her about considering a formal speech evaluation and possibly speech therapy. Some stuttering in preschoolers is the beginning of a lifelong pattern of dysfluency. Try the techniques above first. If the child’s speech does not improve, encourage the child’s parent to contact a speech pathologist. The Stuttering Severity chart at the left can help you determine if and when the child should be referred to a speech pathologist.

Developmental stuttering can be worrisome, but it is often a brief stepping stone to eloquent speech.

References
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About the author
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stutter more when the adult focuses on the stuttering. As children become more aware that they are not speaking correctly, they may begin to get tense and nervous about making more mistakes. They may become more dysfluent than they were before the adult started correcting them.

It is often more effective to address your behavior as a listener than to focus on a child’s stuttering patterns. Pay attention to the child’s message, model a relaxed state, and demonstrate smooth, easy speech. I have seen these techniques work time and time again. Even in my own household.

Developmental stuttering characteristics may include the following:
- Stuttering begins around the ages of 3 to 3 ½.
- Stuttering disappears for a few weeks and then returns.
- Stuttering consists of effortless repetitions or prolongations of sounds.
- Speech becomes more fluent within 6 to 12 months of onset.

More severe (non-developmental) stuttering characteristics may include:
- Later onset of stuttering.
- Stuttering occurs in more than 10 percent of speech.
- Stuttering persists for more than 6 to 12 months.
- Physical struggling behaviors are present, such as aversion of eye gaze, facial grimace, lip tremor, jaw tension, excessive hand or body movements, audible gasps of air.
- Complete blocks of airflow occur more than repetitions or prolongations.
- Stuttering is present in most speaking situations.
- Avoidance of certain words, sounds, or speaking situations.
- Having a family member who is a stutterer.

Consider a referral to a speech-language pathologist if the child is demonstrating more severe stuttering characteristics. For additional information on stuttering, visit the website of the Stuttering Foundation of America, www.stutteringhelp.org.