

Down syndrome and Fluency

Fluency refers to the smoothness and natural rhythm of one's speech. A person's speech may be considered dysfluent when any of the following is often observed; saying "uh" repeatedly in a sentence, pausing frequently prolonging the first sound in a word (e.g., mmmom), repeating the first sound of words (e.g., b-b-because), or "getting stuck" and repeating whole words (e.g., My, my, my name is Ben). Factors that impact speech fluency include:

- Fatigue – mind and muscles falter when a person is tired, and pauses and repetitions increase
- Excitement – the adrenaline rush can cause a person to speak faster and go out of control
- Nervousness – eye contact is avoided and confidence plummets
- Fearfulness – a person may not speak at all or at best in a whisper

Individuals with Down syndrome are at higher risk for developing dysfluent speech because, for most, speech is a skill that requires continued teaching even into adulthood. Even the most verbally competent individual with Down syndrome may use incomplete sentences, speak too quickly, or talk in a quiet voice. Many have a hearing loss and find it difficult to follow conversations in a noisy setting or answer questions on the first request. Without a companion close by to repeat questions, so they can understand them, or to facilitate the conversation, so they can join in, the situation can deflate the individual's confidence. In any social setting where they feel excited, nervous or fearful, dysfluencies can be predicted to increase significantly. That said, social coaching in these situations works extremely well to build confidence and improve fluency.

When speech demands or environmental factors overwhelm the individual's capacity to put thoughts into words, dysfluencies are a sign of stress. Simply reducing speech demands (e.g., stop correcting grammar) or adapting the environment (e.g., turn off the t.v. during conversation) can instantly reduce stress and over time improve fluency.

When do dysfluencies become a concern?

Mild dysfluencies occur infrequently, unpredictably and do not concern the individual or others. At the moderate-severe level there is a concern about the individual's well being and a referral to a speech-language pathologist is highly recommended. Indicators include:

- The individual becomes so aware of his or her difficulties that he or she talks less or avoids talking in social settings.
- Speech is difficult to understand due to the frequency of dysfluencies.
- Others feel uncomfortable when talking to the individual and may either shorten the conversation or avoid social interactions with the person.
- What once was infrequent and no cause for concern, is now reported by others to be alarmingly frequent.
- Dysfluencies are referred to as stuttering by familiar and non-familiar listeners. Stuttering is a dual diagnosis; a condition that the student has in addition to having Down syndrome.

Basic Tips that Promote Fluent Speech...

You can help any individual to speak with more confidence when you put into practice these basic courtesies of social conversation...

Maintain Eye Contact

When you make eye contact with someone you are sending the message, "I am interested in you, I want to connect with you." Dysfluencies can be triggered, if the individual feels he or she only has your attention for a short time and there is pressure to "talk fast, I don't have much time." Sit down face to face and take the time to chat.

Listen Attentively

When you give someone your undivided attention, you will notice that initial excitement or nervousness will dissipate and fluency will improve as the conversation continues. Dysfluencies can easily be triggered, if the individual senses you are disinterested, time is short or others are competing for your attention. Your demeanor, eye contact and body language can send a powerful message that there is no need to rush, we have time to talk.

Slow the Rate of Your Own Speech

If you speak slowly and calmly to someone who is excited or otherwise emotional, their speech in turn will often become more measured and calm. Individuals pick up on social nuances that you express through facial expression, body language and rate of speech. Present a calm presence and, in turn, they will more than likely calm down and speak more carefully and thus more fluently.

Delay Your Response

There is no rush to answer or comment when turn taking in a conversation. Pausing for 5 seconds slows the rate of conversation and sends a powerful message that there is lots of time to talk. Individuals with Down syndrome need more time to process information and formulate responses. Taking the lead to slow the rate of conversation is a simple technique with big results.

Avoid Interrupting

Individuals with Down syndrome need the gift of your time and attention to get their thoughts or comments out. If you interrupt them to say "slow down" or "speak smoothly", their speech may actually become more dysfluent. It is not a favour to finish their sentence for them or speak on their behalf; the message received is that they can't speak for themselves. Interrupting increases performance anxiety and those comments can be viewed as criticism rather than help as you intended. Wait patiently until the student is finished talking. When you focus on the message, e.g., "Thank you for telling me your news." the individual will feel good about talking and want to talk more to you.

