

Learning and the Brain:

The Top Six Things Parents and Educators Must Know

By Cindy Goldrich, Ed.M., ACAC

I recently went to an *amazing* conference in Virginia attended by the top Neuropsychologist and Educators in the country. Three days of intense learning about HOW kids really learn best, what makes learning and performing more challenging for some kids, and what we can all do to improve our education system – both at home and at school. I am excited to share what I have learned this year in my new Teacher Trainings and Parent Workshops.

While it is difficult to boil three days of learning into a brief article, I thought I would share my top “takeaways” from the conference. Feel free to reach out to me with any questions or insights this brings up for you.

Top Takeaways from Learning and the Brain Conference: Executive Skills for School Success

1. THINK PROCESS, NOT JUST CONTENT

We have known for years that the Prefrontal Cortex area of the brain is responsible for planning complex cognitive behavior, personality expression, decision-making, and moderating social behavior. This is typically known as the Executive Function of the brain. The complex set of skills that make up Executive Function are responsible for *HOW efficiently we do what we DECIDE to do*.

Research now shows that “25% of the explanation for performance on all kinds of measures, including IQ tests, is predicted not by *how much you know* but by *how you demonstrate* what you know; that is, the strategies you use to take the test or do the assignment”. Sam Goldstein, Neuropsychologist

2. WATCH OUT FOR STRESS

We all know that there has been an explosion and expansion regarding WHAT kids today are expected to learn and memorize. Science now shows what may wise parents and teachers already knew: When we expect kids to learn too much, too fast, the stress level for many kids increases and their brain actually shuts down. Under stress, the primitive part of the brain takes over and, like other animals, we tend to act out, or zone out, the way animals flight, fight, or freeze. Reducing the stress (and possibly reducing the expectations in the short term) will allow kids to be more available and able to learn and perform.

3. DON'T EVER GIVE UP HOPE

The brain that you “build” early on with exposure to vocabulary, activities, and experiences will still have the foundational blocks developed during that time in place to excel in life, even if there is a delay or a need to catch up due to difficulties in the learning environment or personal struggles. The brain your children built will still be there in later years. And we now have strong evidence that the brain is plastic. Learning continues as long as we actively stimulate the brain. Be patient and positive. School struggles don't need to dictate ones future.

4. TEACH YOUR KIDS ABOUT THEIR BRAIN

Knowing how the brain works let's you know how to use it better - memorize more, learn more, understand more, etc. It is vital that kids know and believe that their intelligence CAN grow and they CAN learn. Check out the work of Carol Dweck, Mindset). Showing kids a bit of the science about the brain – the Executive Functions and the impact of stress, can give them a greater sense of control and belief that their choice's greatly impact their destiny – both now and for the future.

5. HELP KIDS LEARN THE VALUE OF SELF-TALK: METACOGNITION

The conversation we have with ourselves teaches us and guides us throughout life. Self-talk is actually a developmental skill that often is lagging in some children – and adults. Involving your child in the PROCESS of what you are doing with them and for them allows them to experience the planning, time management, complexities, etc. involved in goal setting, achieving, balancing different needs and desires, etc.. Asking them questions rather than focusing on giving them the plan and solutions is a powerful way to build their metacognitive skills.

6. SLEEP AND EXERCISE REALLY **DO** MATTER – A LOT!!

A few quick research facts to ponder:

1. A study showed that 6th graders functioned more like 4th graders in demonstrating their knowledge when they stayed up 40 minutes later 3 nights in a row.
2. In a Canadian study of 500 children, kids with a daily hour of active exercise far outperformed children in exams without exercise.

It's not enough for parents to have this information – students and schools must embrace this as well. There are trade offs with everything – academic learning is only part of the equation for success.

The most important ingredient for a child's learning environment is that they feel safe; that they can feel free to be curious and experiment, and that they will be treated with respect and care. That it's okay for them to make mistakes and not feel too rushed to move on to the next hurdle too quickly. This will cause the most positive brain changes and greatest outcome.

Written by Cindy Goldrich, Ed.M., ACAC Certified ADHD Parent Coach. Originally published in Special-ism© 2013, www.special-ism.com. All rights reserved. Articles may be reproduced or electronically distributed as long as attribution to Special-ism is maintained.