A photograph of a classroom with students raising their hands. The background is a chalkboard with some faint, illegible writing. The lighting is bright, and the overall tone is educational and positive.

Guidelines for Identifying Students with Specific Learning Disabilities

COLORADO DEPARTMENT OF EDUCATION
10/7/08

cde

Acknowledgements

There are many people to thank for being a part of this journey toward a very changed way of identifying and serving students with Specific Learning Disabilities. The following dedicated people have been and still are critical to making this all happen for the improvement of outcomes for all students, especially those with SLD.

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State Board of Education Mission and Vision

Mission

The mission of the Colorado State Board of Education is to provide all of Colorado's children equal access to quality, thorough, uniform, well-rounded educational opportunities in a safe and civil learning environment.

Vision

All children in Colorado will become educated and productive citizens.

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(as of October, 2008)**

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Section 1

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Guidelines for Identifying Students with SLD

INTRODUCTION

Specific Learning Disability (SLD) is an identifiable category of disability in both the federal law, *Individuals with Disabilities Education Act of 2004 (IDEA 2004)*, and Colorado law, *Exceptional Children's Education Act (ECEA)*. This disability category was previously referred to in Colorado law as Perceptual/Communicative Disability or PCD.

A significant shift in the way we think about the identification of Specific Learning Disabilities has occurred. There is heightened emphasis throughout IDEA 2004 on effective core instruction and intervention that will result in improved educational outcomes for all students, including those at risk for learning difficulties and those who may be identified as having SLD. Ensuring that a student is not identified as having a disability because of difficulties that are due to language differences or inadequate instruction, especially in the five essential components of reading and in math, is also elevated in importance. The implementation of a *Response to Intervention (RtI)/Problem-Solving* approach to meeting learning needs greatly increases the chances that appropriate instruction is being provided.

The Regulations reflect the Department's position on the identification of children with SLD and our support for models that focus on assessments that are related to instruction and promote intervention for identified children.

- Federal Register, vol. 71, no. 156,
8/14/06, p. 46647

Identification processes that have operated in a "test⇒eligibility⇒intervention" manner have often resulted in a "wait-to-fail" phenomenon that occurs when a student is having difficulties, but is not eligible for intervention (via special education) because the assessed discrepancy between aptitude and achievement is not yet large enough. This approach has now given way to one that provides interventions as part of a problem-solving process at the earliest indication of need. Then, if both low achievement and insufficient progress are still evident, the student's response to those interventions (RtI), along with other relevant data, may lead to a special education referral and a disability determination.

Collaboration between special education and general education has long been the ultimate goal of many school reform efforts. The essential components and benefits of a *Response to Intervention (RtI)* approach to addressing student learning needs are referenced in both general and special education law at the federal level, furthering the integration of learning support for all students, including those with identified disabilities.

The *Individuals with Disabilities Education Act (IDEA 2004)* and the *No Child Left Behind (NCLB) Act* both heavily emphasize the importance of the following:

- early recognition of learning difficulties through screening;
- a focus on formative assessment that drives instruction;
- attention to outcome data;

- the implementation of scientific, researched-based instruction;
- explicit instruction in the five essential components of reading;
- the provision of supplementary instruction or intervention; and
- increased parental involvement in a child’s learning and in educational decision-making processes.

It is expected that the reauthorization of No Child Left Behind will contain even more direct reference to a *Response to Intervention* approach to improving learning outcomes for all students. The cross-referencing between the two Acts serves to highlight the overlap in approach between general and special education. All of the elements listed above are essential in the identification of SLDs and are incorporated into this guidance document.

There is no longer the need to determine that a significant discrepancy between aptitude (intellectual potential) and level of achievement exists. The validity and reliability of this approach to SLD identification has been seriously challenged for many years through extensive research.

Consensus reports and empirical syntheses indicate a need for major changes in the approach to identifying children with SLD. Models that incorporate RTI represent a shift in special education toward goals of better achievement and improved behavioral outcomes for children with SLD...
 - Federal Register, vol. 71, no. 156, p. 46647

The assessment of cognitive processing (PCD Indicative Behaviors) separate from direct assessments in the achievement domains is also not supported as necessary for either eligibility purposes or to inform instruction and intervention. Instead, a variety of screening, progress monitoring, and diagnostic/prescriptive assessments can provide the information needed.

A comprehensive review was conducted that compared approaches to the assessment/identification of students with learning disabilities. The four approaches reviewed were: (a) aptitude/achievement discrepancies, (b) low achievement, (c) intra-individual differences, and (d) response to intervention. The overall finding suggests that models that incorporate both RtI and low achievement concepts have the strongest evidence base and the most direct relation to intervention. In addition, a general concern is expressed about “status” models of LD identification; that is, identification based on assessment conducted essentially at a single point in time. (Fletcher, Francis, Morris & Lyon, 2005)

Defining a Specific Learning Disability has always been difficult and has relied more heavily on what it is *not*, rather than specifying inclusionary criteria.

Definition issues have been a difficult topic since the origins of the concept of LDs. The heart of the construct, however, has always been the notion of “unexpected underachievement.” The person with LD has always been conceptualized as a person who is unable to learn adequately under circumstances that should support positive outcomes. Thus, LDs have been traditionally identified when a person underachieves despite an absence of other conditions associated with

low achievement (mental retardation, sensory disorders, emotional difficulties, having a primary language other than the language of instruction, poverty, and inadequate instruction). Those who did not achieve in the absence of these exclusionary factors were presumed to have a “disorder of constitutional origin” since environmental causes could be eliminated. (“The Need for Response to Instruction Models of Learning Disabilities,” Jack M. Fletcher, Ph.D., *Perspectives*, Winter 2006, The International Dyslexia Association)

The construct of “unexpected underachievement” is clearly incorporated through a *Response to Intervention* approach that is able to identify students who continue to struggle even when provided explicit instruction/intervention that is effective with most students.

LAWS

Individuals with Disabilities Education Act of 2004 (IDEA 2004)

The State’s charge is to adopt criteria for the identification of Specific Learning Disabilities as set forth in the Act:

§300.307 Specific learning disabilities.

(a) General. A State must adopt, consistent with §300.309, criteria for determining whether a child has a specific learning disability as defined in §300.8(c)(10). In addition, the criteria adopted by the State--

- (1) Must not require the use of a severe discrepancy between intellectual ability and achievement for determining whether a child has a specific learning disability, as defined in §300.8(c)(10);
- (2) Must permit the use of a process based on the child’s response to scientific, research-based intervention; and
- (3) May permit the use of other alternative research-based procedures for determining whether a child has a specific learning disability, as defined in §300.8(c)(10).

(b) Consistency with State criteria. A public agency must use the State criteria adopted pursuant to paragraph (a) of this section in determining whether a child has a specific learning disability.

Federal Regulations

The Federal Regulations to accompany the Act serve to clarify the appropriate implementation of the Act. In addition, the official responses to comments from the field are included in the Federal Register as a preamble to the actual Regulations and provide further interpretation of both the Act and the Regulations. Reference is made to the Federal Regulations and to the Preamble throughout this document.

Colorado ECEA Rules

Consistent with §300.8 and §300.309 of IDEA 2004, the recently amended Colorado Rules and Regulations set forth the following definition and criteria for the determination of a specific

learning disability.

**Colorado Rules for the Administration of the
Exceptional Children's Educational Act (effective 12/30/07)**

2.08(6) Specific Learning Disability

2.08(6)(a) A child with a specific learning disability shall have a learning disorder that prevents the child from receiving reasonable educational benefit from general education.

2.08(6)(a)(i) 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 the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Specific learning disability does not include learning problems that are primarily the result of: visual, hearing, or motor disabilities; significant limited intellectual capacity; significant identifiable emotional disability; cultural factors; environmental or economic disadvantage; or limited English proficiency.

2.08(6)(b) Alternative criteria. A child may be determined to have a Specific Learning Disability that prevents the child from receiving reasonable educational benefit from general education if the following criteria are met:

2.08(6)(b)(i) Criteria under the discrepancy model. <The "old" criteria, including aptitude/achievement discrepancy, are reiterated in this section.>

Administrative units and state-operated programs may continue to use the criteria set out in this Section 2.08(6)(b)(i) through August 14, 2009.

2.08 (6)(b)(ii) Criteria under the Response to Intervention model.

2.08 (6)(b)(ii)(A) The child does not achieve adequately for the child's age or to meet State-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child's age or state-approved grade-level standards:

- 2.08 (6)(b)(ii)(A)(I) Oral expression;**
- 2.08 (6)(b)(ii)(A)(II) Listening comprehension;**
- 2.08 (6)(b)(ii)(A)(III) Written expression;**
- 2.08 (6)(b)(ii)(A)(IV) Basic reading skill;**
- 2.08 (6)(b)(ii)(A)(V) Reading fluency skills;**
- 2.08 (6)(b)(ii)(A)(VI) Reading comprehension;**
- 2.08 (6)(b)(ii)(A)(VII) Mathematical calculation;**
- 2.08 (6)(b)(ii)(A)(VIII) Mathematics problem solving; and**

2.08 (6)(b)(ii)(B) The child does not make sufficient progress to meet age or state-approved grade-level standards in one or more of the areas identified in section 2.08(6)(b)(i) when using a process based on the child's response to scientific, research-based intervention as determined by a body of evidence demonstrating:

2.08 (6)(b)(ii)(B)(I) Academic skill deficit(s); and

2.08 (6)(b)(ii)(B)(II) Insufficient progress in response to scientific, research-based intervention

The criteria set forth in this Section 2.08(6)(b)(ii) may be used as of the effective date of these Rules <December 30, 2007> but must be used by administrative units and state-operated programs no later than August 15, 2009. No later than August 15, 2008, each administrative unit and state-operated program shall submit a plan to the Department describing how the administrative unit or state-operated program will implement the criteria set forth in this Section 2.08(6)(b)(ii) by August 15, 2009.

4.02 (7) Additional procedures for identifying children with Specific Learning Disabilities
The definition and criteria for the Specific Learning Disability category are set forth in section 2.08(6) of these Rules. The additional requirements and procedures for identifying children with Specific Learning Disabilities shall be consistent with 34 CFR §300.307(B), §300.308, §300.309(B) – (C), §300.310 AND §300.311.

The following text in the shaded boxes is from the sections of the Federal Regulations pertaining to SLD as referred to above in section 4.02(7) of the Colorado Rules as also being applicable.

§ 300.307 Specific learning disabilities.

(b) *Consistency with State criteria.* A public agency must use the State criteria adopted pursuant to paragraph (a) of this section in determining whether a child has a specific learning disability. (Authority: 20 U.S.C. 1221e-3; 1401(30); 1414(b)(6))

§ 300.308 Additional group members.

The determination of whether a child suspected of having a specific learning disability is a child with a disability as defined in § 300.8, must be made by the child's parents and a team of qualified professionals, which must include—

- (a)(1) The child's regular teacher; or
- (2) If the child does not have a regular teacher, a regular classroom teacher qualified to teach a child of his or her age; or
- (3) For a child of less than school age, an individual qualified by the SEA to teach a child of his or her age; and
- (b) At least one person qualified to conduct individual diagnostic examinations of children, such as a school psychologist, speech-language pathologist, or remedial reading teacher. (Authority: 20 U.S.C. 1221e-3; 1401(30); 1414(b)(6))

§ 300.309 Determining the existence of a specific learning disability.

(b) To ensure that underachievement in a child suspected of having a specific learning disability is not due to lack of appropriate instruction in reading or math, the group must consider, as part of the evaluation described in §§ 300.304 through 300.306—

- (1) Data that demonstrate that prior to, or as a part of, the referral process, the child was provided appropriate instruction in regular education settings, delivered by qualified personnel; and
- (2) Data-based documentation of repeated assessments of achievement at reasonable intervals, reflecting formal assessment of student progress during instruction, which was provided to the child's parents.
- (c) The public agency must promptly request parental consent to evaluate the child to determine if the child needs special education and related services, and must adhere to the timeframes described in §§ 300.301 and 300.303, unless extended by mutual written agreement of the child's parents and a group of qualified professionals, as

described in § 300.306(a)(1)—

- (1) If, prior to a referral, a child has not made adequate progress after an appropriate period of time when provided instruction, as described in paragraphs (b)(1) and (b)(2) of this section; and
- (2) Whenever a child is referred for an evaluation. (Authority: 20 U.S.C. 1221e-3; 1401(30); 1414(b)(6))

§ 300.310 Observation.

- (a) The public agency must ensure that the child is observed in the child's learning environment (including the regular classroom setting) to document the child's academic performance and behavior in the areas of difficulty.
- (b) The group described in § 300.306(a)(1), in determining whether a child has a specific learning disability, must decide to—
 - (1) Use information from an observation in routine classroom instruction and monitoring of the child's performance that was done before the child was referred for an evaluation; or
 - (2) Have at least one member of the group described in § 300.306(a)(1) conduct an observation of the child's academic performance in the regular classroom after the child has been referred for an evaluation and parental consent,

consistent with § 300.300(a), is obtained.
(c) In the case of a child of less than school age or out of school, a group member must observe the child in an environment appropriate for a child of that age.
(Authority: 20 U.S.C. 1221e-3; 1401(30);1414(b)(6))

§ 300.311 Specific documentation for the eligibility determination.

(a) For a child suspected of having a specific learning disability, the documentation of the determination of eligibility, as required in § 300.306(a)(2), must contain a statement of—
(1) Whether the child has a specific learning disability;
(2) The basis for making the determination, including an assurance that the determination has been made in accordance with §300.306(c)(1);
(3) The relevant behavior, if any, noted during the

observation of the child and the relationship of that behavior to the child's academic functioning;
(4) The educationally relevant medical findings, if any;
(5) Whether—
(i) The child does not achieve adequately for the child's age or to meet State-approved grade-level standards consistent with §300.309(a)(1); and
(ii)(A) The child does not make sufficient progress to meet age or State approved grade-level standards consistent with §300.309(a)(2)(i)
(6) The determination of the group concerning the effects of a visual, hearing, or motor disability; mental retardation; emotional disturbance; cultural factors; environmental or economic disadvantage; or limited English proficiency on the child's achievement level; and
(7) If the child has participated in a process that assesses the child's response to scientific,

research-based intervention—
(i) The instructional strategies used and the student-centered data collected; and
(ii) The documentation that the child's parents were notified about—
(A) The State's policies regarding the amount and nature of student performance data that would be collected and the general education services that would be provided;
(B) Strategies for increasing the child's rate of learning; and
(C) The parents' right to request an evaluation.
(b) Each group member must certify in writing whether the report reflects the member's conclusion. If it does not reflect the member's conclusion, the group member must submit a separate statement presenting the member's conclusions.
(Authority: 20 U.S.C. 1221e-3; 1401(30); 1414(b)(6))

The following chart summarizes the major shifts that are taking place in the identification of students with Specific Learning Disabilities as a result of IDEA 2004, the Federal Regulations and the alignment of Colorado's ECEA Rules with federal law.

Shift in Identification of Specific Learning Disabilities

(As result of IDEA 2004, Federal Regulations and the amended Colorado ECEA Rules)

	THEN	NOW
Proactive Intervention	Waiting to intervene until criteria for special education are met and services can be provided ("wait-to-fail")	Intervening at first indication of learning difficulties, utilizing universal screening and progress monitoring of essential skills and concepts
	Within-child focus of problem; focus on internal, unalterable variables	Systems approach to problem-solving; emphasis on the effectiveness of core instruction for all students; focus on alterable variables (instruction and intervention varied as to time, intensity, and focus)
	Clear eligibility criteria (in or out) – targeted/intensive services often not provided unless found eligible for special education	Tiered model of services delivery across general, compensatory and special education
Problem-Solving	Student Study/Multidisciplinary Team often made up mostly of special educators; individual students typically referred to team by teachers with academic and behavioral concerns, frequently resulting in a special education referral	Problem-solving process as central to the work of Problem-Solving Teams that include general and special educators; parents involved throughout the process and kept informed of instructional strategies and progress; collaborative educational decisions, including adjustments to instruction/intervention, are based on ongoing school, classroom and individual student data; increased focus on early detection and proactive response to difficulties
	Reliance on assessments largely external to the learning context for the purpose of disability identification	Reliance on direct measures of learning that inform instruction/intervention, as well as consideration for special education
Assessment/Evaluation	Assessment data collected during a limited number of sessions used to make eligibility decisions	Multiple data points collected over time and in direct relationship to the instruction/intervention provided used to make important instructional decisions (including special education eligibility)
	Assessment/evidence of Perceptual-Communicative (PC) Indicative Behaviors (processing deficits) required for identification	Emphasis on diagnostic/prescriptive assessments in the area(s) of suspected disability and/or educational need that directly assist in the determination of instruction and intervention
	"Comprehensive evaluation" consisting mainly of formal assessments conducted by individual members of the multidisciplinary team; often the same battery of tests administered to all children referred; assessments resulting in eligibility decisions administered during a limited number of sessions.	"Full and individual evaluation" collaboratively planned and relying heavily on existing data collected throughout the RTI process (multiple data points over an extended period of time); evaluation includes the child's response to specific interventions and other data gathered through universal screenings, observations, teacher checklists, progress monitoring, diagnostic assessments, etc.; parents and classroom teachers as integral members of the team
SLD Construct/Criteria	SLD construct of "unexpected underachievement" indicated by low achievement as compared to a measure of the child's ability (IQ/achievement discrepancy)	SLD construct of "unexpected underachievement" indicated by low achievement and insufficient response to empirically validated instruction/intervention that works with most students, even struggling ones
	"Slow learners" (having low achievement and flat cognitive profiles) not identified as eligible for special education services	Recognition that children we might have thought of as "slow learners" may very well have specific learning disabilities that are causing the cognitive profile flatness and may require the long-term targeted/intensive interventions available through special education

At a Glance: Summary of Eligibility Criteria

Special education eligibility in the category of a Specific Learning Disability is based upon evidence that the student does not achieve adequately for the student's age or to meet grade-level standards in one or more of the following areas: oral expression, listening comprehension, written expression, basic reading skill, reading fluency skills, reading comprehension, mathematical calculation, mathematics problem solving.

Specifically, the multidisciplinary team must determine that ...

- 1) the student has one or more significant academic skill deficits as compared to age-level peers or grade-level benchmarks.
- 2) the student is making insufficient progress in response to research/evidence-based interventions.
- 3) the student's learning difficulties are not PRIMARILY* the result of visual, hearing, or motor disabilities; significant limited intellectual capacity; significant identifiable emotional disability; cultural factors; environmental or economic disadvantage; or limited English proficiency.

In addition, as is stated in the Federal Rules and Regulations and pertaining to the identification of any disability, the findings can not be the result of a lack of appropriate instruction, specifically in the essential components of reading and in math.

Eligibility for special education is based on two final determinations:

- 1) the student has a Specific Learning Disability and
- 2) the student cannot receive reasonable educational benefit from general education alone

* Note that a specific learning disability may co-exist with another disability that is found to be the primary disability by the multidisciplinary team and that all special education needs must be identified, whether or not commonly linked to the primary disability category in which the child has been classified.

Section 2: Overview of *Response to Intervention*

- Relevance of RtI to SLD Identification
- RtI in Colorado: Definition, Purpose & Core Principles
- Components of RtI Essential to the Identification of SLD:
 - Problem-Solving Team & Process
 - Tiers of Instruction/Intervention
 - Assessment: Purposes and Types
 - Family-School Partnership
- RtI: Frequently Asked Questions

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Relevance of *Response to Intervention (RtI)* to SLD Identification

It is essential that a *Response to Intervention/Problem-Solving* process be implemented prior to or as part of the evaluation for SLD. Explicitly, the multidisciplinary team must determine that “the child does not make sufficient progress to meet age or state-approved grade-level standards in one or more of the areas ... when using a process based on the child’s response to scientific, research-based intervention.” As indicated in the introduction to these Guidelines, there is a major shift away from an identification system that was, in effect, a “wait-to-fail” model (to realize the required aptitude/achievement discrepancy) to one where the focus is on the provision of intervention at the first indication of learning difficulties. The presence of “academic skill deficit(s)” can also be documented through the range of performance data collected throughout the tiers, including universal screening, progress monitoring, diagnostic/prescriptive assessment, classroom observations, products, etc. Assessment includes direct measures of learning that inform instruction/intervention and multiple data points collected over time. A multidisciplinary team should be assured by the provision of well-delivered (with fidelity – integrity and sufficiency), research-based intervention that their findings of SLD are not due to a lack of appropriate instruction (a determination that must be made for any disability).

RtI in Colorado: Response to Instruction & Intervention

Definition, Purpose & Core Principles

RtI is an approach that promotes a well-integrated system connecting general, compensatory, gifted, and special education in providing high quality, standards-based instruction & intervention that is matched to students' academic, social-emotional, and behavioral needs.

A continuum of intervention tiers with increasing levels of intensity and duration is central to RtI.

Collaborative educational decisions are based on data derived from frequent monitoring of student performance and rate of learning.

The overarching purpose of RtI implementation is to improve educational outcomes for ALL students.

Core Principles

We believe that...

- **ALL children can learn and achieve high standards as a result of effective teaching.**
- **All students must have access to a rigorous, standards-based curriculum and research-based instruction.**
- **Intervening at the earliest indication of need is necessary for student success (Pre K-12).**
- **A comprehensive system of tiered interventions is essential for addressing the full range of student needs.**
- **Student results improve when ongoing academic and behavioral performance data are used to inform instructional decisions.**
- **Collaboration among educators, families and community members is the foundation to effective problem-solving and instructional decision-making.**
- **Ongoing and meaningful involvement of families increases student success.**
- **All members of the school community must continue to gain knowledge and develop expertise in order to build capacity and sustainability.**
- **Effective leadership at all levels is crucial for the implementation of RtI.**

The principles were adapted by the Colorado RtI Task Force and the Colorado RtI Implementation Team from those given in the document, Response to Intervention: Policy Consideration and Implementation, NASDSE, 2005.

Overview of RtI as a Systems-Wide Model

This section provides a brief overview of RtI as delineated in “Response to Intervention: A Practitioner’s Guide to Implementation” published by the Colorado Department of Education (2008) and available from the CDE website. The full guide provides a comprehensive description of the RtI model and addresses all key elements, such as: leadership; curriculum and instruction; school climate (positive behavior support); problem-solving process; assessment and progress monitoring; multi-tiered model of instruction and assessment; roles and expectations of school personnel and parents; as well as specific examples of decision-making at each tier based on individual student data.

This brief overview focuses on only four of the essential components of an RtI Model – those directly related to the identification of SLD. Certainly the other components must also be addressed to ensure effective implementation of such systemic educational reform.

Context

The *Response to Intervention* (RtI) Model is a school-wide initiative that allows for the utilization of resources for students in need of academic and/or behavioral support. RtI provides a seamless system of interventions and resources which allow students to make significant progress whether they are at-risk for failure or are gifted and talented students not meeting their full potential. Although IDEA 2004 encourages utilizing the RtI process as an approved approach for the identification of students for special education services, the intent of the process is much broader than eligibility alone. The RtI model utilizes instructional strategies such as universal screening and ongoing data analysis to inform instructional interventions, flexible use of building personnel to address student needs, as well as collaborative problem-solving among staff and parents to enhance all students’ performance.



Problem-Solving Process

Diverse representation and collegiality are essential elements of successful problem-solving teams. Teams must be composed of the student’s parents and a variety of educational staff, including teachers, specialists, and administrators. Team membership should include individuals who have a diverse set of skills and expertise and who can address a variety of behavioral and academic problems. Problem-solving teams should identify a facilitator who guides the process and ensures that culture of collegiality is maintained. Other important roles on a problem-solving team include a recorder and timekeeper. Finally, designated consultants or case managers are essential to the follow-through of the recommendations made by problem-solving teams.

The problem-solving process assists the classroom teacher and parents in designing and selecting strategies for improving student academic and/or behavioral performance that have a high probability of success. It provides a structure for addressing the academic and/or behavioral concerns identified by teachers or parents. A problem-solving process requires full collaboration among a team of professionals, along with parents, to identify specific, measurable outcomes and research-based interventions to address the concerns. The process includes ensuring interventions are implemented with fidelity according to their research base and student progress is monitored to determine the student’s response. Family involvement in the process is vital to ensure that all information that might impact success is considered.

Steps in the Problem-Solving Process

A problem-solving process includes a structured format for analyzing possible reasons for a student’s academic or behavioral difficulties and planning interventions. Utilizing a structured problem-solving approach when exploring, defining, and prioritizing a teacher’s concerns helps

the team make efficient use of time and increases the probability of selecting the right intervention(s).

Define the Problem

The problem should be stated in objective, measurable terms, using direct measures of academics and/or behavior. The definition of the problem must focus on teachable academic or behavioral skills that can be measured and can be changed through the process of instruction.

Problems can be defined as the difference between what is observed/measured and an expectation for a student. Expectations can be developed based on local norms, normative standards, criterion based measures, peer performance, instructional standards, developmental standards, district or state assessments, and/or teacher expectations. For example, a second grade student may be reading at 21 words per minute (wpm), while the classroom norm may be 32 wpm. A 10th grade student may be on-task 30% of time and completing tests with 50% accuracy while the peer group is on-task 75% of the time and completing tests with 78% accuracy. Thus, defining the problem involves articulating the accepted expectation.

It also is important to understand whether the identified problem exists for large groups of students, small groups of students, or for only one student since this knowledge will lead to different types of interventions. For large group performance problems, changes in overall (core) curriculum and instruction may be necessary and problem-solving is then conducted on a large scale. On the other hand, if a problem is present for only one or a very few students, individual problem-solving should occur.

Typically, the classroom teacher collects data about the student's performance, including information gathered from the parents, and brings the information to a problem-solving team meeting at the beginning of the process.

Analyze the Problem

The goal of problem analysis is to answer the question. "Why is this problem occurring?" During this step, relevant information about the problem is gathered and considered, potential hypotheses about the probable causes of the problem are described, and information (assessment) is gathered to either confirm or disprove the hypotheses.

Gathering information may involve further examination of classroom products, information provided by the parents, observations in the instructional setting, focused assessments, or examination of data from other district or state assessments. Generally, four methods exist to gather information in school settings: Review of existing data, Interview (student, parents, teachers, peers), Observe (classroom and/or other settings), and Test (direct assessment using valid assessment procedures). This RIOT acronym is useful to ensure that a multi-method, multi-source, multi-setting assessment is completed.

When the underlying cause is determined (for example, a breakdown in a specific reading skill or component), the team may explore evidence-based interventions that are relevant. Some questions for the team to ask in analyzing the problem include:

- Has the student received quality instruction in the target skill?
- Does the curriculum support the development of the target skill?
- Does the school environment support the acquisition and application of the target skill?

Develop and Implement the Plan

The goal of the third step is to develop an instructional/intervention plan that matches the identified student need, provides for adequate support to ensure integrity of implementation and sufficiency, and has the most likelihood of success.

A good intervention plan:

- explicitly defines the skills to be taught;
- focuses on measurable objectives;
- identifies who will complete various tasks, when and how;
- specifies how support to ensure implementation integrity and sufficiency will be provided and how the intervention integrity and sufficiency will be documented;
- describes a plan for measuring and monitoring effectiveness of instructional efforts (including a quantifiable baseline and target goal for the skill to be developed); and
- reflects the resources available.

Collecting data on how the student is progressing (progress monitoring) is another essential component of implementing the plan. The team should determine at the outset how progress monitoring will occur and what measures will be used. For example, for behavioral interventions time sampling or other direct behavioral measures may be used, while academic interventions may utilize curriculum-based measures.

Evaluate the Response to Intervention

Progress monitoring is a methodology for measuring the effectiveness of an intervention. The goal of progress monitoring is to answer the question, “Is the instruction/intervention working?” If an intervention is not delivering the desired results, the intervention should be changed. Thus, a key feature of any method used to collect data is that it can be administered frequently and is sensitive to small changes in skill level. By plotting skill attainment on a graph, trends in student performance can be easily visualized.

