BRAINS BEHIND COACHING

WHAT IS THE LINK BETWEEN NEUROSCIENCE & COACHING?

Neuroscientists know more about the brain and its functionality than ever before, and the one thing all neuroscientists agree on is there is so much more to learn. Your brain is quite simply the most complex entity in the universe but fortunately, you don't need to be a neuroscientist to understand the functional workings of the brain, there are some very simplistic principles that help you recognise why a brain-based approach to coaching can be so valuable, and how you can tap into this knowledge to better deliver coaching initiatives.

Let's look at what this thing called coaching is and how it has evolved.

The word 'coaching' is an interesting one. The term "coach" traces its origins to the Hungarian word kocski, which means 'carriage' a method of carrying you from one place to another. As a term for development, it seems to have first arisen in Oxford around 200 hundred years ago, as slang for tutors who were 'carrying' their well-heeled but often not very bright students through their exams. Sometime around 1830 the word became linked more with sporting prowess than intellect.

The man most associated with kick-starting what we now think of as modern coaching, was ironically a certain Benjamin Karter, football coach turned motivational speaker in the early 1980's. Although very little is known about Mr Karter, 'life' coaching quickly became recognised and deserving of professional status in America. Although it was the best part of a decade before it received similar recognition in the UK.

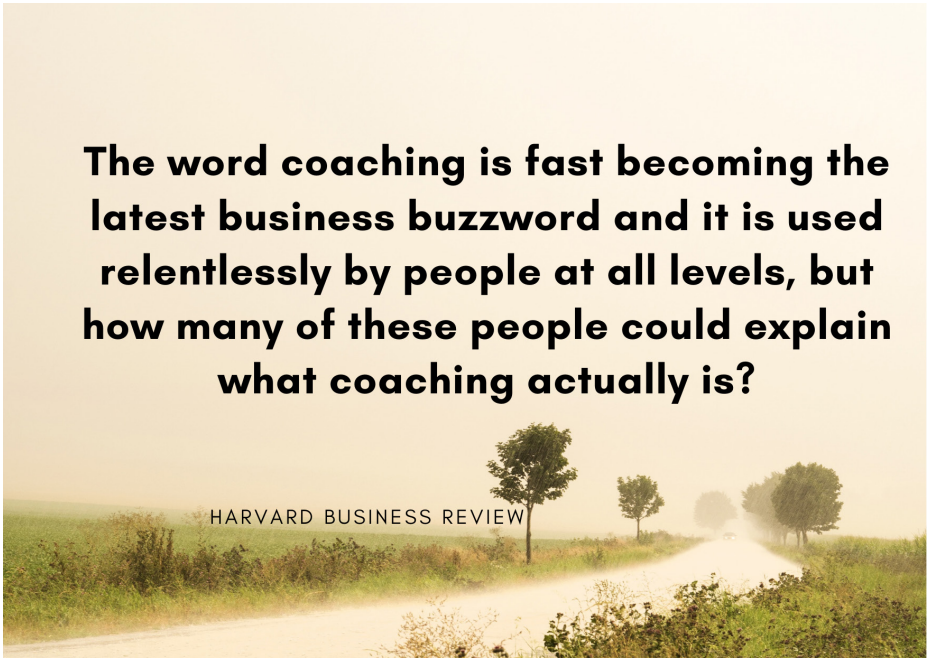
So, keeping in mind that coaching means carrying you from where you are to where you want to go, one of my favourite definitions is:

'The art of facilitating the performance, motivation, and development of another.'

Myles Downey – Effective Coaching

The message here for me is a good one and I think our first link to neuroscience. The art of coaching is not about order, process or control. The art of coaching interprets people as imaginative, evolving, living organisms – not machines or robots. The art of coaching embraces the complexity of the brain and recognises that in order to facilitate a change, two complex organisms (yours and the person you are coaching) must work together effectively.

As neuroscience research discovers more and more about how our brains work, coaches can use this knowledge to help their clients not only bring about desirable change but also to help their clients understand why they behave in certain ways.



