

# Yes, Virginia, there is a Severe Discrepancy Clause, but is it Too Much Ado About Something?



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## Dear Editor of The School Psychologist:

I am 28 years old. Some of my friends say there is no need for a numerical severe discrepancy when determining a specific learning disability. Papa says, "If you see it in The Newsletter, it's so." Please tell me the truth, do we need a severe discrepancy to identify a specific learning disability?

--Virginia

## Answer:

The answer to this question seems to depend upon whether you are asking about the presence of a learning disability or the presence of an educationally disabling condition. Contrary to popular opinion, Virginia, there is no federal requirement for any sort of mathematical measurement of "severe discrepancy;" there is no federal requirement to base any such comparison on test scores at all, and a severe discrepancy may, in fact, be completely irrelevant to the determination of a specific learning disability (SLD).

The federal criteria carry the force of law and virtually every decision and letter we have reviewed speaks to the need for an Individualized Education Plan (IEP) team to determine that there was a severe discrepancy. There are explicit dicta within the federal definition and the regulations that the disability reflect a disorder in psychological processing; and that the cause of the child's deficiencies not be primarily the result of a visual, hearing or motor impairment; mental retardation; or social, economic, or environmental factors CFR sections 300.7 (10); 300.541. Additionally, CFR section 300.534 prohibits the classification of a child under any classification if.

- (1) The determinant factor for that eligibility determination is (i) Lack of instruction in reading or math; or (ii) Limited English proficiency; and
- (2) The child does not otherwise meet the eligibility criteria under Sec. 300.7(a).

Probably nothing related to the identification of specific learning disabilities causes multidisciplinary teams (MDTs) more problems than the decisions they are asked to make regarding whether the child has or does not have a severe discrepancy. Teams are often struggling for clear guidelines to help objectify the process. Questions related to the area of severe discrepancy often include: Does the Individuals with Disabilities Education Act (IDEA) actually demand that a team find a severe discrepancy? Is a severe discrepancy defined or clarified anywhere in IDEA?

How severe is severe? What is the severe discrepancy discrepant from? What IQ or other ability score (e.g., Wechsler Full Scale, Verbal, Performance IQ; Differential Ability Scales General Conceptual Ability or Cluster Score, Woodcock-Johnson Tests of Cognitive Ability III General Intellectual Ability or Cluster Score, etc.) can be used when determining IQAchievement discrepancies? Are there other, acceptable ways to determine severe discrepancy besides using the IQAchievement test score comparison?

The real problem is that neither the federal definition nor the federal regulations have ever defined any of the key terms (e.g., “achievement,” “intelligence,” “severe,” and even “primarily”). Definitions of these terms are left to the IEP teams with whatever guidance their states provide them. In some instances, States have provided guidance for what these terms might mean, but when IEP teams have taken them too literally, the Office for Special Education and Rehabilitative Services (OSERS) has slapped their hands, with the injunction that “no one formula” may be used to establish eligibility.

Various professions have encouraged different definitions of learning disabilities. These definitions, although often very similar to each other, have enough difference between them to cause problems for MDTs when it comes to choosing among them. Below are a few of the many conceptualizations of what constitutes a learning disability. [We have included one State definition (New York) as an example of how the State definitions may differ from other definitions.]

## IDEA [§300.7 (c)(10)]

Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia...The term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

## The Learning Disabilities Association of America (LDA)

Specific Learning Disabilities is a chronic condition of presumed neurological origin which selectively interferes with the development, integration, and/or demonstration of verbal and/or nonverbal abilities. Specific Learning Disabilities exist as a distinct handicapping condition and varies in its manifestations and in degree of severity. Throughout life, the condition can affect self-esteem, education, vocation, socialization, and/or daily living activities. [Association for Children with Learning Disabilities (1986). ACLD Description: Specific Learning Disabilities. ACLD Newsbriefs, Sept./Oct. (16-6), 15. Note: The Association for Children with Learning Disabilities is now the Learning Disabilities Association of America.]

## The National Joint Committee on Learning Disabilities

Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other disabilities (e.g., sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences. [National Joint Committee on Learning Disabilities (1990).]

# DIAGNOSTIC AND STATISTICAL MANUAL FOURTH EDITION TEXT REVISION (DSM-IV-TR; 2000)

## 315.00 Reading Disorder

- A. Reading achievement, as measured by individually administered standardized tests of reading accuracy and comprehension, is substantially below that expected given the person's chronological age, measured intelligence, and age-appropriate education.
- B. The disturbance in Criterion A significantly interferes with academic achievement or activities of daily living that require reading skills.
- C. If a sensory deficit is present, the reading difficulties are in excess of those usually associated with it. [Note: definitions of Mathematics Disorder (315.1), Disorder of Written Expression (315.2), and Learning Disorder Not Otherwise Specified (315.9) are similar.]

### ADDITIONALLY:

Learning Disorders are diagnosed when the individual's achievement on individually administered, standardized tests in reading, mathematics, or written expression is substantially below that expected for age, schooling, and level of intelligence. The learning problems significantly interfere with academic achievement or activities of daily living that require reading, mathematical, or writing skills. A variety of statistical approaches can be used to establish that a discrepancy is significant. Substantially below [*italics in original*] is usually defined as a discrepancy of more than 2 standard deviations between achievement and IQ. A smaller discrepancy between achievement and IQ (i.e., between 1 and 2 standard deviations) is sometimes used, especially in cases where an individual's performance on an IQ test may have been compromised by an associated disorder in cognitive processing, a co-morbid mental disorder or general medical condition, or the individual's ethnic or cultural background. If a sensory deficit is present, the learning difficulties must be in excess of those usually associated with the deficit ... Individualized testing is always required to make the diagnosis of a Learning Disorder ... Learning Disorders must be differentiated from normal variations in academic attainment [**boldface in original**] and from scholastic difficulties due to lack of opportunity, poor teaching, or cultural factors (pp. 4951).