In preparation for evaluating student response to intervention, the teams needs to:

- Determine how the progress monitoring data will be managed/graphed (e.g., with a commercial web-based program such as DIBELS or AIMSweb, Excel, or ChartDog;
- Decide who will do the progress monitoring and how often it will be done;
- Set logical data review timelines based upon the intervention(s);
- Determine rules based on data to be used in looking at whether the intervention or goal needs to be modified.

Decision rules used to determine levels of response to intervention must be broad enough to accommodate different levels and complexity of tasks as well as the age and grade of the student. However, the decision rules must also be specific enough to ensure consistent application across schools and districts. The following guidelines provide specificity while allowing flexibility:

- a. Positive Response to Intervention: Significant improvement is evidenced by a change in the slope of the progress line that indicates the student is making adequate progress toward the benchmark within acceptable time limits. The gap is closing at an acceptable rate.
- b. Questionable Response to Intervention: Improvement is evidenced by a positive change in the slope of the progress line. However, the *rate* at which this progress is being made is determined to be too slow OR the improvement indicates that the student's *rate* of progress is equal to that of peers but that the gap is not narrowing.
- c. Poor Response to Intervention: This condition exists anytime that the gap continues to widen.

If an intervention is not producing the desired results, a first step is to evaluate whether the intervention is being implemented as designed and for an appropriate amount of time. If not, adjustments should be made to ensure intervention integrity and sufficiency.

Teams should also consider whether the intensity of an intervention needs to be increased by: 1) reducing the size of the group; 2) increasing the amount of time/frequency that the intervention is delivered, or 3) narrowing the focus of the instruction.

In summary, problem-solving is a self-correcting, decision-making model focused on academic and/or behavioral intervention development and monitoring using frequently collected measurable data on student performance. The problem-solving process should be rich in data collection and can be repeated as necessary.

Tiers of Instruction & Intervention

This diagram provides a visual of the Colorado Multi-Tiered Model. The problem-solving process is continuous throughout the tiers. Movement between the tiers is flexible and based on student performance data (data-driven decision-making).

Colorado Multi-Tiered Model of Instruction & Intervention

Intensive Level

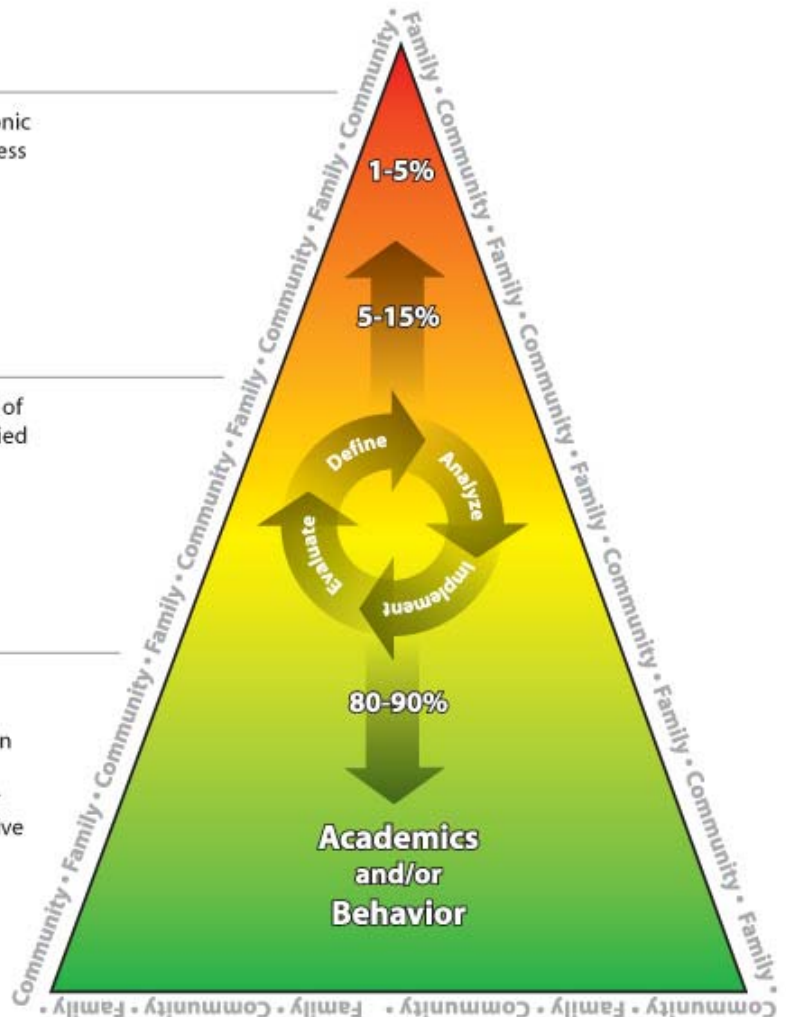
Interventions are provided to students with intensive/chronic academic and/or behavior needs based on ongoing progress monitoring and/or diagnostic assessment.

Targeted Level

Interventions are provided to students identified as at-risk of academic and/or social challenges and/or students identified as underachieving who require specific supports to make sufficient progress in general education.

Universal Level

ALL students receive research-based, high quality, general education that incorporates ongoing universal screening, progress monitoring, and prescriptive assessment to design instruction. Expectations are taught, reinforced, and monitored in all settings by all adults. Discipline and other data inform the design of interventions that are preventative and proactive.





Tier I Instructional Strategies and Interventions

Tier I refers to classroom instruction for all students. This universal level of instruction should result in proficiency for approximately 80% of the students. At this level all students are receiving high quality, research-based instruction. Core instruction should be implemented with fidelity utilizing a curriculum that is viable, rigorous, relevant and standards-driven. Core instruction should also offer sufficient depth, breadth, and complexity to meet the needs of all students in a classroom. Tier I also includes universal supports that are available to all students in academics and behavior. All teachers routinely use a variety of supports as soon as a student begins to struggle in their classroom. For example, strategies may include flexible grouping, differentiated instruction for application of skills and concept formation, re-teaching, enrichment, and/or additional practice. Teachers may change their method of instruction, provide the child with additional help, as well as provide accommodations or modifications.

Tier I Assessment

Assessment is an important component of Tier I, as well. Assessment includes class, grade, and/or district-wide screening and progress monitoring. All schools should have a process for routinely reviewing all students' progress through district level and building level universal screening tools. Screening measures, although brief, can provide an initial indication of which students are entering the school year at-risk for academic difficulties because they are lagging in the development of critical academic skills. Valid and reliable screening tests can help teachers differentiate their instruction based on what students already know and can do. Teachers, administrators and building teams reviewing screening and progress monitoring data for all students should utilize a systematic process of discussing data so that effective adjustments to instruction can be made.



TIER II

Tier II Instructional Strategies and Intervention

Tier II typically involves small group, targeted supports for students with more significant academic and/or behavioral concerns or who have been identified as underachieving. If a student or students continue(s) to demonstrate insufficient progress and the gap between student achievement and expected achievement increases, a more intensive intervention plan can be put in place with the assistance of the problem-solving team through data-driven dialogue. Evidence-based instructional strategies and strengths-based interventions in Tier II are developed based on the specific learning and/or behavioral needs of students and are delivered with fidelity (integrity and sufficiency). Tier II interventions use, to the greatest extent possible, core instruction materials/procedures. This strategy facilitates the transfer of skill development from Tier II to Tier I. Multiple school personnel can provide the interventions, including the classroom teacher, intervention specialist, related service providers, or other staff.

Tier II curriculum and instruction has a two-fold purpose:

- To remediate specific skill or concept deficits of students who are not making adequate academic gains or have mild to moderate difficulties in the area of social competence. This Tier II instruction is explicit, systematic, aligned, and integrated with Tier I curriculum and instruction. Instructional interventions are differentiated, scaffolded, and targeted based on the needs of individual students as determined by assessment data. The primary goal of Tier II curriculum and instruction is to improve student performance in the attainment of state-approved, grade-level benchmarks.
- To enrich and enhance the education of students who have demonstrated proficiency in the benchmarks of the standards for a given discipline. This Tier II instruction should contain sufficient depth, breadth, and complexity to increase individual student skills and concept formation in a determined course of study.

Tier II Assessment

Assessment is more intense and focused in Tier II. Assessments given need to be based on specific skill need, and results of the assessment should lead directly to intervention. Once an intervention is in place, the response to the intervention should be monitored on a regular basis (i.e., at least every other week) using appropriate progress monitoring tools. All students receiving Tier II intervention should participate in progress monitoring for *grade-level* performance in addition to progress monitoring of *Tier II instruction levels*. Grade-level progress monitoring will provide the data to ensure that Tier II instruction has the desired impact on core instruction performance. If the academic or behavioral need is difficult to identify, a diagnostic/prescriptive assessment (whether formal or informal) may be necessary to determine the focus of the intervention. When selecting assessments at Tier II, the focus should be on

identifying the specific skills that need additional work and how best to meet the academic or behavioral needs. Discussions about student progress in Tier II will take place formally in problem-solving team meetings; however, informal discussions should take place on a weekly basis with the progress monitor and interventionist.



Tier III Instructional Strategies and Interventions

Tier III intensive supports are intended for students with significant and/or chronic deficits as well as for students with significant underachievement who require the most intensive services available in a school. Moving to a Tier III intervention is determined by the problem-solving team after several individualized interventions have resulted in limited progress, based on the achievement gap between the student's progress and the expected benchmark. The interventions in Tier III are skill specific interventions that can be delivered by a variety of providers. The interventions increase in intensity and often require one-on-one or small group instruction (e.g., 3 – 5 students). The specific nature of the interventions is based on progress monitoring data and/or diagnostic/prescriptive assessment information. Interventions are more likely to occur outside the general classroom than at the two previous levels. A separate curriculum that is focused on accelerating learning may even be required. As in Tier II, it is important that Tier III interventions use, to the greatest extent possible, core instruction materials/procedures to facilitate the transfer of skill development from Tier III to Tier I.

Therefore, Tier III curriculum and instruction (academic and/or behavior) may serve varying purposes:

- To provide interventions for students who have not responded adequately to one or more rounds of Tier II supplemental, targeted curriculum and instruction. This small percentage of students usually demonstrate more severe deficits and require curriculum and instruction that is more explicit, more intense, and specifically designed to meet individual needs.
- To provide enrichment and/or advancement in a specific area of study for individual students who have demonstrated exceptional knowledge and skills or who have demonstrated an extraordinary capacity for learning.
- To provide training that addresses student-specific learning needs such as mastering Braille code, auditory training, assistive technology, behavior, etc.

Tier III Assessment

The intensity of assessment also increases in Tier III. Because of the urgency at this level, the response to Tier III intervention needs to be monitored at least once a week.

Diagnostic/prescriptive assessments may be given to get a comprehensive look at the student's strengths and areas of need. However, the major purpose of assessment in Tier III is to provide information on how to meet the student's instructional need and to monitor the progress of students compared to *both* grade and instructional-level benchmarks.

Assessment: Purposes and Types

A major feature of the RtI Model is its use of data to drive the decision-making process at the individual student, classroom, and school levels. To support RtI's fluid approach, reliable and ongoing information must be available to:

- Identify academic and behavioral needs of individual students
- Inform the problem-solving process
- Design and modify instruction to meet student needs
- Evaluate the effectiveness of instruction at different levels of the system (e.g., individual, classroom, school, district)

An efficient system that streamlines increasingly limited resources, however, is paramount. Therefore, RtI uses a tiered system of assessments that increase in frequency and intensity as greater needs are revealed. Timely, reliable assessments indicate which students are falling behind in critical skills or which students need their learning accelerated so teachers can design instruction that responds to demonstrated learning needs. By regularly assessing students' progress in learning and behavior, teachers can identify which students need more help and which are likely to make good progress without extra help. A comprehensive assessment plan that includes screening, progress monitoring and diagnostic/prescriptive assessments is critical to the prevention and remediation of academic and behavioral difficulties.

An effective assessment plan has five main objectives:

1. To **determine** the effectiveness of core instruction.
2. To **identify** students at the beginning of the year who are at-risk or who are experiencing difficulties and who may need extra instruction or intensive interventions if they are to progress toward grade-level standards by the end of the year, as well as students who have reached benchmarks and who need to be challenged.
3. To **monitor** students' progress during the year to determine whether at-risk students are making adequate progress in critical skills and to identify any students who may be falling behind or need to be challenged.
4. To **inform** instructional planning in order to meet the most critical needs of individual students.
5. To **evaluate** whether the instruction or intervention provided is powerful enough to help all students achieve grade-level standards by the end of each year.

The five objectives outlined above can be achieved through four types of assessments:

1) screening, 2) progress monitoring, 3) diagnostic/prescriptive, and 4) outcome. They correspond roughly to the four objectives above, but all can contribute in helping plan effective instruction and interventions.

Screening Assessments

Screening assessments are quick and efficient measures of overall ability and critical skills known to be strong indicators that predict student performance. Administered to all students as an initial baseline, these assessments help to identify students who do not meet or who exceed grade level expectations. Results can be used as a starting point for instruction or to indicate a need for further evaluation.

Progress Monitoring Assessments

Progress monitoring assessments are also brief, but are given periodically to determine whether students are making adequate progress. Progress monitoring assessment data should be collected, evaluated, and used on an ongoing basis for the following purposes:

- To determine rate of a student's progress,
- To provide information on the effectiveness of instruction and to modify the intervention if necessary,
- To identify the need for additional information,
- To analyze and interpret gaps between benchmarks and student achievement.

Diagnostic/Prescriptive Assessments

While relatively lengthy, diagnostic assessments provide an in-depth, reliable assessment of targeted skills. Their major purpose is to provide information for planning more effective instruction and interventions. Diagnostic/prescriptive assessments should be given when there is a clear expectation that they will offer new or more reliable information about a child's academic or behavioral difficulties that can be used to help plan more powerful instruction or interventions.

If schools are implementing screening, progress monitoring, and outcome assessments in a reliable and valid way, the need for additional testing, using formal diagnostic

***Please note:** In this context, diagnostic/prescriptive assessment is not referring to assessment for the purpose of "diagnosing" a disability. In fact, the term "diagnostic assessment" is commonly used outside the context of special education. For example, diagnostic assessments are referenced in the assessment frameworks provided as resources for the implementation of the Colorado Basic Literacy Act (CBLA) by the Office of Learning and Results, Colorado Department of Education.*

Parents should be informed of any individually-administered assessments to be conducted. Obtaining written permission for individual assessments is recommended, particularly if special education personnel are involved in conducting the assessments. This permission is not to be construed to be the "informed parental consent" required by IDEA/ECEA prior to special education evaluation to determine eligibility and should not be sought using special education forms. Of course, the information gathered through this process would be considered as existing data and would contribute to the body of evidence required for SLD eligibility should a referral be made at some point.*

**Permission is required by state law for any assessment of a student's behavior.*

instruments, should be reduced. Because they are time-consuming and expensive, complete diagnostic tests should be administered far less frequently than the other assessments, although specific subtests from diagnostic instruments might be used to provide information in areas not assessed by screening, progress monitoring, or outcome assessments. School leaders should continually ask if the value of the information acquired from formal diagnostic tests in planning instruction merits the time spent administering such tests.

Outcome Assessments

Given at the end of the school year, outcome tests (e.g., CSAP) are frequently group-administered tests of important content and skills. Outcome assessments are often used for school, district and/or state reporting purposes. These tests are important because they give school leaders and teachers feedback about the overall effectiveness of their instructional program. As part of an effective assessment plan, outcome assessments should be administered at the end of school year.

Family-School Partnership

When families, schools, and communities work together, children are more successful and schools improve. Effective partnerships include parents, students, community members and educators. Indicators of an effective partnership include 1) sharing of information 2) problem-solving together, and 3) celebrating student successes. Central to effective partnership is the recognition of shared responsibility and shared ownership of student challenges and successes.

In forming partnerships, it is important to nurture the collaborative process. Collaboration is more than simply working together and more than just linkage; it is agreeing to formally work together to achieve mutually desired outcomes. To develop true collaboration, parents must be fundamentally involved in the entire educational experience. Parents should be recognized as having vital information and expertise that they can contribute to the partnership. It is important for school personnel to provide the parents with information and empower them as equal partners in supporting their children's learning, both at home and school. Teachers and parents should openly share student progress information. Parents are key partners in all aspects of RtI and may often provide information about the student and specific strategies that will lead to improved student outcomes.

Recommended "best practices" to support family-school partnerships in an RtI Model:

- Provide basic written information for ALL families about the RtI framework for the school/district, including answers to commonly asked questions and specific school implementation facts;
- Invite parents to participate in the RtI/Problem-Solving Process when it is initiated for their child;
- Support parents in collecting and sharing their child's data as a participant in the RtI/Problem-Solving Process and establish ongoing communication;

- Include parents in the intervention planning and monitoring of their child’s progress and encourage home support of student learning;
- Provide copies of detailed intervention plans, diagnostic/prescriptive assessment results, progress monitoring information and other RtI/Problem-Solving Process documents;
- Assign a “family liaison” who might be a school psychologist, social worker, or counselor. The liaison’s role is to support families, community members and school staff throughout the RtI/Problem-Solving process.

RtI Model: Frequently Asked Questions

(Adapted from the State of Florida Technical Assistance Paper and the RtI Toolkit, Jim Wright.)

What has to exist in order for RtI to work?

RtI is successful when an infrastructure exists to support a problem-solving process which includes intervention development, progress monitoring, and designated meeting times for the problem-solving team. School staff must possess skills in the necessary instructional strategies and interventions as well as in the use of assessment tools for screening, progress monitoring, and determining outcomes. Therefore, school personnel must be provided the training opportunities necessary to gain the skills needed to implement RtI system-wide. Teachers and support staff must have the support of building administrators and district staff to implement the RtI Model. Support provided to teachers must extend throughout the implementation of interventions and the collection of appropriate data to assess student progress.

What is the criterion for a successful intervention?

An intervention is successful if the achievement gap between the performance of the student at-risk and the expected benchmark has decreased based on the data collected through progress monitoring. Problem-solving teams must collect a body of evidence to determine whether the gap has closed by utilizing progress monitoring instruments, such as Curriculum-Based Measurements (CBM), that monitor specific skills and demonstrate incremental change. A CBM is any set of measurement procedures that use direct observation and recording of performance within a given curriculum as a basis for gathering information to make instructional decisions. Curriculum-based measurements assess specific, usually basic, skills presently being taught in the classroom.

How long should interventions be implemented in an RtI Model?

The amount of time necessary to identify and verify effective interventions will vary by skill and the age/grade level of the student. Interventions should be continued as long as the student exhibits a positive response. The interventions should be modified as appropriate when a student’s progress is less than expected.

Who provides the interventions?

A variety of people may provide interventions in the problem-solving process. In Tier I, classroom teachers should be the primary providers of interventions and strategies. At the Tier II & III levels, classroom teachers, paraprofessionals, reading teachers, special education teachers, school psychologists, school counselors, social workers, etc., can provide interventions. The interventionist should be selected based on intensity of intervention, skill level of interventionist, and training required to deliver the intervention. Furthermore, each school needs to determine what individuals are available in the building to provide interventions and the expertise of those individuals.

How do we ensure that interventions are implemented with “fidelity?”

Intervention fidelity is defined by the degree to which an intervention was implemented as intended (integrity) AND the degree to which the intervention was implemented with integrity for a sufficient amount of time (sufficiency). For example, if a student or group of students is to receive a particular reading intervention for 30 minutes each day, then fidelity measures should document that the intervention was actually taught the way its developer intended (integrity) AND documentation should exist that each student received the intervention for 150 minutes/week (sufficiency). The total minutes per week that a student receives a Tier II or Tier III intervention is sometimes referred to as intervention “dosage.”

Ensuring intervention integrity sometimes poses challenges. Often, trained numbers of personnel do not exist to observe directly the implementation of interventions to verify that the intervention procedures were actually delivered the way the developer intended. However, when intervention *support* is provided at adequate levels, intervention integrity is achieved. Effective intervention support means that the teacher implementing the intervention meets regularly with an individual who has experience with the intervention, for example, weekly for 10 weeks or more. During these meetings, student data are examined, the intervention procedures are reviewed, and barriers to implementation are identified and resolved.

Who progress monitors or conducts assessments in the RtI Model?

Many different individuals can progress monitor depending on the tool being used. Because CBM requires minimal training, schools may select multiple individuals to be trained including parents, retired teachers, paraprofessionals, and other school personnel. Behavioral progress monitoring data also may be collected by a variety of individuals. District-wide progress monitoring instruments may also be used and the data collected by district level personnel, classroom teachers, and/or designated building staff. Individuals who are expected to monitor progress should be formally trained to administer the instruments utilized. Additionally, if administering diagnostic/prescriptive instruments, adequately trained and/or appropriately licensed individuals should be conducting the assessments.

How does the intensity of intervention change for students?

Changing the intensity of instruction/intervention (sometimes referred to as “moving” from one tier to another) is a fluid process. A student’s need for instruction/intervention at a more or less intense

level may fluctuate according to the specific skill or behavior being addressed. This fluctuation is to be expected and must be recognized. Essentially, the intensity is based on the performance gap demonstrated through progress monitoring data. Students receiving intervention should also be receiving universal (core) instruction. Thus, intervention is provided in addition to, rather than supplanting, universal instruction.

Is a student ever involved in more than one intervention at a time?

Students should typically participate in one intervention at a time for individual skill deficits. For example, if a student has a deficit in reading, a single problem should be determined and a single intervention should be developed to address the identified problem. However, in some situations a student may be participating in a standard protocol intervention such as a flexible reading group to address reading skills in general, but may also be in a more intense (Tier III) intervention to address a specific skill deficit. Additionally, a student may participate in more than one intervention if there are a variety of skill deficits in different academic or behavioral areas. For example, a student may be receiving a behavioral intervention and a reading intervention at the same time or a reading intervention and a math intervention at the same time.

How long might a child be in the problem-solving process?

The length of time a child participates in the problem-solving process depends on the significance of the gap between the student and peers as well as the specific skill deficits a student exhibits. For example, if a student in 8th grade needs an intervention in math calculations to gain the skills necessary to succeed with algebra, there may be a need for several specific skill interventions to close the gap with peers. Data may demonstrate that the gap is closing, but the length of time to close the gap may be lengthy. On the other hand, a student who is in 1st grade and needs an intervention addressing short vowels may need only a limited Tier II or III intervention and once the skill is gained and the gap is closed with peers, the student can participate in the core curriculum without continued intervention. This student's length of participation in the problem-solving process may be relatively brief.

What documentation is needed throughout RtI/Problem-Solving?

Graphs and charts are basic to RtI documentation. Schools should have a data collection system for tracking and documenting the assessments administered, the intervention strategies used, and specific student outcomes realized. This documentation should demonstrate student progress or lack of progress. Additional documentation should provide evidence that the student actually received the intended interventions for the intended amount of time per week.

How is RtI funded?

This is a local decision. Because RtI requires the school to use staff, time and materials differently, schools and districts are encouraged to reconsider how general funds are expended as this initiative is launched. There are several federal formula grants that can support efforts. For example, the Individuals with Disabilities Education Act (IDEA 2004) allows for up to 15% of Part B allocation to be used for early intervening services. Title I schools that operate a schoolwide program have quite a bit of flexibility and should be able to align supports easily within an RtI approach.

Is RtI just a way to avoid providing special education services?

No. RtI is a way to integrate the mandates of No Child Left Behind (NCLB) and IDEA so that all students receive high quality, effective instruction in the general education setting and beyond. Also, RtI provides a framework of instruction for students who do receive special education services. The intent is to generate a seamless system of support that is available to all students at the first sign of need.

Does a student need to be involved in interventions within all three tiers prior to a special education referral?

No, a referral for special education evaluation may be made at any time during the RtI process if the problem-solving (student intervention) team suspects a disability or if parents request an evaluation. In addition, the tiered support system is intended to be flexible rather than linear, with any given student moving between levels of intervention intensity as needed.

Can RtI be used for students who are Gifted and Talented (G/T) and/or underachieving?

Absolutely, RtI should be used for students identified as G/T. Students who are Gifted and Talented and are underachieving (based on screening measures and progress monitoring tools) should be provided strength-based intervention to increase the potential for sufficient progress. RtI is also appropriate for the exceptionally advanced learner who needs a more challenging curriculum or opportunities for growth. Because the RtI Model is a system-wide model, all students who are making insufficient progress should be provided more intensive interventions based on their individual needs, which include students identified as G/T or who are underachieving.

How does a problem-solving team differ from a multidisciplinary team (eligibility group)?

The problem-solving team's focus is specifically on selecting/developing strategies and interventions to help children be more successful academically and behaviorally. Classroom teachers are central and highly valued members of a problem-solving team. The problem-solving team promotes a collegial atmosphere where teachers work together to solve student problems and use dependable and efficient assessment methods to measure the progress of struggling learners.

A multidisciplinary team is responsible for identifying students who may have educational disabilities and may be eligible for Special Education services. These teams have typically been comprised mostly of specialists, including school psychologists, social workers, speech therapists, other related service providers, nurses, special education teachers, along with representatives from general education. With RtI, the multidisciplinary team will continue to be important to ensure necessary data are collected when considering eligibility. However, most of the required information is likely to be gathered during the problem-solving process. Other information such as observations, diagnostic assessments, or other informal or formal measures may be requested by the team and are completed following a referral for special education evaluation and informed consent by the parent. A "full and individual evaluation," as required by law for disability/eligibility determination, includes all relevant data or information gathered. The

eligibility group may include some members of the problem-solving team as well as any additional individuals important to the evaluation process.

How/what do we communicate to parents?

Regardless of whether the parent initiated a concern or the teacher initiated a concern, parent involvement is critical and should be facilitated throughout the process, beginning with the problem identification phase. Parents should always be invited to the problem-solving meetings, and if parents are unable to attend the meeting, the progress monitoring information should be provided to the parents each time the data are analyzed. Parents should be involved in all the decisions regarding modifications to interventions and related changes to a student's curriculum.

How will the special education teacher plan interventions for a student after he or she has been found eligible for services through the RtI process?

The problem-solving team will essentially provide the current intervention plan when a student is eligible for special education services. Members of the team will continue to work together until effective interventions have been implemented regardless of the source/program in the school through which the student is receiving services.

Section 3: Referral & Evaluation

- Referral
- Multidisciplinary (Eligibility) Team Members
- Evaluation Planning
- Prior Notice and Consent for Evaluation
- Full and Individual Evaluation
- Reevaluation and Determination of Continued Eligibility

DISCLAIMER:

The identification of any products of private vendors in these *Guidelines* is only for the purpose of providing examples and does not constitute the Department's endorsement of such products.

Referral for Special Education Evaluation

Referral of student in RtI process by problem-solving team:

Special education eligibility consideration (referral for evaluation) can be initiated at any time for a student who is suspected of having a disability. For a student already participating in a *Response to Intervention* process, evidence of a significant academic skill deficit and insufficient progress, even when provided research-based interventions, could trigger the suspicion of a specific learning disability and a referral for evaluation. An additional consideration when making the referral might be the apparent need for ongoing and specialized supports and services in order for the student to benefit from the general education curriculum.

In deciding whether a referral for special education evaluation is indicated, the team should consider the answers to the following questions regarding the student's involvement in the RtI process:

- Does evidence exist that this student's achievement and/or behavior differs significantly from that of other students with similar demographic characteristics?
- Does evidence exist that Tier 1 instruction was effective with approximately 75% of students who share this student's demographics?
- Did the interventions implemented have a research-base or represent instructional best practice?
- Were the interventions carried out with fidelity (i.e., carried out as prescribed)?
- Were the interventions provided for an adequate length of time?
- Were adjustments made to the interventions as a result of ongoing progress monitoring? (Were changes made to the intensity, duration or frequency of the interventions or were additional interventions implemented in response to student performance data?)
- Is the student benefitting from the interventions as evidenced in progress monitoring data?
- Was any diagnostic/prescriptive assessment administered for the purpose of informing appropriate instruction/intervention, particularly if the student was not responding adequately to early intervention attempts? If so, what were the results?
- Is there evidence of a significant achievement gap even after targeted and/or intensive intervention?
- Is the achievement gap with grade-level peers closing?
- Does the student need ongoing supports and services that cannot be maintained through general education alone in order to benefit from general education?

