

## The Work Behind the Spelling

By Gale Quackenbush

# THIS IS MY VOICE

Spellers use LETTERBOARDS to become independent thinkers and communicate ideas. Like a spelling bee CHAMPION, Spellers use their knowledge of language, and, like athletes, they train their brains and the muscles of posture, eyes, hands, and arms for making PURPOSEFUL movements called PRAXIS. It requires TEAMWORK with their Practitioner and other CRPs (COMMUNICATION REGULATION PARTNERS) who serve as coaches providing lessons, verbal or gestural PROMPTS, and other SUPPORTS for Speller's success. They may not work in a gym or have a whistle, but together with each Speller, they make movement a major part of their training plan.

**SPELL** LETTERBOARD CHAMPION PROMPTS

Muscles in your posture, eyes, hands, and \_\_\_\_ help you target your Spell letter. ARMS

What does the "R" stand for in CRP? REGULATION

Your CRP knows where to provide gestural and \_\_\_\_\_ prompts. VERBAL

What is another word that means refresh as used in this passage?

RENEW/ENVIGORATE/ENERGIZE

Name another kind of coach. LIFE COACH/SPORTS COACH/ETC

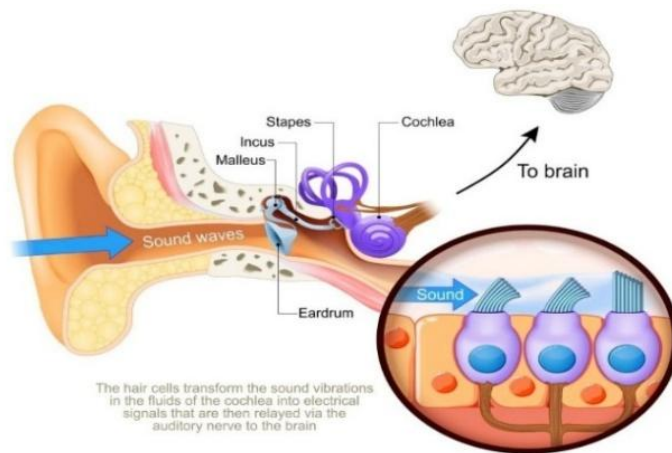
Who else in your life could be a CRP for you? FAMILY/FRIEND /TEACHER/

NAMED INDIVIDUAL

The 3 letters in the acronym CRP are a reduction from how many letters? Create a math problem showing this.  $13 + 10 + 7 = 30$ ;  $30 - 3 = 27$

The acronym reduces the number of letters by what percent?  $3 \div 30 \times 100 = 10\%$

What verbal prompts from your CRP help you the most in Spelling and why?



## LISTEN TO YOUR BODY MOVE

SPELLERS depend on much more than their letterboards. Listening to this lesson requires movement of the air in a specific VIBRATION pattern called AIR CONDUCTION. There are about 15,000 hairlike structures in your ear named STEREOCILIA that are moving in reaction to these vibrations. The process of transforming them into rhythmic ELECTRICAL impulses is called AUDITORY TRANSDUCTION. The tiny beats move along your skull and skeleton as BONE CONDUCTION. Just think, right now we are vibrating our CRANIUMS (aka skulls!) Vibrations from the ear also control your balance (aka VESTIBULAR SYSTEM.) If sounds that are loud, soft, high-pitched, or low-pitched are difficult for you, or if you can't get your body to move the way you want it to, your CRP is there to help you balance the effects of sensory input on your letterboard output.

