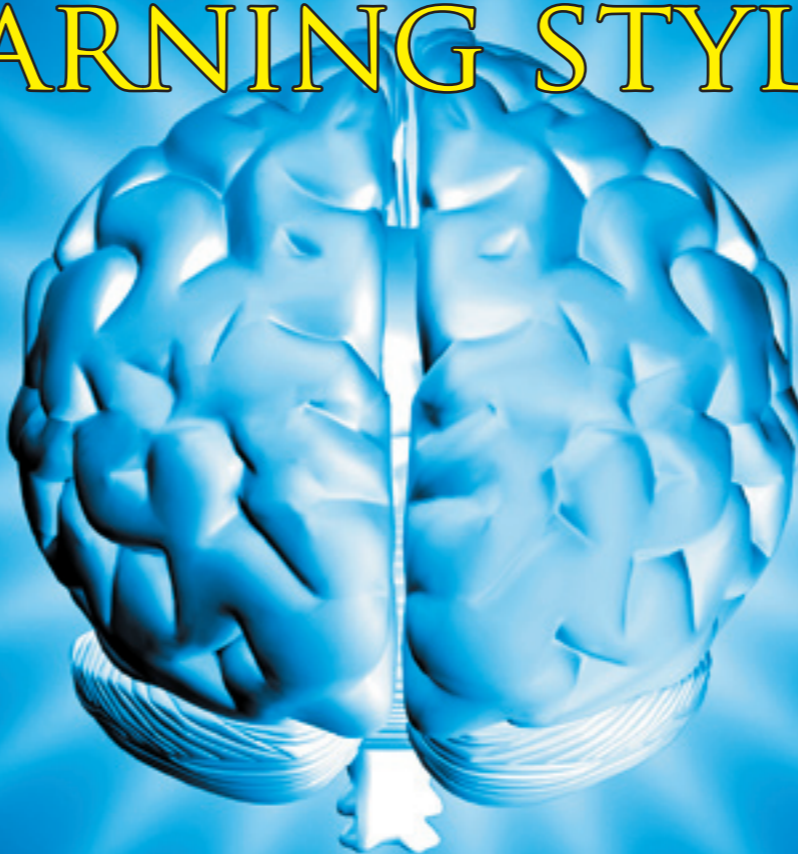


PLASTIC BRAINS AND LEARNING STYLES



What makes people so clever, and, sadly, also so stupid is that their brains keep changing depending on what they are doing with them! The technical term is plasticity – neuroplasticity. The brain continually changes throughout a person's life as the neurons (see Figure 1 over) reorganise themselves and form new connections. This occurs when you learn something – whether that's memorising a new song, acquiring a new skill (like driving or playing the piano), or just falling into a new routine or habit. It's also true that, in the event of brain damage, non-damaged areas can take on some of the functionality of the damaged part.

Throughout your life, your brain is able to change with learning; and these changes mostly occur at the level of the connections between neurons. If you form lots of new connections, the habit or learning seems more 'ingrained'. The more of an expert you become on a particular subject, the larger that area of your brain becomes. It seems that 80 percent of signalling in the brain uses two neurotransmitters – glutamate and GABA (Gamma-AminoButyric Acid). When glutamate passes a signal between two neurons that haven't 'spoken' before, it creates this connection:

Another type of chemical is BDNF (Brain-Derived Neurotrophic Factor), which builds and maintains the brain's circuitry of cells. It can make more dendrites (the little finger-like projections at the end of nerve cells that are used to connect between cells). It's well known that London taxi drivers who learn 'the knowledge' (a mental map of all the streets in London) have a larger hippocampus than, say, London bus drivers, and that's because that part

of their brain is used to acquire and use complex spatial information (Maguire, Woollett, & Spiers, 2006). Similarly, professional musicians have larger areas of the brain associated with music than other people (Gaser and Schlaug 2003). According to Dr John Ratey in his book *Spark!*, it's perfectly normal for neurogenesis (making new brain cells) to occur in adults, and it's more likely to occur if you exercise regularly and work hard during the exercise.

