



CO L O R A D O

Department of Education

Specific Learning Disability Guidelines



Colorado State Board of Education

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.

Members (as of September 2023)

Rebecca McClellan (D), Chairperson

6th Congressional District, Centennial

Lisa Escárcega (D), Vice-Chairperson

1st Congressional District, Denver

Angelika Schroeder (D)

2nd Congressional District, Boulder

Stephen Varela (R)

3rd Congressional District, Carbondale

Debora Scheffel (R)

4th Congressional District, Parker

Steve Durham (R)

5th Congressional District, Colorado Springs

Karla Esser (D)

7th Congressional District, Arvada

Rhonda Solis (D)

8th Congressional District, Greeley

Kathy Plomer (D)

At-Large, Broomfield

Susana Cordóva

Commission of Education Secretary of the State Board of Education

Acknowledgements

These updated SLD Guidelines are a collaborative effort of many dedicated individuals. Aside from the below mentioned individuals, a number of special education directors from the Colorado Special

Education Directors Leadership Team and colleagues from the Exceptional Student Services Unit at the CDE provided guidance and feedback for this updated version of the SLD Guidelines. This guidance document is regularly revised and updated as needed. If you have feedback regarding this document, [please email Veronica Fiedler](#), SLD Specialist

Original Contributors

Patti Atkins	Cindy Donahue	Cathy Lines
Adena Miller	Holly Porter	Mary Smock
Steve Axford	Joncee Feakes	Patty Luttrell
Gloria Miller	Montina Romero	Connie Sperberg
Barb Bieber	Julie Holiday	Georgia Magnera
Gerry Olvey	Karen Rutledge	Christine Villard
Sheila Bisel	Karen Kelly	
Daphne Pereles	Pat Schniederjan	

Contributors of Updates

Project Leads

Veronica Fiedler
SLD Specialist
Colorado Department of Education

Jill Marshal
SLD Specialist (2015-2018)
Colorado Department of Education

Contributors & Reviewers

Erin Ax	Fran Hernandez-Herbert	Ann Summers
Marcia Blum	Heather Hotchkiss	Julian Esteban Torres
Tami Cassel	Raymond Johnson, Ph.D.	Kim Watchorn, Ed.S.
Lee Ann Cox	David Kilpatrick, Ph.D.	Michelle Watkins
Lynne DeSousa	Alyssa Ohleyer	Julia Wigert, Ed.S.
Jason Harlacher, Ph.D.	Jamie Olson	David Woodward
Cassie Harrelson	Andrew Schaper, Ph.D.	
Candace Hawkins, Esq.	Hunter Smith	

Disclaimer

The contents of this manual were developed under a grant from the U.S. Department of Education. However, those contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

Foreword

This guidance document is intended to serve as a resource for educational teams, including educators, leaders, and families, as they collaboratively and intentionally plan, address, and support the unique learning needs of individuals with Specific Learning Disability (SLD). These guidelines are intended to provide an overview of relevant laws, considerations, and best practices for educating students with SLD, or who are suspected of having an SLD. They should be used in conjunction with the Exceptional Children’s Educational Act implementing regulations, the Colorado Department of Education’s Procedural Guidance Manual, as well as other Colorado DOE guidance documents. This guidance document is designed primarily to support best practices. However, some sections cover information that should be considered as mandatory considerations as they reflect state and federal policy. Ongoing effort will be extended to ensure links and documents are current. However, as the components of this document are designed to be fluid and evolving, there may be times when information or links may need to be revised or updated.

Contents

Colorado State Board of Education	1
State Board of Education Mission and Vision	1
Mission.....	1
Vision	1
Members (as of September 2023).....	1
Acknowledgements.....	1
Original Contributors	2
Contributors of Updates	2
Project Leads	2
Contributors & Reviewers	2
Disclaimer	3
Foreword	3
Section 1: Introduction and Laws	10
Introduction.....	10
Laws	12
Individuals with Disabilities Education Act (IDEA).....	12
Federal Regulations.....	12
Colorado ECEA Rules.....	13
ECEA Rules	13
Shift in Identification of Specific Learning Disabilities	18
Proactive Intervention.....	18
Problem Solving.....	18
Assessment/Evaluation	19
SLD Construct/Criteria	19
At a Glance: Summary of Eligibility Criteria.....	20
Section 2: Overview of Colorado Multi-Tiered System of Supports.....	21

Overview of Colorado Multi-Tiered System of Supports (COMTSS)	21
The Five Components of COMTSS.....	22
Team Driven Shared Leadership	22
Data-Based Problem Solving and Decision-Making	23
Family, School, and Community Partnerships	23
Layered Continuum of Supports, Evidence Based Practices, Instruction, and Interventions.....	24
Comprehensive Screening and Assessment System	26
Response to Intervention	30
Response to Intervention (RtI) and SLD Identification.....	30
RtI in Colorado	31
Overview of RtI as a Systems-Wide Model	32
RtI Frequently Asked Questions	43
Section 3: Referral and Evaluation	50
Referral for Special Education Evaluation	51
Problem-Solving Team Review of Existing Information.....	51
Request for Evaluation by an Administrative Unit	54
Request for Evaluation by a Parent/Guardian or Adult Student	56
Multidisciplinary Eligibility Team.....	59
Purpose of a Multidisciplinary Team	59
Required members of the Multidisciplinary Team	59
Essential members of the Multidisciplinary Team.....	59
Additional required team members IF the child is an English Learner	59
Other appropriate members of the Multidisciplinary Team	59
When is a qualified, trained language interpreter required?.....	60
Evaluation Planning.....	60
Effectiveness of Instruction and Intervention	62
Diagnostic Information.....	63

Evidence of Continued Need Determined Through Data Analysis.....	63
Prior Written Notice of Special Education Action.....	64
Conditions under which a Public Agency Must Provide Prior Written Notice:	65
Prior Written Notice and Consent to Evaluate	65
Full and Individual Evaluation.....	66
Extending Timeline for SLD Evaluation	68
Mutual Written Agreement to Extend Timeline for SLD Evaluation	68
Reevaluation and Determination of Continued Eligibility	69
Observation.....	70
Section 4: SLD Determination	72
Criteria for the Determination of SLD	72
Determining Significant Academic Skill Deficits.....	73
Evaluating Response to Scientific Research Based Intervention (SRBI)	74
EXAMPLES: Positive, Questionable, and Poor Response to Intervention.....	75
Consideration of Exclusionary Factors	78
Environmental or Economic Disadvantage	82
Lack of Appropriate Instruction	82
Observation	84
Documentation Requirements	84
Section 5: Eight Areas of SLD.....	86
Oral Expression and Listening Comprehension	87
Definition and Implications of Oral Expression	87
Characteristics of Oral Expression.....	87
Definition and Implications (Listening Comprehension).....	87
Characteristics of Listening Comprehension	88
Assessment for Oral Expression and Listening Comprehension.....	88
Intervention and Progress Monitoring for Oral Expression and Listening Comprehension	89

Norms for Oral Expression and Listening Comprehension by Grade	90
References (Oral Expression/Listening Comprehension)	93
Written Expression	94
Written Expression: Basic Writing Skills (Transcription)	94
Written Expression: Composition (Generational Skills)	100
Written Expression References	102
Basic Reading Skill	105
Definition	105
Characteristics	105
Assessment	107
Letter-Sound Skills	108
Phonological Skills	108
Instant Word Recognition	109
Vocabulary	109
Intervention	109
Progress Monitoring	112
Reading Fluency Skills	112
Definition and Implications	112
Characteristics and Assessments	113
Intervention and Progress Monitoring	115
Reading Comprehension	116
Definition and Implications	116
Characteristics	117
Assessments	118
Intervention and Progress Monitoring	118
References for Basic Reading Skill, Reading Fluency Skills, and Reading Comprehension subsections	120