## New York [Part 200.1, (mm) (6)]

“Learning disability” means a student with a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which manifests itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, neurological impairment, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include students who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage. A student who exhibits a discrepancy of 50 percent or more between expected achievement and actual achievement determined on an individual basis shall be deemed to have a learning disability.

While all of these definitions have merit, none has the force of law in establishing eligibility under IDEA, which provides legal entitlements to children meeting the congressional and regulatory criteria. State definitions and regulations cannot supersede the federal criteria although they can exceed them—that is, they can provide a higher level of entitlements, but they cannot restrict the entitlements provided under the act.

In 1997, Congress passed a substantial revision of IDEA. In 1999, OSERS published its final regulations implementing IDEA, defining a specific learning disability in the same way as it did in 1977. It is interesting to note that in the Federal definition of a learning disability [§300.7 (c)(10)] as well as in the definitions of most advocacy groups and States, there is no mention of the term “severe discrepancy.” One must read further in the relevant Regulations in order to find any mention of severe discrepancy. In IDEA the term is found at §300.541 under the heading “Criteria for determining the existence of a specific learning disability” (below, italics added):

(a) A team may determine that a child has a specific learning disability if (1) The child does not achieve commensurate with his or her age and ability levels in one or more of the areas listed in paragraph (a)(2) of this section, if provided with learning experiences appropriate

for the child's age and ability levels; and (2) The team finds that a child has a severe discrepancy between achievement and intellectual ability in one or more of the following areas:

- (i) Oral expression.
- (ii) Listening comprehension.
- (iii) Written expression.
- (iv) Basic reading skill.
- (v) Reading comprehension.
- (vi) Mathematics calculation.
- (vii) Mathematics reasoning.

We would note that, in this one instance, the *Regulations* say a team "may determine." Is there a difference between "may determine" and "must determine" or "this is the only way to determine?" Note that the Regulations do not define a severe discrepancy.

There appears to be a distinction between the definition of a learning disability and the criteria used to establish qualification for special education services based upon a disability. The definition of specific learning disability establishes the presence of a "disorder" which is manifesting itself in one or more areas of academic achievement as listed above. With respect to other disabilities, the term "severe" and the phrase "adversely affects educational performance" are generally thought of as referring to some absolute deficit. However, when considering SLD eligibility, "severity" must be measured against the child's expected performance, not against some arbitrary general standard. The common requirement is that in determining eligibility under the SLD classification as in others, the team must also find that the child needs special education in order to receive a free appropriate public education (FAPF)—still another term in special education law that is not operationally defined. [Although it is generally accepted by the courts that the benefits expected must be non trivial or meaningful, "need" must be determined by looking at the whole child—a team may not assume that a child does not need special education services simply because he or she is receiving passing grades and/or is being passed from one grade to the next (see *Florence County v. Carter*, 1991).]

If this IDEA '97 regulation [§300.541] is taken at face value, there must be a severe discrepancy between ability (IQ?) and achievement (test scores?) in order for a student to be identified as having a learning disability. Obviously one should not read this section of the regulations in isolation and believe that the mere presence of a severe discrepancy establishes the presence of a learning disability. The severe discrepancy may be the result of factors other than a “disorder in one or more of the basic psychological processes.” As noted above, the *Regulations* require that the multidisciplinary team rule out other factors before determining eligibility as having a learning disability. IDEA'97 Final Regulations, Subpart A §300.7 (c) (10) (ii) notes:

Disorders not included. The term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

The criteria for determining SLD involve a multistep process. One step is for the team to determine that the child is not achieving at a level commensurate with age and ability when provided with educational opportunities. This forces the team, in the ideal world, to rule out apedagogia (lack of instruction) and dyspedagogia (inappropriate instruction) as the source of the learning problem. Unfortunately, teams seldom determine, or even consider, that the source of the child's learning problems is the teacher(s) or the administrator(s), or a mismatch between the child and the curriculum. Instead, the child usually is identified as the problem.

Additionally, as a condition of eligibility, the team would need to determine that the child required special educational services in order to receive FAPE [§300.7(a)(1)].

Okay, I see the difference between the specific definition of a child with a learning disability and the general definition of one who meets the “criteria for eligibility for special education services,” but doesn't the IDEA language, and more specifically the language of the courts, offer more definitive answers than these?

Sorry Virginia, but the courts, in many instances, seem to offer little true guidance in these matters. For example, taking it out of the realm of SLD one would at least expect Circuit Court judges to have some sort of consensus over procedural matters—due process is, after all, their bread and butter. But even in such seemingly “legal” areas of special education law as “Who bears the burden of proof?” the Federal Circuit Courts are split as to how that should be determined. “Is additional evidence allowed upon appeal?” is another seemingly clear-cut legal question upon which the courts should be expected to rule with decisiveness. The First Circuit Court allows supplemental evidence but no embellishments of previous testimony; the 3rd Circuit Court says district courts may exclude additional evidence but with discretion; the 4th says if the evidence was available at the time of the due process hearing, district courts may exclude it; the 6th allows new evidence, but not on new issues; the 7th allows “supplemental” evidence; the 9th agrees with the 1st and 7th; and the 11th Circuit Court threw up its hands and said that whether additional evidence will be allowed is up to the “sound discretion” of the district court judge (TSE, December 15, 2000, p. 5). We make this point only to emphasize how perilous it is to base a conclusion on any single case, much less a due process hearing.

