Alternatives to RtI in the Assessment of Learning Disabilities

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Response to intervention (RtI) has been proposed as an alternative to identification of students with learning disabilities. According to this proposal, all students receive evidence-based instruction in primary grade reading, with additional services for those not meeting established criteria for success. Students who fail to respond to intensive intervention can then be identified as having learning disabilities. Such a procedure is thought to be valuable in that it does not require IQ testing, that it mandates scientifically-based instruction, and that data from interventions can be used for planning special education. Unfortunately, there are significant problems with this approach, including retaining the present conceptualization of learning disabilities, incorporating the multifaceted nature of LD, identification across grade levels and across domains of instruction, and the technical adequacy of RtI measures. An alternative is proposed which posits effective instruction and remedial programs as necessary components of general education and which forms the baseline of special education referral. A process of learning disabilities referral is then proposed which could be expected to significantly reduce overidentification because of "teaching disabilities", and which would still maintain the integrity of the concept of learning disabilities.
Alternatives to RtI in the Assessment of Learning Disabilities

Response to Intervention (RtI) has been proposed as a positive alternative to the present discrepancy-based methods for identifying learning disabilities (LD) (Gresham, 2002; Speece, Mollow, & Case, 2003). There are several reasons why such an approach offers several benefits. First, there are numerous difficulties to the use of ability-achievement discrepancies as an important component of contemporary LD identification. Degree of discrepancy differs from state to state, the nature of tests differs, and the psychometric validity of using such difference scores has been questioned. Further, the validity of the discrepancy construct has been considered questionable. It has been argued that discrepancy based definitions lack conceptual credibility, that discrepancies fail to identify numerous children in need of remediation, and that discrepancy-based methods do not identify a homogeneous population of students and do not provide information relevant to planning interventions (e.g., Lyon et al., 2001).

Scruggs and Mastropieri (2002) provided a number of additional concerns that have been voiced about current procedures for identification of LD. Current procedures, it is argued, overidentify students as having learning disabilities, identify populations that vary considerably from state to state and region to region, and underidentify needy students at primary grade levels. Overall, it can be argued that concerns about discrepancy-based procedures are very substantial.

Advantages of RtI in Identification of LD

RtI has been proposed as a possible alternative to present procedures. There are several reasons for considering RtI a promising alternative. One is the fact that RtI as proposed emphasizes an important deficit area of LD, that is, reading. Although it is argued that RtI could be used for other skill areas, reading is the one usually described by advocates. Justification for this is offered in evidence that as many as 80% of students identified as LD exhibit severe deficits in reading. RtI also emphasizes early identification, in its focus on reading in the early grade levels. This emphasis addresses the "wait to fail" concern often voiced about discrepancy models, where students advance several grade levels before being identified, and early opportunities for remediation are lost. Another advantage of RtI is its expectation of evidence-based, high-quality instruction as a baseline condition to identification. This expectation is likely to eliminate or greatly reduce "teaching disabilities" -- that is, those supposed learning problems that are really the fault of ineffective instruction.

Problems of RtI in Identification of LD

In spite of the apparent advantages of RtI, several questions remain unanswered at present. Several of these concerns include the following (see also Scruggs & Mastropieri, 2002):

The concept of LD. First, does RtI preserve the contemporary conceptualizations of LD? Previous thinking in the field of...
learning disabilities has generally characterized learning disabilities as including several of the following conceptualizations (see, e.g., Keogh, 1994; Wong, 1996):

- **Unexpected low achievement relative to aptitude or ability.** This unexpected underachievement is at the heart of many conceptualizations of learning disabilities. That is, students fail to make acceptable progress in school, but the reason for this failure is not readily apparent.

- **Intra-individual differences.** That is, that the student exhibits a pattern of strengths and weakness, presumably which contribute to the "unexpected underachievement."

- **Presumed processing deficit.** The implication of the "unexpected underachievement" consideration is that the problem is not primarily due to external factors, but resides within the child, and has to do with cognitive processing efficiency.

- **Average or above intelligence.** Students with LD are thought to be at least of adequate intelligence for accomplishing the academic tasks being presented. Deficits in intelligence are not thought to be a cause of learning disabilities.

