# **VIRTUAL kit: EXECUTIVE FUNCTION & SELF-REGULATION – LAYING THE FOUNDATION FOR ACADEMIC SUCCESS**

**Kit QT**

Executive function and self-regulation skills have been identified as strong predictors of high levels of classroom engagement, motivation, and school adjustment, as well as better relationships with teachers and peers, and an easier time at school. “Children who struggle with self-regulation skills have difficulty building and maintaining relationships, paying attention, following directions, and controlling unwanted impulses, all of which impact learning.” (McClelland & Tominey, 2016, p.1). It is easy to see that any discussion related to school readiness or cognitive development in early childhood MUST include how to support the development of executive function and self-regulation skills. But what exactly does that mean?

Executive function is defined by Meriam-Webster as “the group of complex mental processes and cognitive abilities that control the skills required for goal-directed behavior (Merriam-Webster, 2019). These are the skills that allow people, children and adults alike, to have cognitive control over their behavior and include the following three brain functions:

**Cognitive Flexibility**—the ability to focus on a task, then switch to a new task when appropriate. This includes skills such as paying attention and ignoring distractions, switching focus from one task to another, and listening to directions.

**Working Memory**—the ability to remember and process information. This includes skills such as using short-term memory, remembering directions, and recalling information, facts, or instructions.

**Inhibitory Control**—the ability to control impulses & select a better option. This includes skills such as waiting for a turn, self-calming when upset or excited, and using pro-social skills and problem solving in conflict rather than aggression.

In turn, self-regulation refers to the ability to coordinate all of these executive function tasks. It is commonplace for early childhood educators to find ways to teach pre-academic skills such as letters, numbers, shapes, and colors, but what skills, activities, and relationships are necessary to teach executive functioning and self-regulation? This Virtual Kit will lead you to resources to help understand the concept of executive function and self-regulation, while giving you resources to implement with young children to support their development.

**SHOW ME – I NEED IT TOMORROW**

[Center on the Developing Child—Harvard University: Executive Function & Self-Regulation](https://developingchild.harvard.edu/science/key-concepts/executive-function/)

[What is Executive Function? And How Does It Relate to Child Development?](https://developingchild.harvard.edu/resources/what-is-executive-function-and-how-does-it-relate-to-child-development/?utm_source=newsletter&utm_medium=email&utm_campaign=april_2019)

[Enhancing and Practicing Executive Function Skills with Children from Infancy to Adolescence](https://developingchild.harvard.edu/resources/activities-guide-enhancing-and-practicing-executive-function-skills-with-children-from-infancy-to-adolescence/)

[Build Self-Regulation Skills During Large-Group Time](https://highscope.org/scaffolding-executive-function-and-self-regulation/)

[Important New Findings: Self-Regulation and Pretend Play Link to Learning in Young Children](http://www.communityplaythings.com/resources/articles/2013/important-new-findings)

[Cognitive Self-Regulation: Know-See-Do-Improve](https://eclkc.ohs.acf.hhs.gov/school-readiness/effective-practice-guides/cognitive-self-regulation)

BOOK: Stop, Think, Act by Megan McClelland & Shauna Tominey—While not an online resource, this book is full of “I Need It Tomorrow” ideas for implementation of activities in your program, and can be accessed through the KITS ECRC.

**WHAT DOES THIS LOOK LIKE IN PRACTICE? (I HAVE A LITTLE MORE TIME TO READ ABOUT THIS)**

[Preschoolers’ Executive Function: Importance, Contributors, Research Needs and Assessment Options](http://nieer.org/wp-content/uploads/2017/05/Friedman-Krauss_Executive_Function_2017.pdf)

**WHAT DOES THE ECRC HAVE ON THIS TOPIC?**

Below are selected resources from the Early Childhood Resource Center. For additional resources go to the [KITS website](http://kskits.org/) and access the Early Childhood Resource Center catalog by clicking on [ECRC](https://opac.libraryworld.com/opac/home.php), or call (620) 421-6550 ext. 1638 for personal assistance.

* McClelland, M. M. & Tominey, S. L. (2016). *Stop, think, act: Integrating self-regulation in the early childhood classroom*. New York: Routledge.
* Hirsh-Pasek, K. & Golinkoff, R. M. (2003). *Einstein never used flash cards: How our children REALLY learn—and why they need to play more and memorize less*. USA: Rodale Inc.
* Siegel, D. & Bryson, T. (2011). *The Whole-Brain Child: 12 revolutionary strategies to nurture your child’s developing mind*. New York: Delacorte Press.

**HOW CAN I FIND TRAINING/TRAINING MATERIALS ON THIS TOPIC?**

* **KCCTO-KITS ITSN Community Based Training on the** [KITS website](http://kskits.org/).
  + **Academic AND Play-Based: Building Cognitive Skills Through Play**—ITSN Community-Based Training
* Visit collaborative training calendars on the [KITS website](http://kskits.org/).

To inquire about a specific class, contact the KCCTO office at 785-532-7197 or visit KCCTO.org

**IF YOU THOUGHT THIS WAS HELPFUL YOU MIGHT ALSO LIKE**

* [Support Social Competence Through Strategies for Birth-5 (Social Emotional) (2017)](http://kskits.org/sites/kskits.drupal.ku.edu/files/docs/Support_Social_Competence_%282017%29.pdf) (.pdf)
* [Temperament (2018)](http://kskits.org/sites/kskits.drupal.ku.edu/files/docs/Temperament_%282018%29.pdf) (.pdf)

**WHAT IF I STILL NEED HELP?**

You may request technical assistance for the KCCTO-KITS Infant Toddler Specialist Network by calling the KCCTO office at 800-227-3578.

**EVALUATION**

Please take a minute to complete a brief survey on the Virtual Kits page to let us know what you think about this virtual kit, and what other topics you would like to see addressed in the future.

**References**

Center on the Developing Child at Harvard University (2014). [Enhancing and Practicing Executive Function Skills with Children from Infancy to Adolescence](http://www.developingchild.harvard.edu/).

McClelland, M. M. & Tominey, S. L. (2016). *Stop, think, act: Integrating self-regulation in the early childhood classroom*. New York: Routledge.