Mathematical Calculation and Problem Solving	121
Definition and Implications	121
Characteristics	122
Instruction and Interventions	123
Mathematics References	133
Section 6: Special Considerations	135
Preschool/Young Children	136
Older (Secondary) Students	138
Twice Exceptional	139
Twice-Exceptional Learners & RtI:	140
Gifted and SLD Determination/Eligibility.....	142
Speech Language Impairment (SLI) and Specific Learning Disability (SLD)	143
Assessment Considerations.....	144
Culturally and Linguistically Diverse Students	145
Colorado ECEA Rule 2.08 (8) (b)	146
Colorado ECEA Rule 2.08 (8) (a).	146
Key Points.....	147
Section 7: Frequently Asked Questions Related to SLD Identification	151
What is the relationship between dyslexia and SLD?.....	151
Why might a child diagnosed as having dyslexia not be found eligible for special education within the category of Specific Learning Disability?	152
How do an RtI framework and the new SLD eligibility requirements affect the transition process of school to community and/or post-secondary education?	153
What impact does the new SLD eligibility criteria have on “slow learners”?	155
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?.....	156

If a child has been retained, how should a multidisciplinary team determine low academic achievement?	156
What should happen when a child transfers schools and he/she is in the RtI/Problem-Solving Process and/or SLD is suspected?	156
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?	157
How can an Independent Educational Evaluation be conducted considering the role of the RtI process in the determination of SLD?	158
Glossary of Terms & Key Concepts	159
General References & Resources	165

Section 1: Introduction and Laws

In this section:

- Introduction
 - Laws
 - IDEA
 - Federal Regulations
 - Colorado ECEA Rules
 - Shift in Identification of Specific Learning Disabilities
 - “At-a-Glance” Summary of Eligibility Criteria
-

Introduction

Specific Learning Disability (SLD) is an identifiable category of disability in both the federal law, *Individuals with Disabilities Education Act (IDEA)*, and Colorado law, *Exceptional Children’s Education Act (ECEA)*.

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 learning problems that are primarily the result of: visual, hearing, or motor disabilities; intellectual disability; serious emotional disability; cultural factors; environmental or economic disadvantage; or limited English proficiency § 300.8(c)(10)

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 Learning Disabilities (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 commonly associated with low achievement (i.e., intellectual disability, 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.)

Parent report and Information about incidents resulting in possible injury to the head/brain (motor vehicle accidents, falls, etc.) should be sought by the multidisciplinary evaluation team. If there is evidence of a brain injury, the special education eligibility category of Traumatic Brain Injury may be considered. The criteria for Traumatic Brain Injury¹ is also useful for Non-Traumatic Brain Injury (lack of oxygen, brain tumor, etc.) determination under the Other Health Impaired special education category.

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

Collaboration between special education and general education has long been the ultimate goal of many school reform efforts. The implementation of a Response to Intervention (RtI) within a Multi-Tiered System of Supports (MTSS) approach to meeting learning needs of all students should greatly increase 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.

- Fed. Reg.71. 46,647 (August 14, 2006)

The federal Individuals with Disabilities Education Act (IDEA) heavily emphasizes:

- 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;

¹ [Colorado Department of Education Traumatic Brain Injury webpage.](#)

- the provision of supplementary instruction or intervention; and
- meaningful parental involvement in a child’s learning and in education decision-making processes.

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

Laws

Individuals with Disabilities Education Act (IDEA)

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

34 C.F.R §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 34 C.F.R §300.8 and §300.309 of IDEA, the recently amended Colorado Rules and Regulations set forth the following definition and criteria for the determination of a specific learning disability.

ECEA Rules

2.08 (8) 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 (8) (a) 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 impairment, including blindness; hearing impairment, including deafness; orthopedic impairment; intellectual disability; serious emotional disability; cultural factors; environmental or economic disadvantage; or limited English proficiency.

2.08 (8) (b) A child may be determined to have a Specific Learning Disability that prevents the child from receiving reasonable educational benefit from general education if a body of evidence demonstrates the following criteria are met:

2.08 (8) (b) (i) The child does not achieve adequately for the child's age or to meet state approved grade-level standards and exhibits significant academic skill deficit(s) 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 (8) (b) (i) (A) Oral expression;

2.08 (8) (b) (i) (B) Listening comprehension;

2.08 (8) (b) (i) (C) Written expression;

2.08 (8) (b) (i) (D) Basic reading skill;

2.08 (8) (b) (i) (E) Reading fluency skills;

2.08 (8) (b) (i) (F) Reading comprehension;

2.08 (8) (b) (i) (G) Mathematical calculation;

2.08 (8) (b) (i) (H) Mathematics problem solving; and

2.08 (8) (b) (ii) 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(8)(b)(i) when using a process based on the child's response to scientific, research-based intervention.

The following text in the shaded box 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. [71 FR 46753, Aug. 14, 2006, as amended at 82 FR 31912, July 11, 2017

§ 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, motor disability, or an intellectual disability; 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.

[71 FR 46753, Aug. 14, 2006, as amended at 82 FR 31913, July 11, 2017]

Shift in Identification of Specific Learning Disabilities

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

Proactive Intervention

Past Practice	Current Expectations
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

Past Practice	Current Expectations
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

Assessment/Evaluation

Past Practice	Current Expectations
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 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

Past Practice	Current Expectations
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 previously 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 a body of 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; serious 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 cannot 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.
2. The student cannot receive reasonable educational benefit from general education alone.

* Note that a specific learning disability may coexist with another disability² 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.

² Aside from those mentioned in the Exclusionary Factors

Section 2: Overview of Colorado Multi-Tiered System of Supports

In this section

- Overview of Colorado Multi-Tiered System of Supports (COMTSS)
- Five Components of COMTSS
 - Team Driven Shared Leadership
 - Data-Based Problem Solving and Decision-Making
 - Family, School, and Community Partnership
 - Layered Continuum of Supports, Evidence Based Practices, Instruction, and Interventions
 - Comprehensive Screening and Assessment System
- Response to Intervention (RtI)
 - Response to Intervention (RtI) and SLD Identification
 - RtI in Colorado
 - Overview of RtI as a System-Wide Model
 - RtI Frequently Asked Questions

Overview of Colorado Multi-Tiered System of Supports (COMTSS)

Definition:

COMTSS is a framework applied at all educational levels that uses implementation science to create one integrated system. This system is designed to support the needs of all students. COMTSS is defined as a prevention-based framework of team-driven, data-based problem solving to improve the outcomes of every student through family, school, and community partnering, comprehensive screening and assessment, and a layered continuum of evidence-based practices applied at classroom, school, district, region, and state level.

An effective Multi-Tiered System of Supports (MTSS) is a comprehensive and strategic prevention-based framework for continuous improvement. An MTSS capitalizes on data at multiple levels to identify priorities and make decisions that improve educational experiences and outcomes for all students. This team-driven decision-making process should support the allocation of resources that

build and sustain the knowledge and capacity of all stakeholders to select, implement, and evaluate initiatives, and programing that improve educational experiences and outcomes for all students.

Student learning is maximized when adults proactively establish cultures and environments that enable equitable access. Such an enabling context happens when systems, frameworks and processes are intentionally interwoven with principles of implementation science to support collaborative problem solving. This includes the integration of highly effective pedagogy and evidence-based practices implemented with fidelity to provide equitable learning opportunities for all. In Colorado, the foundations of a Multi-Tiered System of Supports are the 5 Essential Components.

The Five Components of COMTSS

- a. Team-Driven Shared Leadership
- b. Data-Based Problem Solving and Decision-Making
- c. Family, School, and Community Partnerships
- d. Layered Continuum of Supports, Evidence Based Practices, Instruction, and Interventions
- e. Comprehensive Screening and Assessment System

Team Driven Shared Leadership

Definition:

Teaming processes and structures that focus on distributing responsibility and shared decision-making across and within regions, districts, and schools to effectively design and use systems of training, coaching, resources, implementation, and evaluation.

Schools typically convene different decision-making teams to analyze data and make curricular and instructional decisions to optimize student growth. Membership may vary based on the team's responsibility and purpose; stakeholders that represent multiple perspectives add value and improve decision-making. When analyzing data and making decisions about assessment, instruction, intervention, technology, and/or student programming, team members should feel confident and competent. This may require intentional capacity-building, such as specialized training or expertise in data literacy; team members should also understand effective teaming practices.