The public agency must promptly request parental consent to evaluate the child to determine if the child needs special education and related services, and must adhere to the timeframes described in §§ 300.301 and 300.303, unless extended by mutual written agreement <of parents and professionals>... (1) If, prior to a referral, a child has not made adequate progress after an appropriate period of time when provided instruction... [Federal Register, §300.309 (c)]

Caution should be taken not to delay a referral for special education evaluation beyond the point when the team should be suspecting a disability. RTI does not replace the right of a child with a disability to be identified as such and to receive special education services.

If a referral to evaluate has been made and the student is already participating in an RTI process, the school may continue to collect the student's response to intervention data up until the time of the eligibility meeting. Additional evaluation data will be collected and any further assessments conducted according to the evaluation plan.

Referral by parent:

Parents have the right to request a special education evaluation at any time. If the AU/District agrees with the parent that the child may be a child with a disability, then the AU/District must evaluate the child. If the AU/District does not believe an evaluation is warranted, a prior written notice to the parents must be issued that addresses why it has been determined an evaluation is not indicated. The parent can challenge this position by requesting a due process hearing to resolve the dispute regarding the child's need for an evaluation.

[adapted from "Questions and Answers on Response to Intervention (RTI) and Early Intervening Services," U.S. Department of Education, <http://idea.ed.gov/explore/home>]

Referral of student not in RTI process:

If the AU agrees to proceed with an evaluation and the student has not been involved in a *Response to Intervention* process, appropriate intervention needs to be provided in the area(s) of difficulty and the student's response/progress regularly monitored. The criteria for eligibility as a student with SLD do not change. However, the sixty-day timeline for completing the evaluation is now in effect. Parents should have a role on the problem-solving team as a *Response to Intervention* process is being implemented for their child. Of course, the parents are members of the multidisciplinary team, if different from the problem-solving team, as well.

Multidisciplinary Team

The membership of the multidisciplinary team formed for the purpose of determining a suspected SLD is slightly more prescriptive than for other suspected disabilities. The determination must be made by:

- the child's parents
- and a team of qualified professionals, which must include...
 - the child's general education teacher; or, if the child does not have a general education teacher, a classroom teacher qualified to teach a child of his or her age

Additional group members.

The determination of whether a child suspected of having a specific learning disability is a child with a disability as defined in § 300.8, must be made by the child's parents and a team of qualified professionals, which must include—

- (a)(1) The child's regular teacher; or
- (2) If the child does not have a regular teacher, a regular classroom teacher qualified to teach a child of his or her age; or

(3) For a child of less than school age, an individual qualified by the SEA to teach a child of his or her age; and

(b) At least one person qualified to conduct individual diagnostic examinations of children, such as a school psychologist, speech-language pathologist, or remedial reading teacher.

- § 300.308, Federal Regulations

- at least one person qualified to conduct individual diagnostic examinations of children, such as a school psychologist, speech-language pathologist, or remedial reading teacher

A suggestion would be to have the multidisciplinary team members chosen from the RtI problem-solving team, as they would be familiar with the child’s data. Additional team members can be added if needed to provide specific expertise or to fulfill particular roles. This is the group that would create an evaluation plan and carry out the necessary evaluation, the results of which are used by the group in determining if the child has a specific learning disability.

If the parent requests an evaluation for a child not receiving intervention through a *Response to Intervention* process and the public agency agrees to initiate special education evaluation, the child should be referred to the problem-solving team, as indicated earlier, and eligibility group members identified.

Evaluation Planning

Once a decision has been made to refer a student for special education evaluation, the multidisciplinary team, including the parents, must review existing evaluation data on the child, such as:

- Evaluations and other information provided by the parents of the child (e.g., parent interview, medical evaluations, outside clinical evaluations, and the health or developmental history);
- Current classroom-based, local, or State assessments (e.g., progress monitoring data, standardized measures including diagnostic/prescriptive assessments, benchmarking data, CSAP, and CELA results);
- Classroom-based observations (e.g., developmental, academic, communicative, behavioral and functional life skills checklists)
- Other information from teachers
- Classroom products
- Record review (e.g., attendance; discipline; and offense reports).

AND, on the basis of that review and input from the child’s parents, identify what additional data, if any, are needed to determine whether the child is a child with a disability, as well as the educational needs of the child. (See §300.305 of the Federal Regulations.)

It is important to note that IDEA 2004 and the Federal Regulations have made it clear that screening to determine appropriate instruction/intervention, essential to an effective RtI process, may be conducted for any child prior to a referral for special education without informed parental consent.

“Screening for instructional purposes is not evaluation. The screening of a student by a teacher or specialist to determine appropriate instructional strategies for curriculum implementation shall not be considered to be an evaluation for eligibility for special education and related services.”

- §300.302, Federal Regulations

In addition, individual diagnostic/prescriptive assessments, as described in Section 2, may have been conducted for the purpose of better informing instruction/intervention, and thus would also have been administered prior to referral. As noted in Section 2, parents should have been informed of any individual assessments to be given and/or written permission obtained. [Please note: Colorado law prohibits school personnel from assessing any student in the area of behavior without giving notice to the parent/guardian that describes the recommended testing and how the results will be used – written permission must be obtained from the parent or guardian prior to the behavioral assessment.] Personnel giving individual assessments need to be qualified to administer the particular instruments. Any certification or licensure requirements linked to the administration of particular assessments need to be taken into account.

Of course, data from any of these assessments do become part of the “existing data” that the team reviews when a referral for special education evaluation is being made and become a part of the “body of evidence” for determination of SLD.

When suspecting SLD and in determining the need for additional assessment or other data collection, it would be helpful for the team to review the *Determination of Disability: Specific Learning Disabilities* document. (See State model form at the end of Section 4 of these *Guidelines*.) The considerations and documentation requirements for an SLD determination and for special education eligibility are clearly specified and include:

- A body of evidence demonstrating academic skill deficit(s) AND insufficient progress when using a process based on the child’s response to scientific, research-based intervention in one or more areas of specific learning disabilities
- Observation in the learning environment
- Relevant medical findings
- RtI data: instructional strategies used; student-centered data collected; documentation of required parent notifications
- Consideration that the learning difficulties are not primarily the result of another disability (as specified), cultural factors, environmental or economic disadvantage; or, Limited English Proficiency.
- Consideration that the learning difficulties are not due to lack of appropriate instruction in the essential components of reading or in math

In other words, the team needs to decide whether the information that already exists is sufficient for a special education (SLD) eligibility consideration and to meet legal documentation requirements, and if not, what further assessment/information is needed for a “full and individual initial evaluation.” (See “Full and Individual Evaluation” at the end of this section.)

Prior Notice and Consent to Evaluate

The public agency must provide notice of the intent to conduct an evaluation for special education eligibility consideration and must obtain informed consent from the parent.

For some students the team may determine that no additional assessment is needed. If that is the case, this decision should be noted on the “Prior Notice and Consent to Evaluate” form as well as the justification for the decision. The evaluation procedures, tests, records or reports that support this decision need to be referenced.

When the team decides that more information is needed, identification of the specific areas for further data collection or assessment must be identified. The team may have developed a hypothesis regarding the causes for underachievement and may have specific questions that still need to be answered through further assessment.

Any planned evaluation procedures need to be documented on the “Prior Notice and Consent to Evaluate” form and informed parental consent for evaluation obtained. The procedural safeguards notice (*Parents’ Rights*) must be provided for the parent. It is especially important that the public agency ensures parental understanding of their rights and those of the child’s.

The full and individual evaluation must be completed within 60 calendar days of receiving parental consent for the evaluation.

“...must adhere to the timeframes described...unless extended by mutual written agreement of the child’s parents and a group of qualified professionals...
[Federal Regulations §300.309(b)(2)(c)]

Full and Individual Evaluation

The Federal Regulations and Colorado Rules require a “full and individual evaluation” that must be conducted before the initial provision of special education and related services. It must consist of procedures to determine if the child is a child with a disability and to determine the educational needs of the child.

As indicated by the phrase “if appropriate” in the following statement from the Regulations [(§300.304)(c)(4)], evaluation is now more focused: “The child is assessed in all areas related to the suspected disability, including, **if appropriate**, health, vision, hearing, social and emotional status, general intelligence, academic performance, communicative status, and motor abilities.”

Even though the evaluation is more focused, the law also states that it must be sufficiently comprehensive to identify all of the child’s special education and related services needs, whether or not commonly linked to the primary disability category in which the child has been classified. It is not uncommon for a child to exhibit co-occurring disabilities (as referenced elsewhere in this document), for which all needs must be identified and addressed.

In the past, the required “comprehensive evaluation” was interpreted by most to mean a common battery of assessments for all students suspected as having a specific learning disability (previously Perceptive/Communicative Disability). Because of the criterion that required the existence of a discrepancy between a student’s ability (IQ) and their achievement, virtually all students being considered were administered an IQ test and standardized, individual achievement tests across all academic areas, regardless of the specific area(s) of concern. Now it is anticipated that the data gathered during the problem-solving process, related directly to the student’s performance in the learning context, should reduce the need for formal assessments.

However, the Federal Regulations make it clear that, in conducting the evaluation, school personnel must use a variety of assessment tools and strategies to gather relevant information about the child, including information provided by the parent that may assist in determining (1) whether the child has a disability, and (2) the content of the child’s IEP, including information related to enabling the child to be involved in and progress in the general education curriculum.

The team may not use any single measure or assessment as the sole criterion for making a disability determination and for determining an appropriate educational program. Even though a child’s response to scientific, research-based intervention is crucial to SLD determination and educational planning, other types of information/assessment data should be collected throughout the RtI/Problem-Solving process.

The following is a list of some of the evaluation tools that might be included in a full and individual evaluation:

- Interviews;
- *Observation of the child in specific, relevant settings;
- Error analysis of work samples
- Curriculum-Based Measurements (CBMs)
- Progress monitoring data
- Results from state & local assessments
- Functional Behavioral Assessments
- Behavior Rating Scales
- Vocational assessments;
- Developmental, academic, behavioral and functional life skills checklists
- *Standardized (norm-referenced) assessment

* These two types of assessment tools are required at some point for SLD determination.

As for all disabilities, evaluation procedures (including assessments) must be valid, reliable and selected so as to not be discriminatory on a racial or cultural basis. Assessments are to be administered in accordance to prescribed instructions by trained and knowledgeable personnel. Students shall be evaluated in their primary language or other mode of communication.

In summary, evaluation procedures shall continue to protect the interests of the child. With the implementation of a *Response to Intervention* approach, reduced reliance on formal, standardized assessments is presumed. **The determination of SLD is based on a convergence of data collected prior to and/or following the referral for special education evaluation.**

Role of Intelligence Testing

With the increased reliance on direct measures of learning in the determination of SLD and the elimination of the IQ/Achievement discrepancy criterion, the need for general intelligence testing is diminished. In addition, the substantial overlap between skills measured through intelligence testing and academic skills, as well as the fact that achievement often affects students' performance on components of IQ tests, the administration of IQ tests may be of limited value in informing instruction.

Role of Cognitive Processing Assessment

Past practices have included descriptions of cognitive processing weaknesses in SLD assessments. The "patterns of cognitive abilities" were often based on a student's performance on subtests of intelligence measures, memory tests, and language evaluations. However, drawing conclusions about the presence of a disability based on these results has not been substantiated by research.

Even though cognitive processing deficits are still an inherent part of the definition of SLD, the Preamble to the Federal Regulations states that "there is no current evidence that such assessments are necessary or sufficient for identifying

The Department <Federal> does not believe that an assessment of psychological or cognitive processing should be required in determining whether a child has an SLD. There is no current evidence that such assessments are necessary or sufficient for identifying SLD. Further, in many cases, these assessments have not been used to make appropriate intervention decisions. (Federal Register, p. 46651)

SLD....In many cases, assessments of cognitive processes simply add to the testing burden and do not contribute to interventions....Although processing deficits have been linked to some specific learning disabilities (e.g., phonological processing and reading), direct links with other processes have not been established. Currently, available methods for measuring many processing difficulties are inadequate. Therefore, systematically measuring processing difficulties and their link to treatment is not yet feasible. Processing deficits should be eliminated from the criteria for classification." (Federal Register, p.46651)

Section 4 specifically describes the data/information necessary for making an eligibility determination in the area of SLD. Reviewing the criteria, mandated considerations, and required documentation will assist the problem-solving and multidisciplinary team in ensuring that all relevant information has been collected and necessary assessments have been administered as a part of the full and individual evaluation.

Reevaluation and Determination of Continued Eligibility

Reevaluations are planned in the same way as initial eligibility evaluations, with parents participating as team members. Existing data are reviewed to determine if any additional data are needed. It is presumed that the initial eligibility process was valid and that the disability remains unless there are data that indicate otherwise, including evidence of a change in the student's ability to benefit from the general education curriculum without supplemental aids and services (specialized instruction no longer necessary). The focus of the review evaluation and meeting is on assessment of progress, responsiveness to interventions (the degree to which the special education services are addressing student "needs"), answering any specific and focused assessment or diagnostic questions, and planning future instruction and interventions.

States that change their eligibility criteria for SLD may want to carefully consider the reevaluation of children found eligible for special education services using prior procedures. States should consider the effect of exiting a child from special education who has received special education and related services for many years and how the removal of such supports will affect the child's educational progress...Obviously, the group should consider whether the child's instructional and overall special education program have been appropriate as part of this process. If the special education instruction has been appropriate and the child has not been able to exit special education, this would be strong evidence that the child's eligibility needs to be maintained.

- Federal Register, p. 46648

Section 4: SLD Determination

- Criteria for the Determination of SLD
- “Exclusionary” Factors
- Lack of Appropriate Instruction
- Documentation Requirements
- *Determination of Disability: SLD* (CDE model document)

DISCLAIMER:

The identification of any products of private vendors in these *Guidelines* is only for the purpose of providing examples and does not constitute the Department’s endorsement of such products.

SLD Determination

CRITERIA

1. The child does not achieve adequately for the child's age or to meet State-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child's age or state-approved grade-level standards;

AND

2. The child does not make sufficient progress to meet age or state-approved grade-level standards in one or more of the areas ... when using a process based on the child's response to scientific, research-based intervention.

One or more areas must be identified

Oral Expression

Listening Comprehension

Written Expression

Basic Reading

Reading Fluency

Reading Comprehension

Math Calculation

Math Problem Solving

CONSIDERATIONS

1. Learning problems in area(s) indicated above are **NOT PRIMARILY** due to...

visual disability; hearing disability; motor disability; significant limited intellectual capacity; significant identifiable emotional disability; cultural factors; environmental or economic disadvantage; or limited English proficiency

2. Findings are **NOT** due to ...

lack of appropriate instruction in reading, including in the essential components of reading instruction
 lack of appropriate instruction in math
 limited English proficiency

DETERMINATIONS

YES

The student has a Specific Learning Disability.

NO

The student can receive reasonable educational benefit from general education alone.

The Multidisciplinary (Eligibility) Team agrees that this student



is



is not *eligible for special education*.

Criteria for the Determination of SLD

1) The child does not achieve adequately for the child's age or to meet State-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child's age or state-approved grade-level standards

AND

2) The child does not make sufficient progress to meet age or state-approved grade-level standards in the area(s) identified when using a process based on the child's response to scientific, research-based intervention.

In one or more of the following areas:

Areas of SLD (See Section 5 for descriptions of each area.):

- Oral Expression
- Listening Comprehension
- Written Expression
- Basic Reading Skill
- Reading Fluency Skills
- Reading Comprehension
- Mathematical Calculation
- Mathematical Problem Solving

In accordance with the two criteria stated above, Colorado ECEA Rules require a body of evidence demonstrating academic skill deficit(s) and insufficient progress when using a process based on the child's response to scientific, research-based intervention in one or more areas of specific learning disabilities.

When considering the student results that rely on a student's response to scientific, research-based intervention, the multidisciplinary team needs to be able to ensure that:

- (1) there was a research/evidence base for the interventions implemented; and
- (2) the interventions were implemented with fidelity, i.e., implemented as intended or prescribed with attention to the what, how, and intensity of instruction.

Guidance in the Determination of an Academic Skill Deficit

One issue that makes it difficult to establish the existence of a Specific Learning Disability is its multi-dimensional nature. "Most of the research on LDs, particularly those affecting reading, shows that they occur along a continuum of severity rather than presenting as an explicit dichotomous category delineated by clear cut-points on the achievement distribution." (Fletcher et al, p. 28).

Because of this lack of discrete cut-points, the decision as to what constitutes a “significant” deficit is a complex one and will require degree of professional judgment. However, the decision needs to be based on valid and reliable data.

In identifying the existence of SLD, a determination must be made that a student continues to have a significant academic skill deficit even after obtaining evidence of effective instruction in the general education classroom and the provision of targeted and/or intensive intervention. Below are some parameters for deciding the significance of a deficit. These are NOT intended to be absolute cut-points and the convergence of multiple sources of data needs to be considered by the eligibility team.

At least one measure needs to reflect a comparison to state/national benchmarks or norms in order to provide some consistency across schools and districts in the interpretation of “significance.”

- Curriculum-Based Measurement (CBM) results that include at least 6 data points that are at or below the 12th percentile (based on national norms) may be considered significant.
- Criterion Reference Measures (CRMs) compare a student’s performance to the goals of the curriculum. These may be provided within program materials or set by teachers. A significant deficit would be indicated by results that are at or below 50% of the grade level expectancy. Thus, grade level criteria must be determined for CRMs. (For example, if the expectation is that a student answer grade level comprehension questions with 80% accuracy and a student’s accuracy through repeated trials is at 40% or less, then a significant deficit might be indicated.)
- When a measure is utilized that provides a percentile rank, such as an individually administered norm referenced test, a score at or below the 12th percentile may be considered to represent a significant deficit.

Again, the finding of an academic skill deficit should not be based on any one measure.

Guidance in the Determination of Insufficient Progress

Problem-solving teams monitor student progress toward norms/benchmarks. Insufficient progress can be determined by identifying expected rates of progress and by utilizing a Gap Analysis. When implementing a Gap Analysis, three types of norms/benchmarks may be used: research based norms, local norms, or criterion-referenced benchmarks.

- Research-based norms: Research is available that identifies average rates of student progress in basic academic skills over time. (However, these norms should be used with caution whenever they are based on small sample sizes.) Research-based norms can be a

helpful starting point for estimating expected student rates of growth. Examples of this type of norm can be found on Aimsweb for reading, math, spelling, and written language.

- Local norms: Some districts may have developed local norms, which allow teams to use the grade-level norms for the district in determining the goal the student is working toward. Evaluation teams will be able to calculate a rate of weekly improvement the student must attain to close the gap with their peers and the expected target.
- Criterion-referenced benchmarks: Benchmarks that are set as a standard of mastery against which a student's performance on an academic task or behavior can be compared. The evaluation team sets weekly rates of student improvement necessary to achieve the benchmark in a reasonable time period. The time period would be determined based on the significance of the gap to begin with. [Disadvantage: The setting of benchmarks can be somewhat arbitrary. Advantage: They can be applied flexibly to a very wide range of student academic skills and behaviors for which formal peer norms are unavailable.]

Wright, Jim. RTI Toolkit (2007)

Gap Analysis:

The following is an example of applying Gap Analysis in order to determine a student's response to an intervention, as well as determining what the intensity level of an intervention should be.

The Gap Analysis is calculated by dividing the expected benchmark (preferably based on national norms) by the student's current performance. The following steps provide a structure for determining the Gap along with the method of determining realistic growth expectations.

EXAMPLE:

A student is in second grade and is reading 20 words per minute (wpm) based on an Oral Reading Fluency probe given during the winter screening.

1. Determine the degree to which this student's performance differs from that of peers. If 75-80% of peers are achieving benchmark, then this student's performance is significantly different. If, however, this student's performance reflects the same level as 30% or more of the peers, then the problem-solving team would consider the role that core instruction plays in student performance first.
2. Determine the current benchmark expectation. For this student the benchmark is 68 words per minute for winter of 2nd grade.
3. Establish the Gap:
Divide 68 wpm (the expected benchmark) by 20 wpm (the student's current performance) $68/20 = 3.4$

The student's performance is 3.4 times discrepant from that of grade-level peers.

The Gap the student has to close by the end of the year is greater than 3.4, since the benchmark will be higher at the end of the year.

4. Determine if the Gap is significant. Any Gap at or greater than 2.0 should be considered significant. For this student, considerable intervention will be needed to close the gap since it is more than 2.0.
4. The next phase of Gap analysis includes determining what constitutes "sufficient progress" that would be necessary to close the Gap.

To determine the necessary gain needed to close the Gap, subtract the student's current performance from the expected benchmark in the next benchmark period (i.e., end of the year).

For this student the calculation is as follows: 90 wpm (end of year benchmark) – 20 wpm (student's current performance) = 70 wpm (necessary to close the gap).

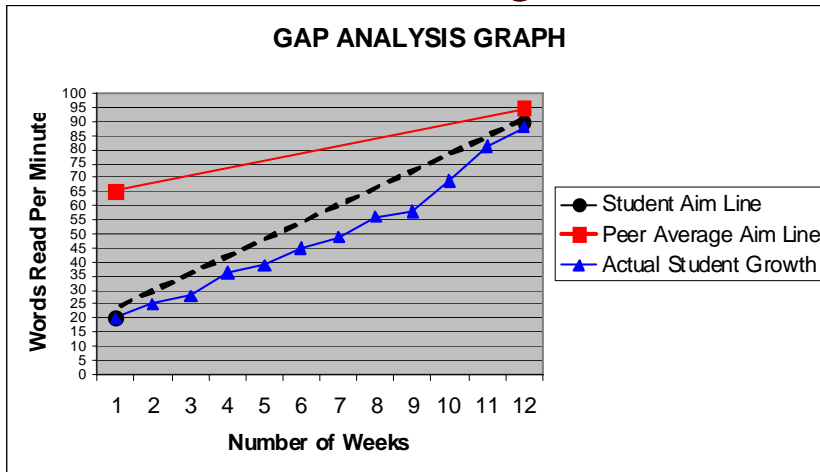
5. At this point, the problem-solving team determines what progress is needed and whether it is realistic for the student. 70 wpm (necessary gain) divided by 15 (number of weeks for intervention) = 4.6 wpm (weekly gain needed)

The problem-solving team then considers whether this is a realistic goal for the student. If the weekly goal seems unrealistic, the team might change the number of weeks estimated to reach the target based on "reasonable" weekly growth. For example, if a more realistic anticipated gain is 3 words per week, the number of weeks to reach the target would equal 70 (necessary gain) divided by 3 wpm (weekly gain) to establish the anticipated length of intervention as 23 weeks. [It is important to note that the extended number of weeks may result in a slightly higher benchmark/target that would have to be considered.]

Gap Analysis needs to be conducted regularly throughout the intervention to determine sufficient progress and response to intervention. (*Adapted from George Batche Presentation*)

The following graphs provide examples of Gap Analysis charts and instructional decisions based on the data. The "Peer Average Aim Line" reflects national norms. The "Student Aim Line" reflects the rate of growth necessary to close the gap in the time specified.

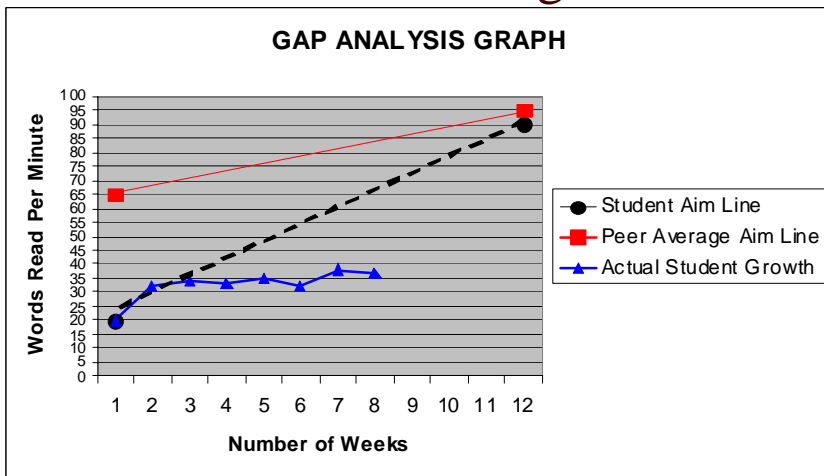
Sufficient Progress



Benchmark - 90 / Current Level – 20 = 70 (gain needed to close the Gap)

Intervention resulted in the 4.6 WPM growth per week necessary to close the Gap with peers.

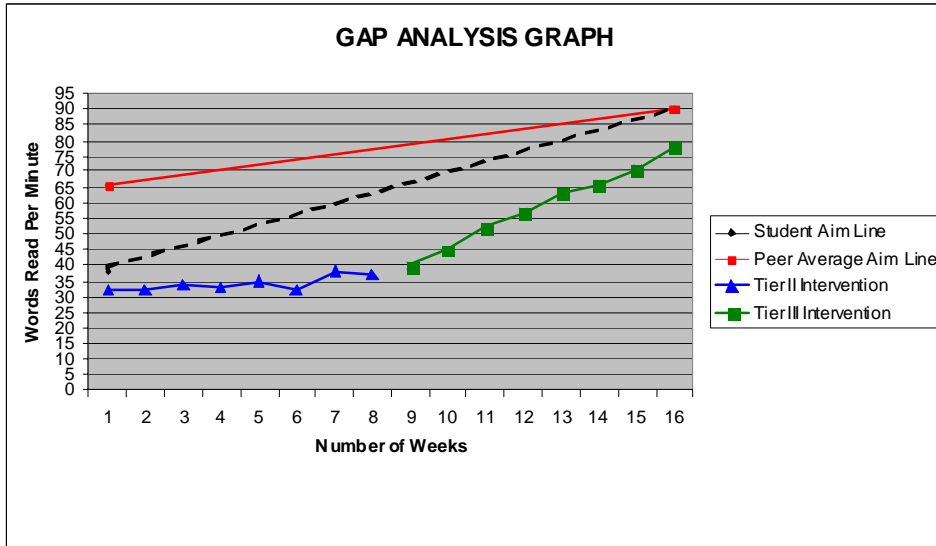
Insufficient Progress



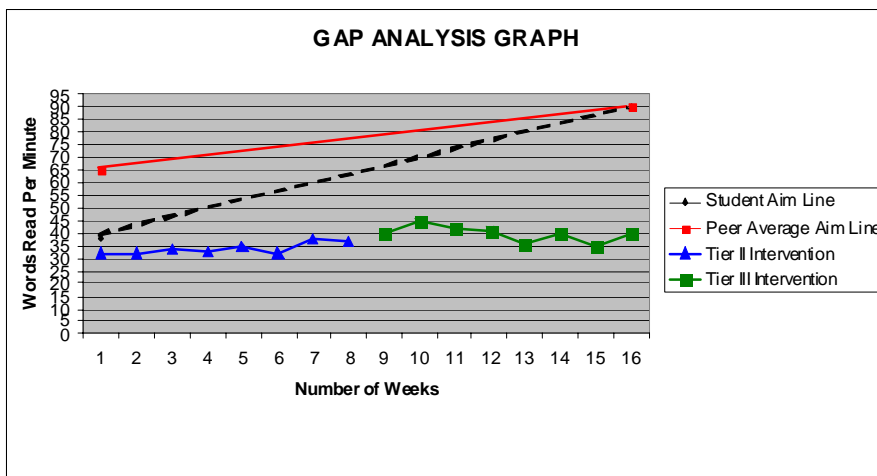
Benchmark - 90 / Current Level – 20 = 70 (gain needed to close the Gap)

Intervention did not close the Gap – student needs more time, intensity or a different intervention.

