

Why Every Child Should Be Individually Assessed

Would a patient with severe stomach pain receive surgery or medication without obtaining an evaluation? Hopefully not. He probably wouldn't consent to surgery unless the doctor had some tests to confirm its necessity. In the dental office, X-rays are considered fundamental in determining the extent of decay or deterioration. And most of us certainly wouldn't buy prescription eyeglasses without an eye doctor's examination to determine correct visual needs. Yet, in education, instruction and intervention *without* diagnostic assessment are the norm. People routinely submit their children to years of education without the benefit of an individually administered examination to determine readiness, learning needs, styles, and limitations.

This is astonishing, especially in light of the evidence that learning and developmental disorders afflict nearly 20% of the school-aged population. In addition, many more children with differences struggle to meet curricular rigors or adult expectations that are inappropriate to their abilities, maturity, or neurological functioning. Every child should be individually assessed to monitor development, identify basic personality and learning styles, plan suitable instructional and motivational strategies and environments, and to detect learning or emotional problems for early and effective remediation.

Assessment is a time-limited, formal process that collects clinical information from many sources in order to reach a diagnosis, to make a prognosis, to render hypotheses about the person's condition, and to determine instructional and other interventions. Although it includes "tests", assessment is a broader process that integrates numerous measurements with professional clinical interpretation specific to an individual. Assessment may result in diagnoses, but its greater goal is to identify combinations and interactions of strengths and weaknesses in aspects of human functioning that have particular relevance to learning and problem-solving (both academically and interpersonally).

Why Aren't Children Routinely Assessed?

Generally, children (or adults) are assessed only when there is a perceived crisis or when symptoms are manifest that perplex others.

The lack of routine individual assessment is attributable to four factors:

1. Financial constraints.
2. Skepticism and fear about educational and psychological testing.
3. Ignorance about the purposes and needs for assessment and misinformation about tests.
4. Absence of crises or noticeably disturbing symptoms or blanket denial that anything may be wrong.

For children at risk, off-track, or in trouble, none of these factors justifies the years of frustration, failure, and family heartache that competent assessment can avert.

According to the California State Department of Education and the Budget act under Proposition 98, the average per pupil expenditure was \$7,002.00 for the 2001-02 school year. In today's dollars, this means that the average child's entire public education (K-12) costs \$91,026.00.

Given the thousands of dollars spent each year per pupil on education and the tens of thousands spent over the course of each child's education, it is quite sensible to spend a small fraction of this sum on the individual assessment that provides direction and effectiveness for the time, money, and effort spent educating each child. Consider for a moment: Would it be sensible to buy a Mercedes Benz and not afford insurance or snow tires? This, then, is the analogous paradox of spending vast sums to educate children without providing the guidance, direction, and preventive protection afforded by individual assessment.

Don't They Test Children at School?

Children must indeed submit to many tests in school — however, such testing rarely constitutes individual assessment. Most of the testing administered is pencil-and-paper *group* testing, which yields much information about the conformity of groups of students to a standard curriculum, but relatively little useful information about the capabilities, learning styles, motivations, and differences among individuals. In general, schools give two types of tests: standardized achievement tests and teacher-made tests. Standardized achievement tests (e.g., CTBS, CAP, Stanford Achievement) are normed on large numbers of students in California or nationwide. They are curriculum-bound in content, yield general information about students' mastery of curricular material, and are intended for use in comparing the relative standings in academic achievement among *groups of students* — that is, *schools*.

Teacher-made tests are given to students to measure the extent to which the children have “learned” the material taught in class and to provide feedback about students' progress. Unfortunately, many teacher-made tests are notoriously unreliable, do not provide accurate and timely feedback to improve learning, are often used in coercive and punishing ways, and supply little (if any) diagnostic information targeted to help the student improve. Additionally, the group testing system uses only a pencil-and-paper

format, and has inherent biases that tend to reward the good test-takers and penalize the poor test-takers, irrespective of actual achievement or ability.

What About Individual Assessments?

Public school districts employ trained specialists who can administer reputable and useful individual tests. Federal and state laws mandate that the schools identify children with exceptional needs and provide free and appropriate education. School personnel often initiate the request for individual assessments; however, parents may also make the request. In either case, the school must legally follow through with assessments, written reports, and meetings within a specified time (usually 50 days). Although these services are available, it is important for parents to realize that mobilizing them requires a suspected disability that adversely affects a student's education. There are many instances where parents want specific information on their child's functioning; yet, school districts have become more stringent and discriminating about the circumstances when they deem individual testing warranted.

This often leaves parents with the choice of struggling against the schools or obtaining a private assessment. An independent private assessment is a wise course of action on several counts. First, a competent and experienced practitioner (especially someone with a background in educational psychology) will usually provide a more comprehensive and targeted assessment. Second, the private practitioner is not biased or restricted by the administrative agenda and policies of the school. Third, the private assessment information can be selectively used to assist the school staff in teaching the child; in situations where disputes exist between the educators' and the parents' views about what is appropriate for the child, the independent assessment can shed light (and evidentiary data) on appropriate decision-making and services.