Teams engage in problem-solving across tiers of support to identify areas of strength and need that are pivotal for students' future success. A team dedicated to individualized problem solving would identify specific strategies and targeted or intensive supports to address unique learning needs of

individual students. This team would be responsible for determining how to assess student learning and would review assessment results to analyze effectiveness of instructional approaches and to determine if growth is adequate.

Data-Based Problem Solving and Decision-Making

Definition:

A continuous improvement process used by stakeholder teams to collect, analyze, and evaluate information to inform decision making at the system and student level.

District and school teams use multiple types of data, including coaching effectiveness data, to inform decision-making, implementation and evaluation at both the student level and the systems level. The School Implementation Team develops and uses a problem-solving culture of continuous improvement that extends from the school to the classroom to the individual student level. While the COMTSS *District* Implementation Team ensures time and resources are allocated to support ongoing, high-quality professional learning for the district and schools on continuous data-based problem solving and decision making.

Effective data-based decision-making relies on evidence from a variety of sources that informs a holistic understanding of the student, while also helping identify specific areas of strength and areas that could benefit from the provision of additional support. Data can be qualitative evidence of learning, such as student work samples, interviews and observational records, anecdotal notes, and data may also be quantitative, as in results from formal assessments.

Family, School, and Community Partnerships

Definition:

Families, early-childhood programs, schools, and communities actively partnering to develop, implement, and evaluate effective and equitable practices to improve educational outcomes for children and youth.

Family, school, and community partnerships (FSCP) positively impact academic and behavioral student outcomes (i.e.: earn higher grades or test scores, graduate from high school and attend post-secondary education, develop self-confidence and motivation in the classroom, have better social skills and classroom behavior).

High-performing schools are often associated with high levels of family engagement. In a summary of research on the impact of school, family, and community connections on student achievement. Students with involved parents, regardless of income or background, are more likely to:

- Earn better grades and take higher-level courses;
- Pass classes and move to the next grade;
- Attend school regularly;
- Have better behavior and social skills;
- Graduate and go on to postsecondary education.

Layered Continuum of Supports, Evidence Based Practices, Instruction, and Interventions

Definition:

Ensuring that every student receives equitable whole child supports that are evidenced based, culturally responsive, matched to need, and developmentally appropriate through layered supports.

The framework for COMTSS is a “way of doing business” that utilizes high quality evidence-based instruction, intervention, and assessment practices to ensure that every student receives the appropriate level of support to be successful. Evidence-based instructional practices are approaches to instruction, intervention, and assessment that have been proven effective through research indicating improved outcomes for students.

It is important that practitioners, educators, principals, instructional coaches, and specialized service providers are well-versed in current understandings related to evidence-based, best practices. Additionally, they should be aware that our understanding of what constitutes high-quality instruction is constantly evolving and should not be looked at as a static list of practices that can be assembled on a simple checklist.

The framework of a multi-tiered approach provides for efficient, effective, and equitable allocation of resources within the education system. When appropriately used, the tiers support each and every learner to experience success by meeting their unique needs.

The layered continuum includes universal, targeted, and intensive supports.

Tier I: Universal Instruction

Universal Instruction, often referred to as Best First Instruction, is the classroom experience for all students. This is instruction at the chronological grade level of the student. Universal instruction is the primary level of support, and the importance of high quality, evidence-based practices in the classroom cannot be understated. Universal instruction includes a wide variety of strategies used to engage students in learning.

This is not a one-size-fits-all solution. Universal instruction should include scaffolds and differentiation to meet the varied needs of learners in the classroom. Providing visual models, tools, vocabulary cards, anchor charts, and strategically grouping students during whole class and small group instruction are all considered universal supports for students. The careful selection of which supports are advantageous for which students require teachers to utilize a variety of formative assessment practices to plan their instruction carefully.

The starting place for decisions about a student's needed instructional and environmental supports is in general education with supplementary aids and services to ensure progress in the curriculum. It is important to establish a culture where all general educators understand that children do not have to earn a placement in a regular classroom with peers. Every child should have the opportunity to access and participate in the general curriculum with support and services ensuring that they are learning alongside other children who are not disabled. A well implemented MTSS makes space for students with disabilities in classrooms with their peers promoting membership and belonging for every student so that all are valued, included, and belong.

Tier II: Targeted Intervention

Even with the best efforts and well-designed core instruction, some students will need extra support. The hallmark of supplemental support is the act of intensifying instruction, in time and frequency while narrowing focus. Therefore, targeted supports expect a degree beyond universal and must be provided in addition to universal instruction. Targeted intervention and support might be implemented by the classroom teacher, a support teacher, or other personnel adequately qualified to teach the defined intervention. The delivery of an intervention and the resources used should result from data analysis, need, and qualifications (of human resource capital) or quality (of tools and materials).

Tier III: Intensive Individualization

When the progress in targeted intervention is not adequate for a student to be successful, it may be necessary to again increase time and intensity and further narrow focus through implementation of an intensive individualized intervention.

Tier 3 interventions may take a variety of forms. It could be that there is a packaged program that aligns well with the student's needs that can be implemented. Or, the intervention provider might design an intervention for the specific learning needs of the student(s). The specificity of the goal could be the indicator of level of intensity. For many students who struggle significantly, the learning segments and/or instructions may need to be broken into smaller steps or more time may be necessary for the student to master the learning objective. Although some students might naturally extrapolate ideas and apply them across topics and settings, some students who struggle might need such connections to be explicitly and repeatedly linked within their learning experiences.

Comprehensive Screening and Assessment System

Definition:

A Comprehensive Screening and Assessment System is the coordinated effort of gathering information across multiple measures to make decisions at the system and student level for the whole child.

A comprehensive assessment system contributes to an outcomes-driven approach that includes structured monitoring and evaluation with a commitment to continuous improvement.

District Implementation Teams are expected to use a comprehensive assessment system to evaluate the quality, equity, and efficiency of instruction, interventions, environment and support to create a responsive system that enhances learner outcomes. This allows School Implementation Teams to ensure time and resources are allocated to educators to support ongoing, high quality professional learning for all assessments.

Assessment: Purposes and Types

A major feature of the Rtl Model is its use of data to drive the decision-making process at the individual student, classroom, and school levels. To support Rtl'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, and
- 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 (See more information below in the Response to Intervention section). 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, culturally responsive assessment plan that includes screening, progress monitoring and diagnostic 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 and may need extra instruction or intensive interventions if they are to progress toward grade-level standards.
3. To **monitor** students' progress during the year to determine whether 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
4. Summative

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 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 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.

Please note: *In this context, diagnostic 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 Reading to Ensure Academic Development (READ) Act by the Office of Literacy, 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.*

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

Summative Assessments

Given at the end of the school year, summative assessments (e.g., CMAS) are frequently group-administered tests of important content and skills. Summative 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, summative assessments should be administered at the end of the school year.

Response to Intervention

Response to Intervention (RtI) and SLD Identification

It is fundamental that a body of evidence is gathered as part of a student's response to intervention prior to or as part of the evaluation for SLD. The multidisciplinary team must determine, through a comprehensive Body of Evidence, 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.” The presence of “academic skill deficit(s)” can also be documented through the range of performance data collected throughout the process of tiered instruction and intervention, including universal screening, progress monitoring, diagnostic 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.

RtI in Colorado

Context

Historically, RtI was introduced to the field of education as a schoolwide reform model in which supports were matched to students' needs based on data. RtI was viewed as a means of addressing concerns in education that included lack of evidence-based practices and ambiguity with special education identification (Jimerson, Burns, & VanDerHeyden, 2007; Tilly, 2002). As RtI was implemented, it was seen as both a framework for providing instruction to all students, as well as a means of providing to students, identified through a problem-solving process, additional support, and interventions. Over time, however, schools and districts faced challenges with implementation, such as lack of buy-in for systems change and difficulty integrating practices together. The field began to pay attention to how best to implement systems change and to integrate practices, leading to the development of Colorado Multi-Tiered System of Supports (COMTSS). MTSS is the combining of all the supports provided to students into one system using implementation science to ensure the components of COMTSS are implemented well. The Colorado Department of Education emphasizes that Response to Intervention (RtI) exists within Colorado's Multi-Tiered System of Supports (COMTSS). COMTSS is a framework applied at all educational levels that uses implementation science to create one integrated system. Within COMTSS, RtI is seen as an individualized process in which a student or students are provided support matched to their need(s).