So why should you be interested in neuroscience as a coach. From a coaching perspective, our current understanding of neuroscience reinforces what we already know, coaching is about change! The fundamental task of all coaching is to provide a context for change. This is true whether the coach is an external coach, an internal coach, a manager or you are just having an ad hoc coaching conversation. Helping people change is important, because as we have seen so graphically in the last year or so, both personal and work life can, and does change rapidly. Change however, is not easy due to the way that our brains are wired. Unfortunately, we tend to get more, rather than less set in our ways as we get older. Neuroscience supports this understanding and explains why old habits are hard to break and new habits are hard to form.

Let's explore this, to execute a task or a behaviour, our brain first breaks it down into its component parts, with each part

then being stored away. These parts are associated with each other by our brain stringing together a line of neurons to form what's called a neural pathway. Neurons are perhaps best considered as 'nerve cells', the fundamental units of the brain responsible for receiving information from the external world, for sending motor commands to our muscles, and for transforming and relaying signals at every step in between. The more you execute a behaviour, the stronger the neural pathway becomes and so too does your ability to execute these actions, to the point where they become habitual and use only the unconscious parts of your brain. In other words, these actions become so deeply engrained that these 'habits' are now completed without you having to think about it.

It is interesting to consider why the brain creates habits. When you're trying to break a bad habit, just the word "habit" can develop a nasty connotation, but this isn't necessarily the case. Imagine what your life would be like without any habits, the very process of getting out of bed in the morning and getting ready for work would leave you utterly exhausted; you would be overwhelmed before you even stepped out the door. Habits allow us to perform mundane tasks without even thinking about them, leaving the brain free to focus on more important matters instead of figuring out how to work a toothbrush every morning.

Yet, as beneficial or enjoyable as habits can be, once a habit has become ingrained, it may seem impossible to break and yet breaking a bad habit can truly change your life for the better.

Understanding these neural pathways is at the root of why change can be so difficult so it's worth considering it more. One of the best analogies, is to think of neural pathways as different types of roads. Initially the pathway through this forest is quite slow and arduous, the path is nothing more than a track and weaves in and out of the undergrowth and trees. However over time we discover better routes through the forest and the passage is easier. As the pathway becomes used more and more, the path is developed into a road, and the road eventually into a motorway. The smaller (less used neural pathways) are like the forest tracks carrying traffic slowly and awkwardly. The stronger (more used neural pathways) are like vast multi lane motorways carrying traffic quickly and efficiently. The brain, much prefers the motorways and uses these in preference to the forest tracks. From the brain's perspective it simply uses less energy to travel on the motorway.

In coaching, we want to help people create new neural pathways for new behaviours. But it's not easy because you are often working with 'motorways' in the brain. It may be that it is far more effective to focus on creating new positive behaviours than stopping old negative ones. After all, if the 'motorway' pathway doesn't get used as much because you are going in a new direction, it will eventually revert to a road and over time a forest track and the new pathway will continue to get stronger each time it is used.

When it comes to change, luckily, we have something on our side, the brain has one extraordinary property that is critical for change, **NEUROPLASTICITY.**

Neuroplasticity, also known as neural plasticity, or brain plasticity, is the ability of neural networks in the brain to change through growth and reorganization. These changes range from individual neuron pathways making new connections, to systematic adjustments like cortical remapping in the case of severe injury or disease. So we know that our brains are not hardwired from birth, as we change, neural pathways carve out new roads and this process literally changes the very architecture of our brains, so as we change, we are physically 'sculpting' the shape of our minds.

In fact, the information you are taking in today will be changing your brain as you mentally process what you read. Food for thought indeed, and yes, in many instances change may be difficult, but the brain's extraordinary properties make it possible. Our understanding of neuroplasticity is fundamental to how we change and one of the key principles that underpin *PRISM*, our online behavioural profiling tool.

A further important part of change is the influence of emotion. Neuroscience shows that our brains are built to detect changes in our environment and are more sensitive to negative change. Sadly, negative events have a greater

impact on our brains than positive ones. This is referred to as negative bias and can have a powerful effect on our behaviour.

So why do we have this negative bias?