What Should a Competent Assessment Include?

Assessment has purposes beyond labeling and diagnosing. Comprehensive assessment uses a scientific methodology that compares thousands of data points to distinguish among conditions that would account for the same sets of data. The job of the examiner is to guide you and your child through this process and turn up with information that can alert you to difficulties and help you achieve defined goals.

Have the assessment done by someone appropriately trained and licensed (preferably with a doctoral degree). Assessment is a clinical process, and should investigate all areas of development relevant to your child's functioning or suspected difficulties. Tests, observations, records, and interviews are tools — but there is no substitute for experienced clinical judgment. When a child manifests symptoms of significant underachievement or maladjustment, a differential diagnosis is necessary to pinpoint the source of the problem. Proper assessment (just like medical diagnosis) uses scientific techniques to "rule out" different disorders that can present similar symptoms.

The assessment process should include a consultation with you, a written report of the results, and specific recommendations for implementation in your child's learning and home environments. Don't settle for some test scores you don't understand plus a statement about whether or not your child qualifies for special services. Look for the following information in your child's assessment:

- Intellectual capacity for school.
- An equating of school achievement with intellectual potentials.
- An alert to reading, spelling, arithmetic, listening, language, memory, or writing problems.
- Measurement of perceptual-motor capacity.
- Discovery of dominant learning modality — auditory, visual-spatial, kinesthetic, mixed.
- Determination of developmental grade level and discrepancies in standard score terms.
- Insight into cognitive style — convergent and divergent.
- Assessment of factors affecting development, family/peer adjustment, and school performance — self-esteem, motivation, anxiety, depression, anger, and other emotional indicators.
- An alert to developing attitude problems and contribution of stressors.
- Identification of temperament, interpersonal strengths and weaknesses, and influences on learning.

After the assessment is completed, you may want to apprise your child's educators of the results and how they influence your child's learning, development, and achievement. Getting school staff to implement the results and recommendations can be tricky, but advocating for your child is a major role you can play in modeling responsibility and ensuring a suitable environment for growth.

Levels of Assessment

It is understandable that tests are intimidating to many people. Perhaps our culture and our professional community have erred in the interpretation and meaning often assigned to tests, as well as the agendas they have served. Regrettably, tests are sometimes used to exclude people or to weed out some from opportunities for which they are deemed unfit.

When used appropriately and diagnostically, tests can save time, pinpoint areas of need, and greatly guide diagnosis, description, and meaningful interventions and recommendations. I have used tests strategically and invaluablely for 27 years in providing assistance to children and adults. It is simply good professional practice.

However, most of the public and much of the professional community misunderstands or misjudges fundamental elements and principles of testing and assessment. Unfortunately, the competitive applications of testing have obscured the broader scientific bases for the measurement of individual differences.

Most testing (and the general perception of testing) is based on an expectation and familiarity with a mode known as *level of performance*. Though level of performance is

only one facet of assessment, it is the aspect most people recognize. Let's review the larger picture:

1. Level of Performance

Level of performance testing encompasses how well the subject (examinee) does. This is measured either in reference to a similar population (group of children the same age, for example) or to a criterion standard (e.g., number of words spelled correctly). The vast majority of tests yield information only in the level of performance domain. Norm-referenced, criterion-referenced, and mastery-referenced scoring systems all compare performance levels, though how they compare them varies. This information is basic and useful because it assesses competencies and shows them in reference to known or assumed standards.

Intelligence tests, academic tests, personality tests, etc. reveal information about how a person performs relative to the performance of others. You can think of level of performance as measuring the height, for instance, of all fourth-graders, or measuring how many push-ups each child does, or reading levels of all the students. One could then rank order the scores and judge a particular child's demonstrated competency or position within the group.

What this information does not reveal is whether the performance shows abnormalities or anomalies with respect to the individual's own self. For this, we need to use other neuropsychological techniques.

2. Occurrence of Specific Deficits (Pathognomonic Signs)

Pathognomonic sign testing is concerned with errors and performance deviations that occur almost exclusively among certain populations. For example, as a medical analog, consider tuberculosis or AIDS. Although the blood and skin of people differ, positive markers for AIDS or tuberculosis would only be expected to occur in people carrying these diseases. In a population comprising people with and without these diseases, we could gather lots of measurements across which people with and without the diseases would differ. However, specific signs would distinguish the people with tuberculosis or AIDS because these signs do not occur in others.

Pregnancy is another example. Though it is not a pathological condition, pregnancy is a good example of the principle of pathognomonic sign testing. You (women only, please) can be a little or a lot pregnant, but as far as pregnancy testing goes, the main consideration is whether you are or are not pregnant. Only pregnant women have certain blood and urine characteristics.

