# What We Improve



#### **METACOGNITION**

process used to plan, monitor and assess our own learning and performance.

Metacognition includes the critical awareness of a) one's thinking and learning and b) oneself as a thinker and learner.

#### **ATTENTION**

a state of focused awareness on a subset of the available perceptual information. It refers to the ability to focus on a piece of information, for the necessary period of time while avoiding distraction. Inattentiveness can cause learning difficulties in school and jeopardize professional success. Our ability to pay attention to the right things, ignore the wrong ones, and to do so for an extended time can be improved with cognitive training.

#### **WORKING MEMORY**

ability to hold information "in mind" and manipulate it. This skill acts as a mental sketchpad in short term memory as you encode new information.

Working memory is interconnected to executive function, creativity, problem solving, and is strongly associated with academic achievement. By optimizing our working memory, we can access more information, are better at manipulating it, and are able to find more novel solutions.

#### PROCESSING SPEED

The amount of time it takes to process information. It can refer to the input, output and/or the integration of information.

Processing speed reflects mental efficiency. Difficulty with slow processing speed can often impact executive functioning skills, and self esteem.

### **EXECUTIVE FUNCTION**

encompasses mental skills such as planning, greater metacognition, inhibition, mental flexibility, initiation, and monitoring of action.

Executive functioning relies on the strength of prefrontal lobe skills (such as attention, working memory, and processing speed) to allow our brains to properly manage, organize, and act on information.

## **LONG TERM MEMORY**

type of memory associated with the preservation of information for an extended period of time. Long term memory is essential for cumulative learning, problem solving, creativity, productivity and interpersonal relationships. We rely on our ability to identify what we need to remember and to store and recall information efficiently.

## **CRITICAL THINKING**

skills of interpretation, analysis, evaluation, inference, explanation, and self regulation.

Critical thinking transcends rote learning to encompass understanding, inferring, connecting, categorizing, and applying. It is vital to lifelong learning, career success, and contributions to society.