

How to Facilitate a Coaching Conversation Using Insights from Neuroscience

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What if you could use knowledge about the brain to help your clients work through some of the challenges that they bring to your coaching sessions? I've been interested in applying neuroscience to leadership for over a decade. I've worked as an executive coach for over 25 years and for the past ten years have been an Associate Professor at Golden Gate University, a private, nonprofit university in San Francisco. In that role, I've been fortunate to design several graduate-level courses in our Business School and design and oversee a Master's in Leadership. I designed and taught an executive coaching course for the past eight years and experimented with teaching students about the brain and how to use that knowledge in their coaching. I'm sharing a tool that I designed to teach both students and coaches about how to leverage the power of one's brain. This article explains the worksheet.

Background Information

I typically show a picture of the brain and explain the following. First, you need to know that your brain is primarily wired for safety. We have five times as many circuits that pick up threats than rewards. We pick up threats in 1/5 of one second. Also, we primarily operate nonconsciously. The truth is, we are on autopilot most of the time. With 11 million bits of information bombarding us every second, our conscious brain can only handle 40 bits. When we encounter novelty or a change, our brain tells us to switch to our executive function, which uses up a great deal of glucose and oxygen. For instance, recall the first time you attended a virtual meeting using Zoom. Like me, you may have stumbled around, trying to figure out how to see everyone, how to mute and unmute your microphone, and even how to upload a virtual background. Eventually, like brushing your teeth, it became a habit, and you didn't have to think about it.

A second key learning about the brain is that our brain has neurons (cells) and neurochemicals. Neurochemicals help the neurons communicate with each other. When our heart is pounding or we are deeply relaxed, we are experiencing the effect of neurochemicals. The neurochemical GABA calms us down, increases feelings of relaxation, and reduces anxiety. As the late Judith Glaser always said, we are always experiencing neurochemical showers, either a good mix or a not-so-good mix. When we experience a threat, cortisol pours through our bodies. Imagine red blobs coursing through your body--and staying there for several hours. Long-term stress can negatively impact us and cause trouble concentrating, fatigue, irritability, and other serious health issues.

Another essential concept is the notion of a complex adaptive system. A complex adaptive system is comprised of several systems that interact with each other and adapt to each other. Each part interacts and brings order to the system. The brain is one example of a complex adaptive system. Five key parts of the brain interact with our nervous system to ensure we breathe, survive, think logically and feel empathy for others. I learned about complex adaptive systems while working on my doctorate. In a highly complex organizational system case study, I discovered that critical shifts in mindsets, enabled by

a network of conversations, contributed to an organizational transformation. I wondered what would happen if we imagined that key parts of our brain had a voice and could talk to each other to create a new reality. In other words, could we facilitate personal transformation by focusing on the conversations in our heads, linking them to critical parts of the brain?

First Iteration of Coaching Conversations in the Brain

While still working face to face, I designed and had my assistant produce both a 15x15 foot and 5x5 foot large brain mat and had students and clients simulate a conversation in the brain using yarn. Then the pandemic hit, and in-person classes and meetings halted. I had to come up with an alternative. I developed the attached worksheet to be used virtually, although it can certainly be used in face-to-face meetings.

Nicknames

I have given many talks about the brain and leadership and noticed that people's eyes start glazing over when I explain parts of the brain. I decided to give the relevant parts nicknames that focused on their function. I included the function and, while describing each part, touched my head to point to a location and had my audience do the same.

How to Use the Worksheet, Part 1

For the purposes of learning, I invite you to identify a recent work or personal situation in which you felt some fear, anxiety, or threat. I will walk you through a conversation that might be occurring in different parts of your brain and see if you can riff on that to imagine the conversation in your brain. There are six players in this conversation, each with a different voice and tone.

First, let's meet the cast of characters, and I'll demonstrate a potential conversation.

