

When Speech Gets Stuck

BY MARGE BLANC, M.A., CCC-SLP

A HIERARCHY OF PRACTICAL SUPPORTS FOR DYSPRAXIA IN CHILDREN WITH ASD

PART 1

THE STORY THAT FOLLOWS HAPPENED EXACTLY THIS WAY... IT'S ALL TRUE, EXCEPT FOR THE NAMES.

I walked through Eddie's backyard, where I had gone for a first home visit. I had just met Eddie and his sister, his mom and his dad. Eddie imitated my name quietly, almost in a whisper, saying "Mah" as we ran along. Without any signs of obvious enthusiasm, he went over to his swing set, whispering a short syllable. It was such a quiet voice that I almost missed it. But his quiet "silh" (for "swing") was unmistakable to ears that have become acutely tuned to such fleeting, subtle pronouncements.

"I hope you can teach Eddie to talk," said Eddie's mother; and his father echoed an equally fervent plea. How was I going to tell them that Eddie already did talk? I had been in this situation many times before, and knew that an instant retort would be ill-timed, and seem lacking in credibility. I knew I'd have to wait until I knew Eddie, and his parents, better.

Parents are clearly not to blame for not "hearing" Eddie and others like him. In fact, we are all "programmed" to think that talking comes in a certain form, with a certain loudness, with a certain rapidity, and, of course, with accompanying eye contact

and referencing (pointing, gesturing, etc.). We think this is always true because it almost always is! Our phone systems expect that we will pause no longer than two seconds. If we do, they cut us off. Our voice mail systems expect us to never talk at a high frequency, or too loudly, or too softly. If we do, they cut us off. It is just "not done."

And, we are programmed as parents and teachers to expect that kids will make eye contact and gesture long before they begin talking...a handy order-of-events for us, so we'll know that they are talking, that they're talking to us, what they're talking about, and that they want us to listen and to respond.

But, those of us who know and love at least one child on the spectrum know we don't have the benefit of this "expected" order of events. Rather, out-of-the-blue one day, we may hear a sound, a word, even a phrase or sound contour...and never again. We think our ears have deceived us...and we are sure that we should not take it seriously. We think we can't afford to delude ourselves into thinking our child actually talked, or has the ability to use the language it would have required. We are, somehow, "bound" by our child's diagnosis to think that our child's language must be "disordered," and that since his speech doesn't sound like real words to us, that it is "babbling" or "jargon."

Back to Eddie... Unlike his parents, I didn't have to worry about being deluded. I had heard dozens of children like Eddie say things that were later validated by repeated, clear productions, and/or other signs of communicative intent, like independent typing. Waiting for that next time a child said a particular word or phrase, though, sometimes seemed to take forever. Usually it did not, however. I learned that if the people surrounding a child believed his words to be real, they would reappear sooner. That was the key!

What if Eddie really didn't say my name, though...or didn't tell me what he wanted to do? Would it do him any harm if I thought he had and responded accordingly? Does it do infants any harm when moms hear "mamamama," and presume [read: "hope"] it means, "Mama?" No, of course not. It is this delighted parental reaction to sound that teaches kids that speech has meaning. It is how children learn to talk!

Shouldn't our "non-verbal" ASD kids have the same opportunity? Of course they should! And it should be delivered with even greater regularity and "benefit of the doubt." I've witnessed, first hand, the positive results that can be achieved with our kids when we presume their communicative intent and respond accordingly. (Blanc, 2004.)

We have all read that, historically, nearly half the individuals with Autism Spectrum diagnoses have failed to develop useful oral language. They have been known as "non-verbal." And we have all known that motor coordination problems are prevalent across the spectrum, with Occupational Therapy leading the way towards understanding the complexity of "praxis" or motor planning. But it was not until 1997 that Speech-Language Pathologist Gail Richard reported in her book, *The Source for Autism*, that the 40% or so on the spectrum who are significantly challenged with Apraxia of Speech (Verbal Dyspraxia) are the same 40% who have not developed useful speech.

