

Discrepancy dinosaurs and the evolution of Specific Learning Disability assessment

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Abstract: Identifying Specific Learning Disability (SLD) has been an arduous task. Until IDEA 2004, diagnosing SLD was limited to IQ discrepancy models lacking in both empirical evidence and contributing to minority over-representation. This paper examines the history of SLD assessment, the phenomena of minority over-representation, and the implementation of Response to Intervention, (RtI) and other alternate assessment for SLD.

Key Words: Specific Learning Disability Assessment, Response-to-Intervention, Culturally and Linguistically Diverse

I. Introduction.

Identifying students with Specific Learning Disability (SLD) has been a difficult and arduous process for many Local Education Agencies (LEAs). Diagnosing SLD was limited to discrepancy models, due in large part, to the federal definition of learning disability which states that “a severe discrepancy between achievement and intellectual ability,” must be present for student identification (Re-Authorization, 2004). Lack of variation in SLD assessment is a key factor in the over-representation of culturally and linguistically diverse (CLD) students in special education (SPED) programs (Harry and Klingner, 2006).

CLD student over-representation and the lack of empirical support for test-based discrepancy models in identification of students as Learning Disabled (Ysseldyke, 2005) revealed that Intelligence Quotient (IQ) combined with school failure was an inadequate measure for identification of SLD students (Fletcher, Coulter, Reschly, and Vaughn, 2004). Addressing this concern, the *Re-Authorization of IDEA* (2004), widened the assessment process to include scientific, research-based intervention in the SLD evaluation/assessment procedure. A historical overview of CLD over-representation in SPED programs, evaluation/assessment procedures and alternate SLD assessments will be discussed in this manuscript.

II. Exigency of Special Education.

Brown v. Board of Education (1954) laid the foundation for the sixties’ civil and disabilities rights movements, bringing to light social injustices and prejudices suffered by people with disabilities. Special educator training programs in the 1960s were scarce and there were relatively no specialists available to address infant and pre-school aged children with special needs (Kirk, Gallagher, Anastasiow, and Coleman, 2006). Congress created the Bureau for the Education of the Handicapped in 1967 and passed the Early Childhood Special Education

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Assistance Act in 1968 (Kirk et al.) to address this issue. However, many students with special needs continued to be neglected in schools. As a result, in 1975 the Education for All Handicapped Children Act created federal funding for states to offer free and appropriate public education (FAPE) to all students, including those with special needs. This act was later re-named and amended to become the *Individuals with Disabilities Education Act* (2004). Countless students with special needs have received the adaptations and accommodation they require to be academically successful as a result of this legislation.

III. SPED Referral Process.

Classification as a student with SLD requires an assessment that may be initiated by a parent, teacher or other school professional who works directly with the student (Kirk et al., 2006). Typically consisting of a referring teacher, an administrator, a counselor, a parent, and a general education teacher, the multidisciplinary team (MDT) collaborates to recommend intervention strategies for the child (Kirk et al.). This process attempts to ensure that the student's teacher implements research-based instructional strategies, collects student performance data, and documents results to curtail unnecessary SPED referrals (Kirk et al.). Samples of the student's writing, homework, in-class assignments, and teacher-made tests/quizzes are presented for discussion in the MDT meetings (Waterman, 1994). Although information of this nature tends to be subjective (Barth, 2004), the MDT analyzes and discusses it to determine whether or not a formal SPED referral is necessary (Kirk, et al.). Many LEAs have established a pre-referral process, minimizing the subjectivity and differentiating between low achievers and students with SLD (Overton, 2003). The goal is to have the teacher attempt different teaching strategies to address multiple learning styles before referring a child for testing (Overton, 2003).

IV. Issues of Over-representation of Minorities in SPED.

Over-representation of CLD low academic achieving students is a causal factor of disproportional numbers in special education (Daunic, Correa, and Reyes-Blanes, 2004). In 1992, Black students accounted for 16% of the total U.S. population, but represented 32% of students in programs for mild mental retardation (Burnette, 1998). During the 1997-1998 academic year, more than 2.9 million, or slightly less than five percent of school aged children, received special education services throughout the United States. The Council for Exceptional Children (CEC, 2002), states that Black students are approximately three times as likely as White students to be labeled Mentally Retarded and twice as likely to be labeled Emotionally Disturbed or SLD.