RtI is a preventive approach to improving individual outcomes through high-quality universal instruction within a multi-tiered system that connects support matched to students' academic, social-emotional, and behavioral needs.

Core Principles³

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 (PreK-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 to build capacity and sustainability.
- Effective leadership at all levels is crucial for the implementation of Rtl

Overview of Rtl as a Systems-Wide Model

This section provides a brief overview of Rtl focusing on the components of Rtl directly related to the identification of SLD. For more information on Rtl within an MTSS, visit the [COMTSS](#) website.

The Response to Intervention (Rtl) Model is a school-wide initiative that allows for the utilization of resources for students in need of academic and/or behavioral support. Rtl provides a seamless system of interventions and resources for students identified as being at-risk for failure. Although IDEA 2004 encourages utilizing the Rtl 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 Rtl 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.

In Colorado, we recognize five features of Rtl:

- **Collaborative Teaming across all educational systems** (including but not limited to general, special, compensatory, and gifted education).

³ The principles were adapted by the Colorado Rtl Task Force and the Colorado Rtl Implementation Team from those given in the document, *Response to Intervention: Policy Consideration and Implementation*, NASDSE, 2005.

- A clear problem-solving model with steps and routines
- A formal and predictable process to build and implement solutions
- **Decision rules based on data** from a variety of formal and informal assessment tools (including curriculum-based measurement, diagnostic assessment, observation, and validated screening and progress monitoring tools).
- **Capacity building opportunities** are available for staff to address and remove barriers to implementation, so staff feel competent to implement support and confident in the plan's ability to achieve intended outcomes.

Problem-Solving Process

Collaborative Teaming

Diverse representation and collegiality are essential elements of successful problem-solving teams. Teams must be composed of the student's family and a variety of educational staff, including teachers, specialists, and administrators. A team may also include any community members that work with the child. Team membership should include individuals who have a diverse set of skills and expertise and who can address a variety of behavioral and academic issues. Problem-solving teams should identify a facilitator who guides the process and ensures that a culture of collegiality is maintained. Other important roles on a problem-solving team include a recorder and timekeeper. Finally, identified next steps and designated team members to carry them out are essential to the follow-through of the recommendations made by problem-solving teams.

Problem-Solving Process

The problem-solving process assists the classroom teacher and the student's guardians 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 collaborative teaming as noted above, and a clear model with steps and routines 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 matched to the identified student needs. Utilizing a clear problem-solving model with steps and routines 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).

Step 1: Problem Identification

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 is also 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.

Step 2: Problem Analysis

The goal of problem analysis is to precisely define the problem and 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.

It is important to collect multiple sources of information to gain a clear understanding of the student's strengths and needs. The RIOT/ICEL matrix is an organizing framework that can help teams gather, organize and interpret data to determine the root cause of an identified problem. RIOT helps to determine the types of potential sources of student information teams may want to analyze:

- **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.

ICEL guides teams in considering the four domains of learning when considering root cause:

- **Instruction**,
- **Curriculum**,
- **Environment**, and
- **Learner**.

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?

Considering the four domains of learning is essential and helps teams avoid the mistake of assuming that learning problems exist exclusively with the learner and underestimating how teacher instructional strategies, curriculum, and environment impact performance (Florida's Problem Solving/Response to Intervention (PS/RtI) Project). RIOT/ICEL puts the problem in the context of alterable variables and moves it outside of the student.

A Gap Analysis can be helpful when looking at student data. Graphing the data to show a trend line and goal line presents the data in a way that makes it easier to see the student's learning trajectory and allows for clearer understanding of what progress may look like over time.

Step 3: Plan Identification and Implementation

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 will be provided to ensure implementation integrity and sufficiency;
- identifies 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 formative 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.

Step 4: Plan Evaluation

During plan evaluation, the plan is reviewed for fidelity and progress monitoring data is analyzed. Teams should consider fidelity data first to determine if a student or students have received the intervention as intended. 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 adjusted. 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 team 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; and
- determine how fidelity of intervention implementation will be measured.

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:

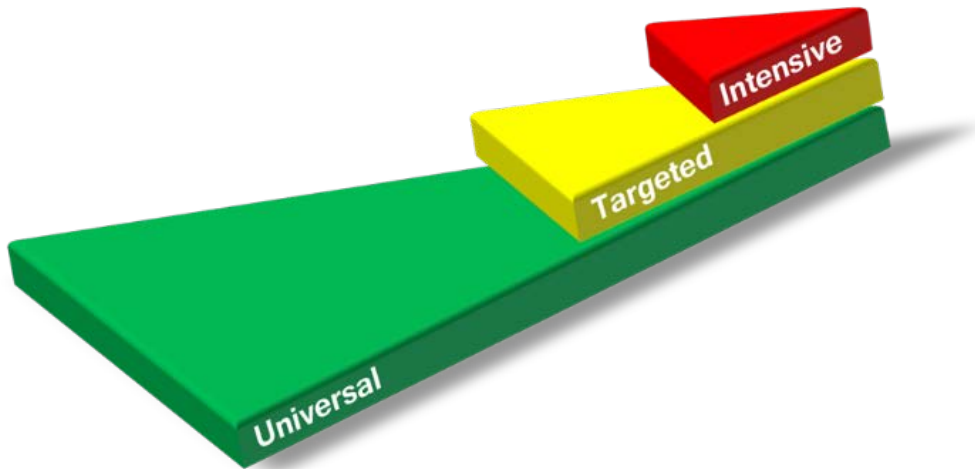
- Positive Response to Intervention: Significant improvement is evidenced by a change in the slope of the progress line that indicates the student is making adequate progress toward the benchmark within acceptable time limits. The gap is closing at an acceptable rate.
- Questionable Response to Intervention: 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. Identify if the intervention was implemented in the manner prescribed with fidelity or if the evidence-based practice was not designed for this specific student, context, or setting.
- Poor Response to Intervention: This condition exists anytime that the gap continues to widen. Discontinue the intervention and reevaluate the most appropriate evidence-based intervention designed for this student within this specific context.

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.

Before considering a change in the intervention, teams must determine the root cause of a child's lack of response. When determining instructional shifts or changes in the intervention, 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. Tiers are flexible as supports are layered based on student performance data (data-driven decision-making).

Tier I: Universal Instructional Strategies and Interventions

Tier I refers to classroom instruction for all students. This universal level of instruction, often referred to as “core instruction”, should result in proficiency for approximately 80% of the students. At this level, all students are receiving high quality, research-based instruction. Universal instruction should be implemented with fidelity utilizing a curriculum that is viable, rigorous, relevant, and standards-driven. Universal instruction should also offer enough 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.