Looking at Eddie, one can understand why. Eddie's voice was extremely quiet...not just because his confidence in being understood was so limited. His muscle tone was low, making all his movements slower and weaker, and the timing of his verbalizations seemed "random," so no one knew when to listen. Essentially, no one could hear him. Without some encouragement and feedback, Eddie was not going to become a competent speaker on his own.

But kids like Eddie are not alone any more. Our kids with apraxia now stand an excellent chance of defying the odds of the past and becoming verbal!

How? The rest of this article will address that. First of all, know that there are now excellent resources and many trained SLP's, OT's, and PT's to help. If your child's therapist is trained in Sensory Integration, your child will have a good start. Why? Because we now know that the sensory/motor "pieces" that challenge your child in his overall sensory and motor learning affect "praxis" as well. And what is praxis, you ask, and how does this translate into speech?

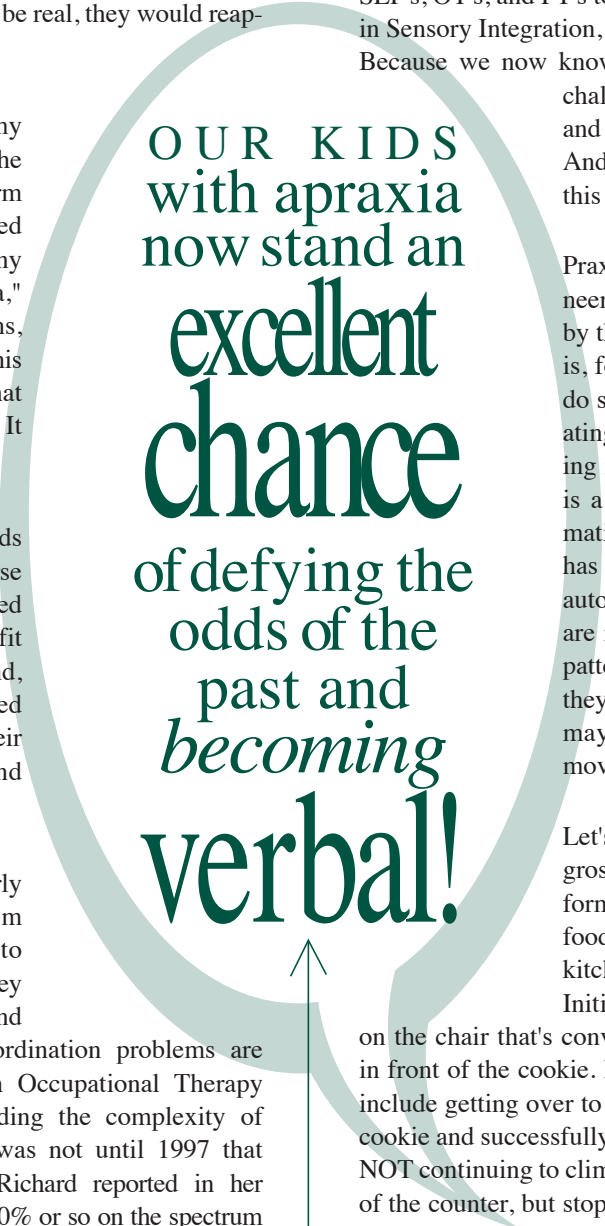
Praxis, as defined by OT's (after the pioneering work of Jean Ayres), and now used by the rest of us, refers to motor plans...that is, formulating an idea, or an "intention" to do something unique with one's body, initiating it, following through with it, and ending it. It is important to note that dyspraxia is a disorder of motor *planning*, not automatic motor execution. If a motor pattern has been practiced long enough to become automatic, it is no longer a "plan." Our kids are readily able to return to familiar motor patterns. We see this is so easy, in fact, that they become "repetitive behaviors," and may risk being labeled "stereotypical movements" or "stims."

Let's look at an example at a whole-body or gross motor level. A motor plan might be formulated when a child sees a favorite food (a cookie) on a counter top in the kitchen and decides to climb up to get it. Initiating the plan might mean climbing up

on the chair that's conveniently, but uncharacteristically, right in front of the cookie. Following through with the plan would include getting over to the chair, climbing up, reaching for the cookie and successfully getting it. Ending the plan would mean NOT continuing to climb up higher, NOT crawling over the top of the counter, but stopping long enough to eat.

