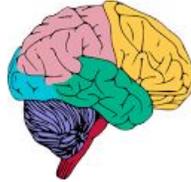


Tutor Tips

Understanding how we learn: the importance of a Multi-sensory teaching approach

How our brains learn



In order to be an effective tutor it is useful to have some understanding of how we learn and retain information in our long-term memory. Initially all sensory information is transmitted through a network of neurons by synapses along the neural pathways and stored temporarily in our short-term memory. Once processed in short-term memory, our brain's neural pathways carry these memories to the structural core, where they are compared with existing memories and stored in our long-term memory. The more senses that can be stimulated during the learning process, the more connections we are able to make in the structural core of the brain and the more likely we are to remember the information as a 'whole picture'.

So what is multi-sensory teaching?



Multi-sensory teaching strategies and techniques stimulate students on multiple levels. The main senses we are referring to regarding multisensory teaching are visual, auditory and kinesthetic (action/movement). A lot of classroom teaching is oral, but for students with poor working memory or poor auditory skills, this can be hugely problematic. Often visual stimuli can be added to oral information in the form of graphs, diagrams and pictures to aid the learning process. Additionally some students absorb more information through a kinesthetic approach and prefer to be more 'hands-on', doing practical activities, experiments, role play and so on. For example, perhaps your student is studying fractions in maths. Instead of simply providing reading material on this or giving verbal instruction, bring a food to dissect such as an apple. Give your student chance to touch, smell and taste an apple, cut it in half, in quarters and so on.

As tutors it can be easy to fall into the trap of only teaching students in the way that we personally learn. However, by observing and questioning our students, we should be presenting information to them in a way that suits their learning styles and plays to their strengths wherever possible. Multi-sensory teaching is useful for all students and can be particularly helpful for children with specific learning difficulties or difficulties maintaining focus and attention. Often

these students will have difficulty with processing auditory or visual information so simply reading or hearing information is less effective.

To fine tune our teaching even more, if an emotion can also be attached to a learning experience, such as happiness, love, excitement and so on (preferably not a negative emotion!), then the more powerful the learning experience is. So where possible, try injecting humour, storytelling, role play and a touch of drama to your lessons. The mind boggles at the endless possibilities!

Sources and Further Reading:

- <https://www.trainingindustry.com/content-development/articles/how-the-brain-learns.aspx>
- <http://www.lexiconreadingcenter.org/what-is-multisensory-teaching-techniques/>
- How the Brain Learns (4th Edition), by Davis A. Sousa, Corwin
- Study Strategies Made Easy, by Leslie Davis M.Ed. and Sandi Sirotowitz, M.Ed. with Harvey C. Parker, Ph.D