



THE ROUND

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THEORIES DEBUNKED: LEARNING STYLES

One of the most ubiquitous theories in education today is the idea that individuals learn better if they are taught in their preferred learning style.

The most dominant of these theories is VAK: that learners have either visual, auditory or kinaesthetic preferences in how they are taught. So prevalent is the theory of learning styles, that a 2014 survey reported that over 90% of teachers agreed with the statement: "Individuals learn better when they receive information in their preferred learning style".

But guess what? There is absolutely no evidence to suggest this is true.

In 2008, psychologists Pashler, McDaniel, Rohrer and Bjork completed a review of the enormous wealth of research literature on learning styles and concluded that barely any of them actually tested the validity of the theory effectively.

Those that did test it, found the theory wanting. Further literature reviews by other academics have drawn similar conclusions.

Eminent cognitive psychologist Daniel Willingham has recorded a [short video](#) explaining why learning styles theory is a myth. He [explains](#) that whilst you might teach concepts with visual, auditory and kinaesthetic elements, it is far more important to tie the approach to **what** is being taught rather than **who** is being taught: the shape of a country is best taught visually, the pronunciation of a word in the French language is best taught auditorily, etc. So whilst we might believe that they have a preferred learning style, being taught in that particular style is not a worthwhile of effective approach.

As such, learning styles are now widely considered by cognitive experts to be a **neuromyth**.



LEARNING SCIENTISTS

THE BEST WAYS TO LEARN

The Learning Scientists are a group of cognitive psychological scientists who have taken their work to the internet over the past year in a bid to bring the science of learning to students and educators.

The group are made up of co-founders Dr. Megan Smith and Dr. Yana Weinstein-Jones, alongside Dr. Cindy Wooldridge and Dr. Carolina Kuepper-Tetzel.

Harnessing the power of social media platforms such as Facebook, Twitter, Tumblr and YouTube, their aims are threefold:

- to motivate students to study
- to increase the use of effective study and teaching strategies that are backed by research
- to decrease negative views of testing

The project began when Weinstein-Jones decided she needed to do more to get her work on improving study strategies to the people who need it: students and teachers. She started by searching Twitter for the words “test tomorrow” and began replying to these students with encouragement and advice on effective strategies.

It wasn't too long before Smith joined in and they'd created a dedicated Twitter account: [@AceThatTest](#). They now run a website too, and can often be seen delivering training to educators.

Their work is centred around six strategies that are supported by research:

- Spaced practice
- Retrieval practice
- Elaboration
- Interleaving
- Concrete examples
- Dual coding

[The Learning Scientists website](#) is a brilliant tool, packed with materials to explore these six strategies. On the website, they provide [videos explaining the strategies](#), as well as free [downloadable materials](#) to use with students, from posters to bookmarks to PowerPoint presentations. Plus they write an incredibly interesting blog exploring cognitive science and its applications in education.

Opposite is a summary poster of the strategies, designed by ex-special school headteacher turned concept visualiser Oliver Caglioli.