Tier I: Universal 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: Targeted Instructional Strategies and Intervention

Tier II typically involves small groups with targeted, supplemental support 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 a Tier II 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:

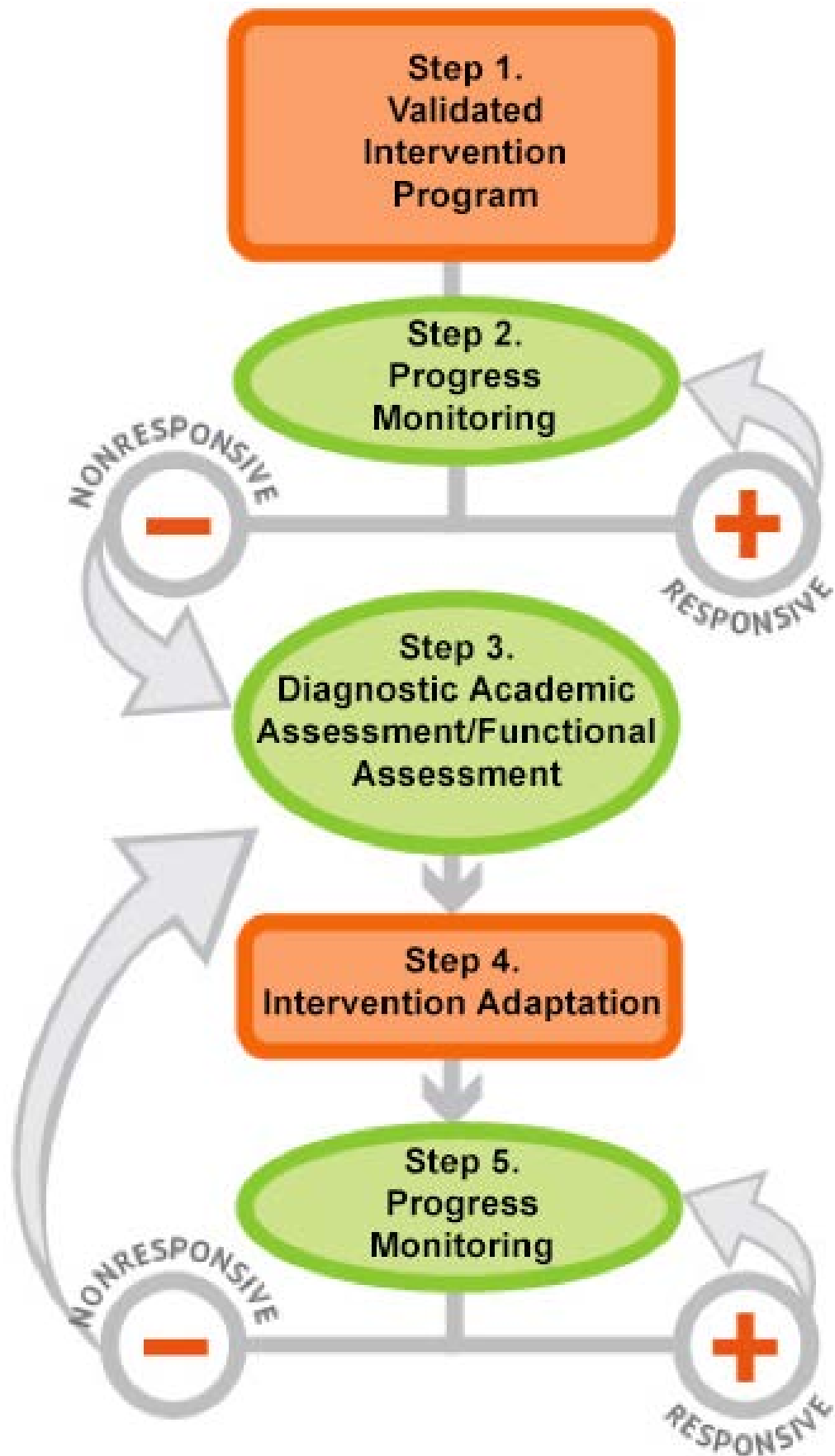
1. To remediate specific skill or concept deficits of students who are not making adequate academic gains or have mild to moderate difficulties in the area of social competence. This Tier II instruction is explicit, systematic, aligned, and integrated with Tier I curriculum and instruction. Instructional 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.
2. 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 enough depth, breadth, and complexity to increase individual student skills and concept formation in a determined course of study.

Tier II: Targeted Assessment

Assessment is more frequent and focused in Tier II. Assessments given are based on specific skill needed, 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 that are aligned to the skill being measured. 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 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: Intensive Instructional Strategies and Interventions

Tier III intensive supports are intended for students with persistent low academic achievement or high-intensity/frequency behavior issues 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 to 5 students). The specific nature of the interventions is based on progress monitoring data and/or diagnostic 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.



Data-Based Individualization, or DBI, is an approach for intensifying intervention for students with the most persistent needs. DBI is a research-based process for individualizing and intensifying interventions through the systematic use of assessment data. The process integrates evidence-based intervention, assessment, and strategies using 5 interactive steps. The graphic to the left shows the five-step DBI process.

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 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 needs and to monitor the progress of students compared to *both* grade and instructional-level benchmarks.

RtI Frequently Asked Questions⁴

What must exist for RtI to work?

RtI is a preventive approach to improving individual outcomes through high-quality universal instruction within a multi-tiered system that connects supports matched to students' academic, social-emotional, and behavioral needs.

⁴ Adapted from the State of Florida Technical Assistance Paper and the RtI Toolkit, Jim Wright.

Key Features of Rtl:

- Collaborative Teaming across all educational systems (including but not limited to general, special, compensatory, and gifted education).
- A clear problem-solving model with steps and routine
- A formal and predictable process to build and implement solutions
- Decision rules based on data from a variety of formal and informal assessment tools (including curriculum-based measurement, diagnostic assessment, observation, and validated screening and progress monitoring tools).
- Capacity building opportunities are available for staff to address and remove barriers to implementation, so staff feel competent to implement supports and confident in the plan's ability to achieve intended outcomes.

Rtl is successful when an infrastructure exists to support a problem-solving process, which includes intervention development, progress monitoring, and regular, designated meeting times for problem-solving teams. School staff must possess skills in the necessary instructional strategies and interventions as well as data literacy including 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 an Rtl system-wide. Teachers and support staff must have the support of building administrators and district staff to implement the Rtl process. 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, within a reasonable amount of time, 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.

A Gap Analysis can be helpful when looking at student data. Graphing the data to show a trend line and goal line presents the data in a way that makes it easier to see the student's learning trajectory and allows for clearer understanding of what progress may look like over time.

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, need and the age/grade level of the student. Interventions should be continued if 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 failure should be a rare event. Where it is not rare, implementation error should be the first suspect.” (VanDerHaden and Tilly, 2016, p. 3)

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 monitors progress or conducts assessments in the RtI Model?

Many different individuals can monitor progress 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, along with 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 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 to determine if the student is responding positively to the intervention. 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.

As mentioned before, if a student is not responding adequately to interventions, it is the charge of the problem solving team to also consider data informing the implementation fidelity of the intervention (did we do what we said we would do and did the student have access to those supports). Something that shows consideration of the data and not just the need to monitor.

What documentation is needed throughout Rtl/Problem-Solving?

Graphs and charts are basic to Rtl 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.

Progress monitoring should happen regularly, with frequency increasing as the frequency and intensity of the intervention increases.

How is Rtl funded?

This is a local decision. Because Rtl 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 Rtl approach.

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

No. It is important to know that the Office of Special Education Programs (OSEP) released [a memo in 2011](#) stating that “The use of RTI strategies cannot be used to delay or deny the provision of a full and individual evaluation” (OSEP, 2011).

RtI is a way to integrate the mandates of Every Student Succeeds Act (ESSA) and IDEA so that all students receive high quality, effective instruction in the general education setting and beyond. 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?

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

collaborative atmosphere where teachers work together to solve student problems, matching supports to student needs, 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 Rtl, 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 families?

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, progress monitoring information should be provided to the parents each time the data are analyzed. Parents should be involved in all the decisions regarding interventions and related accommodations provided.

How will the special education teacher plan interventions for a student after he or she has been found eligible for services through the Rtl 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 and Evaluation

In this Section:

- Referral for Special Education Evaluation
 - Problem-Solving Team Review of Existing Information
 - Request for Evaluation by an Administrative Unit
 - Request for Evaluation by a Parent/Guardian or Adult Student
 - Multidisciplinary Team Members
 - Purpose of Multidisciplinary Team Members
 - Required Members of Multidisciplinary Team
 - Essential Members of Multidisciplinary Team
 - Additional Required Members if the Child is an English Learner
 - Other Appropriate Required Team Members of Multidisciplinary Team
 - When is a qualified, trained language interpreter required?
 - Evaluation Planning
 - Effectiveness of Instruction and Intervention
 - Diagnostic Information
 - Evidence of Continued Need Determined Through Data Analysis
 - Prior Written Notice of Special Education Action
 - Conditions under which a public agency must provide Prior Written Notice
 - Prior Written Notice and Consent for Evaluation
 - Full and Individual Evaluation
 - Extending Timeline for SLD Evaluation
 - Mutual Written Agreement to Extend Timeline for SLD Evaluation
 - Reevaluation and Determination of Continued Eligibility
 - Observation
-

Referral for Special Education Evaluation

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 for the student to benefit from the general education curriculum.