Due process decisions only have force in the system wherein they were issued, and then only if not overturned by a court of competent jurisdiction. There is a danger in over generalizing the results, because they may contain some “bad law;” that is, legal decisions based in part on findings that would have been overturned on appeal, or decisions agreed to by the school simply because settling was more cost effective than litigating over principle. For example, a hearing officer might find that a child had failed to make progress based on standard scores that remained constant over time, certainly a finding that can be appealed—but if the IEP were inappropriate, the hearing officer’s possible error would never be reviewed and, therefore, never be corrected.

Additionally, some caselaw has force only in the region in which the case was decided. For example, a fairly wellknown case, *Larry P v. Riles*, which sought to prohibit the use of intelligence tests in assessing African Americans was upheld in The 9th Circuit Court (1984) but it applies only to California. No other circuit has ruled against using IQ tests for African Americans (OCR, 2000).

Given what the law says, isn't the use of some statistical formula or computer program not only required, but probably the only way to determine a severe discrepancy?

First, Virginia let us say that discrepancy formulae are statistical nightmares (Aaron, 1997; McLeod, 1974; Reynolds, 1990). Furthermore, the absence of some discrepancy should not be used as the sole criterion to exclude children from a specific learning disability (SLD) classification. Discrepancies might be better thought of as presumptive in nature, not exclusive. Since the regulations provide little guidance and no specific requirement regarding any particular way of measuring the discrepancy, teams appear to have great latitude regarding how they make discrepancy decisions.

One state, New York, added a sentence into its definition of Learning Disability (see above) that notes "A child found to have a 50% discrepancy between expected achievement and actual achievement shall be deemed to have a learning disability." Almost 20 years ago, in *Riley vs. Ambach* (United States Court of Appeals, Second Circuit 668 F.2d 635; 1981 U.S. App. December 16, 1980, Argued May 19, 1981, Decided), the court ruled that New York could not use the absence of the "50% discrepancy" to exclude children. The Court concluded that the use of the 50% standard interferes with the proper identification of learning disabled children since it operates to eliminate consideration of factors and the use of techniques that do not, "given the present state of the art," lend themselves to quantification. The clause has come to be defined, maybe as it should have been all along, as a presumptive clause: If all things are in place you can presume the child eligible. But, if a numerical discrepancy isn't clearly evident, you cannot, on that fact alone, exclude the child. We argue that this is true of IDEA. IF there is a discrepancy you MAY identify the child as having a Learning Disability, BUT if there is no numerical discrepancy; you cannot automatically exclude the child. Similar to catching the child redhanded in the act of committing a crime--- you have the evidence, presume the child guilty. But what if you don't catch the child redhanded, does that mean the child could not be guilty? Obviously, there may be other convincing evidence.

Second, as far back as August 23, 1977, the newly created OSERS published its first regulations in implementation of Public Law 94142. Those regulations included the following statement:

“No single procedure is used as the sole criterion for determining an appropriate educational program for a child” (emphasis ours).

One might argue that if a MDT uses a severe discrepancy as the sole criterion to exclude a child, it has violated this clause of IDEA. The Department of Education indicated an intent to review current research on learning disabilities and to make changes to the definition, but as of May, 1999, it had not done so, saying this in the appendix to the regulations:

“[T]he Department plans to carefully review research findings, expert opinion, and practical knowledge over the next several years to determine whether changes should be proposed to the procedures for evaluating children suspected of having specific learning disabilities.”

Many teams and districts are tempted to establish mathematical formulas to identify students with specific learning disabilities. Some commercially produced computer scoring programs automatically calculate discrepancies. These formulas attempt to measure the severity of the discrepancy between ability and achievement. We advise that such formulas not be used as the beall and endall of learning disability determination. Over reliance upon a “magic number” can expose a system to an adverse finding (e.g., Long Beach Unified School District, 1998). It is therefore not wise to try to use automatic formulas to establish specific learning disabilities, mental retardation, hearing impairment, or any other educational handicap. If a team or district were absolutely determined to use a “discrepancy formula,” professional “best practice” would suggest the following rules [see also McLeod, 1974 and Reynolds, 1990. These issues are also discussed thoughtfully in Flanagan, McGrew, and Ortiz (2000) and Mather and Schrank (2001).]

1. The formula should use some form of standard score (including normal curve equivalents). Percentile ranks cannot be used for mathematical comparisons. Grade and age equivalents should not be used for making eligibility decisions. The ability and achievement tests should, of course, be reported with the same statistics (grade equivalents are deceptively simple and may misrepresent the severity of a child’s problem (e.g., Willis & Dumont, 1998, p. 223). Therefore, they should be used with

caution. However, they can sometimes be used more effectively than standard scores in documenting progress (e.g., the 9th Circuit Court in a recent case wrote, “HISD argued that passing marks and advancement from grade to grade were sufficient indicia to satisfy the IDEA). And on this dispute the district court is correct that a disabled child’s development should be measured not by his relation to the rest of the class, but rather with respect to the individual student, as declining percentile scores do not necessarily represent a lack of educational benefit, but only a child’s inability to maintain the same level of academic progress achieved by his nondisabled peers (Houston Independent School District v. Caius, 2000).

2. The formula should take into account the phenomenon of “regression toward the mean,” although a number of states have adopted nonregression formulas for the sake of simplicity. When one attempts to predict one variable from another, the predicted score is likely to be closer to the mean than is the predictor. If the student’s ability score is not exactly average, the achievement score can be expected to fall between the ability score and the mean.