So there's plenty of evidence that the brain can grow and change as learning occurs. Our role, as hypnotherapists, is to help our clients to learn new ways of looking at the world and themselves – to help them to make positive changes in the connections between the neurons in their brain. But this begs a very important question: what's the best way for a client to learn? Should we be making them learn by rote (a very popular method in Victorian schools), or should we be making them read lots of

information, or is watching a YouTube video the key to learning?

You'll remember from school that different teachers had different teaching styles, but perhaps what's really important is a person's learning style. Remember, learning is something you do, not something that's done to you. So, is there some way that we therapists can identify the learning style of each client and use that to educate them and help alter the configuration of their brain cells to create positive change? Well, let's have a look at some of these learning styles.

The one that you're perhaps most familiar with is the one that's in all the NLP courses – VAK (Visual, Auditory, Kinaesthetic). Neil Fleming expanded the model to VARK (Visual, Auditory, Read/write, Kinaesthetic). The theory is that visual learners have a preference for seeing (so they like pictures, PowerPoint slides, diagrams, etc). Auditory learners

prefer listening (lectures, radio programmes, etc). Kinaesthetic learners like to learn from experience (hands-on, projects, experiments, etc). You listen to what your client says, and if they say lots of visual words and phrases, eg: "I see what you mean", "you've really illuminated the subject", they're visual. If they say, "that sounds right", they're auditory. And if they "feel your pain", they're kinaesthetic. Each person is meant to have a preferred learning style.

Another popular way of categorising learning comes from David Kolb. He based his work on the Experiential Learning Theory. The ELT model has two related approaches for gaining experience – Concrete Experience and Abstract Conceptualization – plus two related approaches for

transforming experience – Reflective Observation and Active Experimentation. His learning styles are:

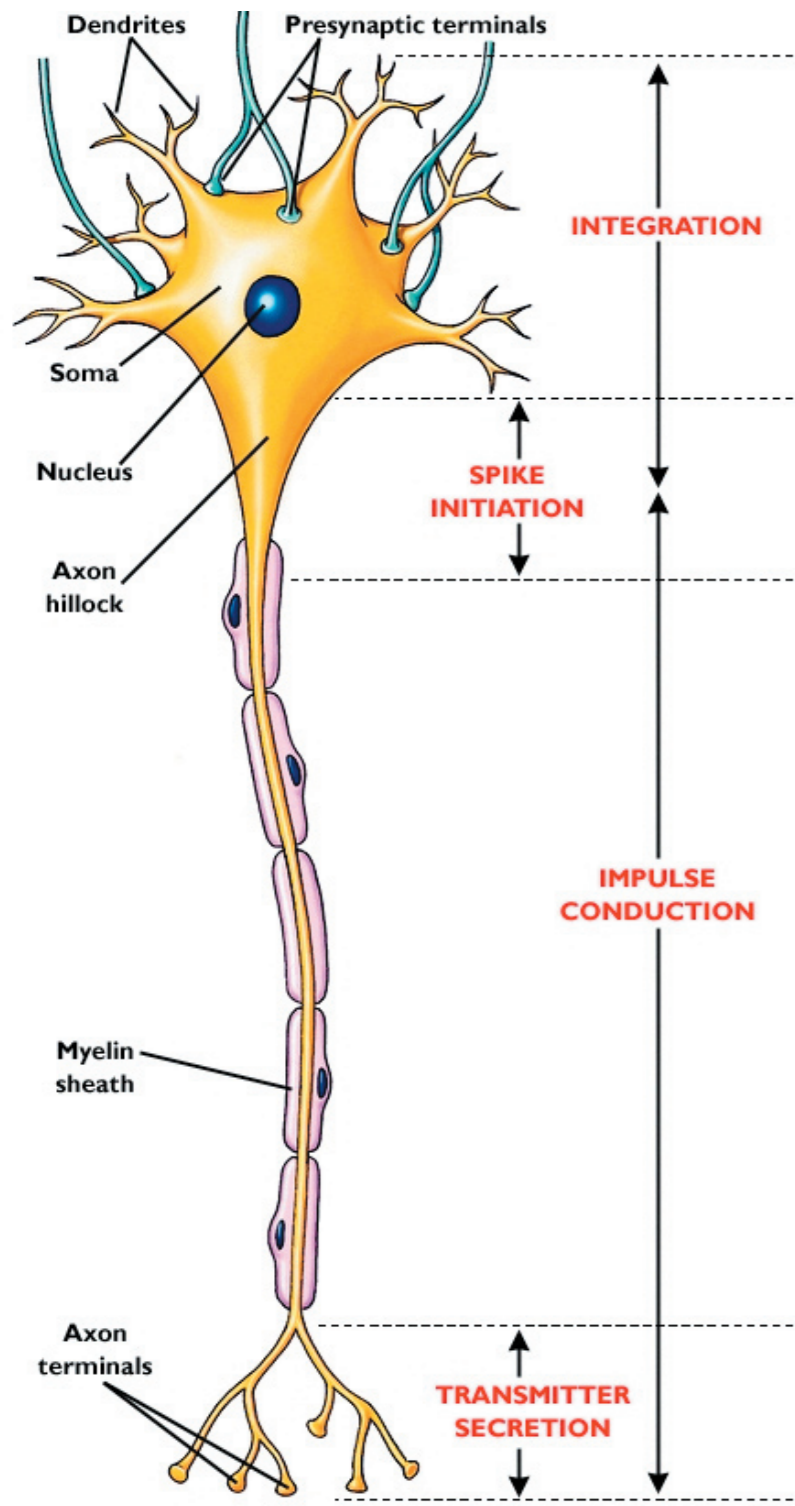
■ **Converger** – abstract conceptualisation and active experimentation. These clients will be good at making practical applications of ideas and using deductive reasoning to solve problems.

