

Understanding Learning

Each of us is endowed with our own unique mind that contains wonderful specialties and obvious frailties. Our individualized profile of strengths and challenges is rooted in the incredibly complex, inborn circuitry of our brains. Because of this wiring, we will not only face some obstacles but also innumerable opportunities.

As adults, we have the luxury of choosing to work and play in ways that take advantage of our assets and, thus, we are rewarded for our strengths and areas of specialization. But our children don't have that luxury. School demands that students be great generalists even though, according to Dr. Mel Levine, many kids display evidence of "premature specialization." So how do we help students optimize their learning so that they can take full advantage of all that their minds have to offer?

First, we must develop each child's unique toolbox of neurodevelopmental functions. The most basic tool used to learn is called a neurodevelopmental function. We each have our own unique set of these functions that support learning and allow us to demonstrate what we know. Each skill we learn in school and in life calls upon a different combination of these incredible instruments. Given the complexity of this system, it is not surprising that some functions work better than others. Clinicians now have the ability to define the unique profile of neurodevelopmental strengths and weaknesses of each child, which can be used to form the foundation of a plan to further develop this toolbox.

Second, we are learning more and more about our brain's neuroplasticity - the ability for the brain to reorganize itself by forming new neural connections in response to experience. Much like we can build the muscles in our body through exercise, we can develop our neurodevelopmental functions with a specific plan that "exercises" them. Having an understanding of our profiles of strengths and weaknesses in a very specific way becomes the first step in developing that exercise plan.

Third, we can use our strengths and affinities to develop weak neurodevelopmental functions. Each of us is more likely to engage in a task when we find it interesting or when we feel that we can be successful. Consequently, the best way to build our weaknesses is by leveraging our strengths and taking advantage of our affinities (passions) whenever possible. This will make the process of "exercising" a weak pathway more engaging and effective.

Take Tommy, for example. Although everyone knew he was bright, Tommy had significant challenges keeping up with work in 4th grade. His mother reported he experienced challenges learning to read in 1st and 2nd grades but made tremendous gains in that area, though he never chose to read for pleasure. During the learning assessment at Success in Mind, we identified that Tommy did, indeed, have neurodevelopmental weaknesses that were affecting his reading decoding. However, he learned to compensate for these weaknesses by using his wonderful language skills. As a result, he was very effective at using the context of a paragraph to help him decode individual words. However, when the words were presented in isolation, his challenge became apparent. We developed a plan that could be implemented at home and in school which would take advantage of Tommy's superb understanding of language as well as his passion for cars to help him exercise his weaknesses in memory that were ultimately affecting his reading decoding. We all finished the assessment day feeling optimistic that Tommy would learn to read efficiently in order to keep up in school.

There are many resources to help you understand your child's specific profile of strengths and weaknesses (see our Resource Center at www.success-in-mind.org). Work with your child and his teachers to better understand both his strengths and his weaknesses. Continue to support him in exploring his affinities and, whenever possible, help him develop the habit of mind to deeply learn about something of interest.

If you found this article helpful, keep an eye out for more to come. Each newsletter will have a section that helps you understand the linkages between the various neurodevelopmental functions and the academic skills that they support.