Our tendency to pay more attention to bad things and overlook good things is likely a result of evolution. Early in human history, paying attention to bad, dangerous, and negative threats was literally a matter of life and death. Those who were more attuned to danger and who paid more attention to the bad things around them were more likely to survive. Of course, this 'survival of the fittest' also meant they were more likely to hand down the genes that made them more attentive to danger, hence why we still have them today. This perspective suggests that this tendency to dwell on the negative more than the positive is simply one way the brain tries to keep us safe. Whilst we no longer have to combat sabre toothed tigers or avoid disaster in the same way as our ancestors, the amygdala, the ancient part of our brain that is best known for its role in fear processing, spends much of its time processing potentially frightening or dangerous things. This protects us from danger but it can interfere with our functioning in the modern world where threats are often more subtle than our ancestors had to deal with.

The impact of negative bias is easy to see, both in ourselves and others. Ever found yourself dwelling on an insult or fixating on your mistakes? Criticisms often have a greater impact than compliments, and bad news frequently draws more attention than good. As humans, we tend to:

- **Remember traumatic experiences better than positive ones.**
- **Recall insults better than praise.**
- **React more strongly to negative stimuli.**
- **Think about negative things more frequently than positives.**
- **Respond more strongly to negative events than to equally positive ones.**

So how do we overcome negative bias?

The first step is recognising that negativity drives an emotion, so to understand negative bias we first need to understand emotions. We shouldn't look at emotions as needing to be controlled and contained, rather we should understand them and make better use of what they tell us. We need to prompt discussions about feelings so we can add this emotional component and understand where negative bias may be having an impact.

For change to occur we must encourage thinking about situations rationally and logically, but if we ignore emotion, we are then missing vital information. Where there is resistance to change, it is rarely because of a missing thought process. It will almost certainly be because we are missing the underpinning emotion. Negative bias can have a powerful impact on behaviour but being aware of it means that you can take steps to coach a more positive outlook.

Our understanding of neuroscience shows that in contrast to negative bias, there is a positive emotional response in the brain when people participate in engaging learning activities – the pleasure of learning increases the brain's release of dopamine. Dopamine plays a key role in how we feel pleasure. It helps us strive, focus, and find things interesting. In addition, we know that the brain may become overloaded during stressful periods and impede the processing and storage of information; thus, learning is more difficult when we are experiencing anxiety. The brain will not register the rewards of new changes if there is high anxiety.

We all know it is not always easy to tell people who are opposed to emotions being part of the conversation, that they need to be "in touch with their emotions." However, neuroscience can help provide more acceptable language. You may say:

"When you are trying to make a change, your brain has to assess the pros and cons of your decision.

Before you act, your brain does a quick calculation, but it relies on more than just your rational thinking to do this. It will also rely on your emotions.

So, we need to consider how you would feel if you were making this change?"

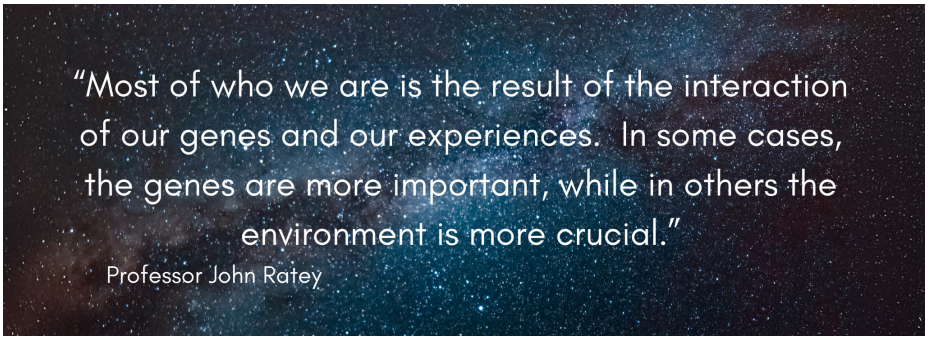
This type of conversation will allow them to add the emotional component to their analysis more readily and will move them closer to change.

In summary, the basic neuroscience principles related to change are as follows:

- **Old habits require less energy. New habits require more brain processing and therefore more energy.**
- **For change to occur, the new process must be embedded.**
- **The brain will tend to remember things that are reinforced in an emotional context.**
- **The brain will not register rewards for the new changes if there is high anxiety.**

Neuroscience has another major contribution to make to coaching – understanding

'Why we are, the way we are.'



