



Dr. Adele Diamond,  
Tier 1 Cognitive Developmental Neuroscientist,  
University of British Columbia, Canada

## WHAT ARE EXECUTIVE FUNCTIONS?

Executive functions (EFs) make possible mentally playing with ideas; taking the time to think before acting; meeting novel, unanticipated challenges; resisting temptations; and staying focused.

Core EFs are inhibition [response inhibition (self-control—resisting temptations and resisting acting impulsively) and interference control (selective attention and cognitive inhibition), working memory, and cognitive flexibility (including creatively thinking “outside the box,” seeing anything from different perspectives, and quickly and flexibly adapting to changed circumstances).\*

\*Extract courtesy of Annual Review of Psychology Volume 64, 2013 Diamond



### EXECUTIVE FUNCTIONS & ACADEMIC OUTCOMES

What does Dr. Adele Diamond say...

"Executive functions (EFs) are critical for success in school, on the job, and in life. EFs suffer if you are lonely, sad, stressed, or not physically fit.

Therefore, if we care about academic outcomes, we should care that students feel they are in a supportive community they can count on, that they are happy (even joyful), and that their bodies are strong and healthy."

\*Extract courtesy of Minn Symp Child Psychol. 2014; 37: 205–232



### EXECUTIVE FUNCTIONS & LITTLE MUSKETEERS

What does Dr. Adele Diamond say...

"Little Musketeers challenges all the critical executive functions -- including self-control, focused attention, working memory, and creative problem-solving -- in a way that's fun for kids. Kids clearly derive great joy from Little Musketeers; they help and encourage one another, and a supportive community develops; those emotional and social benefits of Little Musketeers work to support the executive function benefits of the program."