Let's take this a step further with regard to behavior. Would you ever expect to drive into your neighbor's driveway thinking it's your own? Or put your key into your neighbor's door lock, mistaking it for your own apartment? Or confuse a sink with a toilet? Hardly. These silly examples give a sense of the breach represented by specific deficits. In neuropsychological testing, the breach occurrences are subtler, but they are highly significant.

3. Patterns and Relationships Among Test Scores

As Mark Twain once said, “There are liars, damn liars, and statisticians.” Test scores alone can be misinterpreted. A scientific guard against this is the clinical and mathematical analysis of combinations of scores and patterns and relationships among the scores and performances. The old saw — *where there’s smoke, there’s fire* — must be subjected to the rigorous scrutiny of comparing performance variability with known profiles of deviations in brain function.

Does the examinee show striking variability in scores on different tests that fits a pattern with regard to the known functions of the two cerebral hemispheres or areas within the cerebral hemispheres? An example: Two children the same age can have Full Scale IQ scores of 98. These are average IQ scores. However, these two children may be far from the same or even similar. Child A might have a Verbal IQ of 98 and a Performance (nonverbal) IQ of 99. His “scatter” or variability among the subtest scores could be minimal — no conspicuous weaknesses, strengths in moderation and balance. Child B could have a Verbal IQ of 78 and a Performance (nonverbal) IQ of 123 with variability ranging between the fifth and the 98th percentiles. Child B would probably have significant language learning and academic problems along with superior abilities at nonverbal learning. Such a child would undoubtedly excel at spatial and mechanical tasks, but would struggle with the codes of language that suffuse reading, spelling, writing, and listening. (Interventions for this child would likely include procedures and strategies targeting specific training of the left hemisphere.) All composite IQs are not the same. Patterns and relationships among scores are critical in properly assessing brain function.

4. Differences in the Adequacy of Motor and Sensory-Perceptual Functions on Two Sides of the Body

Neuropsychologists and neurotherapists are very interested in the integrity of and relationship between the two hemispheres. Are they different in the way they function? Do they work together to enhance performance? Are there specific deficits in either hemisphere that are correlated with compromised performance?

In neuropsychology, such findings are known as lateralization — disparities between left and right sides of the brain that go beyond expected limits for examinees with normal brain functions.

When administered properly, even brief screenings contribute valuable information about your child’s neuropsychological makeup that can guide expectations and interventions, indicate deficits needing further attention, and provide predictive information on treatment length and outcomes. The process is complex, however. As wonderful and malleable as the brain is, we need to give it adequate information. Part of the sequence is to gather relevant information in a methodical and translatable manner. That is the essence of assessment.

General Assessment Model

The following assessment model encapsulates an overview of assessment, and may assist you in appreciating its value:

ASSESSMENT MODEL

The following notations describe the components of comprehensive assessment from the perspectives of diagnostic methodology and categorical information yielded as an outcome of assessment:

- **Levels of performance**
 - compares and quantifies
 - *interindividual* — compares performances with those of others
 - measures functioning in relation to others at same age or grade level

- **Clinical / descriptive**
 - identifies preferred styles of learning, behaving, perceiving
 - *intraindividual* — compares strengths and weaknesses shown by examinee
 - identifies indicators of distress and potential or manifest disturbance

- **Achievement / mastery**
 - specifies what the person knows or can do (knowledge, skills, performance)
 - assesses achievement of developmental milestones and readiness for learning
 - criterion-related (relative to task mastery rather than relative to performances of others)

- **Differential diagnostic**
 - process of *ruling out* possible disorders
 - uses scientific methodology of hypothesis testing
 - tests for presence of specific deficits which differentiate conditions
 - identifies factors which sustain or hinder performance
 - interprets why some performances are elevated and others reduced

- **Predictive / prescriptive**
 - prescribes recommendations, interventions, treatments
 - offers prognoses, expectations
 - predicts probable outcomes with or without interventions

ASSESSMENT MATRIX

Abilities	1	2	3
Strengths	4	5	6
Weaknesses	7	8	9
Styles	10	11	12
	<i>Coping/Inhibiting</i>	<i>Applicative/Stunted</i>	<i>Adaptive/Maladaptive</i>

1. Do the identified abilities integrate in the person's coping mechanisms or do they interfere?
2. Is the person able to apply his abilities to everyday demands and real tasks?
3. Are the abilities used toward adaptive or maladaptive results?
4. Are the strengths properly channeled or overextended?
5. Are the strengths advantageous in getting practical tasks done at levels commensurate with abilities?
6. Do the strengths attain adaptive purposes or do they result in manipulation and self-sabotage?
7. To what extent do the weaknesses predominate? Do they exert balancing or humbling effects?
8. Does the person try to use skills beyond what he has in those areas?
9. Are the weaknesses and vulnerabilities controlled and compensated?
10. Do the problem-solving styles provide advantage or do they get in the way?
11. Are the styles efficient and well-matched to the challenges, or are they ill-suited?
12. Do the habits, talents, idiosyncrasies, and processing mechanisms facilitate adaptive functioning?