Since discrepancy formulas are concerned only with achievement lower than ability, there are two situations to consider. If the student’s ability measure is higher than the mean (for instance, 100 for most intelligence tests), the expected achievement level without learning disabilities or other damaging influences will fall between the mean and the ability score, or above 100 and lower than the ability score. If the ability score is lower than the mean, the normally expected achievement score will again fall between the ability score and the mean, higher than the ability score. In this instance, the discrepancy would be from an expected achievement score higher than the ability score. The lower the ability score, the more the expected achievement score will exceed it. The amount of regression toward the mean is determined by the correlation between the two measures. The lower the correlation, the greater the regression. Contrary to general belief, the correlation between measures of ability and achievement is modest. In one example, Hammill and McNutt (1981) reviewed all correlational studies between reading and other variables in 25 journals from 1950 through 1978. Their meta-analysis found, among other things, that the median correlation between WISC and WISC-R Full Scale IQs and reading scores, based on 34 coefficients in 13 studies, was only +0.44. This means that about 19% of the variance in reading scores could be accounted for by WISC(R) Full Scale IQs. The remaining 81% of the variance in reading scores was attributable to other factors!

3. The measurement of a discrepancy between ability and achievement should take into account the Standard Error of Measurement of Differences (SE<sub>diff</sub>). SEM bands around both scores, preferably offset to reflect regression toward the mean can provide a rough approximation with less mathematics. Any formula devised by a team would have to yield a band of discrepancies rather than a single cut-off number. However, such bands are arbitrary cut-offs, so provisions would still need to be made for considering cases falling at the edges of such bands.
4. If the team were considering all seven achievement areas blindly, the size of the differences required for significance would be slightly higher than that needed for a single, predetermined achievement area, based on referral data. The more potential discrepancies being considered, the greater the possibility of a significant discrepancy occurring by accident, by pure chance.
5. It is highly improbable that the most valid measure of ability for a learning disabled student is the Full Scale IQ (GCA, GIA, etc.). The same learning disabilities that depress achievement are likely to depress scores on at least some parts of ability tests as well (Mark Penalty). The team is evaluating discrepancies between achievement and levels of intellectual ability, not overall intelligence. Consequently, the team should often use measures of intellectual ability other than full scale scores (IQs, CCAs, GIAs, etc.).

IDEA, at §300.535, reminds teams to examine the child's ability, without allowing the very disability you might be identifying to impact the scores:

- (e) Tests are selected and administered so as best to ensure that if a test is administered to a child with impaired sensory, manual, or speaking skills, the test results accurately reflect the child's aptitude or achievement level or whatever other factors the test purports to measure, rather than reflecting the child's impaired sensory, manual, or speaking skills (unless those skills are the factors that the test purports to measure).
6. The achievement test scores may not be the most valid measures of a student's achievement. Some students perform poorly on standardized tests, but succeed in class and do not require special education services. Other students may do well on individual, standardized tests, but still have legitimate special education needs be-

cause they cannot function in class without a program of special education. It is not reasonable to use the standardized test scores as the only measures of achievement. Measures of classroom performance must also be considered.

7. Tests are not interchangeable. Two intelligence tests, even from a District's "approved" list (another unwise practice, unless exceptions are allowed for special circumstances), are not likely to yield the same score for the same student. In fact, the same test probably will not give the same score to the same student twice in succession. Consider, for example, a hypothetical student with a significant strength or significant weakness in fluid reasoning (Gf). The strength or weakness would have almost no direct effect on the Wechsler Scales, but would be central to oneseventh of the WJR or WJIII, and onethird of the DAS (Flanagan, McGrew, & Ortiz, 2000; Flanagan & Ortiz, 2001; McGrew & Flanagan, 1998). Differences among content, formats, and scores among academic achievement tests are even more extreme. Discrepancy formulas can lead to bizarre efforts to find combinations of IQ and achievement tests that will confirm someone's belief that the student does, or does not, have an educational disability.

Clearly, the mathematical process of rigidly determining severe discrepancies is not a simple matter. In fact, we do not believe that it is worth pursuing. Rigid adherence to any formula will often violate the most important consideration of all: to be considered to have an educational disability, a student must require a program of special education. In this respect, learning disabilities are no different from other educational disabilities. For instance, one student with an intellectual disability (mental retardation) with a certain IQ score will require special education services and will have an educational disability. Another student with the same score on the same test will not. The same consideration applies to students with various Snellen vision ratings or better ear average hearing ratings. Some students with a given score will require special education and some will not. Only those who require a program of special education have educational disabilities. No mathematical formula should be used to deny services to students who truly require a program of special education. No mathematical formula should be used to falsely "label" a student who does not require special education services, even if the student may require accommodations under PL 94142 (U.S. Congress, 1975). "The determination of an educational handicap is a Team decision, not an exercise in arithmetic" (Willis & Dumont, 1998, p. 112).

The question as to whether a child does or does not have a severe discrepancy is not as straightforward as it might appear. While mathematical formulas offer a statistical method

for calculating the severity of a child's discrepancy, they do not take into account some of the other factors that a team might (must) consider in reaching its determination. At the Learning Disabilities Association of North Carolina (LDANC) website, they say:

The Department of Education, in its letter to IDA of North Carolina, wrote that it is "generally" appropriate for the multidisciplinary team to include in its written report (to determine eligibility) information regarding "outside or extra" instructional help or support which "may indicate the child's current educational achievements reflects the service augmentation, not what the child's achievement would be without such help." Such information should be considered by the team in deciding if the child has "a severe discrepancy between achievement and ability that is not correctable without special education and related services." If, for example, a student with an IQ of 125 and significantly lower achievement scores maintains passing or even exemplary grades, the team should consider whether or not the student achieves only because of special assistance or support. If the student receives no special help, the multidisciplinary team might conclude that student would not need special education. If, on the other hand, the student has tutoring several times a week, works for three to five hours each night on homework with parental assistance, and must have extra time to complete tests in order to pass or maintain a certain grade level, that student might be considered to have a "specific learning disability." His/her grades may reflect all the assistance the student is getting rather than the student's actual achievement level. [Reference: Letter of Clarification from Thomas Hehir, Director, Office of Special Education Programs (OSEP), to Ms. Patricia M. Lillie, and Rebecca Felton, Ph.D., Learning Disabilities Association of North Carolina, Inc., dated April 5, 1995.]

