Welcome!

The primary focus of my practice is neuropsychological assessment. The main reason parents of school aged children, older students, and adults decide to be assessed is to obtain a clearer picture of how the person learns best, and to better understand obstacles which make learning more difficult than expected. Example: the student is found to have visual-spatial reasoning difficulties, and this helps us understand why math is so difficult, or why understanding charts/diagrams simply doesn't seem to click.

Understanding how a student learns best, of course, helps the student become a more efficient/effective worker, builds self-confidence, and in general is a relief! A relief, because students often conclude they are incapable and stupid. Assessment helps teachers draw on their own considerable professional experience, and use strategies which help the student experience more consistent success. Parents understand where, and how to help, and when not to help.

Since learning is a student's primary job, whether in preschool or sitting for a licensing exam, it's typical that students with undiagnosed learning and attention problems also can be very anxious, have blow ups, be unusually irritable, generate self-defeating thoughts, and finds ways to avoid work.

Here are examples of questions I'm asked:

- Why is Megan having such a difficult time learning to read?
- Our son's school thinks he has problems with attention and focus. Could he have AD/HD? He is adopted, and his birth mother has attention problems.
- Our child was a low weight, preterm infant, and we are wondering if that has anything to do with her learning problems?
- Tom doesn't seem to know how to connect with peers, is disorganized, and has problems understanding complex readings. But his reading when younger was just fine. What would help him be more successful?
- Martin is a dyslexic learner, and we want to see if he'll qualify for accommodations when he begins college in the fall?

What is neuropsychological testing?

Testing is simply a methodical way to gather information about a student. Tests are carefully constructed, piloted, revised, and are statistically sound. This means that a student's results can be compared his/her age/gender peers throughout the United States. Examples: How does my student's ability to understand concepts compare with others her age? or, Is my child's reading comprehension at grade level?

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will be very important for me to review that material. It is also important to understand

the child's development, health, and if there is a family history of learning difficulties. You can think of this process as looking at the student from different perspectives, and getting the most accurate picture possible.

Testing helps pinpoint learning strengths and learning glitches, and the picture which emerges from all the information should help the student, teachers, and parents better understand how a child learns and how learning can be supported so the student is more successful, confident, supported and understood both at home and in the classroom.

Testing can also help pinpoint areas in which a student needs special help from a professional, e.g., a math tutor, a learning specialist, speech and language assistance, social skills help, or a referral to a behavioral pediatrician for an attention problem.

Testing can also help pinpoint areas in which a student needs accommodations in the classroom, at home, and on standardized tests like the SATs or ERBs. Examples of accommodations are: extended time to complete work, use of a laptop, having texts on CD, methods to supplement notes, and being able to routinely use a calculator in the classroom. Sometimes a student may have a primary problem with attention, and accommodations can be given to help him/her succeed, e.g., sitting near the center of attention, or being able to move during class in a way which aides focus and is not distracting to peers.

The basic neuropsychological assessment consists of:

- 1. Taking a careful history
- 2. Reviewing records
- 3. Reviewing rating scales completed by parents, teachers and the student. This includes: behavior, learning, attention, emotions, social skills, and adaptive functioning.
- 4. Tests of reasoning and information processing
- 5. Tests of visual-motor integration
- 6. Tests of attention, memory and executive functioning
- 7. Tests of academic achievement
- 8. Taking tests, as needed, with built in accommodations, e.g., extended time.
- 9. A comprehensive neuropsychological assessment report

Feedback appointments with parents and the student.

Questions about educational and neuropsychological testing:

Particularly over the past ten years parents, teachers, learning specialists and psychologists have become more and more aware of learning differences and disabilities. There is a flood of information which can help us better understand how to reach every student, but the quantity, content, and quality can be confusing, contradictory, and sometimes overly zealous. There really are no instant "cure alls" for learning problems.

Because parents and teachers are more aware that detecting learning problems can really help children better succeed as students; recommendations for testing have increased. Testing is recommended because it is one important way to begin figuring out how a student learns best and how to help her/him succeed.

