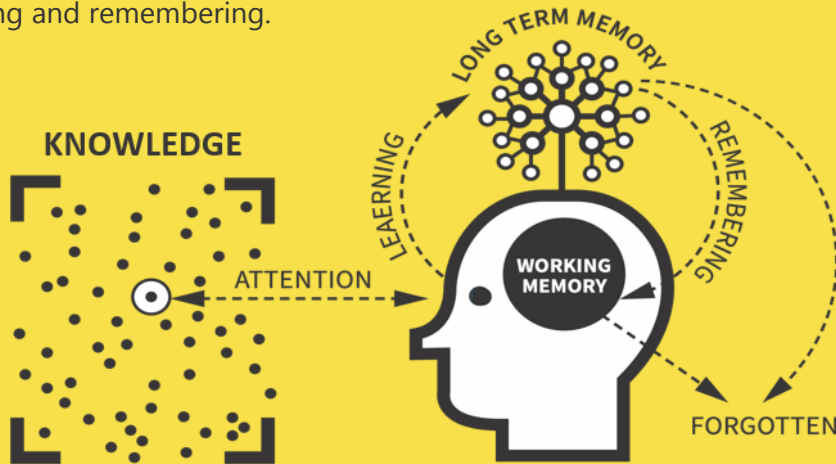


# What is learning?

To become a **successful learner** it is important to understand **what learning is** and **how we learn**. Learning can be defined as **“a change in the long-term memory.”** Willingham’s **Model of Memory** below illustrates how we learn and the relationship between attention, working memory, long-term memory, forgetting and remembering.



**(1) Attention** - The first stage of learning is paying attention to new information and knowledge. Attention is like a spotlight, focusing on specific information while trying to reduce distractions - concentration and motivation is vital. You are more likely to pay attention to new knowledge if it relates to something you already know. This 'prior knowledge' gives new information something to connect and 'stick' to. Once you pay attention to new information, it transfers through your eyes (visual) and ears (auditory) into your working memory.

**(2) Working Memory** - The second stage of learning is thinking about new knowledge in your 'working memory'. Working memory is where you process new information, it's like the brain's 'workspace', where you think about new knowledge. However, there is a limit to your working memory. Most people can only handle a few new pieces of information at a time; therefore, you should learn new material in chunks and small steps so that you are not overloaded at any one time.

**(3) Long-Term Memory** - The third stage of the learning process is the transfer (encoding) of new information from working memory to long-term memory. Encoding is like saving a file to a computer; it converts information into a format that can be stored and retrieved later. You can practice using your new knowledge to strengthen its storage in your long-term memory and you are more likely to recall this information if it is connected to existing knowledge, building your schema of a topic. Think of your memory as a filing cabinet and your schema of topics are the different folders, storing your knowledge.

**(4) Forgetting and Remembering** - The fourth stage of the learning process is forgetting and remembering. Forgetting information happens when memories are not accessed regularly. To combat forgetting, you need to use revision strategies such as spaced repetition, retrieval practice, and elaboration. Remembering involves retrieving information from long-term memory when needed. Retrieval practice activities are essential for improving your memory of new knowledge. Regularly recalling information strengthens your memory and makes it easier to retrieve that information in the future. Successful learners use quizzes, brain dumps, flash cards and other forms of retrieval practice to help them reinforce their learning and improve their long-term memory.