The National Academy of Sciences reports that there are disproportionate numbers of CLD students in poverty. Schools with high concentrations of low-income CLD students tend to have fewer well-trained teachers and resources (Donovan and Cross, 2002). Inadequate quality teacher resources and curriculum hinders equal educational opportunities (Henderson, Kohler, Ritter, Simmons, Skiba, and Wu, 2003). School resource distribution systems most often favor the White students, and additional funding for tutoring CLD students may not be a priority. Teacher's lack of multicultural training, unclear referral processes (Burnette, 1998), ineffective instruction, and poor behavior management (Cartledge, 2002) influence inappropriate SPED program placement for CLD students. These factors hinder cultural mainstreaming for CLD

students, and serve as obstacles in gaining proficiency in the dominant language. Insufficient multi-cultural teacher training results in (Festus and Utley, 1997), a mismatch between home, community and school environments which then becomes a contributing factor in the continued over-representation of students with SLD in SPED programs. Often times, teachers have difficulty in discerning the difference between true SLD characteristics and behaviors that are a manifestation of diverse cultural backgrounds and morays (Duren, Green, McIntosh, Cook-Morales, and Robinson-Zanartu, 2005). This blurring of the two causes an increase in the number of students referred for testing.

V. Exceptional Student Education Assessment Procedures.

Understanding how minority over-representation in SLD occurs, requires one to analyze the process of student assessment for those suspected of having SLD. Choosing an appropriate assessment for SLD is vital to achieving accurate and valid results. SLD assessment requires one to review the Federal law procedures. The *Re-Authorization of IDEA* (2004) offers guidelines for identifying and testing students suspected of having disabilities. It states:

when determining whether a child has a specific learning disability, ... a local educational agency shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability in oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematical calculation, or mathematical reasoning ... a local educational agency may use a process that determines if the child responds to scientific, research-based intervention as a part of the evaluation procedures...(IDEA, 2004).

States and LEAs are offered latitude in assessing students who may meet the criteria of SLD by various methods.

Although the law stipulates that MDTs must review documentation from the child's teacher, parents, observations, and class assignments (IDEA, 2004); it does not offer specific measurements or guidelines for selecting additional intelligence assessments such as the Wechsler Intelligence Scale for Children (WISC) or Woodcock Johnson. The law, as it is currently written, entrusts LEAs to ultimately determine appropriate assessment and placement of children with SLD. What are states considering now for SLD assessment? Is there consensus on SLD definitions and on IQ measurements? What procedures are states following regarding student assessment? Studies in the 1990s yielded a wide array of factors needing further investigation. As far as the name and definition of SLD, a vast majority of states use and agree with the federal terminology previously mentioned (Kidder-Ashley, Deni, and Anderton, 2000; Reschly and Hosp, 2004). All agree on having a team evaluate and determine student placement, as it is part of *IDEA* 2004 (Re-authorization 2004). It is in the tools used to assess the students that the discrepancy exists. SLD classification criteria, including intellectual ability requirements and achievement areas, vary significantly between states (Reschly and Hosp). When congress reauthorized *IDEA*, schools were no longer required to take into consideration whether a child has a severe discrepancy in these areas, yet many states still maintain this practice. Discrepancy criterion is potentially harmful to students, as it delays intervention until student achievement is sufficiently low and a discrepancy is achieved (Lyon, Fletcher, Shaywitz, Shaywitz, Torgesen, and Wood, 2001).

In determining which assessment to use the LEA first considers the skill areas needed to be assessed (Waterman, 1994). LEAs then find suitable tests and select the appropriate ones (Waterman). Tests must be reliable and valid, as well as age and grade appropriate. Most importantly, assessments should be culturally and linguistically appropriate for the students being tested (Waterman). This is where the major problem exists for SLD assessment.