Prior Practice

For individuals with Down syndrome, speaking to a group or to someone in authority can be stressful. It can be predicted that their speech will be less fluent in these situations. Giving the individual rehearsal time beforehand will lessen the stress of presenting. Allowing them repeated practice opportunities will improve their confidence and maintain fluency. Often individuals are excused from presenting when they should be expected to participate. After all, practice is the key to speaking up with confidence and pride! One practical and popular tip is to teach individuals how to speak properly into a microphone. It is fun to self record and self critique rehearsals with a recording device or even a video camera.

Create a Safe Environment

Teasing creates stress and negativity which impacts self esteem and confidence. Stress can lead to dysfluent speech, refusal to talk, and/or avoidance of social interaction. Individuals then become fearful of speaking in the classroom. When individuals hear others mimicking their dysfluencies, snickering while they are presenting, or setting them up for ridicule on the playground, their feelings are hurt and confidence shaken. Whether you are a sibling, peer, parent or other involved adult, advocate for the individual to be treated with respect, so that he or she can speak up freely and safely.

Build on Strengths & Interests

It is common for fluency to improve when singing or reading aloud. The rhythm and beat in both activities encourages an expressive voice and repeated practice of lyrics and text provides great auditory memory skill building. The written words are a visual prompt for a student who has difficulty with word recall or auditory memory. In addition, the punctuation and phrasing in sentences gives the individual cues for when to take a breath and how to speak expressively with beat and intonation. Giving students cue cards or a script will often improve fluency, as the visual support is reassuring back up for anyone who gets nervous or has memory lapses under the stress of public speaking. Poetry, drama or speech classes can be a great confidence builder for those who would benefit from speech therapy. The action, drama, and rehearsal entailed motivates talking and reinforces fluent speech.

Practice Social Skills

Due to the cognitive delays associated with Down syndrome, individuals of all ages benefit from a focus on social skills. Learning to make eye contact, greet others appropriately, use a big voice, sit attentively, wait turns, and listen to others when they are talking can lead to a significant increase in fluent speech. When individuals are allowed to mumble, avoid eye contact, ignore greetings, interrupt others and/or dominate conversations, they do not learn the social communication skills essential for acceptance at school and in the workplace. A focus on kindness, consideration and cooperation impacts speech more than most people realize.

If the strategies shared in this article meet with limited success and fluency remains a concern, ask that the family doctor make a referral for speech-language therapy. Too often it is just accepted that individuals with Down syndrome have difficulty speaking. A fluency disorder is another condition on top of the Down syndrome that requires accu-

rate diagnosis and appropriate therapy. With professional help individuals have the opportunity to learn how to speak clearly and confidently to the best of their abilities.

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The PREP Program

The PREP Program is a centre of excellence in Calgary, Alberta providing innovative educational and therapy services for individuals with Down syndrome ages 2-18 years. Barbara Tien founded PREP in 1988 and continues as Executive Director. Recipient of a Woman of Vision award in 2009, Barbara is a passionate advocate for the successful inclusion of students with Down syndrome in school, community and the workplace. To learn more about the services available visit www.prepprog.org



Kids Get It Too!

When Stress Triggers Dysfluencies

Children with a cognitive impairment are often delayed in social communication skills. They tend to “act out” in their behavior, rather than use oral problem solving skills. It is hard for them to put into words what or who is bothering them when or how often. It is incumbent on parents and educators to look at a sudden change in fluency as a signal that a significant event has happened that the individual is unable to express in words.

A good example is when the frustration level is reached in reading. This is the level at which children exhibit tension, showing signs of nervousness or distractibility that impairs the ability to read fluently and self correct errors. If you adapt the reading materials to their comfort level, confidence and fluency returns. They feel good about their ability – stress free!

The same principle applies to anxiety in speaking situations. A situational increase in dysfluencies can indicate that the child is overly excited, struggling with fatigue, experiencing discomfort, dealing with anxiety, or just overwhelmed by pressure. Reducing expectations to the child’s comfort level and focusing on calming strategies will help improve fluency.

When dysfluencies become a pattern and a concern to parents and educators a first step is to look at fatigue and to book a check up with the family physician. Thyroid and other metabolic disorders are common in individuals with Down syndrome, as is sleep apnea. The next step is to do some detective work around precipitating events;

- What is the same in the child’s life?
- What is different?
- When are dysfluencies most noticeable?