- **Multifaceted in nature.** Learning disabilities are thought to manifest themselves in a number of areas relevant to school functioning. This may refer to problems in memory, organization, social skills, or a number of smaller areas that are affected by the learning disabilities.

- **Patterns of relative strengths and weaknesses.** Students with learning disabilities are thought to exhibit areas of relative strength. This consideration contributes to the "unexpected underachievement" criterion, and also is thought to be useful in planning interventions.

**Discrimination.** Does RtI effectively discriminate between students who have learning disabilities and students whose learning problems are due to other factors? That is, students with mental retardation, emotional/behavioral disorders, attention deficit hyperactivity disorder, or generic low achievement also exhibit low responsiveness to interventions, yet are not considered to have learning disabilities. Students in each of these areas may not respond to intervention, but for different reasons. Such a problem poses the question, if RtI cannot discriminate, how can it classify? It could be considered that specific categories are of less interest with an RtI model, but this has not been articulated clearly to date. Further, an argument can be easily advanced that it is important to maintain categories for purposes of advocacy, further research, federal and state funding, and legislation.

**Multifaceted nature of LD.** Another question which could be raised is whether RTI can be used effectively to address the multifaceted nature of LD (Beitchman, Cantwell, Forness, Kavale, & Kauffman, 1998). That is, if learning disabilities can manifest themselves in problems in math concepts/computation, reading comprehension, composition, handwriting, spelling; or memory, attention, study/organizational skills, how can a response-to-treatment on basic reading skills be used as criteria? Even if reading inadequacy is presumed to be the fundamental characteristic of LD, does this suggest it is the only characteristic? That is, are to assume that success in phonemic awareness will necessarily lead to success in

school? Such a model only seems accurate if reading subskills comprise the single deficit area in learning disabilities. If this is true, then, learning disabilities is the same as severe reading problems. If severe reading problems can be identified and corrected in primary grades, then correcting reading problems in primary grades can eliminate learning disabilities in schools. However, there is little evidence that this is the case. Rather, it seems more likely that LD is a disorder in one or more of the basic psychological processes, of which reading problems are the most apparent manifestation. In such a case, intensive instruction can improve reading skills, but this does not “cure” the learning disability, which may have a number of other manifestations. That is, deficits in sustained attention, semantic memory, organizational skills, perceptual motor skills, or social interactions could lead to problems in a number of other school tasks, such as handwriting, memory of academic content for tests, test-taking skills, planning for homework and class projects, appropriate collaborative interactions with others. Although improved reading skills can be viewed as a positive good, it would not necessarily lead to improved functioning in all areas.

Age levels. Another important concern is whether RtI be used across the age spectrum to identify LD, including preschool, primary grades, elementary grades, middle school, and high school. Presently, the model addresses primarily reading in primary grades, and tells us little about how learning disabilities might be evaluated at higher grade levels, and when the problems emerge primarily as failures in content area learning.

Technical adequacy. A final concern is whether RtI be implemented with technical adequacy. That is, can standardized implementation of evidence-based instruction be assured? Will curriculum based measurement be implemented in a standardized fashion across all classrooms. Will remedial procedures be standardized across classrooms? Can justifiable cut-points in level and slope for each content area at each grade level be developed? And if they are, can they be administered in a standardized, consistent, unbiased manner across classrooms where achievement clearly varies widely?

Finally, some questions emerge which were initially presented with respect to discrepancy models. Will RtI improve present identification procedures? Can it be used to reduce overidentification and inappropriate variability? Will it in fact improve early identification, and can it improve or maintain appropriate levels of representation by ethnic or racial groups? At present there is little research evidence to provide answers to such questions.

In fact, at present, there is insufficient research evidence for many important considerations. It is not known how to establish cut-points for levels of intervention or identification, applications beyond early reading, although some progress has recently been made (see, e.g., Fuchs, 2003). The consequences of wide implementation of RtI for LD identification are not known. And perhaps most importantly, the response of general education to RtI is not known, and in fact whether general education is even aware of the RtI debate is unknown. This is not a trivial consideration, for it is general education that will be required to standardize all instructional and assessment procedures, presumably for all subjects and all grade levels, in order for RtI to work. It seems very likely that many teachers will be
reluctant to abandon practices they have employed for years in order to standardize instruction so that LD can be evaluated. Nevertheless, it is important for general education teachers and other school personnel to be consulted with on this significant issue.