Do you see your child in this scenario? I see some children who go over to the chair but never get to the point of standing on the seat. I see others who get up onto the chair successfully, but who don't stop climbing. I see many others who start towards the chair, but get "sidetracked" along the way, making their original intentions a challenge for us to read. I remember vividly the first time a child, with severe motor planning challenges, told me, "I'm stuck," as he literally could NOT move from his sitting position at the top of a slide.

It is important to observe kids closely, since we will see kids getting 'stuck' far more often than we will have the opportuni-



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ty to hear them tell us about it. This is because such kids are usually rendered speechless too. **Yes, praxis can affect the coordination of any muscles of the body, including those that produce speech.** An amazing array of muscles needs to coordinate before a child can talk fluently...muscles of breathing (specifically exhalation), muscles of voicing/phonation (vocal folds), and the muscles of articulation (oral speech), including those of the jaw, tongue, and lips. So, it is a rare child who can tell you that the rest of his body is "stuck." His muscles of speech are probably "stuck" too, even more so.

When the "stuckness" occurs at the level of breathing, there is insufficient air with which to produce voice. Kids might move their lips, but nothing comes out. The stuckness can occur at the level of phonation, too, so sometimes a child can whisper, but not say something out loud or loudly enough to be heard. SLP's are quite used to another kind of stuckness, that of the speech articulators. Kids might be able to produce a nice voice but without a coordinated flow of sounds or syllables. "Classic" apraxia of speech is like this...unintelligible, disjointed sequences of sounds, with a quality that is flat and forced. But, even kids who are typically unintelligible, or even silent, occasionally have "islands of fluency," when it all comes together perfectly...once in a blue moon. They enjoy their moment in the sun, never able to recreate it again.

All of these scenarios, and dozens more, are within the rubric of apraxia, or, more accurately, dyspraxia, referring to problems with praxis, but not lack of it altogether. It all seems very confusing, I know. But, getting our kids 'unstuck' is possible, using a hierarchy of supports that we have developed in our clinic and use with our ASD kids with dyspraxia every day.

We've witnessed that severely dyspraxic kids do make progress...tremendous progress...as long as the supporting levels for physical development and coordination are honored and provided. **It cannot be stressed enough that "speech is movement," and, as such, "speech therapy" is movement therapy...fun movement therapy!** Praxis is about figuring out how muscles move together, and, for our kids (all 40% of them) who are "stuck," we need to provide **frequent and appropriate** movement opportunities that give them all the feedback their growing bodies need. When provided with enough of the right supports (including the help they need to access them), kids will move (although it may not be steadily) through the hierarchy, eventually achieving fluent speech that honors their drive to communicate and matches their internal intentions. This process will likely take years, which seems discouraging, I know. But, I can tell you from considerable experience that in the context of the interaction, communication, and play where most of this 'training' occurs, kids love it! And it's clearly better than the alternative - remaining minimally verbal.

Before addressing the hierarchy in depth, it's important to review some of the foundation "pieces". These come to us from

the extensive work of OT's like Jean Ayres, and are now being incorporated into the work of many SLP's. It helps to look at it this way: in the example above, if the child trying to get to the cookie can't see where the chair is in relationship to the cookie, doesn't yet know how to climb, and doesn't have the strength to hold out his arm or grasp with his fingers, the "plan" could never materialize. In other words, praxis depends on a "body schema" (Where are my knee joints? Where are my fingers?) and a sense of where one's body is in relationship to the room, the chair, and the cookie. All the senses must be working well enough to know these things. **Successful praxis particularly involves the tactile (skin) sense, proprioceptive (joints and muscles) sense, and vestibular (balance) sense.**

What SLP's are realizing is that the same is true for the mouth - a pretty mysterious space if you can't feel and move it's parts - and the internal connections among breathing, voice, and articulation. Most of us were never faced with "planning" how to move our jaws and tongues in order to learn to talk. But for our kids, it is a truly awesome task, when you think about it. Nothing, even deep breathing, is automatic, and exercising until it becomes automatic seems to take forever. Our kids have to actually "plan" to exhale (witness the kids trying to talk on inhalation rather than exhalation). When it comes to coordination with voice (to make a sound of any kind), the "work" is intensified. That our kids want to talk so badly that they voluntarily practice each step over and over and over is a tribute to their deep intentions and will! Fortunately, we can make their practice fun and rewarding, and they can learn the power of speech early on.

