NEUROSCIENCE IN CORPORATE TRAINING: ALL HYPE OR PRACTICAL APPLICATIONS?

Most people still regard neuroscience as a pathway to cure mental illnesses and disorders such as Alheimer's disease, thereby passing by the possibility of an immediate impact on their everyday lives. In reality, however, research has produced a wealth of findings for improving our everyday functioning. More specifically, one speciality of neuroscience, educational neuroscience, provides us with a goldmine of insights in how our brain learns at work. Unfortunately, a lot of this valuable information is hidden in the dark basements of science. Our speaker, Margie Meacham, will help shed light on these recent scientific discoveries and help you distinguish the hype from practical things you can do today.

"The Brain Lady" uses brain science in her instuctional consulting practice based in Phoenix, Arizona, giving learning professionals practical applications for anybody who wants to help people learn. Her successful book, "Brain Matters: How to help anyone learn anything using neuroscience," leads the reader inside the human brain and links scientific discoveries to practical applications for any learning professional. Her latest book, "Brain Matters Too," will be available on Amazon in the Fall of 2017. It brings to light additional discoveries since her first book was published just two years ago. "The field is moving very quickly," says Meacham, "so I need to be sure and keep up with it for my readers."

In this interview we had the chance to talk with her about how we can put this exciting new information into practical action, the advantages of educational neuroscience and the pitfalls if it's not done with proper care.

How did you develop your interest in applying educational neuroscience to improve learning?
As a little girl I experienced many learning difficulties in first grade. Reading and math were a challenge to me. My teachers wanted to hold me back, but luckily my parents refused to accept their opinion and worked with me the whole summer to help me catch up to the other kids in my class. Although I always had to work harder than other students, I taught myself to overcome this mild learning disability and graduated at the top of my class. This experience taught me that everybody struggles with learning in some way. While there are many commonalities, each brain is unique, so if we figure out how our brain works best, we can all be succesfsul learners.

You made it your life goal to translate learning science to leaning professionals. What can learning professionals do to enhance their training and education programs?
We are just starting to unlock the code that makes the brain works, giving educators, teachers, corporate trainers and mentors new tools to help people learn. In order to make this research applicable for learning professionals, I identified 10 things every learning professional should know about developing, giving and evaluating training. These are all clear, actionable things. We'll be discussing this in detail during my masterclass at L&D talks.

The first principle for example, survival, explains why we need to feel safe in a training context in order to learn. The human brain is primarily a survival organ designed to solve problems related to surviving in an unstable environment. This survival imperative is key to understanding

the learning brain, because even though we face fewer daily threats to our physical survival in normal daily life than our ancient ancestors did, our brains can experience symbolic threats at the workplace. When we don't feel safe with a teacher or a boss, when we believe we will fail an exam, when we feel threatened by our peers or by the trainer, chances of learning are very small.

> "The field of neuroscience is really composed of many sciences, each of them shedding more light on the human brain and how it learns."

As a neuropsychologist, I often read a lot of nonsense about the brain based learning theme. Have you got any advise for our readers on how to distinguish between proper research and nonsense?

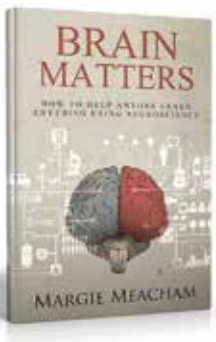
Indeed, if you search for the words 'brain based learning' in Google, you find a number of companies who make a lot of money without checking the scientific validity of their products. As a learning professional, it is important not to be fooled by all the hype succrounding neuroscience these days, but it's hard to stay on top of it and still do your demanding fulltime job. The good news is that you don't have to become a neuroscientist to incorporate learning science into your training practice. Just use your wonderfull brain and be critical of what you see. For example, check the references. Always try to work back to the original research and read the abstract. Who wrote it and what were their goals? Be very cautious of "studies" and "reports" put out by folks who are selling something. And foremost, if you can't find a clear application within a few minutes, file the information under "cool stuff," but don't change your current practice around it. There's been a lot of interesting research that just doesn't have a practical application for the learning professional, at least not yet. Before you run off and change what you're doing based on something you've read, take some time to reflect. Ask yourself how you would use this in your work as a learning professional.

If you had one piece of advice for learning professionals who want to apply neuroscience to corporate training, what would it be?

Apply it to your own learning first. Work with it, see if it helps you learn more effectively and then you can start helping others apply it.

Thank you!

Meet Margie Meacham, "The Brain Lady," on October 19 at the L&D masterclass. Her talk is recommended for all learning professionals who want to cut through the neuro-hype to find simple tips for applying brain science to enhance learning and performance. You will gain new insights about how learning takes place and how you can enhance the effectiveness of your next class using brain-aware instructional design techniques. ■



SOME FACTS

- Tap into emotions: Fewer fact and figures, and more stories and images that can elicit an emotional response, such as pride, excitement, or even fear, will get your message ore attention and be more memorable in time.
- Make it visual: 90% of the information that enters the brain is visual/ Look for a compelling way to get your numbers out in a visual manner by using infographics or other visual media.
- Guide the learner: Tell learners in advance what's important regarding what you are about to say and keep the information coming in short chunks.

As brother and sister, **Tom and Katelijn Nijsmans**, not only share their genes but also a passion for learning. They combined Tom's experience in L&D and Katelijn's knowledge as a neuropsychologist to found a training and consultancy firm, The Tipping Point.