



# Vocal Prosody and Voice as a Resource

There are essentially three parts to vocal quality which you may or may not regularly consider in your interactions with clients and client family systems. These are :

Volume

Cadence

Speed

**Volume-** Most of us are aware already that higher volume speech can cause a child or adult to react with alarm/defensiveness. As we covered in the workshop, helping the nervous system stay in a place of receptiveness (within the window of tolerance) is key to any new learning or behavioral change. So it is important to understand that high volume interactions can induce a fight/flight or shut down response. Not all volume increases are counter-productive however. A moderate, controlled volume increase that keeps the other two areas of voice in mind can be used to signal, "this is very serious, please pay close attention", without signaling alarm.

**Cadence-** Think of this aspect of voice like notes on a musical scale. Your cadence has to do with how expressive (how much up and down) and how intense in any one direction (all high pitch or all low tones) you are using. Think of how you naturally speak to a small child or even a pet that you are trying to calm. What areas of tone (notes) do you gravitate to? Chances are, you are using the middle tones with some melodic (up and down) variations. This helps communicate safety to the nervous system. Flattening your cadence- think of speaking in a single note indicates something is important, especially if accompanied with slightly higher or lower volume than usual. Big variations in cadence (many notes on the scale) indicate playfulness. Think about how your voice sounds when you are purposefully being silly. Intense high pitch (high notes-think whiney or shrill quality) denotes danger and alarm, as does intense low pitch (low notes- think barking quality).

**Speed-** Remember from the workshop that dysregulated brains don't work as well, so slow down. When a person (child or adult) is feeling highly anxious or shut down (outside their window of tolerance) we want to remember to use less words and to speak a little slower. Remember that awkward silences are often the therapists best friend, take your time with speech in high energy situations. Sometimes taking a sip from your mug (coffee/tea/water) helps to create a pause so that you can slow the pace of the conversation to match the nervous systems need for felt safety.

Music is one of the ways we can support our clients and ourselves.

Per Dr. Porges, "Modulation of the acoustic energy within the frequencies of human voice that characterize music, similar to vocal prosody, will recruit and modulate the neural regulation of the middle ear muscles, functionally calm the behavioral and physiological state by increasing vagal regulation of the heart, and promote more spontaneous social engagement behaviors. Vocal music duplicates the effect of vocal prosody and triggers neural mechanisms that regulate the entire social engagement system with the resultant changes in facial affect and autonomic state. Basically, we start to look and feel better when we listen to melodies"

Nazarov A, Frewen P, Oremus C, Schellenberg EG, McKinnon MC, Lanius R. Comprehension of affective prosody in women with post-traumatic stress disorder related to childhood abuse. *Acta Psychiatr Scand*. 2015 May;131(5):342-9. doi: 10.1111/acps.12364. Epub 2014 Nov 17. PMID: 25401486.

*Porges, Stephen. The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-regulation (Norton Series on Interpersonal Neurobiology) 2011 ISBN978-0-393-70700-7 pp.202-214*

TBRI® offers practical tools for parents, caregivers, teachers, or anyone who works with children. TBRI® is designed to meet the complex needs of children who have experienced adversity, early harm, toxic stress, and/or trauma. Within this training there are specific guidelines for caregivers on how to use Vocal Prosody in trauma informed parenting.

<https://child.tcu.edu/about-us/tbri/#sthash.DTb1Gvf6.dpbs>

[LaurieBelanger.com](http://LaurieBelanger.com)



# Using the Engine Dial to do Autonomic Mapping

Alert Program®

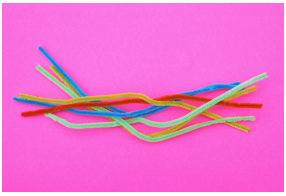
## "How Does Your Engine Run?"



**Introducing the Alert Program® as a resource.** Since 1990, the Alert Program® has evolved and continues to set the gold standard with its user-friendly, low-budget approach to teaching self-regulation. The highly regarded engine analogy has been used by countless therapists, teachers, children, and parents around the world. There is an on-line course available through [www.alertprogram.com](http://www.alertprogram.com) that customizes their approach with language and examples to fit different populations (ex.- children or professional adults). In the course there are many strategies based in the field of occupational therapy for assisting people to find ways to move their engine dial to "just right" regulation for whatever your client is trying to accomplish.

You can find online trainings and extra information at [www.theAlertProgram.com](http://www.theAlertProgram.com)

**A Child client/family Friendly Engine Dial Activity:**



**You will need:** A paper plate, a pipe cleaner or similar bendable craft wire, markers, scissors, tape, construction/office paper, (a big ribbon if you are doing multiple plates for a family to use at home).

Directions: Draw a line across the paper plate, dividing it visually in  $\frac{1}{2}$  from top to bottom. Then draw two lines in the top half dividing that section into 3 equal pie shaped parts. Label the sections Too Low, Just Right, and Too High with Just Right in the center. Pick out the colors for each section.

In the middle of the plate poke a hole with the pipe cleaner and thread it through. Create a knot/twist on the back end so that it stays put. Shape the part facing you into an arrow/pointer for your client to use to show where they are on their engine dial.

Write/draw (can also use stickers) to show how people might be able to tell if they are in each category. (ex. -"I'm up and down and all over the place!", "I stare off some and don't talk much". See if you can get some descriptors of how the body feels in each section. (ex- "my feet feel like running/stomping!", "My whole body feels heavy")

On the bottom half of the plate draw a line from the middle to the bottom, dividing it in half. If needed, use extra paper taped to each side for more space. On each side, "Too Low" and "Too High", list different activities that you identify as helpful, moving that engine dial back into the region of "Just Right". Remember to use Bottom Up strategies:

Physical changes first!

Relationship oriented strategies 2nd.

Cognitive (thinking) strategies come last. See [www.theAlertProgram.com](http://www.theAlertProgram.com) for ideas. I have had whole families attach their own plates to a large ribbon to hang vertically in a common space at home. Adults go first and model use.

# Autonomic Nervous System States per Dr. Stephen Porges' Polyvagal Theory