Amazingly, our kids tackle even more than these praxis challenges on their way to becoming fluent speakers. If the oral senses are not fully developed, or are overly sensitive, "oral motor" therapy can do for the mouth what PT/OT does for the rest of the body. Oral motor therapy can be "hands on" (Beckman) or "hands off" (Marshalla, 1999), but typically cannot be overlooked completely. Even if every sensation the mouth feels is noxious to a child (sensory defensiveness), this can be successfully addressed with the Wilbarger Protocol (Wilbarger, 1991). And, you can rest assured that oral motor therapy and praxis therapy work together and concurrently.

Back to our main topic. The supports for dyspraxia begin at the level of the whole body; sensory/motor work at a gross motor level will get your child started. **The hierarchy works with the knowledge that gross motor comes before fine motor development, and that speech articulation is the "finest of the fine,"** when it comes to the numbers of small muscles that must work together for intelligible speech to occur. As will become apparent in reading the hierarchy, speech is a multi-layered phenomenon, only a part of which is movement of the muscles of the lips, tongue, and jaw. If we only view articulation as the complete definition of "speech," we risk teaching splinter skills, verbalizations that the child will not be able to

access in any way other than the one in which they were learned (think of kids who can say "m" only when prompted, "say 'm'"). Such skills – usually taught before a child was developmentally ready - are limited and more importantly, *limiting*, because they are not a part of hierarchical, supported development.

The reason the hierarchy works is because each level has been adequately practiced and developed, in the context of fun and play, before it is used to support the next higher level. While there is clearly cross-over among the levels, each successive level is targeted until it is reliable enough to support the next. Conversely, when something becomes challenging at any particular level, there is a next-lower level to fall back on to find comfortable production. We always find it helpful to talk about these forward and backward movements with kids, so they know that it is OK, even expected. It is not "regression." It is just part of the process.

Part 2 of this article will start with broadening the typical concept of "speaking," so that you will be able to rejoice along with your child as you embark on the first of the eight levels that make up the hierarchy of supports for dyspraxia. You will learn that we all use our breathing and our voices to communicate, even when we never open our mouths! We'll then share some successful tricks of the trade to help dyspraxic kids move from being 'stuck' to becoming fluent speakers!

REFERENCES

- Ayres, A. J., *Sensory Integration and the Child*, Los Angeles, CA: Western Psychological Services (1979)
- Beckman, Debra A.: *Beckman Oral Motor*
Web Site: www.beckmanoralmotor.com
- Blanc, Marge, *Ask the Experts: Child-Directed Language Therapy*, *Autism-Aspergers Digest*, Jan-Feb 2004
- Marshall, Pamela, *Oral-Motor Techniques in Articulation and Phonological Therapy*, Temecula, CA: *Speech Dynamics, Include.* (1999)
- Richard, Gail J., *The Source for Autism*, East Moline, IL: *LinguiSystems, Inc.* (1997)
- Wilbarger, Patricia, and J. L. Wilbarger, *Sensory Defensiveness in Children Aged 2-12: An Intervention Guide for Parents and Other Caretakers*, Santa Barbara, CA: *Avanti Education Programs* (1991)



BIO

MARGE BLANC, *Speech-Language Pathologist*, is the founder and director of the *Communication Development Center* in Madison, WI. CDC specializes in communication services to children on the autism spectrum and others who benefit from sensory-motor supports.

