Similar to other children, when seven-year-old Adam arrived to the Speech-Language Pathology Department, he was a little leery of having extensive testing in a new environment with some lady he had never met before. His parents explained the situation and asked if it would be possible to be present for the evaluation. Absolutely. I pulled in two more chairs and we were ready to go. After an initial interview with Adam and his parents, I reached for the first test manual and set it up on the table. Adam was clearly uneasy; he was quietly shifting and seemed to be pulled into himself. I looked him in the eye and told him there was one thing that he needed to know before we started testing. I motioned toward the beanie-baby penguin that was on the windowsill between us. Don’t listen to the penguin, I said, he tells kids the wrong answers. He started with a smile and we briefly discussed the problems the penguins unacceptable behavior had caused in the past. He was in a better space and willingly started testing.

The first test that Adam was asked to complete required Adam to read individuals words. I will never forget the amount of whole-body energy that this child put toward attempting to read. He eyed the word, as though ready to grab it if it were to move. He gripped the edge of the table, shifted his weight back and forth, pursed his lips, and furrowed his brow. He had absolutely no idea how to attack the word to decode it, but he had more determination that I had ever seen housed in a such a small body. We moved on to other reading-related tasks where Adam had varying levels of mastery. Throughout the evaluation, Adam discussed the penguin’s interjections. At one point he deferred his uncertainty about his response and asked if he had gotten the previous item incorrect-explaining that the penguin had given him the answer. At other points during the lengthy testing session, Adam requested that the penguin be given a timeout for being bad, a “talking to” by Adam’s father since he hadn’t learned his lesson, and finally Adam asked that the penguin be moved across the room because he was being “just too disruptive.” I began to feel confident in Adam’s potential for learning to read; his interest in pretending with the penguin showed me that he would more than likely take to learning the code of written language through learning fantasy-based stories to help him remember the sounds that letters make and the seemingly arbitrary rules required for decoding the written word.

The results of that morning’s evaluation quantitatively showed a significant delay in reading and a significant deficit in verbal working memory. Qualitatively, it was clear that Adam struggled to express himself. In fact, he spoke with such struggle that it appeared to his listeners as though he was stuttering. Adam’s disfluency, however, was not a motor-based or blocked-sounding type of speech impairment as is typically found in stuttering. Rather, Adam’s sound repetition, word repetitions, and frequent stalling interjections were the result of a language-based impairment; an overarching
impoverished ability to plan his thoughts. Knowing his reading profile and listening to his expression, it seemed that Adam had a poorly organized system for language processing. For reading, disorganization was seen in his difficulty keeping sounds in sequence in order to blend them into words. In language, disorganization was noted in his difficulty sequencing his thoughts into an understandable story. To compound the difficulty, Adam’s limited working memory capacity made retaining sounds or information while he tried to sequence them a legitimate fight. My working hypothesis thus started to emerge: Adam was disorganized.

My theory held true when I found that in order to truly learn and integrate the four steps required to decode a word, Adam required whole-body involvement. We had to go beyond the typical amount of explanation, examples, visual aids, and repetition required for a child with language and working memory deficits. It wasn’t until we moved out into the hall and set up a literal step by step approach to reading, where Adam’s body wasn’t allowed to move on to the next step until his mind had, that Adam’s mind mastered the order in which the steps had to be accomplished. This was starting to make sense: Adam’s body was very linked to his mind. This must be linked to why Adam’s occupational therapist recommended horseback riding to help Adam get his body in rhythm. The pattern and biofeedback that successful horseback riding requires maybe was linked to the necessity of executing a series of steps for reading.

This seemingly well thought-out explanation of my patient’s learning profile quickly escaped me when I realized the sheer amount of knowledge this child had accumulated and his superior level of reasoning. In my readings and based on my experience, it seemed contrary to my theoretical model that a child with such profound organizational issues would be able to efficiently store information, never mind use that stored information and apply high-level analysis. In discussion with Adam’s parents and his classroom teacher, I learned that everyday was a new day for Adam. Each morning his mother would walk him into his second grade classroom. Each morning she would ask him what she thought he would need to do when he arrived. Each morning he would welcome the seemingly new idea of his teacher’s mantra “tag, bag, chair”: flip over your name tag, hang up your bag, and take down your chair. He was not recognizing patterns in a daily routine. Yet this same child, when introduced to the concept of needing to work in order to have things be organized, explained that the process was similar to buying something: you don’t want to have to spend the money, but you are happy once you have what you bought. Strangely, Adam was not recognizing the simple, straightforward patterns that children are expected to learn. Instead, he was recognizing highly complex patterns and making very relevant abstract associations.