## SPELL VIBRATION TRANSFORMS SKELETON

Stereocilia transform vibrations into rhythmic \_\_\_\_\_ impulses. ELECTRICAL

There are about 15,000 \_\_\_\_\_ in the inner ear. STEREOCILIA

Cranium is another word for \_\_\_\_\_. SKULL

Name one type of sound conduction. BONE CONDUCTION/AIR CONDUCTION

What is a synonym for transduction? TRANSLATION/CHANGE

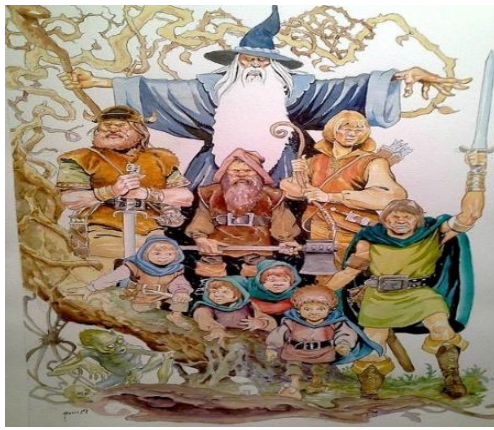
What other electrical messaging methods have been used to communicate?

MORSE CODE/TEXTING

How many hairlike structures can be found in your two ears combined? 30,000

Give an example of how your sense of sight, hearing, touch, taste, or smell can affect you positively during your day.

VAKT: Watch the first few minutes of the YOUTUBE video entitled, Auditory Transduction by Brandon Pletsch. <https://www.youtube.com/watch?v=PeTriGTENoc>.



### Co-Creating a Place of Safety

Those tiny stereocilia in our ears work hard for us behind the scenes. A quote from the movie Lord of the Rings says, “Even the smallest person can change the COURSE of the future.” A lighting technician or GAFFER illuminates each movie scene, The FILM GRIP moves cameras to capture that light, and the Boom Operator ensures sound is recorded correctly by the microphones. Stimulating and managing the sensory APPARATUSES (systems) of our nervous system also requires knowing the settings that change our inner world into a place of safety. The work of all your PERCEPTUAL skills (visual, auditory OLFATORY (sense of smell), and TACTILE) help regulate (maintain balance) your nervous system. With your CRP’s help, you can learn to balance your brain and body connection. This is called CO-REGULATION.

**SPELL**      **TECHNICIAN**      **TACTILE**      **OLFACTORY**

Even the smallest person can change the \_\_\_\_\_ of the future. COURSE

A working system can be called an \_\_\_\_\_ APPARATUS

The sense of smell is called the \_\_\_\_\_ sense. OLFATORY

Name one of the backstage technicians on a movie set. GAFFER/FILMGRIP/BOOM OPERATOR

What is one way that light is used for movie filming? ILLUMINATING/CAPTURING

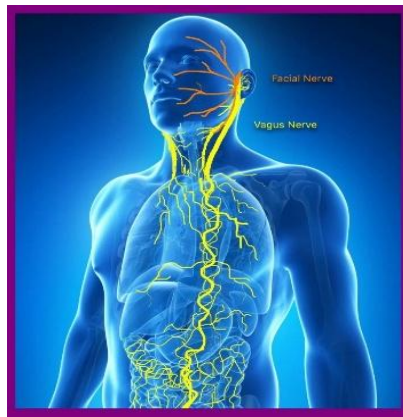
What is a synonym for perceptual skill?

AWARENESS/FEELINGS/EMOTIONAL/SENSORY SKILL/INSIGHT/OTHER

Where do you view the list of film technician names and their jobs during a movie?

MOVIE CREDITS/FILM CREDITS

What can your CRP do for you when you are dysregulated and having a hard time focusing on your Spell letters?



### Internal Messages – Thank your Vagus Nerve

The VAGUS (aka Vagal) nerve is the longest cranial nerve in the body extending from your head to your gut including your tongue, PHARYNX (throat; sounds like feh'·ruhngks), heart, and GASTROINTESTINAL system, keeping organs and systems COPACETIC (means satisfactory.) Every impulse it receives from the senses and other organs informs the brain and the body. These impulses can release ENDORPHINS (aka “happiness chemicals”) or over 100 other NEUROTRANSMITTERS. If you overeat, your stomach and head might ache because the gut and brain share the vagal alert to take care of the problem. This is called the BRAIN-GUT AXIS. A Speller’s work moves outside these autonomic (means involuntary) actions and champions NEUROPLASTICITY – the brain's ability to adapt and change using a letterboard to communicate.