There are other issues that may be argued before a hearing officer when a child does not appear to meet state criteria. *Brody v. Dare County*, a North Carolina case argued by Peter Wright, an eminent attorney in the area of special education law, included the following (Findings of Fact provided by i a state hearing officer):

Dyslexia is a learning disability for the purpose of the Individuals with Disabilities Education Act, 20 U.S.C. Section 1400 et seq. (IDEA), and a child with special needs pursuant to North Carolina's Special Education Act, G. S I 1C, Article 9 (State Act) .

The “Matthew Effect” refers to individuals, who have difficulty learning to read, and whose reading problems are not remediated effectively early in their school career. Because of this these children often remain significantly behind peers in reading skills. If an individual fails to learn well in first, second, and third grade—which are critical grades—then these individuals do not read the amount of material that is necessary to continue to develop good reading skills.

Q. WHEN DETERMINING A SEVERE DISCREPANCY, DOESN'T THE CHILD HAVE TO HAVE AT LEAST AVERAGE ABILITY?

There are some misconceptions that exist about the regulations regarding learning disabilities and a level of cognitive functioning, some that are even codified into state regulations. IQ is not an exception to eligibility. Whether a child's IQ is high or low, the team must still consider whether he or she meets the eligibility criteria in 300.541. (Letter to Ulissi, OSEP, 1992). There is no place in IDEA that necessitates an IQ level for classification as a child with a learning disability. IDEA'97 Final Regulations, Subpart A §300.7 (c)(10)(ii) does note:

(ii) Disorders not included. The term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

On first glance, this section would appear to exclude, among others, any child who is cognitively impaired (mentally retarded). However, the clause contains the operative phrase “primarily the result of.....” A child with low cognitive scores may in fact be a child with a disorder in a basic psychological process and more appropriately identified as LD than MR. Also, a child with mental retardation may additionally have a disorder in a basic psychological process that depresses the child's achievement in one academic domain significantly below even the low expectations from the child's measured levels of intellectual ability and below the child's levels of achievement in other domains. Such a child would have both mental retardation and a specific learning disability, because the excessively low achievement in the one domain was caused by the processing disorder: that particular “learning problem” was not “primarily the result of....mental retardation.”

States have run afoul of OSERS when they have written state regulations that are more restrictive than the federal criteria in CFR Section 300.541. Wisconsin's original definition of a specific learning disability was confusing, and led some teams to conclude that otherwise qualified children weren't eligible because they had IQs below 90, and other teams to conclude an otherwise eligible child under the federal statute was not eligible in Wisconsin because there was only one area of discrepancy.

An audit of their public school systems showed that while most schools were in compliance, some teams believed (1) children with IQs below 90 could not qualify for services, or (2) that if children only qualified in one area they could not be served, or (3) that if a child had only a discrepancy, s/he was automatically eligible without first determining a need for special educational services. They issued the following statement to the local educational agencies (LEAs) as part of their corrective action plan (a plan necessary for them to continue receiving special education dollars from the federal government, ED having frozen their funds):

“If an M-team determines that a child has a significant discrepancy between functional achievement and expected achievement in one or more of the areas listed at 34 CFR 300.541 and needs special education and related services because of that significant discrepancy, the child may not be excluded from LD eligibility because: 1) The child's intellectual capacity is below a particular level (unless the child is determined to have a cognitive disability), or 2) the child has a significant discrepancy in only one of the academic or readiness areas identified at 34 CFR 300.541.”

Wisconsin's interpretation, unchallenged by OSERS, is summarized in the following paragraph from their letter to Thomas Hehir, then OSERS' director:

“Mteams in Wisconsin generally recognize that the criteria contained in both the federal regulations and the state rules must guide an evaluation, but do not direct an Mteam to make a finding of LD eligibility or ineligibility for a particular child. Both the state and federal criteria are permissive in that they require evaluation teams to consider certain eligibility criteria, but they do not require an evaluation team to reach a conclusion solely because the child meets or fails to meet those stated criteria. The rules require

evaluation teams to consider the criteria and the performance of the child against those criteria, but they also require the evaluation teams to use professional judgment in making individual eligibility determinations.”

**Q. SO WHAT ARE THE ISSUES THAT A MDT MIGHT CONSIDER WHEN DECIDING WHETHER A CHILD QUALIFIES AS A CHILD WITH A SPECIFIC LEARNING DISABILITY?**

It is probably not possible to list ALL the factors that a team might consider in reaching a decision, but court decisions and OSERS letters have given us some suggestions.