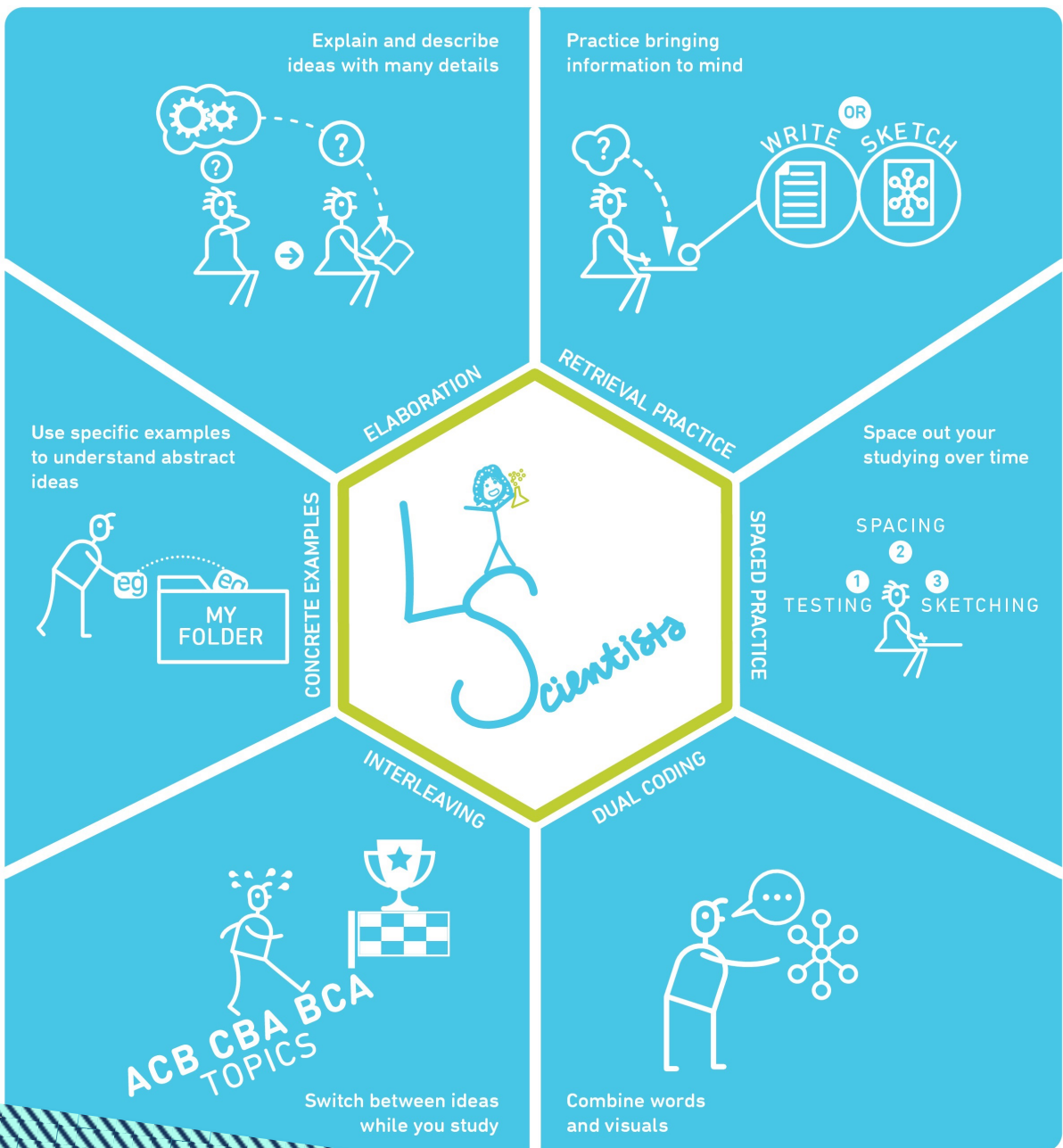
THE SIX STRATEGIES



Six Strategies for Effective Learning

LEARNINGSIENTISTS.ORG

All of these strategies have supporting evidence from cognitive psychology. For each strategy, we explain how to do it, some points to consider, and where to find more information.





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BLOGROLL

ARTICLES AND BLOGS YOU MIGHT FIND INTERESTING

[‘Close the Stable Doors: Effects of Motivation and Engagement on Learner Achievement?’](#) is an article by esteemed education researcher Paul A. Kirschner and consultant Mirjam Neelen. They cite recent studies on engagement and motivation which shake up our assumptions of the importance of these concepts for learning.

[‘Why practice makes perfect in education’](#) is a short article from the Cambridge Assessment blog, summarising a presentation from cognitive psychologist Dr. Helen Abadzi. Abadzi emphasises the importance of practice because, as she says, people are “basically prisoners to their working memory”.

[‘Research articles’](#) by senior leader Chris Moyse. Here, Chris links to some of the most important and influential pieces of research in recent years.

If you want to know a little bit more about any of the ideas in this edition, please don’t hesitate to email me – j.theobald@wildern.hants.sch.uk - or come and find me in Block 9!

James