**SPELL VAGUS PHARYNX GASTROINTESTINAL**

The vagal nerve extends from your head to your \_\_\_\_\_. GUT

The Brain-Gut \_\_\_\_\_ signals and manages digestive issues. AXIS

A Speller’s work champions this ability of the brain. NEUROPLASTICITY

What is a synonym for copacetic? SATISFACTORY

Give another name for your body’s “gut.” STOMACH/ TUMMY

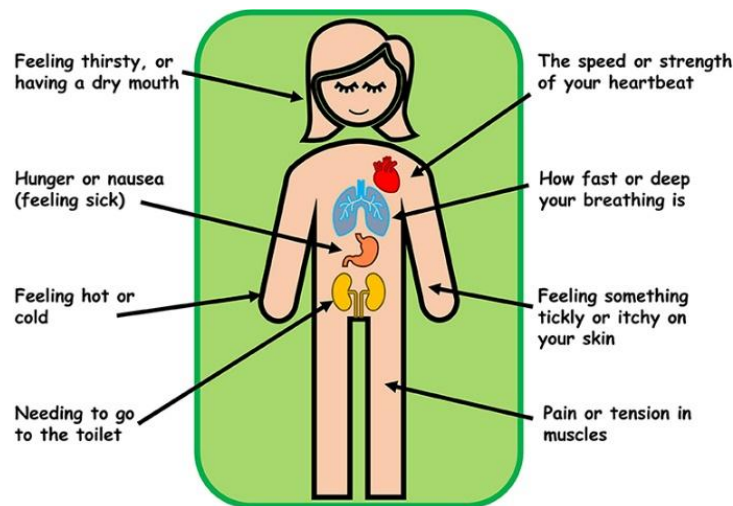
Give one of the names for “happiness” chemicals.

ENDORPHINS/NEUROTRANSMITTERS

What food flavor triggers your happiness chemicals? CHOCOLATE/LEMON/PIZZA

How many neurotransmitter chemicals are thought to be in the nervous system? >100

VAKT: Stimulate your vagus nerve: Breathe in deeply through your nose and on the exhale, try making a sound like “ahhhh” or “mmmm”. Feel the humming vibration in your neck or chest? (You can place your hand on your throat as you blow out or blow into a kazoo.)



## BODY AWARENESS AND FUNCTIONAL SKILLS

Feeling safe and being INDEPENDENT relies on knowing and trusting your body's inner signals. A BODY SCAN is a self-awareness activity using a mental inventory ("checklist") of each part of your body, noticing each part's energy from the top of your head down to your toes. As you think of each body part, spell it by name and then if it feels "well" (okay) or unwell (needs attention.). Another self-awareness activity is DEEP BREATHING. Deep, slow breathing helps calm the nervous system. These are just two ways of improving INTEROCEPTION, which means body awareness. Two LONG-TERM GOALS are 1) understanding how your body sensations inform you about your health and well-being and 2) feeling comfortable sharing that with a trusted person. EXPANDING interoception skills builds confidence for making friends and exploring new interests. These are functional and amazing ways to use your Speller's voice.

### SPELL AWARENESS FUNCTIONAL INDEPENDENCE

A checklist of all parts of something is called an \_\_\_\_\_. INVENTORY  
 How you sense and perceive internal body signals is called \_\_\_\_\_. INTEROCEPTION  
 Understanding body sensations and their meaning is a \_\_\_\_\_ goal. LONG TERM  
 Name an activity mentioned in the text that requires using your body.