1. Neither a low IQ score nor a high IQ score (see above) may be used to exclude a child from consideration as LD. [http://wwwldanatl.org/bulletins/AC\\_1\\_96.html](http://wwwldanatl.org/bulletins/AC_1_96.html)
2. The absence of a numerical severe discrepancy cannot, alone, be used as the criterion for excluding or for including a child from or in special education.
3. It is “generally” appropriate for the multidisciplinary team to include in its written report (to determine eligibility) information regarding “outside or extra” instructional support which “may indicate the child’s current educational achievements reflects the service augmentation, not what the child’s achievement would be without such help.” Within context, for example, a child need not have failing grades, if he or she is passing only as a result of special service or support such as tutoring twice a week or a parent who spends three to five hours with the child on homework each evening.
4. The team should understand and take into consideration both the Mathew Effect (Stanovich, 1994) and the Mark Penalty. If there is prior evidence of higher IQ, and present testing shows a decline (Mathew Effect) that results in the child being ineligible, the team may consider whether the disability may have resulted in significantly different learning experiences which have negatively impacted the scores. IQ scores, depressed by a disorder in basic psychological processes, cannot be used in any abilityachievement comparisons. If the team believes that the same disorder in basic psychological processes that has caused low achievement has also depressed an IQ score (Mark Penalty), the team may consider this in the explanation of no discrepancy.

5. If the multidisciplinary team determines that the assessment measures do not accurately reflect a discrepancy between achievement and ability, the team should state in writing the assessment procedures used, the assessment results, the criteria applied to judge the importance of any difference between expected and current achievement, and whether a substantial discrepancy is present that is not correctable without the provision of special education.

Additionally, here are a few things that a team can consider in determining if there is a severe discrepancy:

- A. How much help did the student receive (within the context of OSEP's letter, referring to the help provided by parents, but certainly a standard that could be extrapolated to children who, for example, no longer had a severe discrepancy after three years of intensive service)?
- B. Did the child's IQ scores go down as a result of the Matthew Effect or Mark Penalty? [In theory, if the team believes that the child's FSIQ went down as a result of his or her having failed to thrive academically; that is, the child wasn't exposed to the same things as other children of the same age and intelligence---then it can infer higher potential, especially if previous test scores were higher. There is a potentially interesting Catch 22 (Heller, 1961) there; the team would also have to rule out inappropriate instruction as being primarily causal.]
- C. Is there another way of documenting the federal standard other than the state's formula? [If so, the team could consider the child for eligibility. While we do not have documented instances of this, failure to consider other standards could leave one vulnerable under Section 504.]

Other jurisdictions outside the 9th Circuit Court have not accepted the limitations imposed by *Larry P. v. Riles*. However, when teams doubt the validity of an IQ score based on one or more of the reasons noted above, we advocate that the team consider the same factors that California would review in making an eligibility determination (i.e., using data from the child's educational and social history as well as adaptive behavior data to make inferences about the child's potential). The total evaluation and determination of eligibility for Special Education must be an integrated process. Again, SLD identification is a professional judgment by a team, not an exercise in arithmetic.

## According to IDEA §300.540:

The determination of whether a child suspected of having a specific learning disability is a child with a disability as defined in §300.7, must be made by...the child's parents and a team of qualified professionals ...

8. The federal regulations require that the child demonstrate a disability in a basic psychological process which would include (but is not restricted to) a perceptual disability. This is basic to the identification process, but it is not as complicated as some would make it. While the idea that there must be a processing disorder that is inherent to or intrinsic to the child seems complex, in fact for most children establishing such a disorder can be as simple as identifying the child's learning problem and narrowing in on other, highly probable causes.

“[I]t is not necessary for the multidisciplinary team to demonstrate or measure the existence of a basic disorder in psychological processing in order to determine that a child has a specific learning disability. Rather, if a psychological processing disorder exists, it could manifest itself through a variety of symptoms that could be observed such as hyperactivity, attention problems, concept association problems, etc. See 34 CFR [Section] 300.542. The end result of these symptoms is a severe discrepancy between achievement and ability.”  
[Letter to Kennedy, IDELR 16 EHLR 1082, (OSEP, 1990).]

For example, if the child has trouble with word identification, it would be reasonable to infer that, if the child's learning problems are not a result of cultural, environmental, or economic factors or one of the other exclusionary factors listed above, that the child might have a deficit in phonological processing, fluent retrieval, and/or oral vocabulary—all basic psychological processes within the meaning of the Regulations. These hypotheses could be tested quickly and easily by observation or by specialized tests. So, Virginia, to summarize our points, we offer:

## LOGICAL STEPS IN DETERMINATION OF A SPECIFIC LEARNING DISABILITY

- I. **Is there a problem with academic performance?** *Problems may be subtle or difficult to document, but if there are no academic problems at all, there is no educational disability. [A problem with an important life function other than academic performance might trigger identification under Section 504 of P.L. 93-112 or the Americans with Disabilities Act (ADA).] Pay close attention to reports of problems that do not result in low grades even though they interfere with learning. For example, the teacher might already be providing an informal program of special education; grades might be based 25% on attendance, 50% on simply turning in homework regardless of quality; and 25% on class participation; or grades might be based on an erroneous perception of the student's academic potential.*

A. Does the student have low scores on group or individual achievement tests?

1. Look at any history of test scores. Be cautious, though, with tests that are used so frequently that the expected growth from test to retest is less than the 90% confidence band or even the SEM. Check the tables.
2. Look at the pattern of strengths and weaknesses on the test scores. Some group tests offer item analyses. Even though the norm-referenced tests do not function well as criterion-referenced measures, those analyses may contain useful information.

B. Is the student receiving low or failing grades in a class?

1. Again, track the history of class grades.
2. Try to determine the basis for the student's grades. High grades might be based on special marking considerations.

C. Is the student working much too hard or much too long to earn adequate grades?

1. Parents may be the best source of this information. A parent interview is essential. We need to know also what the parents would like to learn from the evaluation.
2. Be sure to interview the student. Sometimes it helps to obtain a copy of the report card and discuss it in detail with the student. What does the student want to learn from the evaluation?