For over 30 years, the most common assessment given to school-aged children is the *Wechsler Intelligence Scale for Children- Revised* (WISC-R). This IQ test is composed of two separate tests, the Verbal and the Performance. These two sets reveal important information about the subtests useful in finding student deficiencies (Overton, 2003). However, recent studies indicate that these tests are not practical for establishing who has a learning disability and do not reveal who will most benefit from remediation (D'Angiulli and Siegel, 2003). Studies done on the WISC-R have determined that there is no clear evidence that relates performance on the WISC-R to SLD (D'Angiulli and Siegel). Prior studies have failed to include children without a SLD in their study (D'Angiulli and Siegel). This has caused a lack of comparison between students with a SLD and average students. When trying to formulate patterns, the means are used instead of individual scores (D'Angiulli and Siegel). This indicates that no other individual patterns of needs are developed other than group means. Since there is a range, looking only at the average of particular groups does not help determine future outcomes. Many now are skeptical of even using IQ testing for SLD classification. This is not to say that it may not be useful for diagnosing other disorders.

According to a recent study of the *Woodcock Reading Mastery Test- Revised, the Wide Range Achievement Test- Revised*, and others, the presence of significantly low scores on achievement tests is the best predictor for SLD placement (D'Angiulli and Siegel, 2003). The purpose of an achievement test is to measure a child's knowledge and retention of information. These norm-referenced tests are currently used to assist educators in making both placement and eligibility decisions (Overton, 2003). Unlike IQ tests, assessment tools measure what children should be learning in their grade level. Much revision and review of current policies for assessing students with a SLD is still needed.

After the assessments have been made, the LEAs study the results to determine eligibility criteria. LEAs look for a discrepancy between intellectual ability and achievement (Reschly and Hosp, 2004). However there is no agreement as to the size of the discrepancy nor on a formula to measure said discrepancy. Some states use standard deviations ranging from 10 to 25. This wide range could mean the difference in a child's education. When looking at the specific academic areas, a majority of the states only ask for a deficit in one, some not at all (Kidder-Ashley et al., 2000). This means a child with no notable deficiency may still be deemed as having SLD in some states. Sixteen states rely on their multi-disciplinary teams to determine eligibility of a child (Kidder-Ashley et al.). This means that the LEAs are the ones determining placement; hence there are intra-state inconsistencies in child placement and in assessment results used.

VI. Alternate Assessment for SLD.

Generally, alternate assessments aim at ameliorating student learning challenges through interventions and tiered approaches. Some examples of these are Response to Intervention (RtI), Dynamic Assessment, Curriculum Based Assessment (CBA), and the Learning Disability Evaluation Scale (LDES).

RtI has generated the greatest interest among educators. RtI is defined as the altering of activities or achievement as a result of intervention which utilizes before and after levels of measurement (Gresham, 2001). According to Mellard, Byrd, Johnson, Tollefson, and Boesche (2004), there are three tiers of RtI distinguished by the focus of intervention. The first tier is characterized by preventative activities directed toward the whole group, mainly emphasizing strong instructional intervention strategies (Mellard et al.). The second tier continues to address the group, but includes an increase in intensity, time, and frequency of instructional interventions (Mellard et al.). What changes in the third tier is that the intervention is no longer conceptualized as a preventative intervention for the group, but more as a prescriptive intervention that focuses on the individual student (Mellard et al.).

As with any new construct, there appear to be positive and negative aspects in the model. Positive effects of RtI point to a combining of functions for special and general education, a reduction of inappropriate special education referrals (Fletcher et al. 2004), and elimination of ineffective instructional strategies that may contribute to student learning difficulties (Mellard et al., 2005). Fletcher et al., indicate that some advantages of RtI are that it does not depend on teacher referral, which may at times be biased as shown by Donovan and Cross (2002). Additionally, it does not require a rigorous evaluation process. Another benefit of the RtI approach is that unlike the IQ discrepancy model which builds from student failure, RtI is preventative in nature (Mellard et al.). These qualities may sway some to embrace RtI, but many questions remain about its effectiveness as a viable alternate assessment for SLD.

Issues that arise with the RtI model are based on its effectiveness in identifying a wide age-range of students, and many ask whether all aspects of SLD can be addressed by this type of assessment (Kavale, Holdnack, and Mostert., 2005). Other questions include: (a) Will minority over-representation decrease; and (b) Can RtI measures be applied in a technically efficient manner (Kavale et al.)? Furthermore, there are implementation issues that may hinder the effectiveness of RtI. For instance, there is no consensus on procedural issues of RtI. Also there is no formulation for secondary student intervention, and the quantity of tiers needed for correct SLD identification have not been determined (Mellard et al., 2004).