When parents contact me about the possibility of testing a daughter or son there are many questions they have: What tests I use? Will their child feel badly about being tested? and, Will test information really help? I thought it might be useful to answer some of these typical questions, and that's what I'm about to do.

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What kind of tests are there?

All kinds. A skilled tester will be able to think about a student and then draw on a number of tests which will help clarify how this student learns. It's like having a shelf of reference books available and knowing which volumes are going to help you get useful information.

The tester should also know when the assistance of a colleague's skills are warranted. Example: It looks like a student has problems with language comprehension. Should the child also be seen by a speech and language specialist? In fact, I truly think that team evaluations are extremely helpful because you are obtaining the observations and advice of skilled professionals working together. This is the culture I was trained in at the Children's Health Council at Stanford.

There are some very good tests available. They may be used by counselors, teachers, educational therapists, or psychologists depending on the questions being asked and the qualifications required to do the testing. The core group of tests used have been carefully developed so that information gathered about your student can be compared with what is typically expected of a child his/her age. **The tester will carefully think about how a student performs within tests and between tests.** Examples: Why does the student miss easier items on a test but then answer more difficult ones? Testing shows a student's understanding of math concepts is excellent but his/her ability to correctly calculate math problems are poor. Why and what can help?

Typically the tester is interested in comparing the student's intellectual capabilities with achievement in specified academic areas. The tester finds the student is very bright but her reading rate, decoding, and comprehension are well below her intellectual abilities. She also has problems with letter formation and word problems. Is this student a dyslexic learner?

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The student is usually given a variety of tests. This is called a test battery. The battery will include measures of attention, planning, reasoning, memory, fluency, writing, math and reading. No test is a "golden measure" of a child's abilities. Tests don't "tell" us something, rather it's the person testing who carefully thinks about all the information gathered, and weighs that along with his/her own experience working with children and teens. A clear picture does emerge from consultation, observation, test scores, behavior, history, and professional experience. Tests do not measure such valuable qualities as artistic talent, ability to be compassionate, love of nature, and sense of humor.

Here are some of the standard tests I use depending on what seems necessary to administer in order to get a better sense of the student.

Wechsler Intelligence Scales Learning capabilities in such areas

as:

Preschool, Primary, School Age, Adult. Test used depends on age and/or abilities of the student.

Dr Charles P Roth

Language problem solving, visual problem solving, short-term auditory attention and active working

memory, & speed of processing letter number information.

Wechsler Individual Achievement Test, 2

How does a child's achievement in reading, math, and writing compare with age peers? What are specific strengths/weakness in these areas?

Wechsler Intelligence Scale for Children IV, Integrated

Given after administration of the WISC, IV. This excellent test helps pinpoint possible learning strategies which will help the student.

Conners' Continuous Performance Test, 2

What is a child's ability to visually attend over time? Is he/she impulsive, cautious, inattentive, and how well does she/he process visual information?

Wide Range Assessment of Memory and Learning, 2

Measures verbal, auditory, visual and active working memory. Memory with context, and memory for symbolic information. Memory after delay, and memory with prompts and repetition.

Rey Complex Figure Test and Recognition Trial

Visual and visual-motor planning and organization. Immediate and delayed visual memory, and visual memory with prompts/cues.

Delis-Kaplan Executive Function System

Measures executive functions such as: flexible thinking, planning, reasoning, word retrieval, attention, and motor control.

Parents generally complete a developmental intake questionnaire, and the BASC, 2 and Conners 3 Scales. Teachers also complete equivalent forms.

I may have a student fill out a few questionnaires which help me understand how problems with learning may be affecting how the student feels about him/herself. Example: Sometimes a student is really worried about not doing well, but may not be talking about that with parents.

There are instances in which getting more information about a child's emotions would be helpful. I might have the child do a sentence completion questionnaire, or tell me stories about pictures showing kids: alone, with peers, and with adults. This type of test can also help me understand how a student organizes and expresses thought.