Problem-Solving Team Review of Existing Information

Prior to requesting a special education evaluation and prior to requesting a referral conference, the problem-solving team may have evolved to include specialists with expertise to support intensification and individualization of interventions, targeted assessment, progress monitoring, and data analysis.

The inclusion of specialists will likely vary based on the child's individual needs. Prior to requesting a referral conference, the PST reviews existing information and analyzes the integrity and effectiveness of the scientifically, research-based core curriculum and evidence-based interventions. The team considers a convergence of data including the following: systemic school, grade, and classroom level data, disaggregated group data, as well as the student's individual data. The team reviews formal and informal information from a variety of sources, such as:

- information provided by parents and students;
- school-based problem-solving data;
- results of interventions and supports and accommodations;
- results of current classroom-based and curriculum-based measures;
- for students from a home where a language other than English is spoken, student's level of English language proficiency;
- anecdotal records;
- classroom observations;
- cumulative records (attendance, discipline records, report cards, achievement scores, transcript); and
- private or independent evaluation information, if available (CDE, 2017).

If the curriculum and instruction have been validated and the child demonstrates significant achievement gaps and inadequate response to instruction and intervention the team would request a referral conference.

Once the problem-solving team decides to consider referral for evaluation (request for evaluation), the team evolves to include legally mandated members of a Multidisciplinary Evaluation Team (MET). The initial MET typically includes all or select members of the problem-solving team, other individuals with expertise relevant to the student's individual need, and the legally mandated members, including parents, as prescribed by IDEA ([34 C.F.R. §300.308](#)).

When deciding whether to refer or request permission for a full and individual evaluation, best practice would indicate that the problem-solving team (PST), including parents, would gather data to consider and answer questions that address systemic and individualized supports prior to referral for a special education evaluation. Examples of recommended considerations include the following:

- The student has participated in scientifically-based core curriculum that has had rigorous review and has produced positive educational results; the curriculum has been implemented with fidelity, and positive outcomes are measured for most students.
- The student has been adequately engaged in culturally relevant, differentiated instruction delivered by qualified professionals within a standards-based general education curriculum.
- The student has participated in a preventative, layered continuum of supports including supplemental and increasingly targeted and individualized evidence-based assessments, instruction, and interventions for a sufficient amount of time with appropriate intensity.
- Strategies and interventions have been implemented with integrity, and the team has documented the student's response using evidence-based assessment practices.
- The team has made multiple attempts to address learning concerns through scientific, researched based (SRBI) or evidence-based intervention (EBI), while the student continued to receive instruction in the general education curriculum. At the time of the decision to refer, the team has sufficient evidence to suggest that no additional differentiated strategies, interventions or supports need to be tried in the general education setting.
- The team has sufficiently documented empirical data throughout the individualized problem-solving/Response to Intervention process and collected evidence from a variety of sources that indicate the child may need ongoing, intensive, and personalized supports beyond what is available in general education alone.
- The team has carefully analyzed progress monitoring data collected over a reasonable

amount of time during the provision of targeted and intensive intervention; the student continues to have severe and persistent low achievement and does not make sufficient improvement over time when compared to students with similar demographic characteristics.

CAUTION:

Problem-Solving Teams must be cautious when considering the referral of English learners.

Throughout the individualized problem-solving process, the PST must include members knowledgeable in the selection, administration, and interpretation of culturally relevant, unbiased, and developmentally appropriate assessments, as well as instructional practices with an evidence base for culturally and/or linguistically diverse (CLD) learners. The team also must consider several factors, including the child's stage of language acquisition and level of acculturation, and history of ESL services. For more information on considerations for the referral of culturally and linguistically diverse learners, please refer to the information on Culturally and Linguistically Diverse Learners in the SLD Guidelines section entitled Considerations.

Prior to referral, the PST should validate existing data in the current body of evidence and analyze the integrity of the implementation of standards-based curriculum and evidence-based instructional and intervention practices across an MTSS framework. The team validates the root cause(s) of the learning deficit(s) based on diagnostic assessment results and considers whether instructional approaches were matched appropriately to identified student need in one or more of the 8 areas of SLD outlined in the IDEA and the ECEA Rules.

Different sources of data that the problem-solving team might consider include, but are not limited to:

- A review of assessment data and the alignment of instructional plans across tiers of support.
- Documented observations of the quality of instructional delivery and fidelity of implementation of evidence-based interventions (i.e., Principal Walk Through Data using intervention program fidelity checklists).
- Classroom and district assessment results.
- Comparative classroom and/or subgroup/like peer data (especially for students with cultural and/ or linguistic differences).
- Parent input/level of involvement.
- Educationally relevant medical findings, if any. The parent will most likely provide this information.

- Consideration must include response to intervention data and observation in the area of suspected disability of the child’s behavior(s) across educational settings; best practice would include both observations in areas of strength and need.

CAUTION:

Caution also must be taken not to delay a referral for special education evaluation beyond the point when the team suspects a disability. Neither an MTSS framework nor participation in a process based on the child’s response to intervention replaces the right of a child with a disability to be identified as such and to receive special education services (OSEP, 2011).⁵

Request for Evaluation by an Administrative Unit

A referral for special education evaluation may be initiated when an AU or state operated program requests consent to evaluate from the parent of the child as a result of a building level screening and/ or referral process. ([ECEA 4.02\(3\)](#))

As discussed above, best practice would dictate that a referral for evaluation initiated by the AU/ school-based team be made only after a PST has reviewed a body of evidence indicating that the child has received adequate learning opportunities employing evidence-based practices across a layered continuum support, and the child’s response to intervention has been sufficiently documented through a problem-solving process indicating evidence of both persistent and significant underachievement and insufficient rate of improvement over time. For a student already receiving targeted and intensive intervention in a specific area(s) of difficulty, evidence of a significant academic skill deficit and insufficient progress—even when provided evidence-based interventions—could trigger the suspicion of a specific learning disability and a referral for evaluation. Along with the suspicion of a disability, the team may also suspect an ongoing need for data-based individualization and specially designed instructional supports and services for the student to benefit from the general education curriculum.

If a referral to evaluate has been made and the student is already participating in an RtI Process, the team continues to collect the student’s response to intervention data until the time of the eligibility meeting, and continuing thereafter as appropriate. The individualized problem-solving process does not cease upon referral.

When an AU proposes or agrees to proceed with an evaluation of a student who has not been

⁵ [OSEP Memo 11-07 Response to Intervention \(RTI\) \(January 21, 2011\)](#)

involved in an individual problem-solving process, the criteria for special education eligibility as a student with an SLD do not change. Appropriate, scientifically research-based intervention/evidence-based intervention needs to be provided in the area(s) of difficulty and the student's response (progress) frequently monitored and reported. In this context, the evaluation process and the RtI process/the individual problem-solving process would be initiated and conducted simultaneously.

Excerpts from a memo to State Directors of Special Education from the Federal **Office of Special Education Programs (OSEP 2011)**:

Subject:

A Response to Intervention (RTI) Process Cannot be Used to Delay-Deny an Evaluation for Eligibility under the Individuals with Disabilities Education Act (IDEA)

...In particular, OSEP has heard that some LEAs (local education agencies) may be using RTI to delay or deny a timely initial evaluation to determine if a child is a child with a disability and, therefore, eligible for special education and related services pursuant to an individualized education program.

...The regulations at 34 CFR §300.301(b) allow a parent to request an initial evaluation at any time to determine if a child is a child with a disability. The use of RTI strategies cannot be used to delay or deny the provision of a full and individual evaluation, pursuant to 34 CFR §300.304 – 300.311...