- D. Is the teacher making extraordinary adaptations or accommodations for the student?
1. Teacher interviews are essential. We need to know what has been done, what is being done, how well those interventions have worked and are working, and what specific things the teachers would like to learn from the evaluation.
  2. The classroom observation is often more useful for observing the teaching and the environment than for observing the student.
- E. Is there a notably deficient specific area of performance (e.g., tests, homework, note-taking, etc.)?
- F. Is there another indication of insufficient academic performance?
2. **Are there one or more disorders in basic psychological processes involved in understanding or in using language, spoken or written.** [See [http://alpha.fdu.edu/~dumont/basic\\_disorders.htm](http://alpha.fdu.edu/~dumont/basic_disorders.htm).] *This step follows next in a logical sequence, but determination of any disorder(s) may not be clear until completion of psychological, educational, speech and language, occupational therapy, physical therapy, vision, hearing or other evaluations. There should be multiple, convergent confirmations of any disorders.*
- A. Can each disorder be observed or inferred from academic performance?
1. Again, consider all aspects and all measures of academic performance.
  2. Looking for possible cause-and-effect relationships between basic processes and academic performance. There needs to be a real-life connection between the hypotheses and what is actually happening with the student's performance in school.
- B. Can each disorder be documented through assessment?
1. Once we have documented the deficient achievement and are looking for possible reasons, it becomes more permissible to use poorly normed and completely informal measures and observations. Formal assessment of ability and achievement levels needs to be done, at least in part, with extremely well-normed, reliable instruments that are valid for their intended purposes, but exploring within the area of deficient achievement may (and sometimes, given the state of the art, must) be done with less statistical rigor. The disorders need to be demonstrated clearly, reliably, and convincingly, but not always as test scores. The severity of a learning disability is measured by the severity of its impact on achievement, not by the severity of any basic-process disorder.

2. The McGrew, Flanagan, and Ortiz integrated Cattell-Horn-Carroll (CHC) Cross-Battery Approach is a very useful framework for considering many, though not all, basic-process disorders [See <http://home.att.net/~gtgc/index.htm>.]
3. **Can the team make a logical argument that each identified disorder manifests itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations?** *It is not enough simply to specify deficient achievement and a disorder. There needs to be a logical, cause-and-effect relationship between the two.*
  - A. As noted above, we need to demonstrate how the purported basic-process disorder is impairing the carefully documented achievement area. This demonstration will require a thorough analysis of the student's academic skills. A low test score or low class grade is not enough. We need to show the mechanisms operating in the deficient achievement area(s). Examples of misaligned math problems worked left-to-right and bottom-to-top might, for instance, demonstrate the effect of a visual perception problem on math. The assumption that a visual perception problem impaired listening comprehension might be more difficult to justify unless, for example, we could show how deficient visual imagery was interfering with the listening comprehension.
  - B. Research evidence can be cited to show relationships between certain basic processes (e.g., phonological abilities or rapid naming) and certain areas of achievement (e.g., reading decoding). [See <http://home.att.net/~gfgc/recentlt.htm> for some examples.]
  - C. Some clearly identifiable disorders have no discernable effect on achievement. Simply finding a disorder does not establish a learning disability (e.g., one author's JOW) severe rhythm disorder impairs his singing, dancing, and clapping in time to music, but the effect on academic achievement is trivial, only diminishing his appreciation of poetry).
  - D. It is the disorder in the basic psychological process that distinguishes a specific learning disability from the disabilities and disadvantages ruled out in the federal regulations [(300.7(c)(10))] for learning disabilities (“...learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.”)

E. It is essential, as much as possible, to distinguish learning disabilities from dyspedagogia and apedagogia [300.541(i) “The child does not achieve commensurate with his or her age and ability levels in one or more of the areas listed in paragraph (a)(2) of this section, if provided with learning experiences appropriate for the child’s age and ability levels” (emphasis ours).]

4. **What is the best estimate of the student’s actual intellectual ability?** See *Mark 4:25* *The team must not allow a psychological processing disorder to depress estimates of both intelligence and achievement and then mindlessly conclude there is no discrepancy between the two. For example, verbal and visuospatial learning disabilities, respectively, will depress verbal (Gc) and visual, spatial (Gv) intelligence measures. For another example, a disorder in quantitative knowledge (Gq) would depress the WISC Arithmetic and Verbal IQ scores and DAS Sequential & Quantitative anti Nonverbal (fluid) Scale scores. Logically, the intelligence test should be chosen only after the basic-process disorders have been delineated. The McGrew, Flanagan, and Ortiz integrated CHC Cross-Battery Approach can be a very useful framework for considering intellectual abilities* [See <http://home.att.net/~gfgc/index.htm>.]

- A. Which scales, factors, or subtests on intelligence tests are likely to be depressed by the disorder or disorders?
- B. Which intelligence test, scales, or factors would be likely to yield an estimate of actual intellectual ability uncontaminated by the disorder or disorders?
- C. What is the best estimate of the student’s actual intellectual ability based on those measures?
- D. Have we considered at least all of the broad abilities in the McGrew, Flanagan, and Ortiz integrated CHC theory? It is not prudent, for example, to use a test, such as the WISC-III, that omits fluid reasoning unless we supplement it with a measure of that ability

