



MEASURE WHAT MATTERS!



Measuring Results in Montessori Education

We are thrilled to announce our partnership with the National Center for Montessori in the Public Sector to provide training and tools to measure Executive Function using the Minnesota Executive Function Scale (MEFS) in classrooms!

The National Center for Montessori in the Public Sector (NCMPS) in Washington, D.C., is dedicated to cultivating the Montessori education method. Working with teachers and schools, the NCMPS provides consultation, coaching services, workshops, measurement tools, and more. This partnership is set to launch in October 2016. Together with Reflection Sciences, the NCMPS will introduce the new program at eight training locations and will offer the MEFS to their partner schools around the US.

Visit our website to learn more!
<http://reflectionsociences.com/>

Preschools: What They're Missing

Many preschools in the US focus on building a strong foundation of basics. A child's success over the course of a school year is measured by how high they can count and how well they can read. Their achievements are tangible.

But what sets the foundation for learning and achievement? Research suggests that there may be a greater element involved in academic success aside from ABC's and 123's: **executive function**.

Executive function skills develop slowly over the course of early childhood. Researchers have detected a significant jump in executive functioning from ages 3 to 6, when a child is entering preschool years. If neglected, children may miss this early opportunity, leading to disorganization and impulse control issues in adolescence into adulthood. With practice and support, on the other hand, these early skills will continue to develop into elementary school, middle school, high school, college, and beyond.

To read the full article by Rebecca Givens Rolland, a speech pathologist and specialist in early childhood development, visit: <http://www.usatoday.com/story/opinion/2016/06/02/missing-big-preschool-education-opportunity-column/84601984/>



Ain't Misbehavin' by Tamara Spiewak Toub, Ph. D.

Three-year-old Sam and his mother are playing in the front yard. She tosses him a ball, it bounces down the hill and into the street. Sam happily runs after the ball, while his mom yells, "Stop right there!" Sam keeps running, chasing his ball across the road. He safely gets to the other side, where he throws his body on top of the ball and laughs.

Sam is overjoyed! But his mother is thinking: "Thank God he's okay – he could have gotten hurt! He knows better than that! Why doesn't he respect me? Why doesn't he care about rules?"

Many of us feel and think these things when children don't listen. But there are some questions missing from that list that are really important: "Why *couldn't* he listen to me / respect me / follow the rules? How can I help him to *think before he acts*?"

If you ask Sam, "Should you chase a ball into the street?" he'd probably say, "No!". It is also likely that Sam cares about doing what he's supposed to do and would choose to listen to his mom...if he could.

At age 3, Sam, like his peers, has trouble stopping himself from acting impulsively. In the heat of the moment, when he sees his ball bounce into the street, he doesn't *decide* to chase after it even though it's dangerous and against the rules. He chases after it because he wants to and there's no time to think about options, the pros and cons, and what he will do. He just skips to doing it.

As adults, we know not to do things so impulsively, and we (mostly) know how to take a step back and think before we act. We have developed the executive function skills to help control our thoughts, emotions, and behaviors.

When children "misbehave" by breaking the rules, running after they've been told to stop, hitting

when they get angry – we often respond with punishments, like time-outs. These penalties do not often help anyone. And why would it help, if children simply don't have the EF skills to "behave"?



Many schools in the US are turning to approaches that establish a set of clear behavioral expectations, training students in the underlying skills, and providing opportunities for them to practice and to get positive feedback for appropriate behavior. Similarly, some clinical programs designed to address children's challenging behaviors specifically focus on how adults can support children's EF development.

EF skills are built slowly. Games like "Simon Says" and "Red Light, Green Light," are simple, fun ways to get children exercising their EF skills by first thinking about when and how to move. Adults can also coach children to manage their emotions, like by taking deep breaths when they start to feel angry.

If we ourselves can think flexibly, we can rethink children's "misbehaviors." Instead of, "Why won't they...?" let's try asking, "Why can't they...?" Help them to build their EF skills – not only so they will follow our rules but, importantly, so they can wait their turn, be good friends, focus during school, and be more curious and creative. Let's take a deep breath ourselves and give it a try!

Executive Function: What is it and why does it matter?

Alyssa Meuwissen, Reflection Sciences Trainer, worked with the Search Institute in Minneapolis to help communicate to educators and parents about the importance of EF. She explains that executive function is often thought of as the 'Air Traffic Controller' of the brain. The table below describes how the three components of EF, *working memory*, *cognitive flexibility*, and *inhibitory control* act according to an air traffic controller in a child's brain:

	Air Traffic Controller	Child
Working Memory	I can safely land multiple planes at the same time, by imagining the path each plane has to take and giving directions to each plane without forgetting about the others.	I can follow directions that have multiple steps. If someone asks me to put on my coat, hat, and mittens, I can keep in mind what I have already done and what I need to do next.
Cognitive Flexibility	I can recognize the specific needs of each plane, switch my attention from one plane to another, and follow different procedures for different planes so that each plane lands safely.	I can adjust my behavior to the situation I am in. For example, I follow different rules when I am at the library versus at the park.
Inhibitory Control	I can keep my focus on the planes I am directing, and not get distracted by other people's conversations or actions.	I can do what I am supposed to do rather than what I want to do. For example, when asked to clean up, I can put my toys away instead of playing with each toy I pick up.

To read Alyssa's full article, visit:
<http://www.search-institute.org/downloadable/exec-function-feb-2015.pdf>

The "X" Factor in Early Education

Now that you have a firm grasp on what EF means and why it is important, what can you do to improve your child's executive functioning? Dr. Stephanie Carlson has found, through her research, that activities that promote EF skills in early childhood have one thing in common: they all encourage reflection. Reflecting on a situation allows the child to take a step back and consider other options or viewpoints. Here are a few research-based activities you can do with your child to promote EF:

- Create routines
- Practice thinking out loud
- Help "just enough" and not "too much"
- Try games like Red Light, Green Light or Simon Says
- Encourage pretend play
- Keep it challenging

See her full article on SouthEast Education Network here:
<http://www.seenmagazine.us/Articles/Article-Detail/ArticleId/5645/Executive-Function-Skills-The-X-Factor-in-Early-Education>