There are those that propose that Dynamic Assessment may be the answer to the dilemma of accurate SLD identification. According to De la Cruz, Dynamic Assessment incorporates actual student learning as part of the SLD assessment process; the students' ability to learn is analyzed. Dynamic Assessment comes in many forms, but the basic procedure that is followed is: (a) test the student; (b) train the student; and (c) then re-test the student (De la Cruz, 1996). Swanson and Howard (2005) cite work done by Embretson (1987) that identified three goals of Dynamic Assessment, including increasing estimates of ability, evaluating new ideas, and enhancing true ability.

Swanson and Howard (2005) conducted a research study to determine if Dynamic Assessment could differentiate between poor readers and readers with a disability. Their study showed that poor readers improved with Dynamic Assessment. However 60% of those with a reading disability and 70% of those with a reading and math disability were unable to maintain performance when interventions were stopped and were unresponsive to dynamic testing conditions (Swanson and Howard, 2005). Non-response to this type of intervention was a clear identifier of learning disability (Fuchs and Fuchs, 1998; Swanson and Howard, 2005; Torgeson, 2000).

According to De La Cruz (1996), disadvantages of Dynamic Assessment mainly include concern with construct validity. However there is some disagreement over this. Some say that

changes in student scores due to intervention actually “increase construct validity,” (Carlson and Wiedl, 1979; Elliot and Lauchlan, 1997; Swanson, 1992; Swanson and Howard, 2005, p 18). Dynamic Assessment may assist in the identification of SLD by virtue of non-response to intervention; however it is unclear how reliable and practical it would be to adopt this method on a large scale.

The Learning Disability Index (LDI) developed by Lawson and Inglis (1984) is another alternate assessment being proposed in lieu of the IQ discrepancy model. LDI uses the Wescheler Intelligence Scale for Children III (WISC III), but focuses on specific subtests that indicate brain dysfunction (Watkins, Kush, and Schaefer, 2002). According to Watkins, Kush, and Schaefer, LDI “has been hypothesized to relate to specific neuropsychological deficits of students with learning disabilities,” (Lawson and Inglis, 1985, p. 98). Watkins et al. investigated the diagnostic utility of LDI using a sample from Arizona school districts of 2,053 students currently labeled SLD. They determined, based on their results that the LDI assessment resulted in accurate diagnostic results only 55% to 64% of the time (Watkins et al.). Additionally, results for diagnosing students in both reading disability and math disability revealed minimal accuracy (Watkins et al.). It can be concluded that the LDI assessment does not appear to be a scientifically supported identifier of SLD. After thirty years, we are still seeking the accurate assessment for the elusive diagnosis of SLD.

VII. Future of SLD Alternate Assessment and Minority Over-representation.

Advocates for children such as educators, counselors, social workers, parents, and guardians refer students for assessment in order to determine whether or not the student has SLD. Assessments utilized by school districts around the country aim to identify the problem, as well as the student’s eligibility for receiving necessary special education and related services. In essence, as stated earlier, students suspected of having SLD are tested, diagnosed, and are given interventions as needed to ensure that individuals have access to and make progress in the general education curriculum (Danielson, Doolittle, and Bradley, 2005).

It is apparent that based on research, the current SLD identification assessment practices, and other models that are being implemented or proposed to identify SLD, require further refinement and research to be true indicators of SLD. Keogh (2005) argues that “after decades of effort, we still struggle with questions and problems of classification and identification...” (Keogh, p. 101). Additionally, according to Reschly (2002), “current disability constructs have dubious reliability and validity, particularly treatment validity,” (Reschly, p. 124).

Validity issues and problems of classification, does not minimize the pressing concern about SLD minority over-representation. Since one is not able to determine the true validity of assessments for SLD identification, it is unclear whether one assessment or another would be more useful in reducing minority over-representation in the SLD category. However that does not mean educators and researchers have not been actively trying to address the issue of minority over-representation in SLD. In fact, since teachers are usually the first to refer a student for assessment, many have focused on issues that may be attributed to disproportionate numbers of minorities being identified for SLD. Ineffective teaching, lack of cultural understanding, failure to encourage student motivation, and using a deficit model when assessing students are a few reasons cited for minority over-representation (Malhome, and Brown, 2002; Meyer, and Patton, 2001). Addressing these and similar concerns, combined with continued research and efforts to

infuse authentic SLD assessments, hold the key to opening improved outcomes for students with SLD.

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