5. **Is there a severe discrepancy between the student’s level of intellectual ability (4.C.) and the student’s achievement in one or more of the following areas?** Remember that achievement and ability may be assessed by means other than test scores (I. B.-I. F). *Achievement tests must be chosen thoughtfully. For example, a brief achievement test is not a valid measure of academic performance for a student with a short attention span, and an untimed, silent reading test will not pick up problems with reading fluency. Do not obsess over formulae. Some data will not fit formulae. The team must apply reasoned, professional judgment, not simply indulge in an exercise in arithmetic. By our interpretation of federal law and by most state laws, it is not lawful to deny services*

to a student who truly has a learning disability simply because of the results of a statistical exercise. [See [http://alpha.fdu.edu/~dumont/riley\\_y\\_ambach.htm](http://alpha.fdu.edu/~dumont/riley_y_ambach.htm)]. A statistical comparison of ability and achievement must use only one set of norms (e.g., national age or grade) [See [http://alpha.fdu.edu/~dumont/age\\_vs\\_grade\\_based\\_scores.htm](http://alpha.fdu.edu/~dumont/age_vs_grade_based_scores.htm)] and should use predicted achievement scores rather than simple differences [[http://alpha.fdu.edu/~dumont/Severe\\_Discrepancy\\_Discrepancies.htm#SD2](http://alpha.fdu.edu/~dumont/Severe_Discrepancy_Discrepancies.htm#SD2), [http://alpha.fdu.edu/~dumont/Determining\\_predicted\\_ach.htm](http://alpha.fdu.edu/~dumont/Determining_predicted_ach.htm), and <http://home.att.net/~gfgc/psych101b.htm>].

Remember that these achievement areas have many components, including, for example, vocabulary or factual knowledge, fluency, independence. Few, if any, achievement tests cover all aspects of the requisite skills. Do not use tests on which the student receives very low or nearly perfect raw scores, but find tests on which the student passes and fails several items [<http://alpha.fdu.edu/~dumont/McGee.htm>].

6. **Are the discrepancies caused primarily by the disorders?** *There is absolutely nothing in IDEA to suggest that a student cannot have a learning disability, in addition to other disorders. However the particular discrepancy (“learning problems”) in question must not be primarily the result of a vision, hearing, or motor disability, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage [300 7 (c) (10) (ii)], even if one or more of those disorders or disadvantages may be causing other separately identified learning problems. For example, a child with mental retardation might also have a specific learning disability in math with extremely low achievement severely discrepant from low predicted achievement because of a disorder in working memory. Similarly, a deaf or blind child might have unusual difficulty learning American Sign Language or Braille because of spatial perceptual weaknesses. If we have been careful in our identification and analysis of the disorder(s), we should be able to separate them and their effects from the effects of disadvantages and other disabilities.*
7. **Does the student require special modifications of, or accommodations in, the educational program in order to achieve at levels commensurate with age and ability (4. C.)?** *Here is the crucial issue for identification under Section 504 or the ADA The needed accommodations or modifications should be more than we would routinely ask of a teacher of moderate skill, experience, and dedication.*
8. **Does the student require a uniquely designed program of special instruction in order to achieve at levels commensurate with age and ability (4. C.)?** *This is the crucial issue for identification of an educational disability. If the student does not require a uniquely designed program of special instruction, but meets the other criteria, the identification should probably be under Section 504 rather than The Individuals with Disabilities Education Act.*

## References

- Aaron, P G. (1997). The impending demise of the discrepancy formula. *Review of Educational Research*, 67, 461-502.
- Flanagan, D. P, McGrew, K. S., & Ortiz, S. o. (2000). *The Wechsler Intelligence Scales and Gf-Cc theory: A contemporary approach to interpretation*. Boston: Allyn & Bacon.
- Flanagan, D, P, & Ortiz, S. O. (2000). *Essentials of cross-battery assessment*. New York: Wiley & Sons.
- Heller, J. (1961). *Catch twenty-two*. New York: Simon and Schuster.
- Houston Independent School District (HISD) v. Bobby R.; Joyce R.; and Caius R., 9th Cir., Jan., 2000.
- Larry R v. Riles, 793 F.2d 969, 974 (9th Cir. 1984).
- Letter to Ulissi, 18 IDELR 683 (OSEP, 1992).
- Mather, N., & Schrank, F. A. (2001). Use of the WJIII discrepancy procedures for learning disabilities identification and diagnosis (Woodcock-Johnson® III Assessment Service Bulletin No. 3). Itasca, IL: Riverside.
- McGrew, K.S., & Flanagan, D.P. (1998). *The intelligence test desk reference (ITDR); Gf-Gc cross-battery assessment*. Boston: Allyn & Bacon.
- McLeod, J. (1974). Educational underachievement: Toward a defensible psychometric definition. *Journal of Learning Disabilities*, 12,322-330. Morgan Hill Unified School. Dist. SN-125-90, 17 IDELR ¶28 (Hearing Officer, CA, 1990).
- Office for Civil Rights (2000). *The Use of Tests When Making HighStakes Decisions for Students: A Resource Guide for Educators and Policymakers*. Washington, D.C.  
<http://www.ed.gov/offices/OCR/testing/index.html>
- O'Neill, A. M. (1995). *Clinical inference: How to draw meaningful conclusions from tests*. New York: Wiley.
- Reynolds, C. R. (1990). Conceptual and technical problems in learning disability diagnosis. In C. R. Reynolds & R. W Kamphaus (Eds), *Handbook of psychological and educational as-*

essment of children: Intelligence and achievement (pp. 571592). New York: The Guilford Press. McGrew, K. S., & Flanagan, D. P (1998).

Sattler, J. M. (2001). Assessment of children (4th ed., 2 volumes). San Diego: Jerome M. Sattler. Shannon Carter v. Florence County School District Four; 18 IDELR 350 (4th Circuit, 1991).

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. Reading Research Quarterly, 21, 360-407.

Willis, J. o., & Dumont, R. P (1998) Guide to identification of learning disabilities (1998 NY State ed.). Acton, MA: Copley. Available from: [http://alpha.fdu.edu/~dumont/guide\\_to\\_identification\\_of.htm](http://alpha.fdu.edu/~dumont/guide_to_identification_of.htm)

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