



## PRIOR KNOWLEDGE & MEMORY

### The Primacy of Prior Knowledge

**Knowledge, or more specifically prior knowledge, is one of the most crucial factors influencing a person's ability to learn. When pupils are introduced to new ideas and concepts, they try to make sense of them by relating back to what they already know. The ability to recall previously learnt facts from memory assists the acquisition of new knowledge, allowing pupils to connect more complex ideas with their existing understanding. The weaker prior knowledge is, the more likely pupils are to develop misconceptions.**



Adapted from blog from Research and Policy Manager of EEF Harry Madgwick

• • • • • • • • • • •

**How can we ensure that pupils acquire knowledge in a way that allows them to make appropriate connections between words, concepts, and information?**

**To answer this question, we need to delve a little further into how knowledge is arranged in the mind.**

**One crucial theory that has emerged from cognitive science research is that humans develop and store information in their long-term memory, and that this is done by categorising knowledge into mental models also known as 'schemata'.**

**In all subject areas, pupils learn new ideas by linking those ideas to existing knowledge, organising this knowledge into increasingly complex mental models or "schemata"; carefully sequencing teaching to facilitate this process is important.**

Take a quick look at this BBC clip which explains simply 'How we learn: A quick guide to how the brain stores and retrieves information'

<https://www.bbc.co.uk/teach/teacher-support/latest-theories-on-how-we-learn/zjwm92p>

