



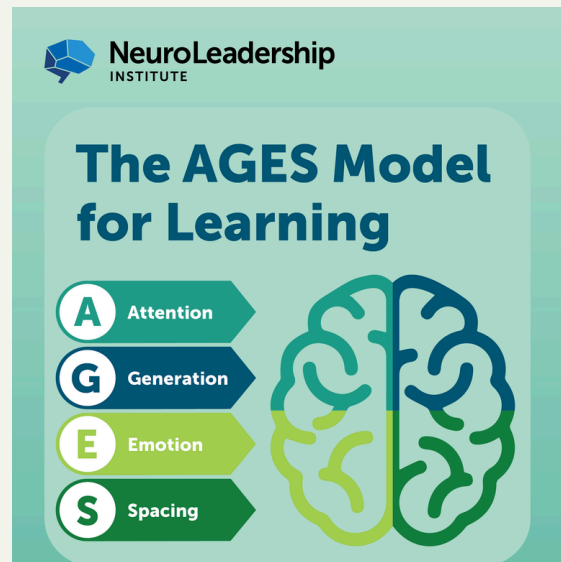
HOW THE BRAIN WORKS - THE PSYCHOLOGY OF LEARNING



01. Attention

Learning takes place when we activate a brain region known as the hippocampus. This occurs when we focus on one topic, without distractions. When we multi-task or let our minds wander, we're likely to deactivate the hippocampus and reduce how much learning takes place.

In short, attention matters because it's how our brain knows what we're trying to learn in the first place.



02. Generation

The second component involves how we engage with the material. We can't just absorb information passively; we must take an active, creative role. This stems from how the brain stores memory, as the hippocampus acts more like a web than a hard drive. The thicker and denser the web of memories, the stronger each individual memory becomes. As learners, we help strengthen that web when we actively create — or generate — those connections. One way to do that is by relating the new material to our existing web of knowledge.

03. Emotions

Emotions play a dual role in learning. First, they've been found to increase our attention to a given topic, which helps us focus. And second, emotions activate a brain region called the amygdala, which seems to alert the hippocampus that the material is important and worth encoding as memory.

04. Spacing

Finally, learning takes time. Instead of cramming information into our heads, only to forget it soon after, neuroscientists have long found that the brain really creates long-term memories through a spacing approach. That is, introduce concepts at a steady rate and wait some time before retrieving that information.