■ **Diverger** – concrete experience and reflective observation. These clients are imaginative and good at coming up with ideas as well as seeing things from different perspectives.

■ **Assimilator** – abstract conceptualisation and reflective observation. These clients can create theoretical models by means of inductive reasoning.

■ **Accommodator** – concrete experience and active experimentation. These clients are good at actively engaging with the world and actually doing things instead of merely reading about and studying them.

Identifying styles of learning can help your clients by Trevor Eddolls



Continued over...

Then there's Honey and Mumford's model of learning, which has four stages:

1. Having an experience
2. Reviewing the experience
3. Concluding from the experience
4. Planning the next steps.

Their styles were named Activist, Reflector, Theorist, and Pragmatist. There's a Honey & Mumford Learning Styles Questionnaire you could use to find out how your clients learn best!

The 4 MAT system is an NLP training style that allows the presenter to speak to all the different types of brains in the room at the same time. Bernice McCarthy developed the 4 MAT system based on other models of teaching. Basically, our clients ask four different questions as they go through the learning process:

- Why? Want to know the reason for learning (Divergers).
- What? Want to get the facts and concepts (Assimilators).
- How? Want to practice and do something (Convergers).
- What if? Want to try out variations (Accommodators).

Yet another model is Anthony Gregorc, which is based on a client's evaluation of the world by means of an approach that makes sense to them. There are two perceptual qualities – concrete and abstract – and two ordering abilities – random and sequential. There are four combinations of perceptual qualities and ordering abilities based on dominance.

So, which of these learning models should we apply? Sadly, it seems none of them really work. A report in 2004 by Coffield et al identified 71 different theories of learning style, but found that none of the most popular learning style theories had been adequately validated. Other researchers have tended to agree. Oh dear! So, where does that leave us? Well, right back where we started.

We know that human brains can learn, and change when learning takes place. So we therapists can use a repertoire of teaching methods in a scattergun way, hoping that some of what we say will be accepted by our client, and learning will take place, and that wonderfully plastic brain will arrange its cells appropriately and create more and more beneficial connections.