This quote from Professor John Ratey is key to who we are and how we have developed.

It is not a matter of either/or, it is part of the ongoing debate over 'nature and nurture' – in effect, both have key roles to play in our behaviour. For a long time, scientists believed that about 60% of our behaviour was inherited – genetic – and the rest we acquired through our experiences of life. More recent research now shows that the genetic figure was too high and in fact it's probably better to regard it as a 50/50 balance. From the moment we are born, or, indeed, technically before we are born, we start interacting with our world. That initial interaction is very intense because the brain is developing at a phenomenal rate, initially to cope with the immediate post-birth world, but then to survive and develop to cope with a lifetime of challenges; in babies; as many as 50,000 brain cells are formed every second.

From our earliest moments of life, we experience the world through our senses, and we respond to the world through what we call behaviour. Gradually, we develop behavioural preferences and we use those frequently to meet our needs, however, we also have low preferences for other behaviours which we tend to use only when we really need to. It is important to note that even though our inherited genetic behaviour remains fairly constant, the behaviour we develop as a result our experiences will continue to change throughout our life.

This is critically important, firstly because it supports the fact that change is possible and it's never too late to change and secondly because it shows without a shadow of doubt that we are unique. We are all unique products of both our genes (nature) and our environment (nurture). This informs coaching in a couple of ways –

Firstly, it reinforces that a directive approach is not useful. When we tell someone, we are imposing our own preference and viewpoint – this may not fit or be the most empowering. When we tell someone, this is the product of our liking and is processed according to our behavioural preferences. The solution best suited to us is not necessarily best suited for the person we are coaching.

Secondly, if we are all different then a lot of the success we have as a coach (and indeed in life) is due to our ability to understand ourselves and others better.

Everyone has their own unique and distinct preferences. When you customise and align your "output" with another's "input" you increase the probability for greater rapport and understanding. You are literally on the same wavelength. This neuroscience principle has enormous implications in all human relationships but especially in coaching. The more we know about ourselves and the person we are coaching the better placed we are to overcome the influence that our own preferences may be having. People unaware of individual behaviour preferences, typically coach others with the unconscious intent of creating a mirror image of themselves. Entering into a coaching conversation with such misconceptions sets the stage for at best, ineffective coaching, and at worst hostile encounters.

Adapting behaviour is crucial to effective coaching.

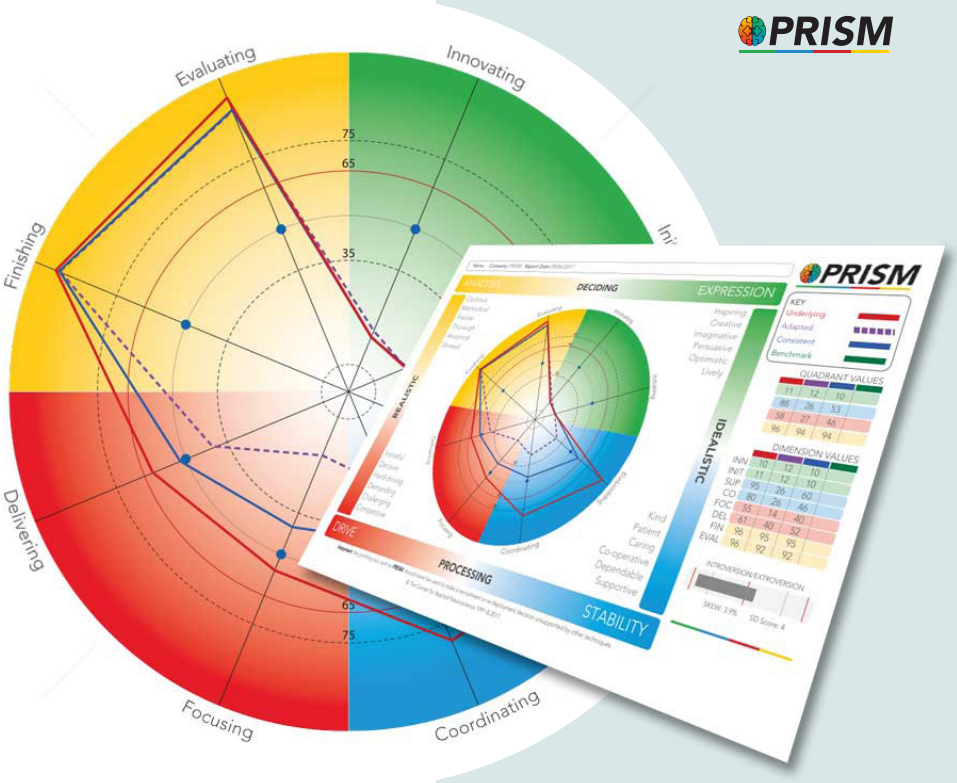
Firstly, we are all different. We all see the world in different ways. Every human being that has ever lived, or ever will live, is unique. You are truly one of kind.

