

Using Accelerated Learning

As a therapist you are probably aware that we are all being encouraged to undertake ongoing learning in the form of Continued Professional Development (CPD). And it's exciting that we have such a wealth of interesting courses to choose from. Some of you will have already started this ongoing learning process, taking short, one-day workshops or choosing to extend your knowledge with longer, full diplomas in subjects such as aromatherapy or sports massage. As a newly qualified therapist you may know in which areas you wish to specialize, or perhaps you have already chosen to study a broad range of topics, making you a well-qualified all-rounder. Or, perhaps there is so much choice you don't know where to start!

For some of you, however, your experiences of studying may not have been positive and the thought of having to do more of it is less than appealing. Many of you may have enjoyed the practical aspects of your chosen therapies but were less enamoured with the theory, including the anatomy and physiology lessons, perhaps because traditionally, theoretical subjects have been taught using "chalk and talk" methods. In other words, a teacher stands at the front of the room and talks for what seems like a very long period of time and you try to make notes whilst your gluteals start to ache! A few days later you realize that you have remembered very little of what was being said. For some of you, learning became challenging and even stressful.

However, those of us using accelerated learning methods know that learning can be a lot of fun and that there are many ways to help students retain information, and in a shorter time frame. Many teachers know about VAS: the theory that some of us learn best using visual means (such as seeing a picture or watching a video), some of us are predominantly auditory (relying more on listening), and others of us are kinesthetic (requiring touch in order to help us retain information).

In addition, some educators and many are choosing to adopt the theory of Howard Gardner who identified what he calls 'multiple intelligences', transferring Gardner's approach to their teaching. As a therapist, knowing your predominant intelligence type will help you to identify your preferred learning style and this can be used to help you learn more, faster and in an enjoyable way.

Basic Overview of Howard Gardner's Multiple Intelligences

- 1) Linguistic. If this is your predominant style you like words and language.
- 2) Logical-mathematical. You like learning using logic and numbers.
- 3) Musical. You learn best with opportunities for music, sound and rhythm
- 4) Bodily-physical. Learning needs to involve movement of your own body.
- 5) Visual-spatial. You like to explore patterns and images within space.
- 6) Interpersonal. You like to work with other people.
- 7) Intrapersonal. You are self-aware and need to self reflect.
- 8) Naturalist. You learn best when exposed to the environment in some way.

Accelerated learning is not just about learning styles. It embraces the learning environment, the way the brain works and how we interrelate with each other.

For now, I have chosen to illustrate how you might identify your learning style to enhance your understanding of muscles.

Read through this list and try to identify which intelligence, or learning style, each suggestion reflects. Tick those that appeal to you and then read my comment at the bottom of the list!