### BODY SCAN/DEEP BREATHING

Name one result of knowing your internal body signals. FEELING SAFE/BEING INDEPENDENT

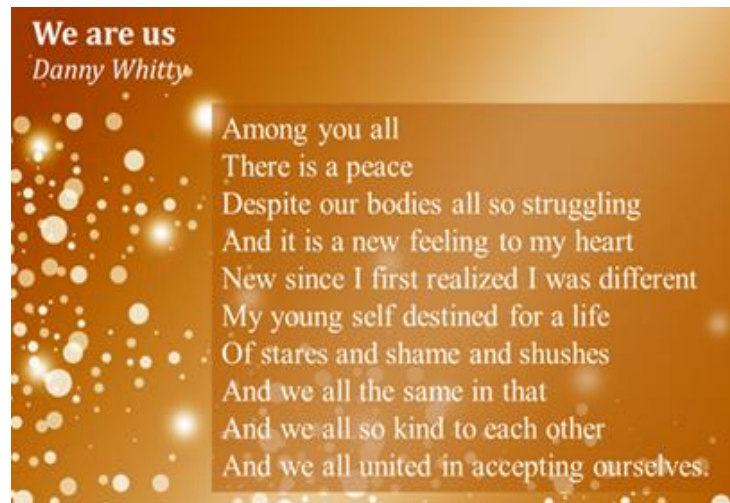
What games do you often play at home?

How do you think learning your internal body signals can improve your health?

What are your S2C session goals? What would make a good long-term goal for you?

VAKT: Listen to a guided BODY SCAN video for 3 minutes. *Body Scan Meditation for Children with Autism & Special Needs* [all ages].

<https://youtu.be/B9MTNoVzgXU?si=67tquUWGA6HrGy2z>



### WHO WE ARE NOW

A fitting TRIBUTE to the work, goals, and progress of Spellers everywhere is the poem written above by DANNY WHITTY (read aloud). Danny was diagnosed as autistic at age 3 and was introduced to spelling in 2015. He is now 38 years old and is honest about his APRAXIA (difficulty with brain and body coordination) and about his ABUNDANT joy. Spelling was the IMPETUS (aka inspiration) for developing his passion for cooking, his skills as an author, and his ADVOCACY work for other Spellers. Before this, he felt trapped and unheard, but Spelling helped him to communicate more fully and create a social network online. Danny is an author, a blogger, and with his sister is a podcast host for All Our Brave Hearts. Danny attributes his Spelling progress and success to the RELATIONSHIPS he built with his CRPs. Becoming an “OPEN” (independent) Speller took 5 years and due to their patience, thoughtfulness, and being OPEN-MINDED in finding ways to connect with him meaningfully.

**SPELL** TRIBUTE AUTISTIC ADVOCACY

Who is the subject of this passage? DANNY WHITTY

Spelling helped develop Danny's passion for \_\_\_\_\_. COOKING

Danny is honest about his \_\_\_\_\_ joy. ABUNDANT

What is a synonym for impetus? INSPIRATION

What is another word that means you communicate with Spelling independently?  
 OPEN

Name one of the ways Danny Whitty shares news and information on Spelling to Communicate.

## AUTHOR/BLOGGER/PODCAST HOST

What year was Danny introduced to spelling to communicate? 2015

How many letterboards did you start with when you began Spelling with your CRP?

Podcasts have become very popular. How could they help spread knowledge about Spelling to other nonspeakers?

What letterboard(s) can be used to spell independent answers and write freely? (Ask your CRP/Practitioner to see the variety of boards to help you choose and explain.)

### **VAKTIVITY: Draw Your Breath.**

Sit quietly with paper and pencil/marker. Place your marker on the paper but before you draw, close your eyes and take a very long deep breath. As you breathe out, allow your hand to be guided by your breath in any shape you choose. When you have emptied your breath, open your eyes. See the path your breath took.

### Creative Writing

Honey, I Shrunk the Speller: Write about when you were shrunk small enough to ride the vagus nerve. Which locations were the most reactive and volcanic? How did you and your group work together to calm the apparatus and move on safely?

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