Versions of the opening story have occurred regularly over the years, and in working with numerous kids who have been termed "non-verbal" and "low functioning," CDC has developed a local reputation in helping kids get "unstuck." Contact her and her associates at the *Communication Development Center*, 700 Rayovac Drive, Suite 200, Madison, WI 53711; phone (608) 278-9161; email lyonblanc@aol.com

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WHEN SPEECH GETS STUCK
Practical Supports for Dyspraxia in Children with ASD

When Speech Gets Stuck

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PART 2

In Part 1 of this article (September-October 2004), we explored the idea of developing fluent, flexible speech from “the bottom up.” This means deep breathing, helping your child coordinate breathing (exhalation) with voice production (vocalization or “phonation”), and finally, coordinating all this with more and more refined movements of the jaw, lips, cheeks, and tongue (the speech “articulators”).

In Part 2, we will see how oral communication is achieved at even the most foundational level if we are well-attuned to our kids. We will revise any misconception you might have had that “speech” is just what happens with the mouth, and instead, help you to know that whenever your child is making ANY sound with exhalation, that he is speaking! And he communicates when you listen!

We will then move up the eight-level hierarchy of support for dyspraxia, assured that while communication occurs at each level, its expression becomes more and more understandable (intelligible), as we move up the continuum. While the process takes many years, they are fun years, and infinitely more rewarding than remaining minimally verbal!

Our goal at each level is spontaneous, fun, and fluent output, regardless of how “basic” that output seems. It all matters, and is foundational to what is to follow! By “fluent,” we mean free-flowing, unhindered and unforced production (no, “Say ...” is wanted here!) Imitation is difficult with dyspraxia on the continuum, and no matter what you read about dyspraxia off the continuum, don’t ask your child to imitate until the time is right (somewhere between levels five and seven)!

We want your child’s production at each level to become so easy that it will support the next higher level. Believe me that it can be done! And your child will have fun getting there! All you need to get started is a sturdy bed to bounce on (most of us eventually get trampolines though!) and as many pillows as your family can put in one room. While you will want to pursue an OT and/or PT evaluation sometime soon, if your child is unable to bounce, or if it feels aversive to him, you should pursue that evaluation right away.

Let’s start now to become familiar with the support hierarchy for speech. **The first, or foundational, level is breathing, specifically deep (“diaphragmatic”) breathing and exhalation.** It occurs at a whole body level, and is what happens when a child is jumping on the bed, running hard, swimming, climbing through a pillow pit, or leaning over an inner tube and swinging. This level is all about fun exertion, which promotes lots of long breaths in and long breaths out. Your child may make some noise here, and that is a plus...but it’s not necessary for success at this level. At this stage, we are primarily thinking about the middle of your child’s body (the “core”), where deep breathing takes place. Amazingly, this area also supports the trunk, shoulders, neck, and arms. The eventual support for gesture, and even the jaw, lives here, and the more the upper body can become coordinated with the lower body, and deep breathing, the better. OTs and/or PTs will be crucial at this stage of the support “game.”

Knowing about this level will serve you well at all the successive levels, because as you move up the continuum, and all else fails (as it will sometimes), returning to level one is “grounding,” and

restores a sense of support to the voice and speech systems. Your OT, PT, or SLP will help you find equipment that can be added to your child's play area, and advise you about what activities can be taken on at home or at the playground. The best rule here is to "find the smile" in your child, and watch for good deep breathing from the belly area, as the muscle of deep breathing, the diaphragm, lowers to support it.

The second level of the support hierarchy is voicing, or vocal

production. This is what happens at the level of the larynx when adequate air flows through the throat. When the muscles of the larynx (vocal folds) vibrate, voice is produced and the child is "vocalizing." Sometimes, a child's first pleasant experience with voice happens during laughter (crying and screaming in pain rarely work as productive vocal experiences, since there is so little awareness of voice under such strain). Laughter elicited through joyful physical experiences such as spinning or tickling (whatever a child truly delights in) is a wonderful first voice experience. I will never forget the wise child who silently lifted up his shirt for a tickle so that he could "find" his "lost" voice when he laughed. When a child has been essentially silent all his life, this stage of supported development is magic. The child feels power and the world knows he is there! Loudness is enhanced with more air flow...more bouncing, etc., and with adequate playful experience making sound, kids have a second, solid place to return to when "all else fails" at the levels higher up.