Sufficient Progress with Intense Intervention



Insufficient Progress – Possible Special Education Referral/Determination



“Exclusionary” Factors

The eligibility team is required to take into consideration the effects of what are commonly referred to as “exclusionary” factors. However, it must be clear that a student, for whom one of these factors applies, could also be appropriately identified as having a Specific Learning Disability. The issue is one of “primary cause” for the learning difficulties. With the changes to SLD Criteria, serious consideration of these factors has become even more important than in the past.

The ECEA Rules, in aligning with the Federal Regulations, require that the multidisciplinary team determine that its findings (that address the criteria for SLD) are not PRIMARILY the result of – “visual, hearing, or motor disabilities; significant limited intellectual capacity (SLIC); significant identifiable emotional disability (SIED); cultural factors; environmental or economic disadvantage; or limited English proficiency.”

The effects on the determination of SLD cannot be considered in the same manner for all the exclusionary factors. Vision, hearing, and motor disabilities, as well as SLIC and SIED, are all special education disability categories. The team must determine whether the primary reason for learning difficulties is the presence of one of these other disabilities or SLD. It is possible for a team to conclude that SLD is the primary disability, even if the child, for example, also has a visual impairment. Some AUs exercise the option of determining a secondary disability. It is not necessary to do so; however, all educational needs that significantly impact the child’s progress in the general education curriculum must be addressed. For example, a student with a motor impairment may also have a reading deficit that requires specialized instruction in basic reading skills.

Cultural, economic and environmental factors are more complex and, thus, more difficult to address in examining the primary cause of poor achievement. Basically, these conditions do potentially influence the development of cognitive and linguistic skills that are necessary for academic learning and can co-exist with specific learning disabilities. (Fletcher et al., 2007)

Explicit guidelines for determining the presence of SLD in students who are English language learners have been developed in Colorado and will be referenced in this section.

It is critical to keep in mind that special education eligibility under any disability category entitles the child’s special education needs to be addressed through the IEP, whether or not those needs are typically associated with the identified disability.

The following sub-sections address all of these “exclusions” more specifically.

Vision, Hearing and Motor (Physical) Disabilities

As with some of the other “exclusionary factors,” these disabilities may co-exist with specific learning disabilities and must be addressed in instructional/intervention planning if they are

present. It is the decision of the eligibility team to determine if the underachievement is due primarily to one of these disabilities or a Specific Learning Disability. The mere presence of one of these disabilities should not preclude a determination of SLD as the primary disability.

A student with a primary educational disability in the area of vision, hearing and/or physical disabilities may be considered as also having a learning disability if the identified learning deficits are significantly greater than what can be reasonably expected as a result of the primary disability (e.g., hearing loss) alone. Again, all the identified needs of the child must be addressed, whether or not typically linked to the child’s primary disability.

Significant Limited Intellectual Capacity (SLIC)

This is probably the one “exclusionary factor” that would not typically be thought to co-exist with SLD. Rather, all academic learning difficulties would be attributed to the condition of limited intellectual capacity.

Criteria for this disability category are very clear and should be considered if limited intellectual capacity is suspected.

A team suspecting SLIC might first start with a measure of adaptive behavior, one of the essential criteria for a SLIC determination. Adaptive behavior within normal limits (not “significantly below the culturally imposed expectation of personal and social responsibilities”) would rule out a determination of SLIC. In addition, a deficiency in academic achievement of 2.0 standard deviations below the mean in measures of language, reading and math is required for the determination of SLIC. In other words, an individually administered IQ test may not be necessary to rule out SLIC as the primary cause of learning difficulties if these other measures are within normal limits.

Significant Identifiable Emotional Disability (SIED)

Specific learning disabilities often co-occur with emotional, behavioral, and attention disorders (Fletcher et al., 2007). Determining which condition is primary is often a difficult task. In some

cases, social or emotional difficulties may be secondary to the lack of school success. In others, the academic underachievement may be a result of mental illness or ADHD. Specifically, math and

*Consideration of special factors –
The IEP team must ... in the case of a child whose behavior impedes the child’s learning or that of others, consider the use of positive behavioral interventions and supports, and other strategies, to address that behavior. (§300.324 Federal Regulations)*

written expression disorders are especially common in children with ADHD, presumably because of the predominant role of executive functioning skills such as strategy use and procedural learning (Barkley, 1997; Fletcher et al., 2002). Research is beginning to clarify the importance of improving academic achievement in combination with positive behavior supports in reducing behavioral difficulties. If social, emotional, and/or behavioral factors are

assessed to be impacting achievement, it is important that they are considered in educational planning, even if it is determined that SLD is the primary disability.

Cultural Factors

Partnering with parents is crucial in assessing this variable, along with student interviewing and observation. Sensitivity and instruction/curriculum review are needed to assess if instruction is “culturally responsive,” an important element of appropriate instruction. A review of AYP (Adequate Yearly Progress) data for individual schools and districts may also be beneficial in addressing the effects of cultural factors. The disaggregated data might indicate that most students of a particular cultural or ethnic group are achieving at acceptable levels in response to the instruction they are receiving. If a particular student is receiving the same instruction in a similar learning environment, but not achieving, a determination that the learning difficulties are not due to cultural factors might be made.

Environmental or Economic Disadvantage

Again, partnering with parents is crucial when assessing these factors as is student interviewing and observation. Assessing, and especially meeting, student needs through the provision of community, medical, and social support is important. Addressing these needs as appropriate may result in improved focus and response to effective academic instruction. As with cultural factors, a review of AYP data for individual schools and districts may also be beneficial in considering the effects of these two factors. The team would be reviewing CSAP results that have been disaggregated based on Socio-Economic Status (SES) as indicated by qualification for free/reduced lunch.

Limited English Proficiency

In order to rule out limited English proficiency as the primary cause of learning difficulties, there are several questions that must be answered affirmatively:

1. Has this student been given an English language proficiency test?

Each spring, the proficiency level of all English Language Learners must be assessed using the *Colorado English Language Assessment (CELA)*. All incoming students whose *Primary or Home Language is Other Than English (PHLOTE)* must be assessed with the CELA Placement test within thirty (30) days of enrollment at the beginning of the school year, or within two (2) weeks of enrollment during the remainder of the school year.

2. Is this student receiving or has this student received English Language Acquisition (ELA) services in accordance with the district’s Language Instruction Education Program (LIEP)?

The No Child Left Behind Act requires each district to have a plan on file with the State.

3. Have targeted interventions been implemented in addition to English language acquisition services?

English language acquisition services, although important, should not be considered to be “interventions.”

4. Has progress been monitored and compared with the progress of a comparable group of English language learners?

It is important to compare students to similar peers (students should be from the same culture, language, age and immigrant groups)

5. Has progress been markedly lower than that of English language learner peers?

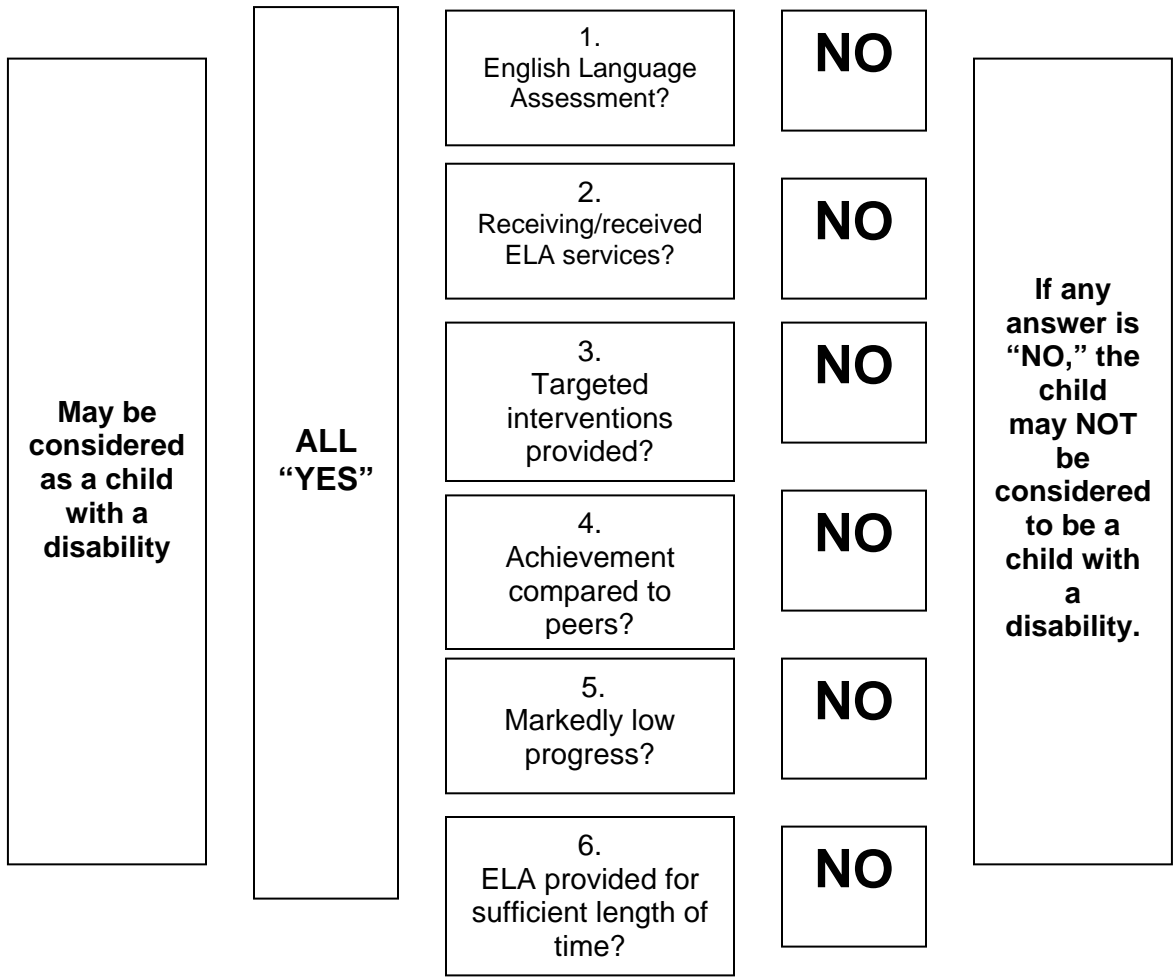
English language learners demonstrate similar acquisition patterns. It must be shown that a student demonstrates atypical growth for his/her peer group in all areas of language (speaking, listening, reading and writing) in order for language acquisition to be ruled out as the cause of the difficulties.

6. Have ELA and other services been provided for a sufficient length of time so that growth can be measured?

Students who are newly arriving immigrants will move through a stage of culture shock and adjustment to the U.S. school system. They may appear to have signs and symptoms of a disability, when in reality they have not yet adjusted to the school system. Although there is not a specific time frame for students to adequately adjust to schooling in the U.S., teams should carefully consider whether the time has been adequate enough to learn basic vocabulary, hear and discriminate the English sounds and symbols, follow basic directions and practice learned skills.

The following chart summarizes these questions/steps for determining whether the student’s difficulties are primarily due to limited English proficiency.

(See Appendix for further information pertaining to students with limited English proficiency.)



Educators need to consider how a student's culture mediates his/her learning.

Lack of Appropriate Instruction

“A child must not be determined to be a child with a disability ... if the determinant factor for that determination is – lack of appropriate instruction in reading, including the essential components of reading instruction [as defined in section 1208(3) of the ESEA]; lack of appropriate instruction in math; or limited English proficiency.” [§300.306(b), Federal Regulations]. Although the previous statement is true for the determination of any disability, additional documentation is required when considering the presence of a specific learning disability. There must be “data that demonstrate that prior to, or as part of, the referral process, the child was provided appropriate instruction in regular education settings, delivered by qualified personnel.”

The term “essential components of reading instruction” means explicit and systematic instruction in—

- (A) Phonemic awareness;*
- (B) Phonics;*
- (C) Vocabulary development;*
- (D) Reading fluency, including oral reading skills; and*
- (E) Reading comprehension strategies.*

*- section 1208(3) of the ESEA
<NCLB> and referenced in Federal Register, p. 46646*

The team needs to consider the instruction that the child has been receiving, the qualifications/training of the person delivering the instruction, and the child’s access to that instruction. Since the determination of SLD requires documentation that a student demonstrates an insufficient response to research-based interventions, there should be evidence that appropriate instruction in the area(s) of concern has been provided. Of course, fidelity of instruction/intervention implementation must be ensured. The team will also want to determine whether a student’s access to core instruction, as well as to interventions provided through an RtI process, is impacted by poor attendance, frequent moves between schools, etc.

If an SLD determination cannot be made due to concerns in this area, attempts need to be made to ensure: (1) appropriate instruction is being provided; and, (2) the student’s response to that instruction is documented.

Documentation Requirements

Parents must be provided a copy of the “evaluation report” and “documentation of determination of eligibility.” [§300.306(a)(2) of Federal Regulations] In addition, there must be documentation to show that parents received specific information, as detailed below, concerning their child’s participation in an RtI/Problem-Solving process.

The evaluation report, perhaps not as formal a report as in the past, needs to include descriptions of the sources of information and a summary of relevant findings. All required documentation must be evident.

The recently revised IEP model forms and supplemental documents include the updated document: *Determination of Disability: Specific Learning Disabilities* (provided at the end of this section).

The following are required in Federal Regulations and/or Colorado ECEA Rules, explicitly for SLD determination. There is obviously some overlap among these elements. For example, the body of evidence in the first bullet would certainly include information obtained through the requirements referenced in the other bullets.

Documentation Requirements:

- Body of evidence that demonstrates: (1) academic skill deficit(s) and insufficient progress in response to scientific, research-based intervention [This body of evidence may include: results of diagnostic/prescriptive assessments, observations, checklists, response to intervention progress monitoring data/charts, results of classroom/district/state assessment, etc.]
- Observation (prior to or following the referral for evaluation) of the child’s academic performance in the area(s) of difficulty that was conducted in the child’s learning environment, including the general education classroom, description of relevant behavior
- Educationally relevant medical findings, if any (documentation should indicate that existing medical findings were considered, even if found to be not relevant)
- Documentation of the child’s participation in a process that assesses the child’s response to scientific, research-based intervention (prior to or as part of the referral process) must include:
 - Instructional strategies used
 - Student-centered data collected, including repeated assessments of achievement at reasonable intervals

AND documentation that the parents were notified of:

- * The State’s policies regarding the amount and nature of student performance data that would be collected and the general education services that would be provided;
- Strategies for increasing the child’s rate of learning;
- Results of repeated assessment of child’s progress; and
- The parent’s right to request an evaluation [*Parents need to be informed of their right to request an evaluation at the point that the team begins to suspect a disability.*]

*** The statement in the following box refers to State guidance around the local education agency’s responsibility to provide parents with information as to general education (intervention) services to be provided and student data to be collected. A recommendation would be to include this statement in general information about the school’s/district’s RtI process that is provided to all parents.**

**Student Performance Data Collected & Services Provided through a
Response-to-Intervention/Problem-Solving Process**

The *Response to Intervention (RtI): A Practitioner's Guide to Implementation* (Colorado Department of Education, 2008) indicates that the type of student performance data collected and intervention services provided will be determined by a local problem-solving team in consideration of student need. The type and intensity of the interventions provided will depend on several factors, including the age/grade of the student, the specific skill being addressed, and the significance of the achievement gap. The type and frequency of student performance data collected will also vary. As the intensity of the intervention increases, the frequency of progress monitoring will typically need to increase (e.g., from every other week to every week when a student is provided intervention at an intensive versus a targeted level). Individual diagnostic/prescriptive assessment may be necessary to assist in the determination of a student's specific instructional and intervention needs.

If a student is provided services through *Response-to-Intervention/Problem-Solving*, the local education agency (LEA) has the responsibility of informing parents of:

- the specific targeted or intensive interventions (instructional strategies used to increase the child's rate of learning) to be provided for their child, and
- the performance data to be collected

- Colorado Department of Education, February 2008

Documentation Requirements, continued:

- Documentation that the team has considered the "exclusionary" factors and made the determination that the findings of learning difficulties are not primarily due to any of the factors. (Specific documentation should be provided for any relevant factors.)
- The team considered and documented that the eligibility is not due to a lack of appropriate instruction in reading, including the essential components of reading instruction, delivered by qualified personnel.
- The team considered and documented that the eligibility is not due to a lack of appropriate instruction in math, delivered by qualified personnel.

AND, documentation of the team's final determination that:

- **The student has a Specific Learning Disability as defined in the Colorado Rules for the Administration of the Exceptional Children's Educational Act, and**
- **The student cannot receive reasonable educational benefit from general education alone (needs specialized instruction and related services).**

The following is the state model "Determination of Disability: Specific Learning Disabilities" document.

DETERMINATION OF ELIGIBILITY: SPECIFIC LEARNING DISABILITY

Definition: 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 the imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Specific Learning disability does not include problems that are primarily the result of: visual, hearing, or motor disabilities; significant limited intellectual capacity; significant identifiable emotional disability; cultural factors; environmental or economic disadvantage; or limited English proficiency. The specific learning disability prevents a student from receiving reasonable educational benefit from general education alone.

The team has considered: **300.306(b)**

- Yes No 1. the evaluation is sufficiently comprehensive to appropriately identify all of the child's special education and related services needs, whether or not commonly linked to the disability category
- Yes No 2. that the student can receive reasonable educational benefit from general education alone
- Yes No 3. the student's performance:
 - is* *is not* due to a lack of appropriate instruction in reading, including the essential components of reading instruction
 - is* *is not* due to a lack of appropriate instruction in math; and
 - is* *is not* due to limited English proficiency.

The student meets the following criteria: **2.08(6)(B)(II); 300.309**

- 1. The student does not achieve adequately for the student's age or to meet State-approved grade-level standards in one or more of the areas identified below, when provided with experiences and instruction for their age or State-approved grade-level standards, **and**
- 2. The student does not make sufficient progress to meet age or State-approved grade-level standards in the area(s) identified when using a process based on the student's response to scientific, research-based intervention.

Check all areas that meet **both** conditions:

- | | | | |
|---|--|---|--|
| <input type="checkbox"/> Basic Reading Skills | <input type="checkbox"/> Reading Comprehension | <input type="checkbox"/> Mathematical Calculation | <input type="checkbox"/> Oral Expression |
| <input type="checkbox"/> Reading Fluency Skills | <input type="checkbox"/> Written Expression | <input type="checkbox"/> Mathematical Problem Solving | <input type="checkbox"/> Listening Comprehension |

The attached evaluation report must contain documentation of the following: **300.311**

- A body of evidence that demonstrates
 - 1. Academic Skill deficits, **and**
 - 2. Insufficient progress in response to scientific, research-based intervention in the area(s) identified above
- An observation of the student's academic performance in the area(s) of difficulty in the learning environment, including the relevant behavior and relationship of that behavior to the student's academic functioning.
- The instructional strategies used
- The student-centered data collected including documentation of repeated assessments or achievement at reasonable intervals
- The educationally relevant medical findings:
 - exist and are described, **or**
 - do not exist
- The documentation that the parents were notified about:
 - The State's policies regarding the amount and nature of student performance data collected and the general education services provided
 - Strategies for increasing the student's rate of learning
 - Results of repeated assessments of student's progress
 - The right to request an evaluation

The team has considered (all must be checked "are not" for an eligibility determination in the area of SLD): 300.306(b), 309(a)(3)

1. That the learning problems in the area(s) indicated above in the criteria section:

- Are Are not Primarily the result of Significant Limited Intellectual Capacity
- Are Are not Primarily the result of a Significant Identifiable Emotional Disability
- Are Are not Primarily the result of a Vision Impairment
- Are Are not Primarily the result of a Hearing Disability
- Are Are not Primarily the result of a Motor Disability
- Are Are not Primarily the result of Cultural Factors
- Are Are not Primarily the result of Environmental or Economic Disadvantage

Yes No *The team agrees that this student has a disability as defined in the State Rules for the Administration of the Exceptional Children's Educational Act and is eligible for special education.*

Multidisciplinary Team Members 4.02(6)(b); 300.306(a)(1)	Title	Indicate Agreement With Team Decision & Initial On Line	
_____	_____	<input type="checkbox"/> Agree	<input type="checkbox"/> Disagree
_____	_____	<input type="checkbox"/> Agree	<input type="checkbox"/> Disagree
_____	_____	<input type="checkbox"/> Agree	<input type="checkbox"/> Disagree
_____	_____	<input type="checkbox"/> Agree	<input type="checkbox"/> Disagree
_____	_____	<input type="checkbox"/> Agree	<input type="checkbox"/> Disagree
_____	_____	<input type="checkbox"/> Agree	<input type="checkbox"/> Disagree
_____	_____	<input type="checkbox"/> Agree	<input type="checkbox"/> Disagree
_____	_____	<input type="checkbox"/> Agree	<input type="checkbox"/> Disagree

- A copy of the evaluation report(s) and the eligibility statement has been provided to the parent(s). 300.306(a)(2)
- Dissenting opinion attached if any team members disagree with eligibility determination

Section 5: Eight “Areas” of SLD

- Oral Expression & Listening Comprehension
- Written Expression
- Basic Reading Skill
- Reading Fluency Skills
- Reading Comprehension
- Mathematical Calculation & Problem-Solving

DISCLAIMER:

The identification of any products of private vendors in these *Guidelines* is only for the purpose of providing examples and does not constitute the Department’s endorsement of such products.

EIGHT AREAS OF SLD

This section provides descriptions of the eight areas in which specific learning disabilities are identified in both federal and state law/rules/regulations. The goal of these summaries is provide a common language and conceptual base for addressing the different types of learning disabilities. Educators, in partnership with parents, can effectively screen, assess, intervene and progress monitor in each of the specific disability areas determined to be of concern.

The information provided is derived from reputable sources, but is not intended to be comprehensive. Many resources are mentioned here and additional ones, including websites, are cited in *General References and Resources* at the end of the document.

ORAL EXPRESSION AND LISTENING COMPREHENSION

(See also Section 6: *Speech-Language Impairment vs. SLD Determination.*)

Definition and Implications (Oral Expression)

Oral expression pertains to the use of words and includes the ability to formulate and produce words and sentences with appropriate vocabulary, grammar and application of conversational rules.

A child's oral expression skills are essential to their learning and academic success. Oral expression problems in students may result in literacy problems (ASHA, 1980). Furthermore, these children may not perform at grade level because of their struggle with reading, difficulty understanding and expressing language, and the fact that they may misunderstand social cues. Oral expression is about the student's ability to express ideas, explain thinking (critical in math), retell stories, and contrast and compare concepts or ideas.

Characteristics (Oral Expression)

The following may be exhibited by those children who demonstrate oral expression difficulties:

- Difficulty with the grammatical processes of inflection, marking categories like person, tense, and case (e.g., the *-s* in *jumps* marks the third-person singular in the present tense), and derivation, the formation of new words from existing words (e.g. *acceptable* from *accept*)
- Learning vocabulary
- Difficulty formulating complete, semantically and grammatically correct sentences either spoken or written
- Difficulty explaining word associations, antonyms/synonyms
- Difficulty with retelling, making inferences, and predictions

Definition and Implications (Listening Comprehension)

Listening comprehension refers to the understanding of the implications and explicit meanings of words and sentences of spoken language. Listening comprehension often co-exists with difficulties in written language and in the auditory processing of oral information. Children with problems processing and interpreting spoken sentences frequently can experience difficulties in mastering syntactic structures both receptively as well as expressively. Although some children appear to perceive and interpret the words used in spoken sentences, they may not be able to grasp the interrelationship among the words in the sentences. Difficulties with listening comprehension should not be mistaken for difficulties or deficits in Central Auditory Processing.

Characteristics (Listening Comprehension)

Children experiencing listening comprehension difficulties may exhibit the following:

- Difficulty with following directions for seatwork and projects
- Difficulty remembering homework assignments
- Difficulty with understanding oral narratives and text

- Difficulty answering questions about the content of the information given
- Difficulty with critical thinking to arrive at logical answers
- Difficulty with word associations, antonyms/synonyms, categorizing, and classifying
- Difficulty with note-taking or dictation

Assessment (Oral Expression and Listening Comprehension)

The classroom teacher may screen for those students who are at risk of having oral expression and/or listening comprehension difficulties by referencing norms for oral expression and listening comprehension acquisition (see chart following progress monitoring/interventions). The speech-language pathologist should be the one to assess and determine deficits in these two areas.

The use of standardized tests provides the speech-language pathologist with valuable information regarding the student's communication skills in specific areas. However, we must realize that standardized assessments may be one component of an assessment process. The use of nonstandardized or informal assessments, dynamic assessment, behavioral and pragmatic observations in the "natural environment" (outside of the classroom) as well as spontaneous and structured language sampling also provide important information that standardized tests by themselves may not.

Some common assessment tools used for assessing oral expression and listening comprehension skills are:

Preschool Language Scale-3 (PLS-4) and the Clinical Evaluation of Language Fundamentals-4 (CELF-4), Bracken Basic Concept Scale-Revised (BBCS-R), Comprehensive Receptive and Expressive Vocabulary Test-Second Edition (CREVT-2), Peabody Picture Vocabulary Test- Fourth Edition (PPVT-4), Test for Auditory Comprehension of Language-Third Edition (TACL-3), Test of Language Development, Fourth Edition (TOLD-4).

For students who are Spanish speaking the following assessment tools are either criterion-referenced or standardized in Spanish:

Bracken Basic Concept Scale- Revised, Spanish, Clinical Evaluation of Language Fundamentals-Fourth Edition, Spanish (CELF-4 Spanish), Preschool language Scale, Fourth Edition (PLS-4 Spanish Edition), Spanish Structured Photographic Expressive Language Test-II (Spanish SPELT-II), Test de Vocabulario en Imágenes Peabody (TVIP), Test of Phonological Awareness in Spanish (TPAS)

The speech-language pathologist should be culturally sensitive when selecting and using assessment tools being administered to second language learners. The use of standardized assessments may not be appropriate with second language learners. It is the responsibility of the speech-language pathologist to validate the assessment instrument being used to the population for whom it was criteria-referenced or standardized.

For a comprehensive reference of assessment instruments for monolingual English speakers or bilingual students, please refer to the *Directory of Speech-Language Pathology Assessment Instruments*, 2007.

Intervention and Progress Monitoring (Oral Expression and Listening Comprehension)

The speech-language pathologist can provide both direct and consultative services in collaboration with the classroom teachers, resource teachers and interventionists in developing intervention strategies that will include explicit skills-training in the areas of oral expression and/or listening comprehension as key to some students’ access to the curriculum.

Providing structured opportunities for students to participate in social interactions, such as giving them “helping” roles or having them “talk through” an activity involving a successfully learned skill, reinforces oral expression skills. Working on beginning, middle and end to organize narratives as well as in the retelling of stories fosters oral expression development.

The direct teaching of listening strategies is important to improving listening comprehension. Particularly effective is cuing the student to keep their eyes on the speaker, make a picture in their head, ask for clarification, and internalize directions by repeating them to themselves. For the older student, learning to listen for the main idea is important. Modeling and demonstration is essential with students of all ages.

An example of progress monitoring of an oral expression and/or listening comprehension intervention would be correct identification of picture cards of specific targeted vocabulary being taught. The desired result should be that the student’s correct labeling/identification of the target vocabulary increase with each collection of data to be analyzed (progress monitoring). The targeted intervention needs to be systematic and explicit in its delivery and progress monitoring.