25 Ideas for learning muscles using accelerated learning methods

1. Make a model. Cut out the shapes of muscles or make them from modelling clay and attach them to a skeleton, either a picture of a skeleton or a real skeleton. (You can buy half-sized, anatomically correct skeletons for around £50).
2. Read about muscles in a book and using a pen highlight or underline key points. (A popular book at the moment is *The Trail Guide to the Body* by Andrew Biel.)
3. Copy muscles from a textbook onto your friends, using different coloured body crayons (available from fancy dress shops). With permission, take a photograph! This exercise greatly helps you with origins and insertions. For example, we all know trapezius covers the neck and posterior shoulders. After doing this exercise you will see where it inserts on the vertebrae. Are you surprised at how low down on the back it is?
4. Make up a mnemonic. For example, a popular mnemonic to help students learn carpals in the wrist is "Some Lovers Try Positions That They Can't Handle" (Scaphoid, Lunate, Triquetral, Trapezium, Trapezoid, Capitate, Hamate). Another one for the order in which thigh muscles attach to the medial side of the proximal tibia is "Say Grace before Tea" (Sartorius, Gracilis, Semitendinosus); the order in which tendons run around the medial malleoli (superior to inferior) is "Tom, Dick and Harry" (Tibialis Posterior, Flexor Digitorum longus, Flexor hallucis longus).
5. Make up a crossword or word search using muscle names.
6. Teach someone. Pick three muscles and teach their origins, insertions and actions to someone else. Having to teach something is a great way to learn it yourself. What resources do you need? Are you just going to say the names of the muscles and describe them or do you need some illustrations? A textbook? An overhead slide? A model?
7. Watch muscles on a video. A very good series is *The Video Atlas of Human Anatomy* by Robert Acland.
8. Act out combined muscle actions such as painting a ceiling, sit-stand, waving, etc. Consider which muscles you are using in each of these actions.
9. Imagine one of your muscles is damaged. What action/s are you now prevented from doing?
10. Group muscles into pairs. Consider agonists/antagonists, or flexors/extensors; adductors/abductors.
11. Compare human and animal models: For example, how do you think human spinal muscles different from those in a cat? List the similarities between a frog gastrocnemius and a human gastrocnemius; compare the muscles in the foot of a monkey with those of a human.
12. With a friend, each choose a muscle. Debate why your muscle is far superior than that of your friends. For example, if you choose soleus, why might it be a superior muscle to gastrocnemius? Why might teres major be better than teres minor? Is supraspinatus more or less important than deltoid?
13. Devise a 10 minute radio interview with a colleague, imagining that you are interviewing "Ravi Rhomboids" or "Patsy pectoralis," etc. What is their claim to fame?
14. "Ask what if..." What if we were all born without latissimus dorsi? What if we had no biceps? Or no triceps? What if we only had two quadriceps instead of four?
15. Devise a teaching chart that classifies muscles.



16. Make your own muscle cards. On each card draw a sketch of the muscle, list its origins and insertions and actions and any key points you want to remember. Carry three cards with you and whenever you have some spare time look at them and try to remember the information.
17. Visit a museum or exhibition displaying muscles.
18. Devise some questions relating to muscles and test your friends.
19. Consider how one or a group of muscles in humans is the same/dissimilar to the equivalent muscles in a horse.
20. Make it real. Attend a day in a dissection lab and see the muscles in situ. See the hamstrings, see the sciatic nerve, see the trapezius, the wrist extensors...(feel free to contact me for information on how this can be arranged)
21. Buy a large wall planner. On it stick small pictures of the muscles you are going to learn each week. Give yourself a treat each time you peel of a muscle from the chart!
22. Devise a muscle "mind map".
23. Devise a song incorporating two favourite muscles.
24. Devise a limerick about muscles. Have a competition with colleagues to see who can write the best limerick.
25. Consider which muscles are used when we do gardening. Try doing some gardening whilst contemplating this question!

Personal Comment: In teaching I use lots of overhead slides, video clips, models and pictures. On a personal level I have always needed pictures and models help make things real for me. Therefore, I have always believed myself to be highly visual and that this was my predominant learning style. However, looking through the handouts I had devised for use in my teaching I noticed something interesting. They were predominantly maths-logical in their approach, often requiring students to tick a box when they had completed some task. There was always a logical sequence to the handouts and I always had a fairly good idea of how long each of the class tasks would take, irrespective of whether there was 24 students in the class or 4. I realized that whilst I am indeed a visual learner, I also need information presented in a logical way. Going around an exhibition, for example, I get annoyed if the captions on models are not clear or if the sequence of displays seems illogical. I also need time to reflect on what I have learnt and notice that I always write up my notes after attending a conference, seminar, workshop or exhibition as this helps clarify and consolidate the information for me.

The take home message is that we all have more than one learning style and it is useful to try and access these as they will help us to learn and retain information. It is also likely, that the activities you enjoy most when learning are highly reflective of your preferred learning style. So next time you are planning to undertake some learning, whether attending a workshop or diploma course for example, consider in advance which activities might benefit you most and plan your learning around these. That way, you really can accelerate your learning!

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