

# Metacognition



## Overview

Metacognition is an awareness and understanding of one's own thought processes. It involves actively monitoring one's own learning and making changes to learning behaviors and strategies based on this monitoring. Metacognition includes knowledge, awareness, and control of one's own cognition.

(Peteranetz, 2016)



## Benefits of Metacognition

- ✓ Improves executive function and higher-order thinking
- ✓ Helps students become self-regulated and independent learners
- ✓ Has a positive impact on learning
- ✓ Empowers students with a growth mindset

*"Individuals skilled in metacognition are more likely to learn effectively, think critically, and adapt to new situations. They can better monitor and control their emotions, motivation, and attention, which can help them achieve their goals more effectively."*

(Burns, 2023)



## Helps Students to...



Set Goals



Self-assess



Revise



Reflect

(Wilson & Conyers, 2016)

## Research

Researchers have found that metacognition has a stronger, more consistent relationship with academic outcomes than virtually any other variable influence that has been researched, including student demographic variables, students' prior knowledge, student-teacher interactions, and socioeconomic status.

(Peteranetz, 2016)

## Metacognitive Strategies

Metacognitive strategies	.52
Strategy monitoring	.54
Self-verbalization/questioning	.58
Elaboration/organization	.75
Teacher clarity	.85
Planning & prediction	.83
Transfer strategies	.75
Cognitive task analysis	1.09

(Hattie, 2024, [www.VisibleLearningMetaX.com](http://www.VisibleLearningMetaX.com))

## The Learning Brain

- ★ The brain changes as new skills are learned & practiced
- ★ New concepts are learned thanks to a malleable brain
- ★ Learning gets easier as you progress
- ★ Monitoring learning and thinking can lead the brain to learning success