Norms for Oral Expression and Listening Comprehension

	Oral Expression	Listening Comprehension
Kindergarten	Speaks intelligibly	Comprehends 13,000 words
	Uses 1500 words	Understands opposites
	Retells a story or event	Follows 1-2 step simple directions in sequence
	Takes turns during conversation	Listens to and understands age appropriate stories
	Sentences should be mostly grammatical	Recognizes meaning from tone of voice, and facial expressions
First Grade	Tells and retells stories and events in a logical order	Comprehends 20,000 words
	Expresses ideas with a variety of complete sentences	Understands months and seasons

	Uses most parts of speech correctly	Remembers information
	Asks who, what, where, and why questions	Follows 2-3 step directions in sequence
	Stays on topic and takes turns in conversation	
	Gives instructions	
Second Grade	Uses increasingly complex sentences	Follows 3-4 oral directions in sequence
	Clarifies and explains words and ideas	Understands direction words for location, space, and time
	Gives 3-4 step directions	Answers questions about a grade-level story or theme correctly
	Uses oral expression to inform, persuade, and to entertain	
	Opens and closes conversation appropriately	
	Experiments with vocabulary	
Third Grade	Summarizes a story accurately	Listens attentively in group situations
	Uses content area vocabulary	Understands grade level material
	Explains what he has learned	Expresses well-developed time and number concepts
	Varies verbal and nonverbal behaviors depending on the audience (more formal to teacher than with peers)	
Fourth Grade	Understands some figurative language	Listens to and understands information presented by others
	Participates in group discussions	Forms opinions based on evidence
	Makes effective oral presentations	Listens for specific purpose
	Identifies main ideas and supporting details	Asks clarifying questions
	Chooses vocabulary appropriate to the message	Uses listening skills to understand directions
	Uses grammatically correct speech	
Fifth Grade	Makes planned oral presentations appropriate to the audience	Listens and draws conclusions in subject area
	Maintains eye contact, uses gestures, facial expressions, and appropriate voice during group presentations	Distinguishes fact from fiction
	Summarizes main points	
	Reports about information gathered in	

	group activities	
Middle School	Presents ideas effectively in discussion with a wide range of audiences	Recognizes stylistic elements such as tone of voice and body language
	Uses a wide range vocabulary for different purposes	
	Uses figures of speech	
	Uses a variety of simple and complex sentence structures	
	Defends a point of view	
High School	Supports a point of view using various forms of persuasion	Self evaluates oral presentations
	Incorporates materials from a wide range of sources (newspapers, books, technical materials, etc.)	Recognizes a speakers point of view, purpose, historical, and cultural context
	Selects and presents a focused topic	Analyzes and synthesizes materials presented orally
	Experiments with stylistic elements	
	Uses language to solve problems	

Websites (Oral Expression/Listening Comprehension)

American Speech-Language-Hearing Association:

www.asha.org/public/speech/development

Language Development in Children:

http://www.childdevelopmentinfo.com/development/language_development.shtml

References (Oral Expression/Listening Comprehension)

American Speech Language Hearing Association. (2007). *Directory of Speech-Language Pathology Assessment Instruments*. Rockville, Md.

American Speech Hearing Association. (1999). *Guidelines for the Role and Responsibilities of the School-Based Speech-Language Pathologist*. Rockville, Md.

American Speech Hearing Association. (1980). *Language Learning Disorders: Ad Hoc Committee on Language/Learning Disabilities*. Rockville, Md.

Birth through Kindergarten/Colorado Communication Guidelines, 2007.

Clinical Evaluation of Language Fundamentals-4, Psychological Corporation, Harcourt Assessment Company, 2003.

Colorado Content Standards for Language Arts

Brace, J., Brockhoff, V., Sparks, N. & Tuckey, J. *First Steps Speaking and Listening Book 2nd edition* by Judy Brace, Department of Education and Training in Western Australia, 2007

Brace et al., *First Steps Speaking and Listening Map of Development, 2nd edition*, Department of Education and Training in Western Australia, 2007

WRITTEN EXPRESSION

A disability in written expression is an identified problem related to the writing process. Like reading comprehension, written expression develops through a progression of several interconnected skills and processes. To fully understand learning disabilities in the area of written expression it is important to differentiate the “transcription” component from the “generational” component (Berninger, 2004). Transcription involves the basic writing skills (BWS) of production of letters, words and spelling. The generational component, or composition, “translates ideas into language representations that must be organized, stored, and then retrieved from memory” (Fletcher, Lyon, Fuchs, & Barnes, 2007, p. 238). BWS are specific to written language, whereas composition processes involve oral language and thought. It is therefore, critical to address both BWS and compositional components in understanding written expression disabilities.

The first part of this section, *Written Expression: Basic Writing Skills*, covers the foundational skills of transcription—handwriting and spelling. The second part, *Written Expression: Composition*, focuses on generational components of composition—capitalization and punctuation, word and text fluency, sentence construction, genre-specific discourse structures, planning processes, and reviewing and revising processes.

Written Expression: Basic Writing Skills (Transcription)

Just as letter identification, phonemic blending, and decoding problems constrain reading comprehension, so do handwriting, phonemic segmenting, and spelling affect written expression (Fletcher, Lyon, Fuchs, & Barnes, 2007). It should be noted that the two processes are not completely parallel. To produce written work, letter forms and written words must be retrieved from memory during the writing process. Before children can give attention to planning, organizing, and constructing written pieces, they must first automatize basic writing skills including handwriting fluency and legibility, and spelling.

Handwriting and spelling difficulties can have serious, negative consequences for written expression, including a result in misinterpretation of the writer’s meaning, producing negative perceptions about the writer and the quality of the written work, interference with the composing process because the writer’s memory resources are overloaded with penmanship and spelling, and most importantly, student avoidance of writing, which further constrains writing development (Fletcher, Lyon, Fuchs, & Barnes, 2007).

Definition and Implications (Handwriting)

By the end of first grade, typically-developing children can name all the upper case and lower case alphabet letters presented in random order and can write dictated letters in both cases accurately from memory. This skill is an integration of orthographic codes (the form of the letter) phonological codes (the name of the letter) and graphomotor codes (output).

The automaticity of letter retrieval and production has the biggest affect on beginning writing development and is the best predictor of written composition fluency, content, and organization. Automatic letter formation and retrieval must be intact before students can attend to composition.

Definition and Implications (Spelling)

Spelling is referenced in the definition of dyslexia adopted by the International Dyslexia Association's Board of Directors in 2002 and is used by the National Institute of Child Health and Human Development. "Dyslexia is . . . characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities" (Lyon, Shaywitz, & Shaywitz, 2003).

Spelling is highly related to both reading and writing development. A solid research base shows that learning to spell enhances the reading and writing of all students. If spelling is not explicitly taught, spelling achievement can drop significantly while reading comprehension stays at an average level.

Learning to read and spell words follows a similar course of acquisition, and depends on the same knowledge about the alphabetic system and memory for the spellings of specific words. In other words, spelling and decoding are linked by phonological processing. However, the two processes are not quite the same.

Like beginning decoding skills, spelling abilities are predicted by a student's ability to map speech sounds to letters and letter clusters and knowledge of letter patterns (Berninger, 2004). However, competent spelling involves more than the skills identified above. It also involves understanding specific, rule-based letter patterns known as orthography, and understanding morphology, or the meaning of prefixes, roots, and suffixes.

Phonology and Spelling: Making the connection between phonemes and graphemes requires an awareness that all words can be segmented into individual sounds, or phonemic awareness. It is this awareness that allows the reader to discover and decipher the alphabetic code (Lyon, Shaywitz, & Shaywitz, 2003). Spelling is intimately related to reading because speech sounds are linked to letters and need to be translated into print.

Orthography and Spelling: After children have developed a secure understanding of the relationship between letters and speech sounds, they develop an understanding of spelling conventions. For example, final /k/ is spelled ck after a short vowel (i.e. *brick*), with a k after a vowel team or consonant (i.e., *book, milk*), and a c in multisyllabic words like *tarmac*). Shankweiler and his colleagues found that high school students' skill in representing individual phonemes with letters and letter clusters coincided almost perfectly (correlation of .95) with the ability to spell whole words.

Morphology and Spelling: An awareness of morphemes or meaningful units is called *morphological awareness*. Morphemes can include prefixes, suffixes, Latin roots, or Greek word parts. In written language, morphological awareness involves linking the sound with a meaning unit, not a letter. An example of this is the ability to distinguish the derivative *missed* from the base word *mist*. Morphology also involves understanding spelling rules for adding suffixes to base words, for example doubling the final consonant in *hopping* or dropping the silent *e* in *hoping*.

Poor spelling abilities hamper the ability to function as an adult. Liberman (1985) and her colleagues found that adult poor spellers limited their writing to words they knew how to spell correctly. The National Commission on Writing for America's Families, Schools, and Colleges reported that employment applications that are poorly written or poorly spelled will be rejected 80 percent of the time.

Characteristics (Handwriting)

Dysgraphia is a neurological disorder characterized by poor handwriting, with poor spelling as a secondary characteristic. People with dysgraphia often have fine motor problems that specifically affect written language (Levine, 1994).

Students with a disability in this area have slow, laborious, and often illegible handwriting. Spacing between words, spacing between letters in words, alignment, letter size and errors in proportion and formation are all affected (Graham, Struck, Santoro, & Berninger, 2006). This exists despite thorough instruction and ample time to practice letter formation outside the demands of spelling or the writing process.

There are three common forms of graphomotor dysfunction:

- 1) difficulty recalling the sequence of strokes needed to form a specific letter;
- 2) use of the larger muscles of the wrist and forearm rather than small muscles of the fingers to form letters; and
- 3) *finger agnosia*, in which a student has to visually monitor the location of the writing instrument because the fingers do not report their location to the brain. A person with agnosia may have an awkward, fist-like pencil grip, placing the thumb over the fingers and thus preventing the fingers from moving the pencil easily.

(Wolf, 2005)

Characteristics (Spelling)

Spelling errors characteristic of people with specific learning disabilities are rooted in faulty phonological processing as well as poor morphological awareness. Louisa Moats found that 90% of errors in spelling could be identified in the following categories:

- 1) Inflected ending omission (i.e., *dressest* for *dresses*) or substitution (i.e., “dropt” for *dropped*);

- 2) Misplacement or omission of /l/ and /r/ (i.e., “backboard” for *blackboard* or “fog” for *frog*);
- 3) Omission of non-salient consonants, including in consonant blends (i.e., “sip” for *slip* or “med” for *mend*);
- 4) Vowel errors (i.e., “maet” for *met*); within-class consonant substitution (primarily fricatives: /f/ and /v/--i.e., “baf” for *bath*--/th/ and voiced /th/, /s/ and /z/, /sh/ and /zh/), and
- 5) Weak syllable deletion (i.e., “xplak” for *explicate*).

Assessment/Progress Monitoring (Handwriting)

This area of disability cannot be diagnosed solely by looking at a handwriting sample. A thorough assessment includes writing self-generated sentences and paragraphs and copying age-appropriate text. The examiner must assess not only the finished product, but also the processes involved, including pencil grip, fatigue, cramping, or tremor of the writing hand, handedness, and fine-motor speed (International Dyslexia Association, 2007).

An example of a handwriting assessment is the *Minnesota Handwriting Assessment* (Harcourt). Normative information is available and the assessment can also be used to monitor progress as a result of intervention. This test takes 2.5 minutes to administer the rate score and more time is given to produce a complete sample for scoring the five quality categories (legibility, form, alignment, size, and spacing). Both manuscript and D’Nealian handwriting styles can be assessed.

Assessment (Spelling)

To analyze spelling for phonological and morphological errors, Moats recommends using a comprehensive sample of words, including words of high and low frequency, real and nonsense words, words of one to four syllables, words with inflected endings (i.e., suffixes –s, –ed, –ing, –er, –est), and words generated both to dictation and in spontaneous writing. Include potentially problematic phonological features, such as liquids (i.e., /l/ and /r/), consonant blends, multisyllabic words, words with unaccented schwa syllables (i.e., *happen*), and non-syllabic or unstressed inflected endings (i.e., suffix –ed as in *walked* or *slammed*).

Some assessment instruments are identified below:

- *Process Assessment of the Learner, 2nd Edition (PAL-II): Diagnostic for Reading and Writing*, (Harcourt). This is a comprehensive instrument that thoroughly assesses handwriting fluency and legibility, spelling, and composition skills. It can be administered multiple times to assess student progress.
- *SPELL Spelling Performance Evaluation for Language & Literacy (2nd ed.)*. Computer software scores and analyzes errors for students Grade 2 – adult.
- *Test of Written Spelling (TWS-4)*, Sopris-West
- *Weshler Individual Achievement Test (WIAT-II): Spelling & Written Expression*
- *WJ-III: Spelling sounds*
- *Wide Range Achievement Test (WRAT 3): Spelling*

Intervention (Handwriting)

Effective writing instruction focuses on (a) legible and automatic letter production; (b) spelling; and (c) composition (word and text fluency; sentence construction; genre-specific discourse structures; planning processes; and reviewing and revising processes) (Berninger & Amtmann, 2003). Children in kindergarten and first grade should receive explicit, systematic instruction in letter formation and in associating the shape with the name of the letter. Work must always begin with the formation of individual letters written in isolation. Alphabets need to be practiced daily, often for months (International Dyslexia Association, 2007).

After almost two decades of research in handwriting instruction, Graham (1999) has found no evidence between the legibility or handwriting speed of students who used manuscript or cursive writing. Nor has he found any convincing evidence that slanted manuscript (the D'Nealian alphabet) makes the transition to cursive writing any easier. For students with LD, research examining the effectiveness of different scripts is "nonexistent" (Graham, 1999, p. 84). Graham advises teaching students with LD traditional manuscript before cursive. But, he cautions that teachers who insist on a strict adherence to any particular model "are likely to frustrate not only themselves but their students as well" (Graham, 1999, p. 84).

Intervention (Spelling)

Teaching students how to segment words into phonemes helps them learn to spell because sounds and letters are related in a predictable way. Phoneme awareness instruction, combined with explicit instruction connecting phonemes to alphabetic letters significantly improves early reading and spelling skills. After students have well-established phonemic awareness, they need to learn to relate the sounds to letters as they spell words.

Phonics instruction teaches how letters of written language map to the individual sounds of spoken language. It teaches students to use these relationships to read and spell words. Systematic and explicit phonics instruction is required. Orthographic letter patterns used to spell many complex and irregular words must be taught as well (Fletcher, Lyon, Fuchs, & Barnes, 2007).

At the most basic level, systematic instruction explicitly teaches letter-sound relationships in a clearly defined sequence. Struggling students also need substantial practice in applying knowledge of these relationships as they read and write. Students also need opportunities to spell words and to write their own stories with words that include the letter-sound relationships they are learning (Armbruster, Lehr, & Osborn, 2001).

Progress Monitoring (Spelling)

One type of CBM for spelling is correct letter sequence (CLS) using dictated, grade-level word lists. Another way to progress monitor in spelling is total number/percentage of words spelled correctly (WSC). Although CLS requires more time to score, it is more sensitive to student improvement (Hosp, Hosp, and Howell, 2007).

One source for standardized spelling lists is AIMSweb Spelling-CBM. Provided are 33 alternate forms for each grade, 1-8. They are intended to be used for benchmarking grades 1-8 and progress monitoring any age.

The ABCs of CBM (Hosp, Hosp, and Howell, 2007) gives explicit instruction in the scoring of curriculum based measures in spelling, whether administering dictated lists of words or scoring words spelled correctly within timed student written passages.

The following are assessment tools or include assessment strategies that may be used to monitor student progress in spelling:

- *Process Assessment of the Learner, 2nd Edition (PAL-II): Diagnostic for Reading and Writing*, Harcourt. [See description above, under “spelling/assessment.”]
- *SPELL Spelling Performance Evaluation for Language & Literacy (2nd ed.)*, Learning by Design, Software for Grade 2 – adult. Scores and analyzes errors.
- Spelling Inventories (inform instruction by categorizing words according to a sequential patterns arranged by complexity):
 - Bear, D. R., Invernizzi, M., Templeton, S., & Johnston, F. (2000). *Words their way: Word study for phonics, vocabulary, and spelling instruction*. Upper Saddle River, NJ: Prentice Hall.
 - Ganske, K. (2000). *Word journeys: Assessment-guided phonics, spelling, and vocabulary instruction*. New York: Guilford Press.
 - *Spellography* (Sopris-West)

Written Expression: Composition (Generational Skills)

Definition and Implications

Like reading comprehension, written expression develops through a progression of several interconnected skills and processes. This section focuses on the generational aspects of written expression—capitalization and punctuation, word and text fluency, sentence construction, genre-specific discourse structures, planning processes, and reviewing and revising processes.

Characteristics

Difficulties in executive function and language hampers the composition component of written expression (Fletcher, Lyon, Fuchs, & Barnes, 2007). In addition to weak skills in handwriting and spelling, poor writers show problems in generating text. They are more likely to have shorter and less “interesting” essays, produce poorly organized text at both the sentence and paragraph levels, and be delayed in their acquisition and/or use of declarative, procedural, and conditional knowledge about writing. Furthermore, “poor writers are less likely to revise spelling, punctuation, grammar, or the substantive nature of their text to increase communication clarity” (Hooper et al., 1994, p. 386).

There is some evidence that, after accounting for difficulties in handwriting and spelling, there is a subgroup of children whose difficulties in written expression are restricted to composition. Students typically struggle in one or more of the following areas: capitalization and punctuation; word and text fluency; sentence construction; genre-specific discourse structures; planning processes; and reviewing and revising processes.

The following are specific indicators of a disability in written composition that are summarized from several sources:

- Word omissions (e.g., They ran to bus vs. They ran to *the* bus);
- Word order errors (e.g., *I and my mom* were here);
- Incorrect verb and pronoun use (e.g., *We is* running fast; me and *him* are here);
- Subject-verb disagreement (e.g., The monster have five *eyes*);
- Use of simple, rather than complex, sentence structures – particularly at the middle and high school levels;
- Word ending errors (e.g., He *laughing* vs. He *laughed*; He is *dyslexia* vs. He is *dyslexic*)
- Lack of punctuation and capitalization;
- Discrepancy between oral and written language;
- Problems with cohesion (e.g., lack of transition words to link ideas);
- Problems with coherence (e.g., poor sentence organization and intra- and inter-paragraph organization);
- Word-retrieval problems (e.g., use of vague or general words—*thing, stuff, good*—instead of specific or precise vocabulary);

(Fletcher, Lyon, Fuchs, & Barnes, 2007; Hooper et al., 1994; Wakely, Hooper, de Kruif, & Swartz, 2006)

Assessment and Progress Monitoring

Thorough assessment of written expression must include an analysis of basic writing skills (skills of transcription) as well as compositional (generational) skills. Work samples should be carefully examined for the above errors.

Examples of Assessment Instruments:

- *Process Assessment of the Learner, 2nd Edition (PAL-II): Diagnostic for Reading and Writing*, (Harcourt). This is a comprehensive instrument that thoroughly assesses handwriting fluency and legibility, spelling, and composition skills for students for Grades K-6. It can also be used to reveal error patterns in older, remedial students, but standard scores will not be generated.
- *Test of Written Language, Third Edition (TOWL-3)* (Pearson Assessments). Assesses capitalization, punctuation, spelling (ability to form letters into words), vocabulary (word usage), syntax (sentence combining), grammar, story construction.

To monitor progress, timed writing CBM can be administered individually or to a group using grade-appropriate story starters. (AIMSweb provides 125 story starters across grades 1-8.) Scoring writing CBM commonly includes three procedures:

- total words written (TWS)
- words spelled correctly (WSC)
- correct writing sequences (CWS)

Other scoring procedures may be applied, such as: number of long words/characters per word; number of different words; number of nouns, verbs, adjectives, etc.; correct capitalization; correct punctuation marks; words per sentence; and number of complete sentences.

(*The ABCs of CBM*, Hosp, Hosp, and Howell, 2007)

Interventions

Successful instruction draws clear linkages among oral language, reading, and written language. As in reading-related skills, effective instruction for students with disabilities in written expression must be systematic, explicit, and intensive (Lyon, 1996b). Classroom-level instruction that involves *Self-Regulated Strategy Development* (SRSD), developed by Graham and Harris (2005), have been shown to be significant in improving writing performance for students with learning disabilities (Fletcher, Lyon, Fuchs, & Barnes, 2007).

Comprehensive instruction includes intervention at all levels of generational composition, including:

- mechanics (capitalization and punctuation)
- word (grammar, including more mature synonyms, antonyms for verbs, adjectives, and adverbs)
- sentence construction
- paragraph construction
- multi-paragraph essays

Websites with information on research and instruction:

The Access Center: <http://www.k8accesscenter.org/index.php>

Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High School.

Graham & Perin, 2007. Addresses 11 strategies to help 4th – 12th grade students improve their writing. <http://www.all4ed.org/files/WritingNext.pdf>.

References (Written Expression):

- Armbruster, B. B., Lehr, F., & Osborn, J. (2001). *Put reading first: The research building blocks for teaching children to read, K-3*. Washington, DC: National Institute for Literacy.
- Ball, E. W., & Blachman, B. A. (1991). Does phoneme awareness training in kindergarten make a difference in early word recognition and developmental spelling? *Reading Research Quarterly*, 26(1), 49-66.
- Berninger, V. W. (2000). Development of language by hand and its connections with language by ear, mouth, and eye. *Topics in Language Disorders*, 20(4), 65-84.
- Berninger, V. W. (2004). Understanding the "graphia" in developmental dysgraphia: A developmental neuropsychological perspective for disorders in producing written

- language. In D. Dewey & D. E. Tupper (Eds.), *Developmental Motor Disorders: A Neuropsychological Perspective* (pp. 189-233). New York: Guilford Press.
- Berninger, V. W., Abbott, R. D., Jones, J., Wolf, B. J., Gould, L., Anderson-Youngstrom, M., et al. (2006). Early development of language by hand: Composing, reading, listening, and speaking connections; Three letter-writing modes; and fast mapping in spelling. *Developmental Neuropsychology*, 29(1), 61.
- Berninger, V. W., & Amtmann, D. (2003). Preventing written expression disabilities through early and continuing assessment and intervention for handwriting and/or spelling problems: Research into practice.
- Berninger, V. W., Winn, W. D., Stock, P., Abbott, R. D., Eschen, K., Lin, S.-J., et al. (2007). Tier 3 specialized writing instruction for students with dyslexia. *Reading & Writing*, 20(3).
- Carlisle, J. F. (1987). The use of morphological knowledge in spelling derived forms by learning disabled and normal students. *Annals of Dyslexia*, 37, 90-108.
- Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of the same coin. *Topics in Language Disorders*, 20(3), 19-36.
- Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2007). *Learning disabilities: From identification to intervention*. New York: Guilford Press.
- Foorman, B. R., Chen, D. T., Carlson, C., Moats, L., David, J. F., & Jack, M. F. (2003). The necessity of the alphabetic principle to phonemic awareness instruction. *Reading and Writing*, 16(4), 289-324.
- Gough, P. B., & Hillinger, M. L. (1980). Learning to read: An unnatural act. *Bulletin of the Orton Society*, 30, 179-196.
- Graham, S. (1999). Handwriting and spelling instruction for students with learning disabilities: A review. *Learning Disability Quarterly*, 22(2), 78-98.
- Graham, S., & Harris, K. (2005). *Writing Better: Effective Strategies for Teaching Students with Learning Difficulties*. Baltimore, MD: Brookes.
- Graham, S., Struck, M., Santoro, J., & Berninger, V. W. (2006). Dimensions of good and poor handwriting legibility in first and second graders: Motor programs, visual-spatial Arrangement, and letter formation parameter setting. *Developmental Neuropsychology*, 29(1), 43.
- Hayes, J. R., & Flower, L. S. (1980). Writing as problem solving. *Visible Language*, 14(4), 388-399.
- Hooper, S. R., Montgomery, J., Swartz, C., Levine, M. D., Watson, T. E., & Wasilenski, T. (1994). Measurement of written language expression. In G. R. Lyon (Ed.), *Frames of reference for the assessment of learning disabilities: New views on measurement issues* (pp. 375-417). Baltimore, MD: Brookes.
- International Dyslexia Association. (2007). Dysgraphia. Retrieved December 17, 2007, from <http://www.interdys.org/FactSheets.htm>
- Levine, M. (1994). *Educational care: A system for understanding and helping children with learning problems at home and in school*. Cambridge, MA: Educators Publishing Service.
- Lieberman, I. Y., Rubin, H., Duqués, S., & Carlisle, J. (1985). Linguistic abilities and spelling proficiency in kindergartners and adult poor spellers. In D. B. Gray & J. F. Kavanaugh (Eds.), *Biobehavioral measures of dyslexia* (pp. 163-176). Parkton, MD: York Press.

- Lyon, G. R. (1996a). Learning disabilities. In E. Marsh & R. Barkley (Eds.), *Child Psychopathology* (pp. 390-434). New York: Guilford Press.
- Lyon, G. R. (1996b). Learning disabilities. *Future of Children*, 6(1), 54-76.
- Lyon, G. R., Shaywitz, S. E., & Shaywitz, B. A. (2003). A definition of dyslexia. *Annals of Dyslexia*, 53, 1-14.
- Marlow, A. J., Fisher, S. E., Richardson, A. J., Francks, C., Talcott, J. B., Monaco, A. P., et al. (2001). Investigation of quantitative measures related to reading disability in a large sample of sib-pairs from the UK. *Behavior Genetics*, 31(2), 219-320.
- Mehta, P. D., Foorman, B. R., Branum-Martin, L., & Taylor, W. P. (2005). Literacy as a Unidimensional Multilevel Construct: Validation, Sources of Influence, and Implications in a Longitudinal Study in Grades 1 to 4. *Scientific Studies of Reading*, 9(2), 85.
- Moats, L. (2005). How spelling supports reading, and why it is more regular and predictable than you may think. *American Educator*, Winter 2005/06, 12-43.
- Moats, L., & Foorman, B. R. (in press). Literacy achievement in the primary grades in high poverty schools: Lessons learned from a five-year research program. In S. Neuman (Ed.), *Literacy Achievement for Young Children from Poverty*. Baltimore: Paul Brookes.
- National Commission on Writing for America's Families Schools and Colleges. (2005). *Writing: A Powerful Message from State Government*. New York: College Board.
- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Bethesda, MD: National Reading Panel, National Institute of Child Health and Human Development.
- Shankweiler, D., & Liberman, I. Y. (1972). Misreading: A search for causes. In J. F. Kavanagh & I. G. Mattingly (Eds.), *Language by ear and by eye: The relationship between speech and reading*. (pp. 293-317). Cambridge, MA: MIT Press.
- Shankweiler, D., Lundquist, E., Dreyer, L. G., & Dickinson, C. C. (1996). Reading and spelling difficulties in high school students: Causes and consequences. *Reading and Writing: An Interdisciplinary Journal*, 8, 267-294.
- Shaywitz, S. E., Shaywitz, B. A., Fulbright, R. K., Skudlarski, P., Mencl, W. E., Constable, R. T., et al. (2003). Neural systems for compensation and persistence: Young adult outcome of childhood reading disability. *Biological Psychiatry*, 54(1), 25-33.
- Wakely, M. B., Hooper, S. R., de Kruif, R. E. L., & Swartz, C. (2006). Subtypes of written expression in elementary school children: A linguistic-based model. *Developmental Neuropsychology*, 29(1), 125.
- Wolf, B. J. (2005). Teaching Handwriting. In J. R. Birsh (Ed.), *Multisensory Teaching of Basic Language Skills* (2nd ed., pp. 413-438). Baltimore: Paul H. Brookes.

BASIC READING SKILL

Definition and Implications

Learning to read is not like learning to speak. The human brain is hard-wired to learn spoken language and it is therefore, a naturally occurring process (Shaywitz, 2003). Typically, simply exposing hearing children to spoken language allows them to acquire and produce speech. Learning to read, however, is not “natural” for children. It has to be explicitly taught; exposure to text and print is not enough for the majority of the population.