Over the course of teaching Adam to read, I had worked extensively with Adam’s school reading specialist to ensure consistent practice of structured decoding. She came to observe sessions with me at the hospital and we discussed Adam’s progress and peculiarities regularly. With these organizational concerns crossing the reading boundary into overall learning, it was clear that I needed input from his classroom teacher to identify how what I was seeing in the therapy room was played out in the more dynamic classroom setting. I hoped that learning more about his everyday function would help
guide my therapy to something meaningful to Adam. The school was stumped, however. They knew something didn’t seem right and expressed the potential of “counseling him out” of the private school. More probing led me to what I was suspecting: Adam didn’t recognize systems, he was always looking for lost papers, and he was getting up to get pencils at inopportune moments. His teacher explained that he didn’t seem to grasp the basic organization of charts, yet he was impressing his teachers and peers with intellectually curious questions, sincere empathy for people and animals they read about, and a wit that far exceeded his years.

One of the most fantastic things about Adam’s thinking is his premature ability to analyze it. This helps his instructors tremendously, not only in teaching a skill and the reason for learning it, but this meta-analysis also supports independent generalization of the skill. Adam’s mind loves structure and organization. I introduced him to structures for expressing his thoughts. First I showed him a hierarchical chart for categorizing information. Using this chart, Adam was shown how a topic, its main ideas, and their details can be arranged visually and shown how to use it for expression. He was surprisingly quick to pick up that when one provides information by overwhelming the audience with details, a chaotic (or at best tangential) explanation results. Similar structures were introduced for recognizing spatial patterns (such as anticipating what a third grade classroom would look like based on his knowledge of a second grade classroom), for predicting events based on routines (e.g. morning routine, bedtime routine) and for retelling an event (i.e., characters, setting, problem, emotions, plan, attempts, resolution, possible morals).

Slowly, through reinforced practice, Adam is learning these structures and generalizing them. Like with his reading, it will take a lot of repetition and likely some unconventional therapy to ingrain these new ideas in order for them to become automatic. Today, Adam still struggles with organizing his verbal expression sufficiently enough to speak fluently. He also still struggles with fluent reading; it seems that similar to his mind, his eyes don’t know where to focus their attention. But he is learning about his own learning and demonstrating signs of this. For this child, this is the best prognostic sign I can imagine.

The part of this case that I find the most promising happened recently. Adam’s parents, reaching their limit with the principal’s looming threat to remove their son from the prestigious school, wrote a letter to the principal requesting a grace period of a year to let their son continue on without the pressure of needing to perform. Adam’s father wrote an impassioned letter eloquently describing his son’s learning profile, his dedication in therapy, his growth over the past years, his almost constant ability to defy the odds, and his need to be allowed to be a child. He explained it was time to give the constant doubt in Adam’s potential a rest. The description that Adam’s father provided was better than my graduate level education in this field could have provided because he not only knew what I had explained to him, but he saw the daily impact on his child. The school was convinced, at least for the time being. All this time of working with Adam and explaining his strengths and weaknesses to his parents, I hadn’t realized how much his parents had absorbed. They know were the informal leaders of Adam’s cheering squad- a cheering squad in which I feel exceedingly fortunate to have been able to play a role.
I will continue to work with Adam on fundamental organization and basic pattern recognition in his language and in his world. I continued to be impressed with the abstract associations that he constructs in order to demonstrate his mastery of new organizational concepts. In the last conversation I had with Adam’s teacher a few weeks ago, she explained that Adam seems to be “settling in” to third grade; he seems calmer and more aware of his surroundings. Although I attribute the majority to Adam’s maturity, I hope that my work with Adam has helped him recognize patterns, expect the predictable, and see structure in the otherwise chaotic so that his mind may now make the routine be routine and his energy may be channeled into his intellectual curiosities.