Another important part of support at the second level is shared joy in movement, fun, and vocalizing. This is where adults get to be kids again, to let go and have fun...yelling, singing, laughing, and humming on a kazoo the entire time. This not only takes the pressure off the silent child, but "models" the kind of vocal output we are supporting at this stage. Remember that dyspraxia is a disorder of "planning," so the key here is to never have expectations for your child! The moment a child senses your expectation, he has to try, and when he has to try (or "plan"), he is rendered silent, or his sound becomes forced!

The third level of the hierarchy is that of intonational support.

Parents and therapists should not even think about this level until kids achieve pretty reliable, automatic "vocal access" at level two. This does not mean vocalizing whenever a child "wants" to (since "trying" makes it harder, of course). It means that kids know that they can run and get on the trampoline whenever they want to get their voices going again, and they enjoy joining you

in yelling, screaming, laughing, and generally playing with the immense variety of ways voices go up and down (intonation).

In our clinic, we spend lots and lots of time supporting kids at level three, because, truth be known, most of the meaning of oral communication is carried with intonation, and not with words at all! Listen to conversations at an airport, in the other room, on the bus, and hear how intonation sounds when you can't hear the particular words.

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Once kids develop some intonation, we begin to understand what they know. If you are so fortunate as to have a child who is already at this stage of development, listen carefully in the next week, and see how many "intonational utterances" you can hear. Hypothesize what your child might be saying with his voice...and, over time, you will probably find out that you were right! When the clarity of "No way!" or "I know!" or "Come on!" emerges at later stages in this progression, you will be amazed at how long your child has been "talking."

The transition from level three to level four is a huge one, and one you want to make sure your child is ready for. You know that your child can enact some gross motor "plans," and you can see that his sense of his body in space is improving. He doesn't get "stuck" at the tops of slides or in his car seat nearly so often. He probably has plenty of automatic motor sequences that he can't get out of, however, and this is classic level three behavior. You'll see what

I mean in the next paragraph...where we start to address stopping and starting (or "initiating").

The fourth level of support is the first where "control" starts to emerge. We do not want to rush into this stage, and you will want to have an experienced SLP listen to your child before deciding he is ready. This level is one of starting, stopping, and maintaining sound. Your child will know how to keep his voice going already, and stopping is often just a matter of running out of air. First attempts at "starting" voice, however, are another story. They often come in brief "fits and restarts," like saying "ha ha ha," where the pause between syllables is short. This is because true "initiating" is the hardest part of the challenge of dyspraxia, and usually, kids just have to sneak up on it.

Supporting your child at this stage means knowing that momentary successes cannot, yet, be duplicated. That is fine. Let it go for the day. Return to it tomorrow. And, in between, drop back to the third level and have fun talking! A great trick here is to get your

child giggling in whatever way you know will work. Then “model” (everything we say is an unintended “model”) something fun like, “Gotcha!” or “Wow!” or “Hey!” When your child “initiates” vocalization in the midst of your vocal play, it won’t be “from scratch,” but, hey...giggling is vocalizing! It is a “backdoor” technique that will feel like initiating, and will, over time, become more commonplace.

The fifth level of support has often been going on for one or more levels already, but it is not until now that we give it our attention. This is the level of vowel sounds. Vowels are a result of changes in the size and shape of the oral cavity (mouth) when air flows through it and voice is produced. It’s nothing more than that, but the effect is powerful!

As with all the levels, support comes from the bottom up, with play partners using the open sounds “ah” or “uh” in their play, and all the others too, such as “oh,” “uh oh,” wow, and hey. Ask your SLP to note how flexible your child’s mouth is, and include

any exercises recommended to “stretch” it. Food variety and mouthing toys are helpful in your child becoming more aware of his mouth and how to move it. By this time, you have learned a trick or two from your OT and PT also, and know that how your child supports his head (especially his jaw) is critical to his success with vowels. Trunk control is as important as it ever was, so go back to some of the OT/PT “basics” as well.

