The science of learning

the education hub

is a multidisciplinary field that draws on neuroscience, psychology, and education research to better understand how we learn and the factors that influence learning, and to mobilise these understandings to enhance teaching and learning

Neuroscience is the scientific study of the brain and nervous system. It seeks to understand the biological basis of learning, memory, behaviour, perception, and consciousness. It explains how sensory, motor, and cognitive tasks are performed in the brain.

Psychology is the scientific study of the mind and behaviour. It is linked with neuroscience and involves the study of perception, cognition, attention, emotion, intelligence, subjective experiences, motivation, brain functioning, and personality.

Education research is concerned with education and learning processes, and the many factors that shape educational outcomes. It seeks to describe, understand, and explain how learning takes place and how formal and informal systems, policies, and contexts of education affect learning.

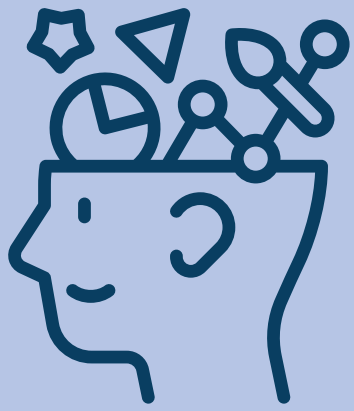
To use the science of learning in your classroom, consider both emotion and cognition, and how they work together.

Emotion:

- Build relationships and connection by getting to know your students
- Create an environment where it is safe to ask questions and take risks
- Learn how to support students' motivation and self-regulation

Cognition:

- Consider the learning trajectory from novice to expert, and employ teaching strategies appropriate to where students are on the trajectory in a given topic
- Learn about cognitive load and how to optimise it
- Use effective strategies for consolidating information in long-term memory, such as retrieval practice and spacing



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