Request for Evaluation by a Parent/Guardian or Adult Student

Another way to initiate a special education evaluation is by parent or adult student request. Parents/Adult student have the right to request a special education evaluation at any time. A parent may request referral, whether the child has participated in a response to intervention or is receiving targeted or intensive intervention as part of the Rtl/problem solving process.

Parent Request for Evaluation Made to Non-Special Education Personnel

If the parent has verbally requested an evaluation to school personnel, the AU should establish procedures for this process. It is important to understand that a parental request for a special education evaluation does not have to be made in writing for it to trigger the AU's obligation to either request parental consent to conduct the evaluation or deny the request to evaluate. However, once the initial parental request has been made, either verbally or in writing, to initiate the formal special education evaluation process, the parent will need to sign a document providing written consent to evaluate. That document will include an evaluation plan that describes the methods and tools that will be used to collect additional information needed to make determinations and to design appropriate individualized education program for the child. As soon as possible, the staff member receiving the verbal or written request contacts the appropriate person(s) who can initiate the formal evaluation process, including scheduling a Referral Conference for the Multidisciplinary team including the Parent.

Once an AU representative (SPED teacher, School psychologist, etc.) receives notice of a verbal or written request for evaluation the AU would schedule a Referral Conference. When scheduling the conference, the AU solicits information from the parent regarding the area(s) of concern/suspected disability. The AU describes the special education process to parents, and provides guidance as to what type of information the parent might bring to the meeting (e.g., concerns, observed behaviors at home, indicators of a significant academic deficit or lack of progress, historical information, medical or clinical evaluation reports, student interests, strengths and needs, social emotional observations, stress, homework, peer relations). The role of the family in the design of the evaluation is crucial. The family can provide important insight and perspectives on early development that may not be easily discernible in the context of the school environment.

The parent and AU find a mutually agreeable date to meet to review information together. The AU informs the parent they may invite others to the referral conference if needed. Once the referral conference is scheduled, the AU prepares for the conference by reviewing existing data of student information (See Review of Existing Data above).

Caution should be exercised not to delay the referral conference due to lack of response to a parent's verbal or written request for an initial evaluation. It is recommended that the date the parent's request for evaluation is received is noted somewhere in the student's education records.

Administrative Unit Options

OPTIONS WHEN A PARENT REQUESTS INITIAL EVALUATION

1. If the Administrative Unit (AU) agrees with the parent that the child may be a child with a disability, then the AU must evaluate the child in accordance with IDEA 34 [C.F.R 300.301](#), [300.305](#), [300.304](#) and [300.310](#) as well as ECEA implementing rules Section [4.02\(2\)](#) of the ECEA Rules. A *Prior Written Notice and Consent for Evaluation* form would then be signed by the parent and the team should proceed with the steps described in the Evaluation Planning section.
2. If the AU does not believe an evaluation is warranted (e.g., evidence confirms that a disability is not suspected), a *Prior Notice of Special Education Action* must be issued to the parents that explains
 - a description of the action refused;
 - an explanation of why the action is being refused;
 - a description of each assessment, evaluation procedure, record, or report used by the school as a basis for the refusal;

- a statement concerning procedural safeguards available to parents;
- sources for parents to contact for help;
- a description of other options considered and why they were rejected; and
- a description of other factors relevant to the refusal.

The parent may challenge the AU's refusal by requesting a due process hearing to resolve the dispute regarding the child's need for an evaluation⁶. It is important to note that when families have been consistently involved in the problem-solving process and in educational decision making regarding their child, such disputes occur less frequently.

It is considered best practice for the MET to discuss alternatives for how to best support the needs of the student, (e.g., 504 consideration, or next steps within general education and multi-level instruction).

A caution to teams: Students should not be referred for special education simply because additional academic support is needed. Special education is not, nor should it be, the only path to receive additional academic support. A continuum of instructional supports should be established within the general education setting that employs universal design for learning principles (UDL), differentiated and culturally relevant instruction for all learners, and a layered continuum of evidence-based instruction and intervention practices.

A special education referral where the team suspects an educational disability must be clearly distinguished from a building level referral for instructional support (Tier 2 or Tier 3 intervention) where an educational disability is not yet suspected or a building level referral for screening, both of which are general education processes. The administrative unit or state-operated program should establish and follow procedures for referring a child for an initial evaluation to determine whether or not the child has a disability and needs special education and related services. (CDE, 2008)⁷

⁶ Adapted from ["Questions and Answers on Response to Intervention \(RTI\) and Early Intervening Services," U.S. Department of Education](#)

⁷ [IEP Procedural Guidance: Exceptional Student Services Unit Technical Assistance](#)

Multidisciplinary Eligibility Team

Purpose of a Multidisciplinary Team

The membership of the multidisciplinary team is formed for the purpose of planning and conducting a special education evaluation and determining eligibility. When a Specific Learning Disability is suspected the required members of the multidisciplinary team are slightly more prescriptive than for other suspected disabilities. ([C.F.R. §300.308](#))

Required members of the Multidisciplinary Team

- Parents [according to C.F.R. §300.308 parents are required members of the team whereby proceeding without parents must be consistent with 300.322(d)].
- 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.
- Special Education Teacher (or Speech Pathologist if child is receiving only speech/language).
- At least one person qualified to conduct and interpret individual diagnostic evaluations, such as a school psychologist.
- Special Education Director or designee.

Essential members of the Multidisciplinary Team

- Student age 15 or older (optional if younger than 15).

Additional required team members IF the child is an English Learner

- At least one representative with expertise in second-language acquisition.
- A representative/s who can interpret assessments in the child's first language and state English language assessment data (i.e., ACCESS, WIDA).

Other appropriate members of the Multidisciplinary Team

- A representative(s) from the problem-solving team who is familiar with the child's response to intervention data.
- A person with relevant expertise or knowledge in discipline area(s).
- Community service agency representative (if student is age 15 or older and the

agency will provide or pay for services).

- A person with relevant expertise or knowledge of the child.
- A representative(s) of alternative program services in which student is served (for example, Culturally and Linguistically Diverse Education, English Learner Service providers, Title I, reading interventionist etc.).
- A paraprofessional or additional teachers who know the child. It is suggested that someone with social/emotional/behaviors expertise is included if challenges exist in these areas.

When is a qualified, trained language interpreter required?

A qualified and/or trained language interpreter may be needed so that parents can participate meaningfully in deliberations [\[34 C.F.R. § 300.322 \(e\)\]](#).

Evaluation Planning

When the request for evaluation has been initiated, and prior to signing consent to evaluate if an evaluation is indicated, the team, including parents, should begin evaluation planning.

The Multidisciplinary Team collaboratively designs a comprehensive evaluation plan that drives the full and individualized evaluation, informs eligibility decisions, and the creation of an appropriate instructional program, if necessary. Information collected during the Rtl process prior to referral is **part** of the evaluation data and **does not replace a full and individual evaluation**. The Body of Evidence collected during the 60-day evaluation time frame, including Rtl and other data collected prior to referral or as part of the evaluation process, is considered by the Multidisciplinary Team in determining whether the child has a disability as defined in the State Rules for the Administration of the Exceptional Children's Educational Act (ECEA) and is eligible for special education and related services.

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.