The sixth level of support is that of consonant sound development, even though the child may have already developed a few consonants along the way (the “m” sound is nothing more than voicing with the mouth closed). But at this stage in the hierarchy, kids are really ready to take off in their consonant sound production, usually following a developmental progression from lip sounds (m, b, p) to back-of-the-tongue sounds (g, k, ng), to front-of-the-tongue sounds (n, d, t), and then the more controlled sounds (l, r, s, sh, f, etc.). This level is the one most people think of as “speech,” and it is helpful to realize how much must happen before it can be really successful. We know

that a “splinter skill” like, “Say ‘b,’” for example, fails to generalize into conversation and play. If this level is targeted when the child is ready, however, generalization happens readily, because all the lower levels support it.

The sixth level involves the production of all the consonants of the language, in all their variations, as they precede or follow other sounds. These movement patterns involve accurate timing, pressure, and grading of all the muscles of articulation, while maintaining vowel production, intonation, and voice. Support at this level involves play with rhythm and timing, singing and chanting, coordination with motor movements such as gesturing, signing, clapping, and finger tapping, specialized oral motor “tricks” like resistance (horns, straws, etc.), and facial touch-cuing like PROMPT (Hayden, 1984). Work closely with your SLP to learn how to use supports your child likes and finds helpful, and remember that this is still play, not imitation work...yet.

The seventh level is putting it all together in running speech, sequencing sounds in all the possible orders of the language, coordinating the transitions from sound to sound, and using

10 Tricks of the Trade to help dyspraxic kids get unstuck and moving towards fluency:

- 1** Give your child fun, easy access to equipment and space for bouncing, climbing, jumping, and pushing/ pulling his arms...at all times! Make sure it is considered ok and even “cool” to use it all day long, not just for “sensory breaks”.
- 2** Join your child in every activity...never hold back from jumping, laughing, yelling, making sound effects, or just being silly! You are making reciprocity possible, offering your child the give and take that was never possible in infancy.
- 3** Gently “motor” your child into getting started whenever s/he gets “stuck”.
- 4** Rely on the level of support just below the one you are targeting in your play or work.
- 5** Remember that “speech” is not just “articulation” of sounds sequences. Rather, it is all the beautifully-communicative intonational contours kids learn at level three, and involves all the levels, down to level one. Your child is a speaker...he is learning to “talk better”. He is not “non-verbal”.
- 6** Know that the hierarchy works! It may take years before the layers underlying articulation are supported enough that you can effectively “work on speech”, but when the time is right, articulation will have the opportunity to “take off”!
- 7** Learn to listen closely! You will become an expert at “reading” your child’s voice and intonation.
- 8** Don’t panic! I cannot stress enough, don’t panic! Your relaxed attitude will comfort your child...and take the pressure off him. Rest assured that a child who has not been essentially silent all his life will be thrilled just to be heard and taken seriously!
- 9** Stay in constant contact with your SLP, and share your child’s latest successes frequently, if not daily. This person will be your ally for years, so get into the practice of letting each other know what you’ve heard, and what to listen for in your child’s blossoming speech.
- 10** Stay hopeful! There is good reason to!

a rate that eventually approaches “normal.” The practice work your SLP will provide at this level involves saying target utterances, while varying the emphasis and intonation, thus changing meaning. The level of practice material changes at this point, because spontaneous imitation will be pretty easy now. That’s what “fluency” is all about...imitation only when it is not “trying” any more!

A word to the wise is in order here. Your child’s expressive language will start to explode now, as his consonant sounds start coming. Sounds won’t be reliable for some time to come, however, and you may not be able to understand him as well as you did! As ironic as this seems, this is classic “apraxia of speech,” where sounds get mixed up, and the sound your child intends for the end of the word, for instance, occurs at the beginning. Resist asking him to repeat himself just yet...even if he can, it requires more “planning” than it is worth at this point, and it will probably come out differently anyway! Better to teach yourself to replay his speech in your own brain...and with your own lips...and to listen closely! Remember that intonation is still your best clue, and that your child’s timing will become better! As it does, you will see the “referents” (e.g. the cookie) more often, and have more tangible clues for understanding!