**Alternatives to RtI**

RtI as presently characterized describes appropriate procedures for addressing reading problems in general education. It suggests that all students receive evidence-based instruction in reading; that students failing to make adequate progress are given more intensive instruction, and that only after repeated attempts to provide high-quality, intensive instruction are students referred to special education. These are general education treatments, likely to reduce inappropriate referrals to special education. However, the question remains, is RtI best suited for identification of LD or as an early reading program for general education? As an example, let us assume that evidence-based intervention is widely implemented in elementary schools, but as an early reading intervention in general education classrooms (it may not be necessary — or even possible — that all reading instruction is standardized across all classrooms). All students, then receive high-quality reading instruction. Students with early reading problems receive more intensive instruction in small groups. If this program is successful, referrals will most likely decrease, and only those who “truly” have learning disabilities will be identified. In such a scenario, all interventions are within general education, so it seems logical that general education (not special education) funds pay for these services. Special education funds are then reserved for students with disabilities, including learning disabilities, and the possibility of false positives is greatly reduced.

In such a scenario, how then, should learning disabilities be identified? We can return to the federal definition of learning disabilities, which states in part:

*...a disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations (Federal Register, 1977, p. 65083).*

The federal definition also states that learning disabilities is not the result of visual, hearing or motor handicaps, mental retardation, emotional disturbance, or environmental, cultural, or economic disadvantage. The condition of learning disabilities, then, is achievement deficits not explained by: low vision; hearing impairments; physical disabilities; mental retardation; environmental, cultural, or economic disadvantage; or insufficient opportunity to learn. The addition of evidence-based practices and "RtI-type" interventions also guarantee that students will have received appropriate, high-quality services.

The problem remains, however, how do we operationalize discrepancies? For vision, hearing, physical, environmental, opportunity, discrepant performance is typically viewed as a dichotomy (that is, students are considered to be either adequate or inadequate with respect to these considerations). However, for intelligence, a different picture may emerge. Should the difference between achievement and intellectual ability best be viewed as a dichotomy or continuum?
On the one hand, intellectual ability could also be viewed as a dichotomy. That is, students are considered to be either adequate or inadequate with respect to intelligence. That is, a cut-off could be established (e.g., > 80, see Breier et al., 2001). If a student is considered to be adequate in intelligence, then further consideration of IQ would be unnecessary, and the identification procedures could focus on the nature and degree of underachievement. On the other hand, a specific discrepancy (e.g., 1, 1.5, or 2 standard deviations) could be calculated between IQ and achievement.

Either version might meet in spirit the recommendation of Vaughn, Linan-Thompson, and Hickman (2003): “Students with LD could be identified on the basis of low achievement, application of the exclusionary criteria, and then response to intervention” (p. 392). While not called for by Vaughn et al., response to intervention could simply reflect levels of evidence-based instruction implemented by general education as assurance that students had indeed received high-quality instruction. With "RtI-type" services implemented in general ed as a supplemental service, all students would have received such instruction.

Use of an arbitrary IQ cut-off, however, could also create some problems. The procedure might misidentify students who are generally low achievers, or whose underachievement is not "unexpected". It might increase overidentification of students with learning disabilities, beyond those levels already considered by many to be excessively high. Students identified with an IQ cutoff might not conform to the conceptualization of "unexpected underachievement". That is, a student with an IQ of 80 and a reading standard score of 85 might be identified as having a learning disability, and yet might not meet conceptual criteria. Further, an IQ cutoff might remove from consideration students with low IQs, who nevertheless are performing below expectations, for example, a student with an IQ of 80, but a reading standard score of 55.