In 1997, the National Reading Panel (NRP) was established in order to assess the status of research-based knowledge, including the effectiveness of various approaches to teaching children to read. The NRP identified 5 components to reading instruction that are essential for a student to learn to read. These 5 components are also referenced in IDEA 2004 and the Federal Regulations. The 5 essential components are phonemic awareness, phonics, reading fluency, comprehension and vocabulary.

For most of the student population identified with learning disabilities, a breakdown occurs in their basic reading skill (BRS). BRS difficulty includes problems with phonemic awareness and/or phonics. That is, students struggle to identify individual sounds and manipulate them; to identify printed letters and the sounds associated with those letters, or to decode written language. It is also typical for these students to struggle with spelling, or encoding. However, it should be noted that not all students with encoding difficulties have BRS difficulties.

It should be noted that in reading research and in clinical contexts, a breakdown in basic reading skill is frequently referred to as dyslexia. While schools tend not to use this term, instruction and intervention should align with the underlying need for BRS acquisition.

Characteristics and Assessments

The ability to understand letters and the sounds they represent is a prerequisite skill for reading comprehension. While many people think that learning phonics is something children should learn in kindergarten and 1st grade, many students do not, particularly if phonics has not been taught systematically and explicitly. Difficulty in decoding words impacts the ability to comprehend text and may be misidentified as a disability in the area of reading comprehension. Therefore, educators should carefully plan how they will assess a student’s reading abilities.

At the kindergarten and first grade level, it is best to assess whether students can identify letters, as well as consonant and short vowel sounds, through teacher-made or formal assessments.

If letters and sounds are not mastered, the student’s phonemic awareness should be assessed. “Phonemic awareness refers to the ability to notice, identify, and manipulate the individual sounds—phonemes—in spoken words.” (Shayitz, 2003, p. 51) For example, can the student identify that the word “cat” has 3 distinct sounds: /c/ /a/ /t/? Can they blend those sounds

together to make one word? Assessment tools for both of these areas (phonics and phonemic awareness) include the Comprehensive Test of Phonological Processing (CTOPP) and Test of Word Reading Efficiency (TOWRE). The Dynamic Indicators of Basic Literacy Early Skills (DIBELS) is also an effective tool. There are many informal assessments that can be conducted as well.

At the upper grade levels, assessment should start at higher skill levels and then funnel down to the more basic skills. Therefore, it is recommended to start at the reading fluency level. If students cannot decode sentences fluently, then word level reading should be assessed. Teachers should determine if students can read words in isolation from a list. If the student is not able to do this accurately, then assessment should address single syllable words, and then vowel sounds. Many older students with BRS deficits have not mastered their vowel sounds, and those who have tend to struggle to decode multi-syllable words. Formal assessments for these skills include the Test of Silent Contextual Reading Fluency (TOSCRF), Test of Silent Word Reading Fluency (TOSWRF), TOWRE and DIBELS.

If older students have not mastered their consonant and vowel sounds, it may be prudent to assess their phonemic awareness. Many of these students don't understand that words are made up of individual sounds that can be segmented and blended. The CTOPP can be used with this age group as well.

Work samples should also be examined. Many students who struggle with BRS write using simpler language in their writing than in their oral vocabulary (typically 1-2 syllable words), and often jumble the letters in the words. They may have the correct letters, but in the wrong order. This is indicative of difficulties with sounding out what they are writing and relying heavily on their visual memory in attempting to spell.

When examining work samples, educators should look for patterns. Does the student have any words or vowel patterns they can spell or use consistently? Do they consistently use all of their short vowel sounds correctly? Do they understand the "magic e" rule? Work samples are extremely informative about concepts students have mastered, as well as those they have not.

The Colorado Department of Education also provides assessment flowcharts in accordance with the Colorado Basic Literacy Act. These provide basic frameworks for how to assess reading abilities at the different grade levels. For more information see the following website: <http://www.cde.state.co.us/action/CBLA/index.htm>

If students do have the skills to decode at grade or age level accurately, but not fluently, then this may not be a basic reading skill issue. Reading fluency skills are addressed following basic reading skill.

Intervention

For all students with basic reading skill deficits, instruction must be systematic, direct and

explicit. Instruction must be targeted to the student's unique needs and focus on areas of skill breakdown.

Systematic instruction progresses from simple to complex and follows a predetermined scope and sequence for instruction. Time should be built into lessons for independent practice and review of previously mastered skills.

In addition, because every year that a student misses out on grade level reading, they also miss learning grade level vocabulary, all reading interventions need to include enriched language experiences. These include listening to, talking about, and telling stories (Shaywitz, p.262).

A key component of effective intervention is the provision of ample opportunity for practice. Students with BRS deficits need significantly more practice on skills in order to be not only accurate, but fluent with the skill. Teachers need to teach to *mastery*, not just accuracy.

Students who have breakdowns at the phonemic awareness level should be taught how to segment and blend words. Lessons should be brief (10-15 minutes per day) and should have two or three focused activities. In *Language Essentials for Teachers of Reading and Spelling (LETRS), Module 2*, Louisa Moats provides the following guidelines for teaching phonological skills:

- Build proficiency at segmenting and blending individual phonemes in words with two or three phonemes.
- Gradually move through the developmental progression of task difficulty. The object is to 'roam around in phonological space' at the appropriate level of difficulty.
- Emphasize oral production of words, syllables, and sounds. After hearing sounds, children should say them, paying attention to how the sounds feel when they are formed.
- Always show children what you want them to do [model]. Do one together, and then let the children do one.
- Give immediate corrective feedback. For example, if the child gives a letter name instead of a sound, tell him or her the difference and elicit the correct response.
- Think 'multisensory:' Use concrete objects—such as fingers, chips, blocks, coins, or felts—to represent speech sounds. Inject movement into the activity.
- Letters reinforce awareness once children have the idea. Phoneme awareness, reading and spelling are reciprocal; each benefits the others.

(Moats, p.19)

There are many reading programs that incorporate these guidelines. As Sally Shaywitz explained, "the specific program chosen from among them is far less important than the provision of systematic, explicit instruction in phonemic awareness and phonics, and then teaching children how to apply this knowledge to reading and writing" (Shaywitz, p. 263).

When teaching phonics, all of the rules around systematic, explicit and direct instruction continue to apply. There are many ways to teach phonics well, however, it works best if there is a daily routine at the beginning of each reading lesson. Again, Louisa Moats provides recommendations from her LETRS Module 7 for what the routine should include:

- Set up a goal and purpose for the lesson.
- Review what has been taught, with the goal of accurate and fluent response.
- Identify and isolate phonemes: Listen for sounds, pronounce sounds, and use oral-motor cues to enhance speech sound awareness.
- Teach alphabet names, sequence, and letter formation, until they are known.
- Link the sound with its symbol: Introduce a new sound-symbol concept or association, following a planned progression.
- Apply phoneme-grapheme associations to reading real and nonsense words.
- Extend to word study: sorts, chains, maps, families.
- Spell by sound-symbol association; say word, segment sounds, spell, check, say word again.
- Recognize and spell irregular ('memory') words.
- Use speed drills as necessary to increase fluency in well-learned skills.
- Write words, phrases, and sentences to dictation.
- Read decodable sentences and books for fluency and meaning.

(Moats p. 19-20)

While interventions for BRS deficits tend to result in more rapid success with younger children, there is ample research to show that older students *can* learn these skills and become effective readers with the right instruction. It is never too late to teach someone how to read.

Progress Monitoring

Progress Monitoring should occur at the student's instructional level and should be specific to the skills they are being taught. However, periodic benchmark assessment should occur to compare student performance with that of peers.

Curriculum Based Measures (CBM) are well researched and can be used to monitor student's progress toward mastery of concepts. CBM were developed to permit frequent assessment of student growth on targeted skills. They also help to guide instructional practices and determine when changes in intensity, duration, or intervention are needed.

Tools that can be used to monitor progress in BRS include DIBELS, Aimsweb, Monitoring Basic Skills Progress (MBSP), and other Curriculum Based Measures (CBM).

Websites and references are provided at the conclusion of *Reading Comprehension* for all three areas of reading.

READING FLUENCY SKILLS

Definition and Implications

Reading fluency refers to the ability to read words accurately, quickly and effortlessly. Additionally, fluency skills include the ability to read with appropriate expression and intonation or prosody. Fluency therefore relies on three key skills: accuracy, rate, and prosody.

Reading fluency can and should vary, even for skilled readers, depending on the type of text (narrative, expository, poetry), familiarity with the vocabulary, background knowledge of the content, and the amount of practice the student has had with a particular text or type of text. Fluency comes from many successful opportunities to practice reading (Lambert, 2007).

Fluency is a necessary but not sufficient component for comprehension. It is, however, the bridge that links accurate word decoding to comprehension (Rasinski, 2004). The ability to read fluently allows readers to free up processing “space” so that they can comprehend, make connections to the text and acquire new vocabulary. Typically, students who cannot read fluently show a significant lag in reading comprehension skills as well.

Characteristics and Assessments

It is important to understand the difference between a basic reading skill (BRS) deficit and a reading fluency deficit. Students who struggle with fluency typically present in two distinct profiles. The first includes students who struggle with accuracy, rate and prosody; the second includes those who struggle with rate and prosody only. Students who struggle with reading accuracy should be assessed for possible BRS deficits. Typically, these students need instruction in phonemic awareness and phonics, and therefore, the fluency interventions alone will not result in as great an improvement.

Students who only struggle with reading rate and prosody (how fast they read and if they read with expression) are those who truly have a fluency disability and will benefit most from fluency interventions. Typically these students will also struggle with any rapid automatic naming tasks such as identifying colors, letter names, numbers, names of familiar items and so on.

Fluency deficits may compound other reading deficits. Disfluent readers are exposed to significantly fewer words than those who are strong readers. If these skills are not remedied early, the cumulative lack of exposure to words becomes extremely challenging to reconcile. Students who are struggling to read are less motivated to read, reducing exposure to vocabulary, a critical element of reading comprehension. As a student progresses through school, a breakdown in fluency can make it extraordinarily difficult to keep up with the intensity and high volume of reading required for secondary and post-secondary education.

There are many assessments that can measure reading fluency. Again, it is important to attend to accuracy while conducting fluency measures. If a student struggles with accuracy, it is important to assess the underlying basic reading skill.

Some examples of assessments that measure fluency or that include fluency measures are: Test of Word Reading Efficiency (TOWRE); Test of Silent Word Reading Fluency (TOSWRF); Gray Oral Reading Test-4 (rate and accuracy scaled score combined); Aimsweb progress monitoring measures; Dynamic Indicators of Basic Early Literacy Skills (DIBELS); Qualitative Reading Inventory-4 (QRI-4); and Texas Primary Reading Inventory (TPRI).

Intervention and Progress Monitoring

The earlier reading fluency intervention is provided, the more likely it is that students will respond. “Once serious fluency problems have developed, they can be resistant to remediation.” (Spear-Swerling, 2006) Joe Torgesen and his colleagues have found that reading fluency is the hardest area to improve when intervention has not occurred early enough. This is not to say that fluency cannot be improved, rather that early identification and intervention are most likely to result in complete remediation.

It is important to note that when intervening for reading fluency, an overemphasis on rate alone can have a detrimental affect on overall reading ability. Direct, explicit instruction is required for students to improve all three components of fluency: accuracy, rate and prosody. Reading rate develops as a function of efficient decoding skills, opportunities for successful practice, and learning to read with expression (Rasinski, 2004, B).

A good fluency intervention program includes frequent opportunities to practice reading. According to the National Reading Panel, guided oral reading in small groups is sufficient for “typical” children, however, it should not be the sole technique used for teaching fluency to students with an identified disability in this area (NRP, 2000). Teachers should model reading fluency, students should work in pairs, and chunking or phrasing should be explicitly taught. Other strategies include simultaneous oral reading, reader’s theater, and having students chart fluency rates as they improve.

J.J. Pikulski and D.J. Chard identified the following nine steps to building fluency in their article *Fluency: Bridge between decoding and reading comprehension*:

- Develop orthographic/phonological foundations (phonemic awareness, letter knowledge, phonics).
- Increase vocabulary and oral language skills.
- Effectively teach high-frequency vocabulary and provide adequate practice.
- Teach common word-parts and spelling patterns
- Effectively teach decoding skills and provide adequate practice.
- Provide students with appropriate text to assist in building fluent reading.
- Use guided, oral repeated reading strategies for struggling readers.
- Support, guide and encourage wide-reading.

- Implement appropriate screening and progress monitoring assessments. (Pikulski & Chard, 2005)

There are numerous tools available to monitor fluency. As listed above, Aimsweb, DIBELS and other Curriculum Based Measures are available with multiple forms that allow frequent administration. The key to progress monitoring fluency is to do the frequent monitoring at the student's instructional level (student can read accurately with 95-100% accuracy), but to benchmark at least 3 times per year at grade level. The progress monitoring will be sensitive enough to show growth and gain as a result of instruction, and the benchmarking will help keep the ultimate goal in mind.

Websites and references are provided at the conclusion of *Reading Comprehension* for all three areas of reading.

READING COMPREHENSION

Definition and Implications

A disability in the area of reading comprehension affects a student's ability to understand and make meaning of text. The RAND Reading Study Group defines reading comprehension as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (RRSG, 2002). Reading comprehension is a complicated set of processes that has been studied relatively little compared to the other areas of reading. In spite of the lack of research on reading comprehension *only* disabilities, there is consensus that all students with any type of reading disability benefit from direct, systematic, explicit instruction in reading comprehension skills and strategies.

It is most common for students to have basic reading skill (BRS) deficits combined with comprehension deficits, and/or fluency deficits. If this is the case, it is critical to instruct on the basic skill deficits *as well as* the comprehension deficits. Although it tends to be more unusual for a student to have a comprehension only deficit, this can occur. A reading comprehension deficit assumes that basic reading skills are intact and that the student can read fluently without errors. Students with a reading comprehension disability are typically not identified until the shift occurs from *learning to read*, to *reading to learn*. In most cases, this is around the third or fourth grade.

Characteristics

Reading comprehension encompasses a multi-faceted set of skills. First, and foremost, children with this deficit may have more basic struggles in the area of oral language including new vocabulary development. In *Overcoming Dyslexia*, Sally Shaywitz determined that a child learns about seven new words per day, which amounts to three thousand words per year (Shaywitz, 2003). If students struggle with acquiring oral language, this will certainly impair their ability to comprehend written language. Typically students who struggle in this area use smaller words and need significantly more exposure to new words. These students may also be challenged by how to form sentences. Their ability to understand what makes a complete sentence and what order to put words in may be impaired.

For students with breakdowns in language comprehension, phonological processing is often intact. Nevertheless, a student must be able to understand oral language before they can comprehend written language. If there are gaps in listening comprehension, it is likely there will be gaps in reading comprehension as well. While gaps in oral language are often a contributing factor to reading comprehension, not all students with reading comprehension disorders have oral language deficits.

Another area that can affect comprehension is working memory. The demands of reading new information, holding on to it, connecting it with previously learned information and applying the new learning can be overwhelming for some students. In addition, it is significantly more

difficult for students with working memory deficits to learn new vocabulary introduced in a novel setting than when it is directly taught.

There are also several other processes that must occur for a student to comprehend well. These include the ability to infer, monitor comprehension, and be sensitive to story structure. To make inferences the student must draw conclusions from text or “read between the lines.” Comprehension monitoring is one of the most important and effective strategies used by effective readers. It requires the reader to “identify inconsistencies in the text, gaps in understanding, or the need to seek information from other parts of the text” (Catldo & Cornoldi, 1998). Students who are poor readers do not stop when they are confused by text and will not check for understanding during the reading process.

Finally, story structure sensitivity is an important contributor to reading comprehension. Each genre in literature has its own distinctive linguistic style and structure clues. Understanding the implications of story titles, paragraph beginnings and conclusions, bulleted points, and use of illustrations, for example, fosters stronger comprehension of text. Poor readers do not attend to these details.

Assessments

Unfortunately, there are not assessments for accurately measuring all aspects of reading comprehension. As was noted in the RAND Reading Study Group Report,

Currently, widely used comprehension assessments are heavily focused on only a few tasks: reading for immediate recall, reading for the gist of the meaning, and reading to infer or disambiguate word meaning. Assessment procedures to evaluate learners’ capacities to modify old or build new knowledge structures, to use information acquired while reading to solve a problem, to evaluate texts on particular criteria, or to become absorbed in reading and develop affective or aesthetic responses to text have occasionally been developed for particular research programs but have not influenced standard assessment practices. Because knowledge, application, and engagement are the crucial consequences of reading with comprehension, assessments that reflect all three are needed (RRSGR, 2002).

The easiest aspect of comprehension to measure is that of vocabulary. Two common assessments are the Peabody Picture Vocabulary Test (PPVT) and the Test of Word Knowledge (TOWK). A speech-language pathologist (SLP) should be consulted to rule out speech-language impairments if a deficit in expressive or receptive language is suspected. The SLP can also be very helpful in assessing any area related to vocabulary development.

Examples of assessments for passage comprehension (typically retell and inference) include the Diagnostic Assessment of Reading Second Addition (DAR-2), Qualitative Reading Inventory-IV (QRI-IV), Developmental Reading Assessment 2 (DRA-2), and other Informal Reading Inventories. Passage reading fluency assessments that are related to reading comprehension include the Aimsweb Maze CBM or other CBM maze passages.

Intervention and Progress Monitoring

In spite of the fact that assessment tools are limited for identifying specific reading comprehension deficits, there is good news about reading comprehension interventions. Both specific skills instruction and strategy instruction have been shown to result in very positive outcomes.

As the name implies, specific skills instruction includes direct instruction on improving the skills required to be a successful reader and can include vocabulary instruction, instruction on how to find the main idea, fact finding and making inferences. Teachers should model and coach students in these skills. Instruction must be explicit.

Strategy instruction is “viewed as [instruction in] cognitive processes requiring decision making and critical thinking” (Clark & Uhry, 1995). This includes instruction on activating prior knowledge, comprehension monitoring, and understanding how to read for different purposes.

Regardless of the type of intervention, in order to be effective, comprehension instruction must be explicit, systematic, and provide multiple opportunities for practice. The National Reading Panel outlined the following seven categories of text comprehension instruction which have a solid, established scientific basis:

- 1) Comprehension monitoring, where readers learn how to be aware of their understanding of the material;
- 2) Cooperative learning, where students learn reading strategies together;
- 3) Use of graphic and semantic organizers (including story maps), where readers make graphic representations of the material to assist comprehension;
- 4) Question answering, where readers answer questions posed by the teacher and receive immediate feedback;
- 5) Question generation, where readers ask themselves questions about various aspects of the story;
- 6) Story structure, where students are taught to use the structure of the story as a means of helping them recall story content in order to answer questions about what they have read; and
- 7) Summarization, where readers are taught to integrate ideas and generalize them from the text information

(National Reading Panel, 2000)

While many of these strategies are effective in isolation, they are far more powerful and produce greater effect sizes when used in combination in a multiple-strategy method.

As with the area of assessment, there are significantly fewer progress monitoring tools available to measure the specific areas of comprehension. Aimsweb and Ed Checkup do have maze progress monitoring tools that measure overall comprehension.

Websites with information on research and instruction (Reading/Literacy):

The Access Center: <http://www.k8accesscenter.org/index.php>

Center on Instruction: <http://www.centeroninstruction.org/>

Colorado Basic Literacy Act: <http://www.cde.state.co.us/action/CBLA/index.htm>

What Works Clearinghouse: <http://ies.ed.gov/ncee/wwc/>

National Reading First Technical Assistance Centers:

- The University of Texas at Austin: Center for Reading and Language Arts
<http://www.texasreading.org/utcrla/>
- Florida State University: Florida Center for Reading Research <http://www.fcrr.org/>
- University of Oregon: Center on Teaching and Learning <http://reading.uoregon.edu/>

References (Basic Reading Skill, Reading Fluency Skills, and Reading Comprehension subsections):

Cataldo, M.G., & Cornoldi, C. (1998). Self-monitoring in poor and good reading comprehenders and their use of strategy. *British Journal of Developmental Psychology*, 16, 155-165

Clark, D.B., & Uhry, J. K. (1995) *Dyslexia: Theory and practice of remedial instruction*. Baltimore, MD: York Press.

Moats, Louisa C. (2005). *Language Essentials for Teachers of Reading and Spelling: Module 2 The Speech Sounds of English: Phonetics, Phonology, and Phoneme Awareness*. Longmont, CO: Sopris West

Moats, Louisa C. (2005). *Language Essentials for Teachers of Reading and Spelling: Module 7 Teaching Phonics, Word Study, and the Alphabetic Principle*. Longmont, CO: Sopris West

National Reading Panel. (2000). *Report of the National Reading Panel: Teaching Children to Read, an Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*. Washington, DC: National Institute of Child Health and Human Development.

Pikulski, J.J., & Chard, D.J. (2005). Fluency: Bridge between decoding and reading comprehension. *The Reading Teacher*, 58(6), 510–519

Rand Reading Study Group. (2002). *Reading for Understanding Toward an R&D Program in Reading Comprehension*. Santa Monica, CA: RAND

Rasisnski, Timothy V. (2004). *Assessing Reading Fluency*. Honolulu, HA: Pacific Resources for Education and Learning.

Shaywitz, Sally. (2003). *Overcoming Dyslexia: A new and complete science-based program for reading problems at any level*. New York: Vintage Books.

Spear-Swerling, L. (2006). Children's Reading Comprehension and Oral Reading Fluency in Easy Text. *Reading and Writing*, 19, 199

MATHEMATICAL CALCULATION AND PROBLEM SOLVING

Definition and Implications

The federal and state statutes identify two specific areas of math disability. Mathematical calculation includes the knowledge and retrieval of facts and the application of procedural knowledge in calculation. Mathematical problem solving involves using mathematical computation skills, language, reasoning, reading, and visual-spatial skills in solving problems; essentially it is applying mathematical knowledge at the conceptual level.

Math disabilities have not been researched as extensively as reading disabilities. In a recent analysis, it was approximated that between 1996 and 2005, reading studies outnumbered mathematical studies by a ratio of 14:1 (Berch & Mazzocco, 2007). As a result, defining a math disability is somewhat challenging. Terms that have been associated with math disabilities include “developmental arithmetic disorder,” “dyscalculia,” and “specific mathematic disability.” (Fletcher et al., 2007)

The National Council for Teachers of Mathematics (NCTM) divides math into two categories: content strands and mathematical processes.

The content strands include: 1) number and operations, 2) algebra, 3) geometry, 4) measurement, and 5) data analysis and probability (NCTM, 2000). These areas can be more simply thought of as the *what* of mathematical learning. Because of the diversity of skills required for these 5 areas, it is difficult to clearly define a construct or set of characteristics for students with a math disability (Berch & Mazzocco, 2007).

The area of mathematical processes in NCTM includes: 1) problem solving, 2) reasoning and proof, 3) connections, 4) communication, and 5) representation. These more closely align with mathematical problem solving disabilities and can be thought of as the *doing* of mathematics.

Typically, students with a mathematical calculation disability struggle in the area *number and operations* of the content strand. Students with a mathematical problem solving disability will often have problems within the category of mathematical processes. There is considerably more research available in the area of mathematical calculation than in the area of mathematical problem solving.

There is some evidence suggesting two subtypes of students who have disabilities in mathematics. One is a subset of children with a *math only* disability, the other has both *math and reading* disabilities. It is known that when reading and math deficits co-exist, both areas tend to be more severely impaired than when occurring in isolation.

In spite of the fact that relatively little research has been done in the area of math in general, a disability can have significant implications for students. “Mathematics, like literacy, is a primary method of communicating thoughts and ideas in our world. ...Without an appropriate

level of competency in mathematics, students will find it difficult to manage many important aspects of their lives such as: budgeting; purchasing; practicing household tasks involving measurement including cooking and dispensing cleaning supplies, pesticides and medication; planning for retirement; and so forth” (Allsopp, Kyger & Lovin, 2007). Poor comprehension and achievement in mathematics can also limit students’ career opportunities.

Characteristics and Assessment

The most commonly identified deficit in the area of mathematical calculation involves *number sense and operations*. Characteristics of students who have difficulties in calculation can include an inability to consistently identify written numbers and poor association of written numbers with the concrete representation of a quantity (number sense). Operations include the ability to understand calculations such as adding, subtracting, multiplying and dividing. This involves not only the ability to follow the procedures but to understand the meaning of the operations.

Developmentally, in most areas of mathematics, learning begins by using concrete materials, then moving to representational or semi-concrete drawings, and finally proceeding to abstract levels that use written symbols to represent mathematical constructs (Allsopp, Kyger & Lovin, 2007). Therefore, students with poor number sense may have the ability to add by counting on their fingers, but may not have moved to a more abstract and fluent stage of having memorized their math facts. Conversely, a student who has memorized their math facts may not understand operations at the conceptual level and this gap can impede future success in mathematics, as well. Teachers should assess for both the procedural and conceptual level of understanding in all areas.

Students with mathematical problem solving disabilities may have difficulties that include the inability to: identify important information; filter out unimportant information; and determine necessary steps in problem solving. An additional area of weakness can include metacognition or the inability to monitor one’s own learning. Students with poor metacognition may not be able to evaluate their own work or implement strategies needed. Students may also have a passive approach to problem solving. For these students, math is a just a series of rote actions with no purpose other than to attain a right or wrong answer. They do not easily activate previously learned strategies or knowledge. Students with mathematical problem solving disabilities tend to use simple strategies such as counting on fingers when adding or counting each number rather than “counting up” (starting with the bigger number and counting from there) or retrieving memorized math facts.

Diagnostic mathematical assessments include both norm-referenced and criterion-referenced measures. Error analyses and student interviewing may also be very informative in determining specific areas of deficit and mastery (Fleishman & Manheimer, 1997). Curriculum-based measures are particularly helpful for monitoring progress. Textbooks may provide assessments that can provide useful information, as well.

Examples of norm-referenced mathematical diagnostic assessments are: KeyMath3 which assesses the understanding and application of critical math concepts and skills from counting

through algebraic expressions; Stanford Diagnostic Mathematics Test, 4th ed. which provides both a screening assessment and a full diagnostic test; and Early Math Diagnostic Assessment (EMDA) which is designed to screen/assess students PreK through grade 3.

Of course, numerous broad achievement test batteries sample components of mathematics (often computation and reasoning/application/problem solving) in conjunction with other skill areas. Common examples are the Wide Range Achievement Battery, 4th ed. (WRAT IV) and the Woodcock-Johnson Tests of Achievement III (WJ-III).

Progress Monitoring

Curriculum-based measures (CBM) for math include *early numeracy*, *computation*, and *concepts and applications*, with most of the research/technical work being done with computation (*The ABCs of CBM*, Hosp, Hosp, and Howell, 2007). Estimation measures are also now being developed. *Early numeracy* measures include missing numbers, number identification, oral counting, and quantity discrimination. *Computation* measures usually include specific skills within the curriculum such as multiplication facts. *Concepts and applications* taps various math skills related to specific curricula. Scoring of CBM for Math typically involves a determination of correct digits (CD) rather than correct problems. Another similar measure is the Monitoring Basic Skills Progress (MBSP) which provides a sampling of a year's curriculum and thus it differs for each grade level (Fuchs, Hamlett, & Fuchs, 1990, 1994, Pro-Ed).

For the secondary level, CBMs addressing *concepts and applications* tap mathematical skills taught in the upper grades, such as measurement, time, and graphical interpretation. *Maths Mate* is another tool that contains curriculum-based measures in all areas of math for grade levels 5-10. It consists of worksheets to be completed weekly followed by a test at the end of each month.

Foegen (2006) cites several progress-monitoring options for general mathematics at the middle school level. These include estimation, facts, and concepts-based measures. High school content areas such as algebra are being studied and tools developed. Currently, there are some measures for algebra basic skills, foundations, and content analysis (Foegen, 2006). Curriculum-embedded progress monitoring would also be appropriate for secondary students.

