



**CO-ACTIVE**<sup>®</sup>  
TRAINING INSTITUTE

# The Science of Transformational Coaching

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# Introduction

Brain science has evolved independently from the profession of coaching yet remarkable connections between the disciplines suggest a whole greater than the sum of its parts. Coaching is no longer considered experimental or unconventional. Three decades into the practice and certification of coaching, it is growing more prominent in the development of leaders. And on a parallel path, technological developments are enabling us to understand and take advantage of the complexity and flexibility of the human brain.

Advances in technology such as functional magnetic resonance imaging (fMRI) mean we no longer need to go on instinct, or even trial and error, to understand why people change and grow. We can see certain brain activity right before our eyes—something that is inspiring to those seeking to spark a new path or purpose with innovative thinking.

This document details some of the ways coaching influences brain activity to create positive change. It focuses specifically on Co-Active coaching, a unique coaching framework and one of the earliest established coaching models.

There are several distinct elements of Co-Active coaching that make it a particularly transformational approach and well-suited to coaches who are wanting to achieve a deeper and more sustainable level of change for their coachees. Learn more about the science behind this approach over the following pages.

“We’ve known intuitively, and from watching results for 30 years, that the Co-Active model is an effective approach to coaching,” says Karen Kimsey-House, co-founder of the Co-Active Training Institute, whose world-renowned Co-Active coaching model is considered the gold standard of coaching methodology. “Now we can truly begin to link the theory and evidence.”



“CTI offers a gold standard of coach training, and the Co-Active model behind it is remarkably congruent with a vast body of research in positive psychology and coaching. As business, health and personal coaches begin to master and articulate these messages, we believe it will create inroads for more individuals and organizations to see the value and validity of coaching.

It’s exciting to see how the entire field can be uplifted by connecting science and theory with the spirit and practice of coaching. In the future, results will continue to show how science can be mapped to CTI’s Co-Active model and their four cornerstones of coaching.

***—Dr. Carol Kauffman, founder and director of the Institute of Coaching and faculty of Harvard Medical School for over 25 years***

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## **A Science-Backed Process for Optimal Human Growth and Change**

Evidence from the field of neuroscience confirms that the philosophy and tools of coaching and leadership are in powerful alignment with what is known about effective brain development.

Using neuroscience foundations, coaches are positioned to engage the client's brain in ways that create openness, creativity, and the optimal environment for neuroplasticity, leading to lasting, transformative change.

Anyone looking to evoke new patterns in their thinking and in their life can be confident knowing that scientific proof continues to support the successes of coaches and leaders who have essentially rewired their brains.

Co-Active principles offer a variety of ways to help individuals move out of a reactive state and create new possibilities for moving forward, with tools and skills that can be linked to neuroscientifically proven stress-reduction techniques, right-left hemisphere integration, and neuroplasticity.

## **Reducing Stress Creates Room to be Proactive**

Science has revealed that when the brain is influenced by the chemicals associated with stress, it is less creative and less able to think of long-term solutions. Because there is no judgment or evaluation in Co-Active coaching and leadership development, the client remains open to input and is much more able to access their own unique creativity.

There is evidence that reflecting on personal values provides biological and psychological protection from the adverse effects of stress. In a 2005 study by scientists at UCLA, individuals were subjected to a stress challenge in a laboratory setting. Those who were given the task of identifying their values and reflecting on them before the test showed significantly lower cortisol levels after the test than the control group subjected to the same stress test but not asked to identify or reflect on their values.

Co-Active coaches use values and life purpose to help their clients find meaning in their life and create a compelling vision for the future, which research shows contributes to an overall increased sense of well-being and reduction of stress.

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## Integration: The Competitive Advantage of Brain Complexity

Research also shows that the process of having “collaborative, contingent conversations” that are emotionally attuned and non-directive builds positive neural connections in the brain.

In other words, connected conversation with a present and open coach cannot help but have a positive impact on the brain, which in turn leads to improved relationships and greater capacity to show up more powerfully in the world.

For example, a 2010 fMRI study at Case Western Reserve University found that when subjects spent 30 minutes talking about their desired personal vision, the parts of their brain “associated with cognitive, perceptual, and emotional openness and better functioning” were activated.

This study shows how coaching with compassion can “light up” human thoughts and neuroscience teaches us that we are amazingly complex and multilayered beings—the more we can integrate and be agile with this complexity, the better.

By helping clients expand their focus beyond the presenting issue or problem, Co-Active coaching facilitates the engagement of the whole brain. Rather than looking just for the most logical answer, a Co-Active coach will often encourage the client to explore both thoughts and feelings and to give voice to intuitive gut reactions. This kind of attention helps integrate the right and left hemispheres of the brain, which not only opens up new solutions and creativity but also builds lasting connections that can be used for future problem-solving.

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## Neuroplasticity: The Art of Changing the Brain

Co-Active coaching helps people identify the pathways that are not working and focus on creating new ones that lead to more resonant, effective, fulfilling lives. Over time, through commitment, support, practice, and reflection, those “ahas” become dominant neural pathways, and what was once a reach and challenge becomes commonplace.

As neuroplasticity expert Norman Doidge points out, there is substantial evidence we can “rewire our brains with our thoughts.” But because the default in our brain is to go with the pathways that are already developed, it is difficult to change without focused, supported, intentional effort.

Co-Active coaching brings this sort of focus and support, making it possible to literally help a client’s brain rewire itself for greater effectiveness. By asking curious, powerful, open-ended questions designed to make the client think, Co-Active coaches stimulate reflection, which helps to anchor in learning and produce lasting growth.

There is a saying among neuroscientists: “If it fires, it wires,” meaning that much of what we do creates the potential for a new neural pathway. Through a process called “myelination,” the more a pathway is used, the stronger it becomes. This is because every time we repeat an action, a fatty covering called myelin coats the neural pathway, making connections stronger and more secure.

Coaches are taught to keep the focus on a dance between having the client forward the action—doing things that move their lives forward—and deepen the learning—reflecting and making meaning of what they have attempted and accomplished. The result is to create a positive upward cycle of learning for the client.

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## Conclusion

Everyone longs to be successful in their lives, whether it is at work, at home, or as a parent, friend or partner. We don't want just to change one particular circumstance—we want the fundamental ability to live, work, react, and create in the most effective way.

As the growing body of neuroscience research reveals, the tools of Co-Active coaching and leadership development profoundly help clients develop positive new neural networks, respond more calmly to stress, make choices more easily, and access much more of their creativity.

This inevitably leads to more effective, successful, and fulfilling lives, and there is substantial evidence from neuroscience that this philosophy is particularly effective in engaging, motivating, and helping clients experience lasting change and transformation.

## About CTI

The Co-Active Training Institute (CTI) was there when the earliest pioneers transformed coaching from a promising idea into a flourishing and vital industry.

Our founders helped establish many of the standards and ethics that coaching professionals live by today. We continue to champion the power of coaching to improve people's lives and impact, whether they're seeking personal growth, they're looking for a better way to relate to others, or they're leaders who want to develop and inspire human potential.

We've trained over 145,000 people, including employees in more than a third of Fortune 100 companies. Coaching is one of the fastest-growing, most in-demand leadership skills and it can help people transform lives and careers. That means that Co-Active coaches and leaders are transforming organizations and communities across the world while also bringing richness and wholeness to their own lives.



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