

Effective Learning Strategies:

Dual Coding

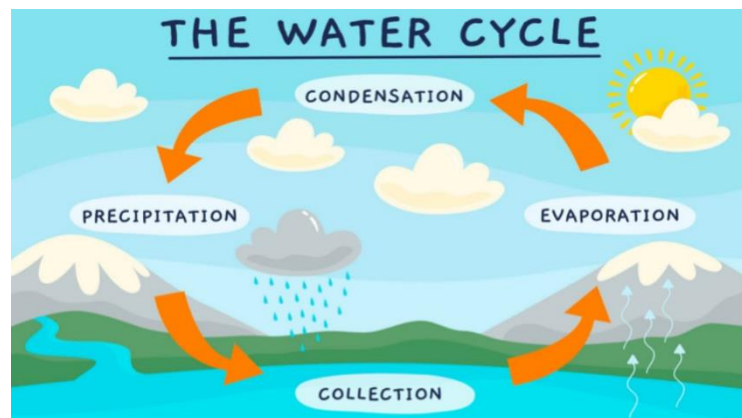
Much research has been carried out to find the most effective learning strategies. Just because they are effective doesn't mean that they are easy! In fact, you may find some of these strategies quite difficult to implement consistently. However, it is partly because they are challenging that they are so effective, so don't give up.

DUAL CODING is a strategy that helps in two ways. Firstly, it can help make ideas more concrete. Abstract concepts and lengthy explanations can be difficult to recall because they are difficult to visualise. **DUAL CODING** exercises force you to find a way of representing abstract ideas and lengthy explanations in a concise visual way, making the ideas more concrete. Secondly, it makes recall easier by creating multiple pathways to retrieving the same information. For example, it may be difficult to explain the water cycle by trying to recall lengthy passages you read in the textbook. You may remember some parts but not others. But, by recalling the diagram you drew to represent the different stages of the water cycle, you may find it easier to provide a fuller explanation as the visual clues provide the prompts you need to recall more information.

What is DUAL CODING?

DUAL CODING combines visual images with verbal information. Put simply, it is about converting diagrams and pictures into text, and text into diagrams and pictures.

For example, the picture on the right shows a visual representation of the water cycle. The arrows in the pictures show how the key concepts links together and the pictures provide visual clues as to how the overall concept may be explained.

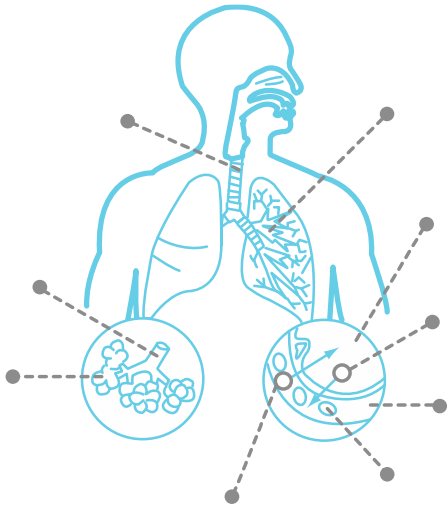


How do I implement DUAL CODING?

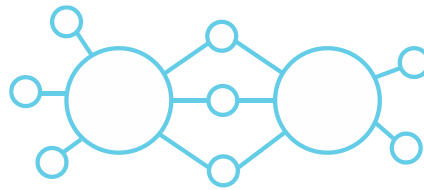
If you already have visuals and text, compare the two and check you understand how the visuals represent the words. You could even try to explain the visuals in your own words and then compare this to the verbal explanation provided.

If visuals have not already been provided, then it is time to create your own. There are many ways in which verbal information can be represented visually. Here are a few suggestions:

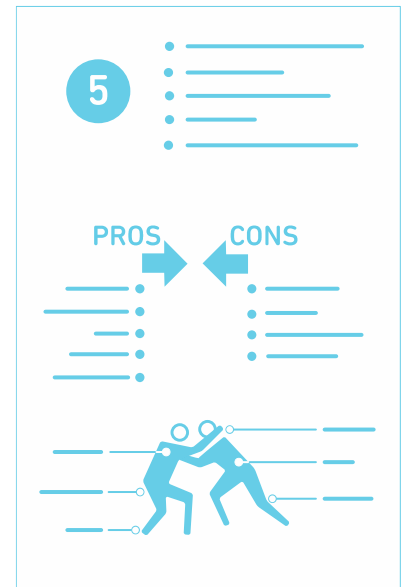
DIAGRAM



GRAPHIC ORGANIZER



INFOGRAPHIC



CARTOON STRIP



TIMELINE



These are great ways of consolidating your learning. To take it to the next level, you can practice recall by attempting to draw your visual cues from memory. From there you can then attempt to recount the information verbally.



THE LEARNING SCIENTISTS