1. Threat Detector, also known as your amygdala. It is between your ears. It is working away, picking up threats every 1/5 of a second. Threats can be actual physical threats or threats to one's sense of self and identity.
2. Learning Librarian, also known as your hippocampus, lives near your Threat Detector and spends its days and nights embedding learning and storing memories, especially negative ones.
3. Habit Central, sits in the Center, just above and behind your ears. It's where habits are embedded. This part of the brain allows you to operate quite efficiently, so you don't have to use up a lot of energy thinking about what to do at every moment.
4. Sensory Emotion Spotter, also known as your insula, is tucked deep inside your brain. It helps you become aware of visceral sensations, which helps you identify emotions.
5. Cortisol is a neurochemical that is secreted by the adrenal glands. We have receptors all over our bodies. When we feel threatened, cortisol can last a long time in our bodies, causing inflammation and negatively impacting our memory, emotional regulation, and ability to bounce back.
6. Optimism Center is located on the top front of your brain (behind your prefrontal cortex) and helps you focus, generate optimism, and empathize. Importantly, imagining the possibility of a positive future event helps regulate the Threat Center when we expect that future to come to fruition. The voice of the Optimism Center –is "Oh, something else is possible for me here."

7. Thinking Center, or your prefrontal cortex, is located in the very front of your brain, above and behind your forehead. It allows you to think logically, make decisions, and self-regulate. Once you make a decision, it organizes resources in your brain to help make it happen. The voice of the Thinking Center is: "I'm in charge here, and once I focus my attention on a goal, I can figure out what to do."

8. GABA is a neurochemical that calms us down and helps us relax our bodies and emotions. Imagining our Thinking Center sending GABA juice to our Threat Center is beneficial.

Let's now imagine a conversation in your brain when you encounter a threat.

Scene 1:

You log on to Zoom for a meeting to share progress on a product. Your boss' face appears. You start giving an update on your product. Your boss interrupts you.

Boss

No, you are doing that all wrong.

Threat Detector (in a deep threatening voice)

Danger, Will Robinson, Danger.

Learning Librarian (in a scared voice)

I spoke up to my father once and got smacked

Habit Central (in a sure voice)

"I never challenge a boss, or anyone for that matter."

Sensory Emotion Spotter (a pained voice)

I'm feeling a pain in my stomach

Cortisol walks in and sprays a thick, red, toxic substance all over everything. You do and say nothing.

Hiding and cowering behind a wall are Optimism Center and Thinking Center. GABA is nowhere to be found. All are frozen in place.

You say nothing.

[How to Use the Worksheet, Part 2, What's Happening In Your Brain](#)

Now it's your turn to fill in the worksheet. Take your actual situation and fill in the conversation you imagine might be occurring. If you can do this with a partner, all the better. You could also use this as a framework in your client coaching work.

[How to Use the Worksheet, Part 3, Calm Down Your Threat Detector and Get in Touch with Positive Voices](#)

Now let's see how you can use your knowledge about the brain's key functions to help yourself, a partner, or coaching client address their challenge. Note that the questions provided for the coach are

suggestions. If you have other questions that work for you, by all means, use those. I encourage you to be mindful of the part of the brain you are addressing as your questions emerge.

Scene 2

Boss

No, you are doing that all wrong.

Threat Detector (in a deep threatening voice)

Danger, Will Robinson, Danger.

Coach

Take a couple of deep breaths.

Coach

Where are you feeling this in your body?

Sensory Emotion Spotter (a pained voice)

I'm feeling a pain in my stomach

Coach

Name the emotion accurately if possible. What would it be saying if your (throat, chest, stomach, etc.) had a voice? What's at risk for you? What memories are triggered?

Learning Librarian (in a scared voice)

I spoke up to my father once and got smacked

Coach Speaking to Learning Librarian (Choose Question or Questions)

How might you reframe that memory? What's the silver lining? How can you change the story to be more empowering?

Coach-Speaking to Optimism Center

What might be possible for you if this challenge is resolved?

Coach Speaking to Thinking Center

What is your goal in this situation? How committed are you to achieving it? What will it take to increase that commitment?

Coach Speaking to Habit Central

What habit is getting in your way?

Habit Central (in a sure voice)

"I never challenge a boss or anyone for that matter."

Coach Speaking to Habit Central

What might you name it? What benefits are you getting from this habit? What are you losing (what's the negative impact?) What new habit do you want to develop? How might you name it? How committed are you to change? What's your first step?

Coach Eliciting a Positive Neurochemical Bath

Take another deep breath. Imagine yourself achieving your goal. Feel positive neurochemicals bathing your body. How can you take this feeling forward?

[How to Use the Worksheet, Part 4, Debrief](#)

Reflect on what worked, what didn't, and what you learned. How did knowledge of the brain assist you in unpacking the challenge?