Tools are available from several publishers including AIMSweb, AAIMS (Algebra Assessment and Instruction – Meeting Standards), and Yearly Progress Pro (McGraw-Hill).

Interventions

Research on effective math interventions is emerging, but lags behind that found in the reading area (Fletcher et al., 2007). Some general research-based practices relating to math instruction have been identified below.

CRA is an intervention for mathematics instruction that research suggests can enhance the mathematics performance of students with learning disabilities. (See *The Access Center*: www.k8accesscenter.org which is endorsed by the U.S. Office of Special Education Programs.)

The CRA instructional sequence consists of three stages: concrete, representation, and abstract:

- *Concrete.* In the concrete stage, the teacher begins instruction by modeling each mathematical concept with concrete materials (e.g., red and yellow chips, cubes, base-ten blocks, pattern blocks, fraction bars, and geometric figures).
- *Representational.* In this stage, the teacher transforms the concrete model into a representational (semiconcrete) level, which may involve drawing pictures; using circles, dots, and tallies; or using stamps to imprint pictures for counting.
- *Abstract.* At this stage, the teacher models the mathematics concept at a symbolic level, using only numbers, notation, and mathematical symbols to represent the number of circles or groups of circles. The teacher uses operation symbols (+, -, \times , \div) to indicate addition, multiplication, or division.

The CRA instructional strategy of progressing from **concrete to representational to abstract** is cited as being effective (Fleischner and Manheimer, 1997). This practice involves teaching students first at the concrete level, for example, learning that multiplication is just repeated addition using objects such as toothpicks or blocks. From the concrete, students can then start to generalize and apply this knowledge to representations of concrete items such as images of a yard with a fence for learning how to find area. Using the representation, students can identify how many squares fill the space. Finally, students can then move into abstract conceptual knowledge application in order to become more fluent. Fluency in math includes both accuracy and rate with the ultimate goal being able to apply mathematical understandings in relevant, authentic ways. An example is applying the formula for area (length \times width) to determine how much tile is needed for a bathroom floor. In this example, memorized formulas as well as math facts are abstract concepts, but highly valuable in terms of building fluency toward solving the problem. If a student doesn't understand the practical application of why the formulas work the way they do, they are less likely to retain the information or generalize it.

Practice is a critical instructional component for supporting struggling learners. In this case, ample practice opportunity does **not** mean skill drills. While many teachers provide students with timed worksheets for practicing day after day, this is in fact negatively correlated with improving outcomes. Drill practice creates a lack of interest in students and typically results in frustration and anxiety. (Allsopp, Kyger and Lovin, 2007, p. 146)

Practice opportunities should be varied, motivational and whenever possible should occur in authentic contexts. For example, rather than doing paper and pencil activities around measuring perimeter and area, students can measure tiles on a floor or the area of a bulletin board, window or desk-top. Combining these activities with a specific purpose, for example, how to rearrange the classroom or design a new bulletin board, enhances the authenticity and meaning of these activities. It also shows students how mathematical concepts can be generalized to other life activities.

The following are important to remember when planning practice for struggling learners (Allsopp, Kyger and Lovin, 2007, p. 147):

1. Practice activities involve mathematics concepts and skills with which students have already demonstrated initial understanding.
2. Practice activities provide students with multiple opportunities to respond using the target mathematics concept or skill.
3. Practice activities match students' levels of understanding (e.g., concrete, representational, or abstract)
4. Practice activities are designed to complement students' unique learning characteristics so that the students can best demonstrate their understanding. Students' responses (e.g. writing, speaking, drawing) are not significantly affected by their disability.
5. The teacher provides directions and models how to perform the task required by the practice activity before the students begin.
6. The teacher continually monitors students as they practice, providing corrective feedback and positive reinforcement for accuracy and effort.
7. Practice activities include a process for measuring individual student performance.
8. Subsequent instructional planning is based on the degree to which students demonstrate mastery of the concept or skill being practiced.

Other research-based strategies that have been demonstrated to improve mathematical outcomes for students are identified below:

- *Structured Language Experiences*: Students are encouraged to use their own language to describe their mathematical understandings. This practice helps students develop and improve metacognition (important to problem solving) through talking, writing, drawing or performing.
- *Structured Cooperative Learning Groups* or *Peer Tutoring*: For struggling learners, the activities should be highly structured with clearly defined tasks.
- *Progress Monitoring Students' Mathematical Understandings*: Progress monitoring should be used to: provide students with immediate, tangible feedback about their learning; provide teachers with data for making instructional decisions; and, help students with setting goals and enhancing metacognition. Progress monitoring data should also be used to communicate with parents regarding their child's progress.
- *Maintenance of Mastered Concepts and Skills*: Because memory is sometimes an area of difficulty for students with math disabilities, it is important to periodically review previously learned concepts and skills. An effective practice is to provide 5-10 minutes of daily "maintenance" time that could be done as a warm-up activity at the start of each class period.

(Allsopp, Kyger and Lovin, 2007)

Websites with information on research and instruction in math:

The Access Center: <http://www.k8accesscenter.org/index.php>

Center on Instruction: <http://www.centeroninstruction.org/>

Colorado Math: <http://www.cde.state.co.us/coloradomath/index.htm>

National Council for Teachers of Mathematics (NCTM): <http://www.nctm.org/>

What Works Clearinghouse: <http://ies.ed.gov/ncee/wwc/>

References (Mathematics):

- Allsopp, D.H., Kyger, M.M., & Lovin, L.H. (2007). *Teaching Mathematics Meaningfully*. Paul H. Brookes.
- Berch, D.B. & Mazzocco, M.M.M. (2007). *Why Is Math So Hard for Some Children?* Paul H. Brookes.
- Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2007). *Learning disabilities: From Identification to Intervention*. New York: Guilford Press.
- Fleischner, J.E., & Manheimer, M.A. *Math Interventions for Students with Learning Disabilities: Myths and Realities*. *School Psychology Review*, 1997, 26:3, 397-413.
- Foegen, A. (2006). Monitoring student progress in algebra. Presentation at the annual Pennsylvania Technical Assistance Network conference: University Park, PA.
- Hosp, M.K., Hosp, J.L. & Howell, K.W. (2007). *The ABCs of CBM: A Practical Guide to Curriculum-Based Measurement*. New York/London: Guilford Press.

Section 6: Special Considerations

- Preschool/Young Children
- Older (Secondary) Students
- Twice Exceptional
- Speech-Language Impairment vs. SLD Determination
- English Language Learners

DISCLAIMER:

The identification of any products of private vendors in these *Guidelines* is only for the purpose of providing examples and does not constitute the Department's endorsement of such products.

Pre-school/young children

The historical model for child identification and early childhood services for children 3-5 years old has been “early response” and has not followed the “wait to fail” scenario experienced by some elementary school students. Colorado has taken the approach that young children cannot wait for intervention if developmental challenges exist. Colorado has an inclusive model for preschool services. Because of that philosophical and operational approach, most professionals in local school systems routinely work with children in multiple settings and discuss teaching and learning strategies for specific challenges with all program staff. If a child with an IEP is in an early childhood setting, early childhood and related services personnel often work with the program staff to help them implement research-based strategies with all children, including those that the teaching staff are “watching” before deciding to make a referral or not.

Preschool/young children have distinct developmental patterns that distinguish them from older learners. For young learners, all developmental domains are intimately connected. Development in any one domain (physical, social, emotional, cognitive and language), influences and is influenced by development in all other domains. Typically, development of young children occurs simultaneously in all domains but unequally, there are inconsistencies and discontinuities in their learning patterns.

The child’s experiences and interactions with their environment (physical) and the people (social) in it are the context for development and learning and have immediate as well as delayed effects. The importance of the effects of the social environment and experiences of young children cannot be understated as it relates to learning. Young children are just beginning to show their preferences for the modes of knowing and learning and it is often difficult to distinguish preferences from experiential effects. For young children, the learning process often requires many repetitions across multiple contexts before knowledge is integrated and consistently demonstrated.

There are specific “delays” that might be predictive of later learning disabilities and should be addressed early on, for example:

- delay in comprehension and/or expression of spoken language
 - limited receptive vocabulary
 - difficulty understanding simple directions
 - reduced intelligibility
 - immature syntax
- delay in emergent literacy skills
 - slow speed for naming objects and colors
 - limited phonological awareness (e.g., rhyming, syllable blending)
 - minimal interest in print
 - limited print awareness (e.g., book handling, recognizing environmental print)

- LDonline

In Colorado, when a preschool child with a disability turns six years of age, the multidisciplinary team must shift the *Preschool Child with a Disability* eligibility to one of the

other disability categories prescribed in IDEA 2004. If a specific learning disability is suspected the RtI process must be implemented as this is a component of eligibility. However, if the team determines there is appropriate data from preschool interventions, progress-monitoring, and other assessment; and the child meets the other criteria, SLD can be considered using existing data. Because academic skills are just beginning to develop at this time, it is often difficult to validly determine a specific academic deficit. Other disability categories (or a decision that the child may not need special education supports and services) may be considered more relevant for a six-year-old (e.g., Speech-Language Impairment), with ongoing instruction/intervention and monitoring over time helping provide clarity as the child progresses academically during the early elementary years.

Recognition and Response (R&R) is a system being researched for pre-K children that follows a three-tiered model similar to RtI. Below is description of R&R from the FPG Child Development Institute (<http://www.fpg.unc.edu/~randr/>). The following website provides additional information: *Recognition and Response--Pathways to School Success for Young Children*: <http://www.recognitionandresponse.org/> .

What is Recognition and Response?

Recognition and Response (R&R) is a multi-tier system that holds promise for pre-kindergarten children who experience learning difficulties in the areas of language, cognition, and academic learning. This model is consistent with the wisdom and values of the early childhood field because it emphasizes high quality curriculum and instruction and the importance of early intervening using research-based methods. Some three- to five-year-olds will require additional supports to acquire key school readiness concepts prior to kindergarten, even when teachers use effective curriculum and intentional teaching. R&R is designed to help early childhood teachers *recognize* children who show signs of learning difficulty and *respond* in ways that help them experience early school success. R&R is an emerging early childhood practice, and the tools and resources (e.g., assessment strategies, instructional approaches) that are necessary to support its implementation in early childhood settings are still being developed. However, many components of R&R, such as intentional teaching and providing a high quality learning environment, are already in place in most high quality early childhood classrooms. With these elements in place, early educators might begin using this approach to (a) determine whether most children are making adequate progress in key domains of learning and development and (b) respond to individual children who require additional supports to learn.

Older (Secondary) Students

Many educators have expressed concerns that a *Response to Intervention* model for identifying learning disabilities will not work for older students. This is, however, an incorrect assumption; RtI can be implemented quite successfully at the secondary level. The problem-identification, problem analysis, intervention and response to intervention steps apply at any level of development. The data used in these steps at the secondary level may be different, but the process remains the same. For instance, at the secondary level “common assessments” typically are used for progress monitoring of content areas. These common assessments are conducted every 3-4 weeks and take the place of a weekly test. Data can be used to determine the

performance of an individual or group of students compared to overall class or grade-level performance. When an individual student or group of students (25% or fewer) is performing significantly below the peers, then the problem solving process can be applied. The common assessments can continue to be used to progress monitor response to intervention. As long as data are available to assess current performance, a benchmark or goal is available, a gap can be determined, and a timeline is agreed upon, RtI can be used. It is important throughout the problem-solving process to consider and address any underlying factors impacting academic performance in content areas such as: basic reading skills, reading comprehension, listening comprehension, written expression, etc.

If students are performing significantly below grade level in reading, writing or mathematics, they should certainly be considered for a “standard intervention protocol” to address their needs. A standard intervention protocol refers to the implementation of a specific intervention supported by research to be effective with students who have similar needs/deficits.

Additionally, there is significant evidence that many older students identified with SLD have never received adequate instruction in either general or special education and that many respond quite well once exposed to it (Torgeson, et al., 2001; Simos, et al., 2002). Regardless of whether students have previously been identified as having a SLD, they should be given the opportunity to receive evidence-based instruction in their area of need to determine whether or not they respond adequately to that instruction.

It should also be noted that a major component of RtI is the use of screening measures to identify students considered to be at risk. As Jack Fletcher indicates, “it is sometimes easier to screen older students for reading difficulties because the assessments themselves are highly reliable and have better sensitivity and specificity.”

For older students, even the Colorado Student Assessment Program (CSAP) can be an effective screening tool. Schools can use this as their first cut to identify students who are not proficient. From there they can use further screening assessments such as fluency or phonological awareness measures to determine students’ specific needs and match them to instructional intervention.

While the concept of providing interventions outside of special education may require significant systemic reorganization at the secondary level, there is no reason to think that RtI models could only be successful at the elementary level. Indeed, the *Response to Intervention* model allows educators to get at the heart of our general understanding of specific learning disabilities at any grade level, and that is *unexpected underachievement*.

Twice Exceptional

According to the Colorado definition, twice-exceptional students are:

1. Students who are identified as gifted and talented <G/T> in one or more areas of exceptionality (specific academics, general intellectual ability, creativity, leadership, visual, spatial, or performing arts);

and also identified with:

2. A disability as defined by Federal/State eligibility criteria: Specific Learning Disability (SLD); Significant Identifiable Emotional Disability (SIED); Physical Disability (PD); Sensory Disability (vision, hearing); autism; or ADHD. The identification of a disability may result in a 504 Accommodation Plan or if special education eligibility is determined, an Individual Education Plan (IEP) will be developed.

Historically, in traditional educational settings, many twice-exceptional students with learning disabilities were overlooked for services. This is due to a number of issues, including the student's ability to mask a deficit and the system's lack of early screening (e.g., in the components of reading), along with the perception that a child must be functioning below age and grade peers to receive support. This, understandably, led to a need to identify and serve the disability under a special education label.

The discrepancy model for identification of Perceptual/Communicative Disabilities (now SLD) did determine many students who were recognized as G/T to also have SLD. The problem with the discrepancy formula is that for many impacted students, the IQ score is depressed or in some cases, even drops over time as the disability continues to impact performance. To become eligible for special education services, the student would have to wait to be far enough behind to make the cutoff. Since special education was seen as the only avenue for receiving targeted instruction/services, students' educational needs were often unmet. `

Twice-Exceptional & RtI:

In contrast, the *Response to Intervention* model is ideal for twice-exceptional students. Screening is built in so that many deficits are discovered long before they would have been in the past. Twice-exceptional students who are good at masking their disability are often picked up through this screening process and interventions are prescribed and implemented without the need of a special education label. Screening that assesses specific skill attainment (such as phonemic awareness and decoding) will pick up on difficulties early, when targeted intervention is most effective. Global outcome assessments may not detect these specific areas of underachievement.

Many of the attributes of an RtI model are helpful to twice-exceptional students. The built-in family partnership allows parents to be part of the problem-solving with their children and the school team. Progress monitoring provides data on the effectiveness of the prescribed, research-based intervention and can directly inform the next instructional intervention.

The problem-solving process can address a variety of academic/behavioral difficulties that are often present in twice-exceptional students (e.g., Attention Deficit Hyperactivity Disorder,

anxiety, lack of motivation, obsessive compulsive disorder, or difficulties in reading or writing) through focused interventions. Instead of immediately evaluating for special education, the implementation of interventions that make both instructional and diagnostic sense should be initiated. This model allows for those interventions to be identified and implemented immediately rather than having school personnel spend their time administering assessments that may not be helpful in guiding instruction.

The major advantage to providing interventions at the earliest indication of difficulty is that twice-exceptional students often respond very quickly to the appropriate interventions and, thus, can greatly benefit from both early screening of specific skills or content and the provision of targeted interventions.

As indicated in the Colorado definition of “twice-exceptional,” 504 Accommodation Plans are appropriate for many twice-exceptional students. They may have a need for accommodations (e.g. extended time or use of assistive technology) within their learning environment to be successful. A student need not be determined eligible for special education – 504 Accommodation Plans can serve to identify specific accommodations that will benefit them throughout their schooling.

For those students formally identified within their district as gifted and talented, a plan should be written. This GT plan (e.g., Advanced Learning Plan) should align with other learning plans in the building so that one comprehensive learning plan can be developed for the child.

G/T and SLD Determination/Eligibility:

Eligibility for special education services in the category of SLD will still be appropriate for some students whose skills are significantly low (in one or more areas of SLD) as compared to grade or age-level benchmarks and who are not sufficiently responding to specific interventions through the RtI process. It is likely that fewer students will be made eligible but, as with any student with learning difficulties, they will have had instructional opportunities to address/remediate areas of difficulty without the necessity of a “label.”

With the implementation of the newly revised criteria, the data gathered through interventions over time will contribute to a body of evidence that may illustrate the need for ongoing and intensive support. Because of the specificity of the criteria and the opportunity for diagnostic/prescriptive assessment and intervention throughout the process, twice-exceptional students who are found to be eligible for special education will be more appropriately identified. Those who are not found eligible will have had the opportunity to receive intervention and may be determined to be appropriately served through a 504 Accommodation Plan.

Speech-Language Impairment vs. SLD Determination

The sequence and process of normal language and speech development provide the framework for determining if a student exhibits a listening comprehension and/or oral language disorder, delay or difference. In younger children, birth through preschool, an oral language and/or

listening comprehension deficit may more appropriately lead to a determination of Speech-Language Impairment (SLI) as the primary disability. However, as the student enters the early primary grades many of these oral language and listening comprehension deficits begin to manifest themselves as learning disabilities impacting academic achievement and not as clearly categorized as a communication disability. The Speech-Language Communication Rating Scale provides a consistent method of describing overall communication functioning. The Communication Rating Scale helps to substantiate eligibility or dismissal criteria for special education in the category of SLI.

Learning disabilities are a heterogeneous group of disorders composed of various clinical subgroups. The speech pathologist focus is with those students that exhibit learning deficits as manifested by continuous problems in the acquisition and development of oral language and listening comprehension. The speech-language pathologist should be the one to assess and determine deficits in regards to oral language and/or listening comprehension. The speech-language pathologist must be able to provide both direct and consultative services by collaborating with the classroom teacher in regards to language programs for children identified with learning disabilities. They should be participating in analyzing the language of the curriculum and conduct language intervention services for students where appropriate.

English Language Learners & RtI

[See also Section 4 where limited English proficiency is addressed as a possible “exclusionary factor” for SLD determination.]

The RtI process with English language learners requires special considerations. Specific, recommended best practices in RtI implementation, as well as eligibility consideration, with English language learners are as follows (adapted from Cherry Creek Schools, 2005):

- In the general classroom, teacher planning and curriculum are aligned with ELD (English Language Development) standards and grade level content standards.
- The selection of interventions must be based on knowledge in culturally and linguistically appropriate instruction.
- A professional who is knowledgeable about stages of language acquisition and the student’s cultural background must participate in the RtI and eligibility process.
- The use of an interpreter should be considered when discussing strategies, supports, and/or special education eligibility with parents.
- A thorough medical and social/cultural history is a crucial data source in decision-making and should be obtained early in the process.
- English language learners should be compared with other English language learners similar in background, age, and amount of exposure to English acquisition services and NOT be compared to native English speakers in making initial RtI decisions and in assessing progress.
- Data for English language learners should always include the home language survey, informal language proficiency scores, and CELA assessments, when available.

- English language learners move through stages of language acquisition: these should always be considered when planning interventions and when analyzing progress monitoring data to determine intervention effectiveness. **(See Appendix for information about *Stages of Language Acquisition*.)**
- ELA programs should not be considered a scientific, research-based intervention in and of themselves; specific instruction/interventions within these programs may be considered as such. **(See Appendix for an *Intervention Analysis tool*.)**
- Any focused, diagnostic assessments must be sensitive to the cultural and linguistic background of the students and administered in the language and form most likely to yield accurate results. Scores must always be interpreted with caution.
- A specific learning disability determination should not occur unless it can be demonstrated that the difficulties producing the problems are pervasive across languages.

Section 7:

Frequently Asked Questions Related to SLD Identification

DISCLAIMER:

The identification of any products of private vendors in these *Guidelines* is only for the purpose of providing examples and does not constitute the Department's endorsement of such products.

What is the relationship between “dyslexia” and SLD?

Although the definition of Specific Learning Disabilities (in both federal and state law) refers to dyslexia as one of the conditions that may be included, dyslexia is not a special education disability category in and of itself.

A commonly accepted definition of dyslexia that is endorsed by both the International Dyslexia Association (IDA) and the National Institute of Child Health and Human Development is as follows:

Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge.

The *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, published by the American Psychiatric Association, makes only an indirect reference to dyslexia. DSMIV sets forth classification criteria for a “reading disorder,” stating that “it has also been called dyslexia.” It also includes conditions called “expressive language disorder,” and “disorder of written expression.”

Specific Learning Disabilities that involve word level reading deficits (as described in the definition of dyslexia given above) have been cited by leading researchers as the most common of all learning disabilities. There is some confusion between the identified educational disability category of SLD (recognized under the Individuals with Disabilities Education Act and Colorado’s Exceptional Children’s Educational Act) and a clinical diagnosis of dyslexia. Under federal and state law, if a student has an identified learning disability that significantly impacts the ability to learn without special supports and services, the entitlement label is Specific Learning Disability. An individual with dyslexia may or may not be eligible for special education services. Eligibility is dependent on whether the criteria and other determinations for SLD are met. However, there is certainly overlap between students who have had a clinical diagnosis of dyslexia and those who have been identified as having a specific learning disability and been found eligible for special education.

Even though school personnel do not typically diagnose dyslexia, screening of the five components of reading and providing research-based intervention at the first detection of difficulty should be occurring through an effective RtI process. A student with the types of deficits that might indicate the existence of “dyslexia” would be considered for SLD identification if they are exhibiting significant achievement gaps (e.g., as compared to grade-level norms) even after targeted/intensive interventions and who are making insufficient progress after reasonable attempts to remediate through these interventions.

While specific learning disabilities (which may include dyslexia) cannot be cured, proper instruction can promote reading success and alleviate many difficulties associated with them. Instruction for individuals with reading disabilities should address all five components of reading including phonemic awareness, phonics, fluency, vocabulary and comprehension.

Additionally, interventions should be:

- Research-based;
- Explicit: directly teach skills for reading, spelling, and writing;
- Systematic and Cumulative: i.e., have a definite, logical sequence of concept introduction; and
- Structured: have step-by-step procedures for introducing, reviewing, and practicing concepts.

Educational programming should be based on careful consideration of evaluative information provided by parents, educators, and others. There are many well-researched programs/interventions available for schools to use in meeting a student's reading needs.

Additional resources on this subject can be found at these websites:

- The International Dyslexia Association: <http://www.interdys.org/>
- Schwab Learning: <http://schwablearning.org/>
- The Florida Center for Reading Research <http://www.fcrr.org>
- National Center for Learning Disabilities: <http://www.nclld.org/>
- National Research Center for Learning Disabilities: <http://www.nrclld.org/>

How do an RtI framework and the new SLD eligibility requirements affect the transition process of school to community and/or post-secondary education?

Currently, most college testing services and postsecondary schools request specific psychometric documentation of specific learning disabilities. With the move away from the aptitude-achievement discrepancy criterion for SLD determination, college testing services and college disability offices will need to re-examine their criteria for the provision of accommodations and services. In the meantime, it will be important for public schools, parents, and students to advocate for the acceptance of existing data that documents the determination of disability and the need for accommodations and services. Schools should work collaboratively with colleges and other agencies to ensure that the continuing needs of students with SLD will be appropriately addressed. The importance of student self-advocacy will be paramount in this transition process.

The Colorado ECEA Rules are clear on the need for transition planning:

“Beginning with the first IEP developed when the child is age 15, but no later than the end of 9th grade, or earlier if deemed appropriate by the IEP team, and updated annually, thereafter, the IEP must include: appropriate measurable postsecondary goals based upon age appropriate transition assessments related to training, education, employment, and, where appropriate, independent living skills; and; the transition services (as defined in section 2.51 of these rules and including courses of study) needed

to assist the child in reaching those goals.” [Colorado ECEA Rules: 4.03 (6)(D)(I), 4.03(6)(D)(II), 4.03(6)(D)(III)]

A high school student with a specific learning disability will need clear direction as to course of study, accommodations for college entrance exams and/or intense instruction in basic skills, depending on the postsecondary goals identified by the IEP team, including the parents. A data-based decision making process, such as the RtI framework, can facilitate this postsecondary goal-setting by examining existing assessment and progress-monitoring data. Explicit record keeping of a student’s response to intervention and use of accommodations can provide documentation for disability identification and access to services in postsecondary settings. Focused, diagnostic assessment can validate performance data which indicate the need for educational/testing accommodations. Also, specific measurable goals around self-advocacy skills are appropriate.

IDEA 2004 (20 U.S.C., 1414 (a)(5)(B)(ii)) includes a new requirement that the school district provide students who are no longer eligible for IDEA services with a summary of the student’s academic achievement and functional performance. This summary must include recommendations on how to assist the student in meeting the student’s postsecondary goals.

Colleges and other post secondary training institutions, common settings for high school graduates who have specific learning disabilities, usually do not do assessments to determine if an individual has a disability and/or if there is a need for accommodations. The individual student is often expected to provide the necessary documentation. Through an RtI Model of intervention provision, explicit performance and accommodation data should be available.

Randy Chapman, in *The Everyday Guide to Special Education Law – A Handbook for Parents, Teachers, and Other Professionals* (2005), suggests the following:

A performance summary that includes good documentation of the student’s disability and needs, as well as of supports and accommodations the student needs to be successful, would be a very useful transition tool. A summary with that information could be used to document that the adult student is a person with a disability under Section 504 of the Americans with Disabilities Act.

What impact does the new SLD eligibility criteria have on “slow learners?”

When the aptitude-achievement criterion for perceptual communicative disabilities (PCD) was in effect, the following definition was given for “slow learners:”

“Slow learners are students with below average cognitive abilities who are not disabled, but who struggle to cope with the traditional demands of the regular classroom.”(Carroll, 1998).

Basically, “slow learners” were not eligible for special education because there was no significant discrepancy between their aptitude and achievement levels. Their IQ scores often fell in the borderline to low average ranges, with comparable achievement. They often had “flat profiles.” There is now the recognition that children thought of as “slow learners” may very well have specific learning disabilities that are causing the cognitive profile flatness.

In an RtI framework and with the new criteria for identifying a child as having a specific learning disability, students who previously were not eligible for special education services because they were “slow learners” are now students who may have significantly low achievement, make insufficient progress in response to research-based interventions and DO qualify as needing specialized instruction to benefit from general education. If a child does not meet the criteria for significantly limited intellectual capacity (SLIC), he or she may meet eligibility criteria for specific learning or language disability. These children may have significantly limited academic achievement in several areas and their discrepancies from peers, in rate and amount of progress, may be severe.

The term “slow learner” has little meaning in a multi-tiered RtI framework where all children are supported in achieving to the highest extent possible, and response to intervention is consistently monitored with changes in instruction made according to data. Some students will need more intensive instruction, significant repetition, a unique setting, and low teacher/student ratio to benefit from general education.

What happens if a student is referred to the RtI/Problem-Solving Process either because of universal screening or parent/staff referral and he/she has had previous interventions or has previously been considered for special education?

Particularly with changes in SLD eligibility, students who might not have been found eligible (“slow learners” are an example) for special education previously and/or have been provided instructional interventions in the past, may be referred for eligibility consideration. Data collected through a previous RtI process may be reviewed as “existing data” in evaluation planning and, ultimately, in making an SLD/eligibility determination. It is possible for a student not found eligible under the previous eligibility criteria to now be determined to have a specific learning disability.

If a child has been retained, how should a multidisciplinary team determine low academic achievement?

The team should consider the use of age norms and scores. A comparison to grade-level norms may give the false impression that the student’s achievement is within normal limits, when in fact, the student was probably retained because of below average achievement.

What should happen when a child transfers schools and he/she is in the RtI/Problem-Solving Process and/or SLD is suspected?