We know from our understanding of the brain that behaviour is created by a combination of nature and nurture, an exclusive combination unique to you. *PRISM* does not, therefore, label people or try to fit them into 'boxes' instead it provides users with a powerful, graphic showing how they approach situations and individuals in different ways.

Secondly, we adapt. We adapt and modify our behaviour in response to different situations, environments and people. We adapt our behaviour to suit the situation we are confronted with.

For example, you are likely to exhibit different behaviours when relaxed at home with your family compared to the behaviours you use when dealing with a challenging situation at work. *PRISM* shows how you are likely to adapt your behaviour and can reveal areas of frustration or stress.

Thirdly, we can change. The brain is constantly changing, this ability called neuroplasticity means we can all change, however some change may be more difficult than others and require more focus.



When do you use *PRISM* to coach?

Initially when building rapport and to help the person you are coaching understand themselves, understand others and understand you, so you can both understand where there may be conflict or comfort. By linking to the person's goals, helping them identify areas of strength and blindspots. Identifying when overdone strengths kick in and how to avoid them having a negative impact. *PRISM* is not a panacea for all coaching challenges, but it can be really useful.

How does the *PRISM* map help you see negative bias?

As we know negative bias is our tendency to pay more attention to bad things and overlook good things. This negative bias may kick in when someone is working outside their comfort zone, or perhaps inside their comfort zone when they are feeling frustrated at not being able to use their potential. It may also show when a person is getting an adverse reaction due to not flexing their behaviour, being unaware of their overdone strengths. The person needs to tune into their emotions to understand this.

How can we develop specific behaviours?

Firstly, recognise why a person wants to develop, and the stretch involved. If someone has a very low (avoided) behaviour preference, then moving from that position will be tough. Helping people recognise that developing behaviour requires focus and that throwing someone in at the deep end is very different to having a structured PDP or targeted coaching.

One of my favourite techniques for development that fits well with coaching is Critical Incident Awareness – The key principle is to find someone in the business who uses the behaviours that the person needs to develop and then capture what it is that they actually do (the critical incidents) so the person can replicate this. The two methods of capturing critical incidents can be by interviewing or observation. The principle behind using someone in the business is that they are already operating and using the behaviours they want to adopt in the same environment and culture. It is feasible to use people outside the business and observation can also be achieved by watching some behaviours (eg Leadership/Presentation skills etc) in action on Youtube, Ted talks etc. Once mastered CIA is extremely useful and of course completely self-directed by the learner.

How do you coach leaders with *PRISM*.

A modular approach is ideal.

Firstly, pull out strengths and blindspots and cover where overdone strengths may be evident. Overdone strengths are where someone uses a strength at such a high level that it can be seen as a weakness by others. This is key for helping leaders, understand self, understand others, flex behaviour.

Secondly, look at Emotional Intelligence and Mental Toughness available in the *PRISM* Professional report.

Thirdly, consider the *PRISM* 360, observations from others can really raise awareness.

There are other *PRISM* tools you could consider, Team Performance Diagnostic for team awareness and *PRISM* leadership styles.

Are You a Coach, Trainer, Leader, L&D or HR Professional Looking To Build Individual and Team Potential?

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