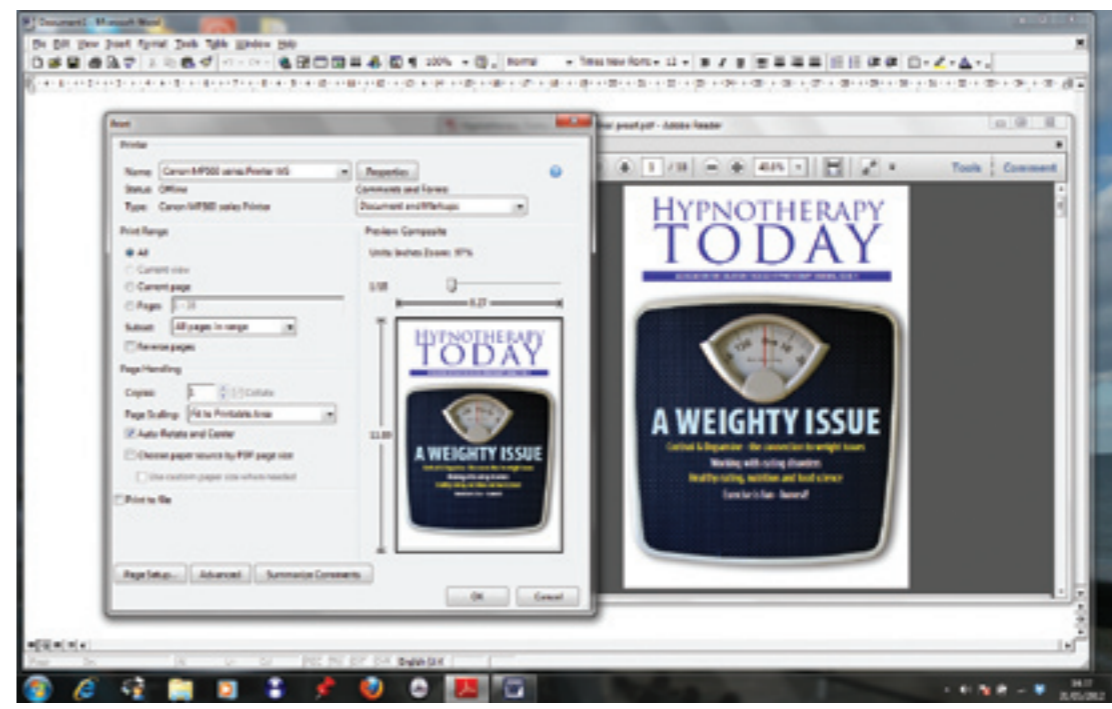
Remember, it seems people learn most when:

- They're relaxed
- The information is organized and presented in smallish chunks
- They're not tired.
- The information is repeated
- There aren't any distractions
- They're motivated.

So perhaps that's what we should focus on, and not worry about knowing or trying to identify the client's learning style. The important thing is that no matter how a client learns, given the right situation, learning will take place – and those plastic brains will get themselves into a good shape ■

PRINTING OFF!

Some of our members have had problems printing off copies, so here are some tips



highlighted, and the image in the top right hand corner will appear single.

If your printer prints on both sides (duplex) then by clicking in the duplex check box means your printer will save paper - however if you do this I highly recommend you print from page 1 otherwise you won't get the effect of spreads. You can bind it or staple it to keep all the pages together.

If you don't want to print off all the pages but just certain articles, then where it says "Pages" then choose the page numbers you need.

It became apparent at the AGM that a number of therapists were having trouble printing off Hypnotherapy Today, so I decided to give some clues as to what might be the problem.

For the moment, we have it as pdf for a number of reasons and it depends on what kind of printer you have, to how you print it off.

For PCs running Adobe Acrobat, as you type CTRL P to print, you will see the button marked "Properties" next to the printer you're sending it to.

If this is marked 2-on-1 printing, it will print both pages on one sheet of A4 - so the type will be very small. If you want to print each page on A4 make sure this check box is not

Some prefer to read it on a tablet, so if you require it as single pages instead of double page spread, this can be set up easily. Just email me at afsfhjourn@gmail.com with "single pages please" in the subject box.

