

Brain Science 102: Neuro-Plastic What?

So what is all this commotion around Neuroplasticity?

Neuroplasticity is the brain's natural ability to form new or stronger connections (neural network highways) between its 100+ billion cells (neurons) in order to compensate for injury or changes in one's environment. *The brain is capable of repair, and most importantly, change, and evolution.*

Why is it important to understand neuroplasticity?

Personal crisis is often a catalyst for change. In a moment of crisis, we are forced to see things in a different way as we recognize (and eventually admit and accept) that *what we've been thinking and/of doing is no longer working for us.*

As we move beyond the initial period of emotional intensity and chaos, we can become more open to change. Information we previously ignored, avoided or point blank didn't notice, becomes evident to us. Things that once caused great stress now only cause a momentary discomfort. The brain is able to "kick into gear" and focus on solving problems instead of worrying (being afraid) and causing emotional distress.

In this way, crisis can be an agent of positive change. Once a crisis is dealt with, the resulting reorganization in the brain allows you to meet and accept the world in a new way – calmly, with confidence, and without fear.

In coaching we are often working to evoke and/or manage change. By focusing the power of the brain we can train it to adapt through a process of interactive "meaning making." Popularized by Jack Mezirow in his Transformative Learning Theory, meaning making is literally how our brain develops. We assign meaning to various events, experiences and/or situations in our life and as we file and catalog our experiences in our minds, we draw upon that information later on to get through life, making decisions based on what we know and don't know. This is very much how a computer operates – based on the data in the system, various interactions with the computer produce certain results based on what information the systems contains.

Through the process of coaching, you are able to move past old programming as underlying meanings of held thoughts/beliefs are revealed. Thinking processes that are no longer producing the intended results are surfaced and more appropriate ones can be chosen and reprogrammed into the brain. As a result the brain literally restructures and reorganizes itself at a higher level of understanding and capability. So when we encounter our next obstacle, we're often surprised to find that we can easily deal with situations that once seemed impossible and stressful.

According to the theory of neuroplasticity, changing thought patterns will actually change both the brain's physical structure (anatomy) and functional organization (physiology). In other words, *the brain is capable of adapting and evolving.*

Big picture example of how our brain circuitry works to create a memory

The brain can change the strength of neural connections and it can add or remove connections. You can, with practice, actually *change the way in which you think and perceive life and the associated emotions*. In other words, if you persistently think a thought that brings about negative emotions, you can replace that thought with a positive one via a coach-like-process that brings about positive emotions. The brain will “rewire” itself to accommodate this new thought and over time this becomes a new and empowering way to think about life. The end result is emotional states that bring about more happiness and life satisfaction.

How coaching can help this process

Coaching is a process in which a person undergoes intentional development based on their desired goals and outcomes.

Through thought provoking conversations and learning in action processes, the brain is inspired and improves itself through brain plasticity, resiliency and flexibility.

With each evolutionary step you take through the coaching relationship, you are better equipped to think through and deal with situations you experience, and better equipped to continue evolving your learning capacity.

Here’s how the coaching process works:

Similar to dealing with a crisis, you become aware of the need to do something different in response to a given situation. In coaching that need for a change might be driven by a desire to make changes in the way you respond to something that has already happened in your life, and/or to create the changes to allow something new to be brought into your life.

Regardless of whether or not you are trying to manage or evoke change... it is not uncommon that *the old ways of thinking and doing in your life are no longer serving you*. You might even experience a sense of upheaval from these changes that can manifest in any number of ways. These FEARS (False Evidence Appearing Real) or limiting beliefs can rise to the occasion as part of our primal prehistoric being. Our natural brain part the “alarm system” once prudent in the jungle – known as our amygdala - is always on the watch, although in these modern times it’s warning signals are often the sheep crying wolf.

When our alarm system goes off... our thoughts are often clouded by the emotional stimuli resulting in confusion and can result in poor choices. Coaching helps you to recognize this emotional penetration and to be able to step back and create a myriad of choices despite the fear based signals. As you develop your capacity to make improved choices, your brain reimprints this kind of thinking (literally through neural network patterns) and creates a new pathway internally that makes life a whole lot easier on the outside!

For example, let's say you've been having severe financial problems, and these have caused you immense stress. Your predominant thoughts are those of fear ("what if..."). This fear is paralyzing, it manifests in physical problems, and causes you to make hasty or other poor decisions. With coaching, you'll be able to put the emotional triggers aside and deal with the problem calmly and confidently. *You'll learn to identify the beliefs that cause you to think and act in a certain way, and reprogram these beliefs so that they serve rather than hinder you.*

The goal is to get the brain thinking proactively rather than reactively by restructuring the way it works. The emotions will be taken out of the equation, and you will be able to constructively deal with any situation.

If you prefer a visual for the evolutionary process: imagine yourself climbing a very long staircase. You're standing on a step somewhere in the middle. You're comfortable there, yes, but you know that you must climb to the next step in order to eventually reach the top. *You got to where you are using certain thought patterns and actions;* but those thought patterns will not allow you to take even one more step. But you know you must! A coach can help you take that next step. It's the action of getting from one step to the next that is difficult and requires effort and commitment; and a coach can help you make the required effort. Once you're standing firmly on that higher step, life is wonderful and calm again, the view is even better, and you're more enthusiastic and motivated about taking the next step!

For more information on the coaching process – we encourage you to take us up on a free consultation. It's a great way to learn more about coaching and test drive it for yourself.

Reach us at 503-241-2200 or via email: info@barakainstitute.com