However identification criteria are established, it should not be forgotten how strongly IQ-achievement discrepancy criteria are bonded to the category of learning disabilities itself. In an article entirely critical of discrepancy, Aaron (1997) revealed that hostility to discrepancy, at least for him, was really manifest as hostility to the entire category of learning disabilities:

_When the discrepancy formula disappears from the educational scene, so will the concept of LD.... we are beginning to get a glimpse of the promised land (Aaron, 1997, p. 489)._ 

Aaron is not alone in this perspective. A number of years ago, similar concerns were voiced:

_It is time to quit viewing eligibility decision making as a technical problem. It means putting an end to efforts to try to find better ways of defining concepts and conditions that cannot be defined and may not exist (Algozzine & Korinek, 1985, pp. 392-393)._ 

If elimination of the category of learning disabilities is sought, then this specifically should be the topic of discussion. If it is not, then discussion is needed that demonstrates how RtI identification procedures will preserve the category of learning disabilities while improving identification of students with learning disabilities.

**An Alternative to RtI in Identification of Learning Disabilities**

Over the years, numerous alternatives have been proposed to present identifi-
cation procedures, including Bayesian procedures, "double deficit" criteria, phonological process core differences, neuropsychological measures, and measures of cognitive processing (see Scruggs & Mastropieri, 2002, for a review). Although all contain some areas of strength, none to date have gained general acceptance. Considering together the concerns about RtI in identification of learning disabilities, and at the same time remaining mindful of problems commonly voiced about current procedures (Scruggs & Mastropieri, 2003), an alternative to both RtI and present procedures can be proposed:

1. Create change in general education so that "RtI-type" first and second-tier reading programs are implemented in general education. That is, all students are assured of evidence-based instruction (although variability in response to student and teacher characteristics is accepted). Further, supplemental procedures are in place for students who fail to demonstrate adequate progress, for any reason. Students who are referred to special education, then, have already been assured very high quality general education treatments. Such procedures should guard against overidentification in two ways: first, "teaching disabilities" as a cause of LD will be eliminated, since all students will have received high-quality instruction. Second, school personnel will be less likely to refer students to special education because other services simply are not available (MacMillan, Gresham, & Bocian, 1998; MacMillan, Gresham, Siperstein, & Bocian, 1996). Such requirements can help enforce strict criteria for LD identification. Since the first and second tier services are entirely within the domain of general education and appropriate to the scope of general education, services should come from general education budgets.

2. All students identified as having learning disabilities will demonstrate very low achievement in one more significant areas of school functioning, and this level of functioning will be documented from more than one record, possibly including teacher reports, evidence of student classroom performance, and standardized test scores.

3. All students identified as having learning disabilities will meet exclusionary criteria with respect to sensory and motor functioning; social-emotional functioning; or economic, environmental, or cultural disadvantage.

4. All students will demonstrate a discrepancy (e.g., 1, 1.5, or 2 standard deviations) between IQ and achievement. Schools, state and federal education authorities can determine the best criteria, or whether these must be standard across states.

5. Early identification will be encouraged so that appropriate remedial services can be maximized. With appropriate general education services in effect, it will become obvious at very early ages that general remedial services alone will not be sufficient to insure adequate school functioning. Therefore, there will be little to be gained from adopting a "wait to fail" approach.

6. The final decision is made by a team but must be supported by evidence.
To the extent that all measures are vulnerable and all students unique, it is important that teams of professionals agree on the best decision for individual students. However, such decisions must be supported to the greatest extent possible by reliable evidence.

There are several advantages to such a procedure. First, it maintains the concept of disability, that is, as within-student, long-term or lifelong, unexpected underachievement. As a disability consideration, special education remains a viable and appropriate placement. As general low achievement, the disability consideration is lost, or at least weakened, and the appropriateness of special education is unknown. The presently proposed alternative to RtI provides an operationalized procedure which can reduce overidentification and variability from subjectivity in decision making. The “RtI-type” services maintain emphasis on high-quality, evidence-based practice, and provides an alternative to special education. This alternative is greatly needed in order to provide appropriate services to the many students caught in the middle -- those not "disabled" by any reasonable portrayal of the concept, and yet struggling to keep up in school. When such students are appropriately provided for, identification problems will dissipate, and special education services will be reserved for those students for whom they were created -- students with disabilities, most in need of special attention.
References