“Assessments of children with disabilities who transfer from one public agency in the same school year are coordinated with those children’s prior and subsequent schools, as necessary and as expeditiously as possible, to ensure prompt completion of full evaluation.” [§300.304 (c)(5), Federal Regulations]

Although the above statement from the Federal Regulations is specifically addressing special education eligibility evaluations, the same concept applies to a child who might be involved in the RtI/Problem-Solving Process. Results of universal screenings, summaries of interventions, and other collected data need to follow the child so that there is as much continuity as possible in supporting academic achievement. A parent who has been involved as a member of the problem-solving team should be able to contribute to the continuity of the problem-solving process at the new school as an important source of information about the child’s learning.

How would an AU determine a child’s response to intervention and the adequacy of instruction when a child who attends a private school or is being home-schooled is suspected of having an SLD?

An AU, in determining whether a child for whom systematic data is not available has a specific learning disability, should still try to determine what instruction/intervention has been provided and what evidence of the child’s learning is available. Many private schools do collect assessment data that might permit a determination of how well a child responds to appropriate instruction. Similar data may be available for many children who are home-schooled. Another option would be for the AU to provide limited interventions (probably at a neighborhood school) during the evaluation period and track the child’s response as part of the evaluation process.

Regardless of a child’s response to intervention, it is very clear in IDEA 2004 and the Federal Regulations that the determinant factor for the disability cannot be a lack of instruction in the essential components of reading or in math. Therefore, an AU needs to make inquiries as to what is being provided instructionally as well as to how the child is learning (responding). The preamble to the Federal Regulations includes the following interpretation:

As part of the evaluation, the eligibility group must consider whether the child received appropriate instruction from qualified personnel. For children who attend private schools or charter schools or who are home-schooled, it may be necessary to obtain information from parents and teachers about the curricula used and the child’s progress with various teaching strategies. The eligibility group also may need to use information from current classroom-based assessments or classroom observations. On the basis of the available information, the eligibility group may identify other information that is needed to determine whether the child’s low achievement is due to a disability, and not primarily the result of lack of appropriate instruction. **The requirements**

for special education eligibility or the expectations for the quality of teachers or instructional programs are not affected, and do not differ, by the location or venue of a child's instruction. <emphasis added>

- Federal Register, p. 46656

How can an Independent Educational Evaluation be conducted considering the role of the RtI process in the determination of SLD?

If a parent disagrees with the evaluation conducted by the administrative unit, they have the right to request an independent educational evaluation (IEE). Typically these occur in a clinical environment. **Regardless of who does the IEE or where it occurs, the IEE must conform to the state eligibility criteria if it is to be at the public's expense.** If the IEE fails to follow the state criteria, Administrative Units are under no obligation to use the information provided.

The parent, however, would not have the right to obtain an IEE at public expense before the public agency completes its evaluation simply because the parent disagrees with the public agency's decision to use data from a child's response to intervention as part of its evaluation to determine if the child is a child with a disability and the educational needs of the child. ... An IEE must meet the agency criteria that the public agency uses when it initiates an evaluation.

- Federal Register, p. 46689, 46690

Glossary of Terms & Key Concepts

Glossary of Terms & Key Concepts

Assessment Types

There are four major types of assessment used to drive instructional decisions. They are 1) screening; 2) progress monitoring; 3) diagnostic/prescriptive; and 4) outcome.

Body of Evidence

A body of evidence is a collection of information about student progress and learning. This information incorporates data from multiple sources and multiple assessment tools/methods. No single data point is adequate for a body of evidence. The convergence or triangulation of data guides a team of parents and professionals in making educational decisions such as: prescribing/developing interventions, assessing progress, and possibly determining disability status or access to other eligibility-driven services.

Curriculum-Based Measurement (CBM)

A very effective assessment available for monitoring student progress on a specific skill is Curriculum-Based Measurement (CBM). CBM is an alternative to other procedures that may be too costly, time consuming, disruptive to instruction, or ineffective for identifying progress frequently. CBM is comprised of standard directions, materials, scoring rules, and is a timed assessment. CBM is characterized by several attributes:

1. Alignment – students are tested on the curriculum being taught.
2. Technically adequate – CBM has established reliability and validity.
3. Criterion-referenced – CBM is used to determine if students can demonstrate their knowledge by reaching specified performance levels on certain tasks.
4. Standard procedures are used to administer CBM.
5. Performance sampling – CBM employs direct, low-inference measures through which correct and incorrect student behaviors, on clearly defined tasks, are counted within a set time interval.
6. Decision rules are in place to provide those who use the data with information about what it means when students score at different levels of performance or illustrate different rates of progress on the measures over time.
7. Repeated Measurement – CBM can be used over time and to identify insufficient progress as well as level of performance.
8. Efficient – Training is minimal and measures can be given quickly.
9. Summarized efficiently – a variety of techniques are available that make data accessible to classroom teachers and students.

Data-Driven Decision-Making

The process of planning for student success (both academic and behavioral) through the use of ongoing progress monitoring and analysis of its data

Duration

For the purposes of documenting response to intervention, duration refers to the length

(number of minutes) of a session multiplied by the number of sessions per school year. “Sufficient duration” is dependent on a number of factors including the program or strategy being used, the age of the student, and the severity of the deficit involved. Some programs offer guidelines or recommendations for duration.

Evidence-Based Instruction/Interventions

See research-based instruction/intervention/practice

Family-School Partnerships

Parents and school staff collaborate to ensure student success. Parents and students (as appropriate) are included in data collection and decision-making through participation in the RTI/Problem-Solving Process. The collaboration includes developing effective intervention for both school and home.

Fidelity

Fidelity of intervention implementation includes two key factors that must align with the intervention’s evidence/research base. The first, integrity, refers to the degree to which an intervention is implemented (taught) as intended. The second factor, sufficiency, refers to the intervention being implemented for an adequate amount of time (minutes per week and overall duration) to achieve desired results.

Flexible Grouping

Groups are formed according to specific student needs that arise. Prescriptive, focused, research-based interventions are provided to these groups by any trained or skilled staff member, regardless of special or general education categorization of the students or the educator’s special or general education job description. These groups are not permanent – students are moved in and out of groups according to need.

Focused Assessment

Formal and informal assessment targeted to specifically plan program service delivery and/or appropriate interventions for student success.

Frequency

Frequency of an intervention (e.g., number of times per week) is an important element of a student’s prescribed intervention and should be monitored as an element of implementation fidelity.

Gap Analysis

Gap analysis is a method of measuring the difference between the student’s current level of performance and benchmark/targeted expectations. It is also used to determine progress of learning over time.

Intensity

The adjustment of duration, length and teacher-to-student ratio to a child's academic or behavioral intervention – may also refer to narrowing the focus of the intervention.

Intervention

The systematic and explicit instruction provided to accelerate growth in an area of identified need. Interventions are provided by both special and general educators (based on expertise rather than titles). They are designed to improve performance relative to a specific, measurable goal. Interventions are based on valid information about current performance, realistic implementation, and include ongoing student progress monitoring.

Multi-Tiered Model

The multi-tiered intervention model provides instruction/intervention at differing levels of intensity – Tier I (universal), Tier II (targeted) and Tier III (intensive) –according to student need and response to intervention. Essential to the model is ongoing progress monitoring and focused assessment.

Problem-Solving Process

The problem-solving process is an interdisciplinary, collaborative team process which is based on a multi-tiered model and includes data-driven decision making, parent-school partnerships, progress monitoring, focused assessment, flexible service delivery, and prescriptive, research-based interventions.

Problem-Solving Team

A collaborative team (which includes parents, general and special educators) that meets to evaluate student data and to plan and monitor prescribed interventions.

Progress Monitoring

Progress Monitoring is the ongoing process that involves collecting and analyzing data to determine student progress toward specific skill attainment or general outcomes. The data generated is essential to making instructional decisions. Monitoring student progress is an effective way to determine if the instruction being delivered is meeting the needs of the student.

Research-based Instruction/Intervention/Practice

A *research-based* instructional practice or intervention is one found to be reliable, trustworthy, and valid based on evidence to suggest that when the program is used with a particular group of children, the children can be expected to make adequate gains in achievement. Ongoing documentation and analysis of student outcomes helps to define effective practice. In the absence of definitive evidence, the instruction/ intervention must be considered “best practice” based on available research and professional literature.

Screening

Refers to a quick checklist, survey, or probe that measures a student's development or skills and that is used to determine if further evaluation is needed. Universal screening measures are administered to all students in a class or grade level.

Specific, Measurable Outcome

The statement of a single, specific desired result that is expected from implementation of an intervention. To be measurable, the outcome should be expressed in observable and quantifiable terms (e.g., Johnny will demonstrate mastery of grade-level basic math calculation skills as measured by a score of 85% or better on the end-of-the-unit test on numerical operations).

Standard Protocol Interventions

A standard protocol intervention refers to the implementation of a specific intervention that is supported by research to be effective with students with similar needs/deficits. There are usually well defined entry criteria and clear progress monitoring tools. A standard protocol intervention is often chosen as an initial intervention for struggling students with similar problems. The standard protocol can be implemented in any tier, but is most commonly applied at the universal or targeted levels. When students are unresponsive to the intervention trial, more intensive or individually designed interventions might be necessary.

Appendix

- Stages of English Language Acquisition
- Intervention Analysis Tool for English Language Learners

STAGES OF ENGLISH LANGUAGE ACQUISITION

Silent and Receptive Stage

Students do not verbally respond to communication in the second language although there is receptive processing. Students should be actively included in all class activities, but not forced to speak. Employing the **Natural Approach and Total Physical Response (TPR)** strategies will allow students time and provide clues to encourage participation. Students are likely to respond non-verbally to peer-buddies during inclusion in many activities: *Interaction with visuals and audiovisuals, games and hands-on projects. As students progress through this stage, they will begin to participate using gestures and pointing and they may begin to provide one word verbal responses.*

Adapted from **Project Talk Academic Excellence Program and Title VII.**

<p style="text-align: center;"><i>Characteristics</i></p> <p>Students:</p> <ul style="list-style-type: none"> ➤ Are often verbally unresponsive ➤ Are often hesitant and un sure ➤ May use one word responses ➤ Are developing listening skills ➤ Need time to be comfortable with classroom environment, procedures and activities ➤ Respond non-verbally by pointing, nodding gesturing or drawing 	<p style="text-align: center;"><i>Strategies</i></p> <p>Teachers need to</p> <ul style="list-style-type: none"> ➤ Encourage listening and not force speaking ➤ Slow speech, emphasize key words ➤ Model and demonstrate activities ➤ Use visual aids, pictures, graphic organizers, realia ➤ Use gestures and body language ➤ Use multimedia aids to illustrate concepts ➤ Use Total Physical Response ➤ Modify work by amount, time, content
<p style="text-align: center;"><i>Learning tasks</i></p> <p>Listen draw Point select Move choose Mime act Match circle</p>	<p style="text-align: center;"><i>Assessing Comprehension</i></p> <p>Know: Show me the . . . Comprehend: Draw a . . . Apply: Point to examples of . . . Analyze: Draw the parts of . . . Synthesize: Show what would happen if . . Evaluate: Move (object/to place)if you agree. . .</p>
<p style="text-align: center;"><i>Students</i></p> <p>1. 2. 3. 4. 5</p>	<p style="text-align: center;"><i>Strategy I'll use</i></p>

Information compiled from BVSD, CDE, Krashen, Bloom's Taxonomy, Wall-Macht & Ream, March 2000

Early Production

Students in this stage begin to respond verbally using one or two words. Students begin to develop the ability to understand words often repeated in a familiar context. Students begin to develop listening skills and build their passive and receptive (listening) vocabulary. They may begin to group two and three words together in a short phrase to respond to a question or express an idea.

Adopted from **Project Talk Academic Excellence Program and Title VII.**

<i>Characteristics</i>	<i>Strategies</i>												
<p>Students:</p> <ul style="list-style-type: none"> ➤ Relate words to their environment ➤ Begin to grasp main ideas of message ➤ Begin to focus on contextual clues ➤ Use routine expressions independently ➤ Demonstrate improved comprehension ➤ Mispronounce words (no need for correction) ➤ Will repeat or recite memorable language ➤ Will use one or two word responses advancing to two or three words ➤ May not tell you if they do not understand 	<p>Teachers need to</p> <ul style="list-style-type: none"> ➤ Use cooperative learning and scaffolding techniques ➤ Ask Yes/No and directed choice questions ➤ Ask Who? What? Where? questions ➤ Ask listing type questions ➤ Use Think-Pair-Share technique when asking questions of the class ➤ Allow students to illustrate knowledge ➤ Use labeling and diagramming in illustrations ➤ Modify work by amount of time, content 												
<i>Learning tasks</i>	<i>Assessing Comprehension</i>												
<table border="0"> <tr> <td>Name</td> <td>Categorize</td> </tr> <tr> <td>Label</td> <td>Tell/say</td> </tr> <tr> <td>Group</td> <td>Chant</td> </tr> <tr> <td>Respond</td> <td>Answer</td> </tr> <tr> <td>Discriminate</td> <td></td> </tr> <tr> <td>List</td> <td></td> </tr> </table>	Name	Categorize	Label	Tell/say	Group	Chant	Respond	Answer	Discriminate		List		<p>Know: Where is the . . . ? Comprehend: Draw and label the . . . Apply: Show me how you know . . . Analyze: Show how you would sort. . . Synthesize: Predict (tell) what comes next Evaluate: Why did ____ choose ____?</p>
Name	Categorize												
Label	Tell/say												
Group	Chant												
Respond	Answer												
Discriminate													
List													
<i>Students</i>	<i>Strategy I'll use</i>												
<ol style="list-style-type: none"> 1. 2. 3. 4. 5. 													

Information compiled from BVSD, CDE, Krashen, Bloom's Taxonomy, Wall-Macht & Ream, March 2000

Speech Emergence

Students in this stage begin to respond in simple sentences when they are comfortable in the setting and engaged in activities they understand. Instruction should be focused on strategies that ensure comprehensible input. All interactions with students in this stage should be focused on communication rather than form. Teachers and other students should encourage and be receptive to all attempts to communicate (gestures, attentiveness, following directions, any oral participation.) Teachers and students should model correct usage in all communication, but not correct errors.

Adapted from **Project Talk Academic Excellence Program and Title VII.**

<p style="text-align: center;"><i>Characteristics</i></p> <p>Students:</p> <ul style="list-style-type: none"> ➤ Begin to speak in simple sentences ➤ Demonstrate expanded vocabulary ➤ Show improved comprehension ➤ May ask for clarification or meaning ➤ Participate in small group discussions ➤ May rely on native language to communicate complex ideas ➤ Start to acquire basic communication skills and social language ➤ May not tell you if they do not understand. 	<p style="text-align: center;"><i>Strategies</i></p> <p>Teachers need to</p> <ul style="list-style-type: none"> ➤ Use cooperative grouping ➤ Encourage efforts to participate ➤ Ask How and Why questions ➤ Emphasize content area vocabulary ➤ Provide picture-rich content area text ➤ Provide opportunities for participation in early reading and writing activities ➤ Modify work according to individual need.
<p style="text-align: center;"><i>Learning tasks</i></p> <p>Recall role-play Retell select Define describe Explain organize Compare make up</p>	<p style="text-align: center;"><i>Assessing Comprehension</i></p> <p>Know: Can you recall . . .? Comprehend: Explain what is happening? Apply: How would you use? Analyze: How would you organize? Synthesize: What would happen if . . . Evaluate: What choice would you have made?</p>
<p style="text-align: center;"><i>Students</i></p> <p>1. 2. 3. 4. 5</p>	<p style="text-align: center;"><i>Strategy I'll use</i></p>

Information compiled from BVSD, CDE, Krashen, Bloom's Taxonomy, Wall-Macht & Ream, March 2000

Intermediate Fluency

Students in this stage gradually make the transition to more elaborate speech. With continued comprehensible input and communication-focused interactions, students may begin to link familiar phrases and generate sentences to express their ideas. Teachers need to continually model language usage, extend receptive vocabulary, and provide frequent opportunities for students to produce language in comfortable situations.

Adapted from ***Project Talk Academic Excellence Program and Title VII.***

<p style="text-align: center;"><i>Characteristics</i></p> <p>Students:</p> <ul style="list-style-type: none"> ➤ Begin to speak in more complex sentences ➤ May use incorrect grammar and verb forms ➤ Participate more often in large groups ➤ Need context clues in content area ➤ Exhibit greater vocabulary development ➤ Begin to think in the new language instead of translating from native language 	<p style="text-align: center;"><i>Strategies</i></p> <p>Teachers need to</p> <ul style="list-style-type: none"> ➤ Provide visually rich content instruction ➤ Design content activities that focus on speech production, not grammatical form ➤ Have students take on larger roles in cooperative group activities ➤ Provide extra time or modify assignments ➤ Introduce colloquialisms/idioms 										
<p style="text-align: center;"><i>Learning tasks</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Summarize</td> <td style="width: 50%;">classify</td> </tr> <tr> <td>Restate</td> <td>extend</td> </tr> <tr> <td>Contrast</td> <td>evaluate</td> </tr> <tr> <td>Predict</td> <td>support</td> </tr> <tr> <td>Create</td> <td>examine</td> </tr> </table>	Summarize	classify	Restate	extend	Contrast	evaluate	Predict	support	Create	examine	<p style="text-align: center;"><i>Assessing Comprehension</i></p> <p>Know: How would you describe. . .?</p> <p>Comprehend: Which statements support . . .?</p> <p>Apply: What questions would you ask about__</p> <p>Analyze: What is the relationship between__?</p> <p>Synthesize: Can you predict the outcome if. . .?</p> <p>Evaluate: Compare and contrast. . .</p>
Summarize	classify										
Restate	extend										
Contrast	evaluate										
Predict	support										
Create	examine										
<p style="text-align: center;"><i>Students</i></p> <ol style="list-style-type: none"> 1. 2. 3. 4. 5 	<p style="text-align: center;"><i>Strategy I'll use</i></p>										

Information compiled from BVSD, CDE, Krashen, Bloom's Taxonomy, Wall-Macht & Ream, March 2000

Advanced Fluency

Students in this stage begin to engage in non-cued conversation and to speak fluently using social and academic language. It is appropriate to begin to direct students' attention to grammar, idiomatic expressions, and reading comprehension skills. Activities should be designed to develop skills in higher order thinking, vocabulary development and cognitive processing. Students in this stage need deliberate instruction in reading and writing and frequent opportunities to practice them.

Adapted from **Project Talk Academic Excellence Program and Title VII.**

<p style="text-align: center;"><i>Characteristics</i></p> <p>Students:</p> <ul style="list-style-type: none"> ➤ Can interact extensively with native speakers ➤ Make few grammatical errors ➤ Participate in English literacy programs ➤ Have high levels of comprehension but may not understand all of the academic language ➤ Read and write for a variety of purposes ➤ Continue to need extensive vocabulary development in content 	<p style="text-align: center;"><i>Strategies</i></p> <p>Teachers need to</p> <ul style="list-style-type: none"> ➤ Emphasize content area vocabulary ➤ Begin to provide grammar instruction ➤ Focus on reading and writing skills ➤ Have students take on advanced cooperative learning roles (note-taker, reporter) ➤ Continue to support content area instruction with visuals, realia, and active learning strategies
<p style="text-align: center;"><i>Learning tasks</i></p> <p>Construct debate Hypothesize elaborate Justify conclude Analyze influence Defend persuade</p>	<p style="text-align: center;"><i>Assessing Comprehension</i></p> <p>Know: How would you explain? Comprehend: Put this in your own words Apply: What other way could you___? Analyze: What ideas justify___? Synthesize: Show what would happen if . . Evaluate: What would you cite to defend__?</p>
<p style="text-align: center;"><i>Students</i></p> <p>1. 2. 3. 4. 5</p>	<p style="text-align: center;"><i>Strategy I'll use</i></p>

Information compiled from BVSD, CDE, Krashen, Bloom's Taxonomy, Wall-Macht & Ream, March 2000

INTERVENTION ANALYSIS TOOL FOR ENGLISH LANGUAGE LEARNERS
(Directions for completing follow the tool.)

Intervention:						
Student Background Information	Comments					
Culture(s):						
Language(s):						
School Experiences:						
Language Proficiency Level: LEP FEP (not appropriate for an NEP)						
Other factors:						
Instruction/Protocol	High		Low			
MAXIMIZATIONS	5	4	3	2	1	0
1. Does the instruction/protocol increase time and practice of the skill?						
2. Does the instruction/protocol increase number of examples of the skill?						
3. Does the instruction/protocol increase repetition of concepts?						
4. Does the instruction/protocol increase the focus of the skill (narrow it down)?						
5. Does the instruction/protocol increase progress monitoring compared to peers?						
6. Does the instruction/protocol increase feedback to the student?						
7. Does the instruction/protocol increase student-to-student interaction?						
8. Does the instruction/protocol increase opportunities for instruction-related student talk?						
9. Does the instruction/protocol increase the student's use of functional language?						
Total of all columns:						
Total maximization applicability score:	/45 =					%

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Instruction/Protocol	High				Low	
	5	4	3	2	1	0
MINIMIZATIONS						
1. Does the instruction/protocol decrease the number of students in the instructional group?						
2. Does the instruction/protocol decrease the number of concepts taught at one time?						
3. Does the instruction/protocol decrease the number of steps in processes?						
4. Does the instruction/protocol decrease the linguistic complexity?						
Total of all columns:						
Total minimization applicability score:	/20 = %					

Instruction/Protocol	High				Low	
	5	4	3	2	1	0
INSTRUCTION						
1. Does the instruction/protocol teach for mastery of essential skills and English language acquisition?						
2. Does the instruction/protocol teach for fluency of the skill?						
3. Does the instruction/protocol teach organization and processes?						
4. Does the instruction/protocol teach thinking skills?						
5. Does the instruction/protocol teach for vocabulary acquisition?						
6. Does the instruction/protocol teach through the use of visual aids?						
7. Does the instruction/protocol teach using contextualized language?						
Total of all columns:						
Total instructional applicability score:	/35 = %					

Maximization Score	Minimization Score	Instructional Score	Total Score	Percent of Applicability for this Intervention
/45	/20	/35	/100	%

For LEP students	For FEP students
80-100% is appropriate	50-100% is appropriate

If the score is below 50%, the intervention is not appropriate for an English Language Learner.

Directions for completing the Intervention Analysis for ELLs

Note: It is extremely important to have a person knowledgeable about second language acquisition involved in the analysis of any intervention for an English Language Learner.

1. Fill in the name of the intervention being analyzed.
2. Fill in the student's identifying information including language proficiency level (this analysis is for students at the Limited English Proficiency or Fluent English Proficiency levels, **not** Non-English Proficiency).
3. Look over the intervention guide (if pre-packaged), or the protocol or instructional methods that are used in the intervention.
4. On the **maximizations** section, rate each of the questions high or low. (i.e., for number one, if the instruction/protocol increases time and practice of the skill, but not by much, it might receive a 2 or 3 for that particular question. However, if it increases the time and practice by quite a bit, it might receive a 4 or 5). Continue with the remaining questions.
5. On the **minimizations** section, rate each of the questions high or low based on what the intervention decreases. (i.e. for number one, if the instruction does not decrease the number of students in the instructional group compared to what the student is already receiving in the classroom or ESL classroom, then it would receive a low score {0 or 1}). Continue with the remaining questions.
6. On the **instruction** section, rate each of the questions high or low based on what the intervention provides. (i.e., for number one, if the instruction does teach mastery of skills, but does not include an English Language Acquisition component, it would receive a medial score (3)). Continue with the remaining questions.
7. At the bottom of each section, record the total number of points given divided by the number possible to give a percentage of applicability. If one of the sections is significantly lower than the others, that would be the area to maximize, minimize or change.
8. At the bottom of the second sheet, total all of the scores together to get a possible percentage out of 100 points (combining the maximizations, minimizations and instruction scores).
9. For LEP students, 80-100% is appropriate and for FEP students 50-100% is appropriate. **DO NOT USE THE INTERVENTION IF IT IS BELOW 50%.**

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General References & Resources

DISCLAIMER:

The identification of any products of private vendors in these *Guidelines* is only for the purpose of providing examples and does not constitute the Department's endorsement of such products.

General References & Resources

[Section 5 includes numerous references and resources related to the 8 “areas” of SLD.]

Barkley, R.A. (1997). *ADHD and the Nature of Self-Control*. New York: Guilford Press.

Batsche, G. (2006). Colorado State Special Education Director meetings.

CDE Materials from RtI Implementation Team (2006–2007).

CDE Materials from Specific Learning Disability Committee (2006–2007).

Cherry Creek Schools RtI Handbook (2006).

Deno, S. (2003). “Developments in Curriculum-based Measurement.” *Journal of Special Education*, 37(3), 184–192.

Fletcher, J.M., Francis, D.J., Morris, R.D., & Lyon, G.R. (2005). Evidence-based Assessment of Learning Disabilities in Children and Adolescents. *Journal of Clinical Child and Adolescent Psychology*, vol. 34, issue 3.

Fletcher, J.M., Lyon, G.R., Barnes, M., Stuebing, K.K., Francis, D.J., Olson, R., et al. (2002). Classification of learning disabilities: An evidence-based evaluation. In R. Bradley, L. Danielson, & D.P. Hallahan (Eds.), *Identification of Learning Disabilities: Research to Practice* (pp. 185-250). Mahwah, NJ: Erlbaum.

Fletcher, J. M., Lyon, G. R., Fuchs, L.S. & Barnes, M. A. (2007). *Learning Disabilities: From Identification to Intervention*. New York: Guilford Press.

Fountain–Ft. Carson School District RtI Practitioner’s Guide (2007).

Hosp, M.K., Hosp, J.L., & Howell, K. W. (2007). *The ABCs of CBM: A Practical Guide to Curriculum-Based Measurement*. New York: Guilford Press.

McCook, John. E. (2006). *The RTI Guide: Developing and Implementing a Model in Your Schools*. Horsham: LRP Publications.

National Council on Staff Development (2001). “National Staff Development Council Standards for Staff Development.” www.nsd.org/library/comprehensive.cfm

Pikes Peak Literacy Strategies Project: www.pplsp.org

Sandomierski, T., Kincaid, D., & Alozzine, B. (2007). “Response to Intervention and Positive Behavior Support:

A Comprehensive K–3 Reading Assessment Plan: Guidance for School Leaders.
Center on Instruction Reading Strand: Florida Center for Reading Research, Florida State University.

Wellman, B. & Lipton, L. (2004).

Data-Driven Dialogue: A Facilitator’s Guide to Collaborative Inquiry. Sherman: Mira Via, LLC.
Wright, J. W. (2007). *RTI Toolkit: A Practical Guide for Schools.* Port Chester: Dude Publishing.

Websites:

Aims Web website: <http://www.aimsweb.com>

Alpine Achievement: <http://www.alpineachievement.com>

Do What’s Right: <http://dww.ed.gov>

Florida Center for Reading Research: <http://www.fcrr.org>

Florida Problem Solving & RtI Project: <http://www.floridarti.usf.edu>

International Dyslexia Association: <http://www.interdys.org/>

Intervention Central website: www.interventioncentral.org

Learning Disabilities Online: <http://www.ldonline.org/>

National Association of School Psychologists: <http://www.nasponline.org/>

National Association of State Directors of Special Education <http://www.nasdse.org>

National Center for Learning Disabilities: <http://www.nclld.org/>

National Center on Student Progress Monitoring: <http://www.studentprogress.org/>

National Research Center on Learning Disabilities: <http://www.nrclld.org/>

Oregon Reading First: <http://oregonreadingfirst.uoregon.edu/>

What Works Clearinghouse website: <http://ies.ed.gov/ncee/wwc/>

Recognition and Response--Pathways to School Success for Young Children:
<http://www.recognitionandresponse.org/>

RTI Action Network: <http://www.rtinetwork.org>

Schwab Learning: <http://www.schwablearning.org/>