

Module 1.1

Brain Basics: *What Brains Are For*

Week 1

This module addresses basic necessary understanding about the brain to have this class make sense. These are brain basics. They won't remember most of this, but we have to start somewhere! Watching the video 2x will familiarize them with some of the terms we'll use.

- **Before class:**

- Cue up the video
- Check emails or texts 15 mins before class
- Open (or print) trainer notes
- Put intro questions in the chat for reference.

Lesson Plan:

- Welcome
 - This course is about the intersection of brain science and education: Neurodidactics. We use a coaching module, appropriate for singers of popular styles.

- This course does not cover specifics of anatomy, laryngeal or pharyngeal function, or acoustics.
- This course offers certification of completion in NeuroVocal Method professional training. This certification brings you into the NeuroVocal community, and makes you eligible for Level 2 training, the completion of which makes you a Certified Coach.
- Introductions: 10 x 6 mins each = 1 hour
 - Your name and what you like to be called
 - pronouns
 - Where you live
 - How long you've been teaching
 - What, or who, you like best to teach
 - Something you'd like us to know about you (optional)
- Housekeeping: 10-15 mins
 - You'll get information two ways
 - Emails after class. Please create a folder in your email program for these, as they contain links to resources.
 - Individual web pages for each class. These will be included in the emails you get 4-5 days before class.
 - PLEASE communicate with me via MY EMAIL unless it's urgent, in which case text me at
 - Facebook: have you joined the group?
 - Requirements of certification: (say them)

- You must attend 15 of 16 online classes
 - If my schedule and your schedule do not synch up, please let me know and I'll accommodate you as best I can.
 - Private coaching with me is available to you. I offer you a 50% discount.
 - If you'd like feedback on your coaching, you can select an add-on and submit a 30-minute video of you teaching NVM principles. I will provide written feedback, and if you'd like to meet with me as well we can do that.
- Please reserve one week extra on your calendar in case something happens and we cannot meet for one week due to technical problems.
- Permissions (to use for promotion, etc.) You agreed to this when you signed up for the class, but if you do not want your likeness or words to be used for promotional purposes, please email me and make that request explicit. (ask them to nod if they understand)
- Coaching observation: There will be 4 coaching observation opportunities. These are open to all NeuroVocal coaches. They happen at various times, and you're welcome to attend live or watch later. You're also welcome to volunteer to be my client! Recordings of them will be available on our Course Overview page.

- This class seems long but goes by quickly. I expect you to try the new things on your clients *before you know how to do them*. I expect you to practice what you learn in your 1:1 coaching just as you'd like your own clients to practice. If you want to get all this class has to offer, you'll need to practice!

Show Video

After video invite people to stand and stretch. Take a 5-minute break. Encourage physical movement.

After the video, recap central ideas. The overarching theme of your lecture should be about predictive processing; the predictive brain. You are welcome to use ideas listed here.

Instructor:

1. PLEASE BE CLEAR (or as clear as you can) about when you're citing studies, speculating, speaking from experience, etc. We never want our opinions confused with actual data.
2. Look at the list below and decide which TWO THINGS you would like to focus on in your lecture
 - Brain architecture isn't wrong, but it's not complete. The brain is not a map of the mind.

- EXPAND: Why does allostasis matter? Because it's the nature of brains. The built-in nature of your brain to predict is HUGE. We have to work in that framework when introducing new ideas and skills.
 - What we perceive as one thing is actually many things. Our brains have evolved to behave in a certain way; the nature of the brain is to predict.
 - It evolved that way, and extends to all the parts of our lives.
- EXPAND: How we create reality.
 - Memories + sensory input = experience.
 - Sensory data: your ears, eyes, and mouth are passive. They just receive the signals that are floating around in the air. Your ears pick up sound waves. It's your brain that turns those sound waves into meaning. We tend to forget that we see and hear with our brains, not our eyes and ears.
 - Your brain is "seeing" sensory input, it's reaching for a memory that it can apply to that data.
 - So when we cannot find a memory, we cannot create an accurate reality. Experiential blindness is an example of that. This matters when we learn a new skill. There's no memory to reference. We WILL try to reference an existing memory, even when it doesn't serve us. (i.e., "never underestimate the power of the Sing File.")

- EXPAND: Predictive processing
 - Show of hands: was anyone familiar with the idea that brains predict?
 - All the brains predict. In this class we'll cover more material that will explore this idea.
 - NeuroVocal principles are based on the predictive nature of the brain. Don't worry about understanding this right now. Just know that it's an essential part of NeuroVocal principles, and we'll keep coming back to it.
- EXPAND: Experiential Blindness
 - Although this phenomenon has been named in studies for visual processing, we know that this happens across all the senses. Because this phenomenon
 - While you were looking at that black & white image, your brain was *busy* trying to figure it out.
 - Here's an example of experiential blindness with sound. (skip to 2:55)
 - <https://www.youtube.com/watch?v=zFUvswVDTDE>
 - Saying this in preparation for you making the weird sounds you're going make. When there is experiential blindness in the action; how do we bring people into this - there has to be understanding and language that allows them to enter in without being too scared.

- You will experience this “experiential blindness” regarding both hearing and intentional, coordinated phonatory response.
 - This opportunity is GOLDEN for you, because it is what all of your clients go through. You’ve gone through it before, but probably not consciously.
- EXPAND: tell a story of your own experiential blindness, invite people to share.
- EXPAND: Therefore, to create fluency in anything, and to reduce resistance to those new skills, we have to be aware of the way the brain works. We need to work WITH it’s predictive nature, even when it’s hard. (e.g., when there are no memories to reach for)
- No application homework this week, here’s why.
 - Adult learners in a professional class. It’s helpful to look for the things we’ve covered in class in your own life.
 - This week there are no vocal exercises BECAUSE getting right down to offering applications of voice things makes voice professionals fixate on the way they’ve always done it because that’s what they’re used to. So if I give you an exercise you’ll be inclined to say, “I can hear what that exercise is for and I’m going to bring *that technique* into my studio.” that’s not what this class is about. We’re going to be working on people’s brains, and the outcome will show up in their voices.
- Go through the homework and resources page.

- Make sure to explain that the Doodles site is to show clients how predictive brains work. This will prime them for understanding the predictive brain.
- Look for prediction error correction. Use the example of the stair you did not see and so you stumbled or fell. (A universal experience.)