

## The Link Between Playful Learning, Self-Regulation & Academic Achievement

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- I. What is Self-Regulation/Executive Function?
  - A. Components of EF: Inhibitory, effortful, self-control: Being able to act appropriately when tempted to do otherwise; Ability to delay gratification; Stay on task even when bored; and Pay attention despite distractions (e.g., Blair, Zelazo, & Greenberg, 2005; Jones, Rothbart & Posner, 2003; Mischel et al, 2010)
  - B. Components of EF: Working Memory: Holding information in mind and being able to work with it; Being able to reflect on one's thinking; Weighing two different strategies for the same situation so you can choose the better one; Taking more than one perspective at a time (e.g., Baddeley, 1992; Roberts & Pennington, 1996; Zelazo, et al. 2003)
  - C. Components of EF: Cognitive Flexibility: Flexibly adjusting thinking, actions, and mental effort to changing demands of the situation; Intentionally investing more mental effort in tasks that are difficult; Necessary when you are multi-tasking (given two or three assignments at the same time) (e.g., Zelazo et al, 2003; Diamond 2006)
- II. Why is Self-Regulation /Executive Function Important?
  - A. Importance for the Learning and Academic Achievement (e.g., Blair 2002; Epsy et. al., 2004; Blair & Razza 2007; McClelland et al., 2007; Passolunghi et al., 2007 Specific Example: Evidence on EF and Reading (e.g., Blair, et. al. 2010; Pugh, et. al, 2006)
  - B. Importance for the Development of Social-Emotional Skills (e.g., Blair, 2002; Eisenberg, et. al., 2004; Calkins, & Marcovich, 2010; Blair, 2010; Center for the Developing Child at Harvard, 2011)
  - C. Toxic Stress & Academic Achievement (e. g., Blair, 2012; National Council on the Developing Child, 2010)
- III. How Self-Regulation /Executive Function Develops—The Vygotskian Approach
  - A. Regulation **by** others, regulation **of** others, and then self-regulation
  - B. EF development in preschool and kindergarten: Mature Intentional Make-Believe Play (Dramatization) and its Role in Self-Regulation (e.g., Vygotsky, 1977; 1983; Diamond et. al., 2007; Diamond & Lee, 2011, Manuilenko. 1948)
  - C. Playful Learning activities –Learning Games with embedded EF practice (e.g., Bodrova & Leong, 2007; 2005)

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