The eighth level involves accessing all the levels of support, under more and more purposeful conditions, within the real challenges of daily life. Remember that apraxia is a disorder of “trying.” So when trying becomes harder, so does the possibility that an individual must rely on a more foundational level of support to approach a particular situation. Specific strategies at this level will include role-play and practicing under simulated conditions (you’ll find that all those apraxia “programs” will begin to fit here), and then under a variety of supported real-life conditions.

Now to summarize: one of the nice things about a hierarchy is that it has, as part of its structure, a level for everyone, whether they’re having a good day or a bad day, that provides positive support. There’s always a level to drop down to when one level is challenging.

One area that will likely remain a stumbling block for months, if not years, is level four, initiating voice. Kids like the boy mentioned earlier who asked for tickles in order to start his voice, had learned that “initiating” the motor plan of speaking is often the hardest part of talking. How many kids do you know who can talk “till the cows come home” once they get started, but, if they become too sedentary, their silence can stretch long into the day? Kids will advance beyond level four, but still need to return to it (and even level two) when they have momentarily “lost” their voice. Kids realize this, and so they often want to keep talking, just so they won’t lose their voice and have to initiate getting it started again. Don’t be surprised at this, and don’t let your child become discouraged. It is a natural part of what the OTs call

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“alertness” or “arousal,” and when kids become too sedentary, and have lost deep breathing, support for voice is also lost. Get them up and moving, get their “engines” going, and they will learn that this is their “fail safe,” and rely on it for years to come. (DeGangi, 2000; Williams and Shellenberger, 1996)

Now you know the fundamentals and how you can help your child, in a developmentally-appropriate way, alongside the treatment he is receiving from your SLP (and OT and/or PT).

With this understanding available to us, we are prepared to revisit the common portrait of our children, the 40% of our ASD kids who would have remained “non-verbal” in the past, the ones we called “low functioning.” Arms at their sides, standing on the periphery of life, they appeared disinterested and perhaps intellectually limited. But now that we understand the hierarchy of supports for dyspraxia, we can ask one crucial, informed question, “Can this child initiate action...of any kind?” If he cannot motor plan with his legs...or his arms...or his voice, he is “stuck.” But, what if we started him running, or climbing, or sliding, or jumping...what could he do then? And then where could he go next? Try it yourself...again and again and again...remembering the hierarchy...and you will find out!

References

- Agin, Marilyn C., L. F. Geng, and M. J. Nicholl, *The Late Talker: What to do if your child isn't talking yet*, NY: St. Martins Press (2003)
- Blanc, Marge, *Autism and Verbal Dyspraxia: What We Are Learning from Our*

Children and How We Can Help Them, Madison, WI: Wisconsin Speech-Language-Hearing Association Convention (2000).

Childhood Apraxia of Speech Association of North America: *Apraxia Kids Web Site*: www.apraxia-kids.org.

DeGangi, Georgia, *Pediatric Disorders of Regulation in Affect and Behavior*, San Diego, CA: Academic Press (2000).

Hayden, Deborah, “The PROMPT System of Therapy: Theoretical Framework and Applications for Developmental Apraxia of Speech,” *Seminars in Speech and Language*, Vol. 5, Number 2, May 1984.

Williams, Mary Sue and S. Shellenberger, *How Does Your Engine Run? A Leader's Guide to The Alert Program for Self-Regulation*, Albuquerque, NM: TherapyWorks, Inc. (1996)



BIO

Marge Blanc, Speech-Language Pathologist, is the founder and director of the Communication Development Center in Madison, WI. CDC specializes in communication services to children on the autism spectrum and others who benefit from sensory-motor

supports. Versions of the opening story have occurred regularly over the years, and in working with numerous kids who have been termed “non-verbal” and “low functioning,” CDC has developed a local reputation in helping kids get “unstuck.” Contact her and her associates at the Communication Development Center, 700 Rayovac Drive, Suite 200, Madison, WI 53711; TEL (608) 278-9161; email lyonblanc@aol.com