Sometimes parents need very specific information and the evaluation will be more limited. Example: A test of cognitive abilities (WISC, IV) is needed as part of a school application. This testing, nevertheless, will still involve information beyond the test itself, e.g., reviewing previous testing, talking with the parents and child, or consulting with a learning specialist who has given the child the Woodcock Johnson. It is really unwise to administer and interpret a test in a vacuum, and I do not work this way. I also will not administer and report scores only. Scores can be misinterpreted apart from interpretation.

I use a diagnostic teaching approach in my work. This means that I give tests in the prescribed standard manner, and I may then introduce changes which allow me to see how a child does with modifications. Example: I may notice a child loses the line when working, and I might provide a guide or encourage the child to point and name to see if this improves learning and problem solving. The use of the WISC IV Integrated is really helpful since there are built in, normed "accommodations," which help us understand, for instance, if a child's memory improves when given a multiple choice format. Perhaps a child has real difficulty with math word problems on the WISC IV, but will do well when the same problems are simply presented as numbers on a worksheet.

What happens after testing is administered?

The first step is to score and begin interpreting.

My usual way of proceeding is to **make an outline of my report, and have the parents come in for a feed back appointment.** Approximately two weeks after the parent conference I will have the final draft of the report finished. I think of myself as a learning consultant for parents, and it is the parents who own the report and the findings.

I try to avoid jargon in my reports and to make specific connections between the findings and what they mean in the classroom. Example: "I found that Matt's visual memory for what words look like is weak, and that means many times when he runs across a word he can't pull the meaning right out of his memory instead he has to decode it again and again. This makes reading slow, and many kids with this problem put so much effort into sorting out the printed words they are seeing that they lose the meaning. No wonder Matt looks distracted during periods of silent sustained reading." This would be followed by a recommendation of what might help: "Matt should work with a reading specialist learning tricks to help him improve his sight vocabulary. It would be helpful if the specialist was trained in both the Orton-Gillingham and Lindamood Bell

systems. Kids with reading fluency problems can also really benefit from having texts on CD, or a software system which reads aloud."

Some parents ask me to come to a Student Study Team meeting at their child's school to discuss the findings with the teachers and learning specialist, and many parents ask me to talk with their child. I think this is a terrific idea; one which Dr. Mel Levine calls "demystification." A child is generally very relieved to know why reading, math, attention, or organization is such a chore. Kids often compare themselves negatively with their classmates, think they aren't smart, and feel bad about homework battles with parents.

This can also help improve a child's parents and teacher's attitudes: moving from frustration and thinking of a child as "lazy," to understanding why the child is having problems with learning.

I have almost universally found that children and teens do not feel badly about being tested. I avoid the term "Doctor," and try to create an atmosphere in which the child understands that we are trying to figure out how she/he learns best. Kids get this and are generally very cooperative.

I find that most private school teachers understand learning differences, and are willing to help these children succeed. Public schools are required by law to offer accommodations and remediation if the testing finds them necessary and the IEP team agrees. Accommodations only, called a 504 plan, are generally much easier to put into place than special education services such as daily reading assistance by a learning specialist.

Finally, I think one of the best things the parents of a learning disabled child can do is: get educated, and learn to be a reasonable advocate for your child. I think parents can get very worried, teachers can have varied understanding of learning problems, and a counterproductive interchange between home and school can result.

Visit my website for my recommendations for good sources for parents to become better educated: http://www.drcproth.com/resources

Want to read more? Further reading published by Dr Roth:

Neuropsycological testing: In plain English? http://www.drcproth.com/neuropsycological-testing-in-plain-english.pdf

ADHD Brain Functioning http://www.drcproth.com/adhd-brain-functioning.pdf

Thoughts about ADHD http://www.drcrproth.com/adhd-thoughts-about-adhd.pdf

Dyslexia: Facts

http://www.drcproth.com/dyslexia-facts.pdf