34 C.F.R. §300.302

As part of the decision-making process to refer a student for special education evaluation, the multidisciplinary team, including the parent, gathers all data relevant to the area of suspected disability and collaboratively reviews existing educational evidence, assessment results and other relevant data on the child. Evaluation tools that might be considered in a full and individual evaluation include the following:

- Evaluations and other information provided by the parents of the child (e.g., parent interview, medical or clinical evaluations, health or developmental history, incidents that may have resulted in brain/head injury, etc.).
- Record review (including attendance, discipline, curriculum, prior referral for special education assessment, and other reports).
- Current classroom-based, local, and state assessments.
- Screening or interim assessments.
- Criterion Referenced measures that compare student’s performance to goals of curriculum.
- Social, emotional, behavioral, executive functioning and/or attention data
- Diagnostic assessments.
- Standardized norm-referenced assessment.
- Progress monitoring assessment data.
- Classroom-based observation in area of specific skill deficit (that may include academic, developmental, communicative, social/emotional, and functional skills checklists).
- Other relevant quantitative or qualitative information from the child’s teachers and support staff.
- Data regarding use of accommodations or interventions.
- Records of classroom instructional task completion and resulting products or work samples.
- Available data/information related to any of the individually relevant “exclusionary factors” outlined in eligibility criteria for SLD, or other areas of suspected disability (e.g., data to document appropriate instruction in reading and math, use of non-biased assessment, language status/ English language proficiency level, sociocultural diversity, or presence of another disability) for the purpose of determining if any of other factors might be the “primary” cause of the student’s learning difficulties.
- If the student is an English Learner. data includes history of ESL services, prior years language proficiency assessments, and language status.

It is strongly suggested that if the student has participated in academic intervention for a period of time, the results of the progress monitoring data should be included in the body of evidence used in

determining the existence of a Specific Learning Disability (including frequency, duration, and intensity of interventions implemented). Other data gathered throughout the intervention process may also be used for the purpose of determining eligibility and informing the Individualized Education Program (IEP), if found eligible.

The team considers the existing information and decides if the data are sufficient to satisfy documentation requirements and enable the team to make determinations of the existence of a disability, of all of the child's special education and related services needs, and if found eligible, develop a meaningful IEP that allows the child to be involved and progress in the general education curriculum.

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.

It is strongly suggested to involve a school psychologist as part of a multidisciplinary team. In some cases, it is wise to rule out cognitive deficits if there are concerns revealed in the pre-referral data.

It is also important to consider including input from the school psychologist or social worker about a student's social/emotional status, even if it is data collected through an informal evaluation.

When considering evaluation, the Multidisciplinary Evaluation Team documents answers to the following questions:

Effectiveness of Instruction and Intervention

- Does evidence exist that Tier I Instruction was effective with approximately 75-80% of students who share this student's demographic characteristics?
- If evidence does not exist that most students are responding adequately to universal instruction, how does the student's performance compare to the majority? (For example, in a Title 1 school, if most students are performing below expectation, is the student's performance on par with the majority or do data reflect considerable difference)?
- Does evidence exist that this student's achievement and/or social/emotional or behavioral functioning differs significantly from that of other students with similar demographic characteristics (i.e., the stage of English Language Development)?
- Has the student been involved in (appropriate accessed) culturally relevant, best first

instruction in general education? If not, what are the reasons?

- Have parents been included in conversations about the student's performance? Were parents provided strategies to support learning (in the area(s) of need) at home?

Diagnostic Information

- Have diagnostic assessments been administered for the purpose of informing the selection and implementation of appropriate instruction/intervention, particularly if the student was not responding adequately to early intervention attempts? If so, what were the results?
- Have the interventions implemented been proven to be effective through a strong scientific research/evidence-base for students with similar demographic characteristics (e.g., number of years in school, level of language acquisition or number of years receiving in ELD services)?
- Was the selection of Tier II intervention based on data, and is the intervention scientifically evidence based? What is the indicating evidence?
- In Tier II intervention, have most students responded positively to evidence-based instruction? How does the student's performance compare to students receiving the same Tier II intervention?
- What evidence do you have that the adult providing the Tier II intervention(s) was appropriately trained in how to implement the scientifically research-based intervention with fidelity?
- Have the interventions been carried out with fidelity (i.e., carried out as prescribed with sufficient intensity), for an adequate length of time, with integrity (implementing the program as designed? (Consider checklists.)
- Have adjustments to the interventions been made and documented in response to ongoing progress monitoring data? (Were changes made to the intensity, duration or frequency of the interventions, or were additional interventions implemented in response to student performance data?)

Evidence of Continued Need Determined Through Data Analysis

- Is there evidence of severe and persistent underachievement when compared to students with similar sociocultural characteristics, even after targeted and intensive intervention?
- To what degree is the student benefitting from the interventions as evidenced in

progress monitoring data?

- To what degree have interventions been adapted and individualized to meet the specific learning needs of the child? What is working for the child?
- Is the difference between actual and expected performance in comparison to grade-level peers closing (consider conducting a gap analysis applied over time to measure the student's rate of improvement)?
- Is there evidence of a need for ongoing supports and services to gain reasonable benefit from general education that cannot be maintained through general education alone?

Prior Written Notice of Special Education Action

Providing a timely and correct Prior Written Notice to the parent(s) is essential to protecting the rights of students receiving special education and their parents; this step is a vital component of the procedural safeguards that schools **must** make available.

The notice must be written in language understandable to the general public and provided in the native language of the parents or other mode of communication used by the parent, unless it is clearly not feasible to do so. [\[34 CFR §300.503\(c\)\(1\)\(i\)\]](#)

If the native language/mode of communication of the parent is not a written language, steps must be taken to translate the notice orally or by other means to the parent in his/her native language/mode of communication, ensuring that the parent understands the notice. Written evidence documenting these requirements must be maintained by the public education agency. [\[CFR §300.503\(c\)\(2\)\]](#)

The Prior Written Notice must provide information for each of the following elements:

- a description of the school's action(s), proposed or refused;
- an explanation of why actions are proposed or refused;
- a description of evaluation, procedure, assessment, record, or report used as a basis for the proposed or refused action;
- a description of any other options the IEP team considered and the reasons for rejecting those options;
- a description of any other factors relevant to the proposal or refusal of action;
- sources for the parent to contact with any questions regarding provisions of the prior written notice requirements; and
- acknowledgement of provision of Procedural Safeguards.

Conditions under which a Public Agency Must Provide Prior Written Notice:

When the public agency proposes to initiate or change

- the identification of a student;
- the evaluation of a student;
- the educational placement of a student; and/or
- the provision of free, appropriate public education (FAPE) to a student.

When the public agency refuses to initiate or change

- the identification of a student;
- the evaluation of a student;
- the educational placement of a student; and/or
- the provision of FAPE to a student

It is important to understand that PWN must always be consistent with 300.503, regardless of the form used. Additionally, the short form only works to satisfy this requirement when the IEP provides all the necessary content listed above.

Prior Written Notice and Consent to Evaluate

When a special education referral has been made, the public agency must provide notice of the intent to conduct an evaluation for special education eligibility and must obtain informed written consent from the parent. The team documents the intent to evaluate using [the Prior Written Notice and Consent for Evaluation](#)⁸ form. Information regarding the [Parent and Child Rights in Special Education: Procedural Safeguards Notice](#)⁹ or Parent's Rights must be provided to the parents at this time.

Parental rights must be provided in writing in the parent's native language. It is especially important that the public agency explains the document and ensures parental understanding of their rights and those of the child. This may require a language interpreter [34 CFR §300.322(e)]. The public agency MUST take whatever action is necessary to ensure that the parent understands the proceedings of the IEP Team meeting, including arranging for an interpreter for parents with deafness or whose native language is other than English.

⁸ [Colorado Department of Education Prior Written Notice & Consent for Evaluation \(DOC\)](#)

⁹ [Colorado Parent and Child Rights in Special Education Procedural Safeguards Notice \(2011\) \(PDF\)](#)

In rare cases, the multidisciplinary team may determine that no additional evaluation information is needed. However, all relevant functional, developmental, and academic performance data from multiple sources should be reviewed and included in the evaluation report. If further assessment is not indicated, the team’s decision should be noted on the [Prior Written Notice and Consent for Evaluation \(DOC\)](#)¹⁰ form with the justification for the decision. The evaluation procedures, tests, records, or reports that support this decision need to be clearly listed. Please note that the “areas to be evaluated” would still need to be documented on the form, even if it is determined that no additional evaluation data are needed. The team would indicate the areas for which they have already collected the evaluation data. An evaluation to determine whether the child has an educational disability, whether she is eligible for special education services, and the specific special education needs of the child, must be conducted—even if all data necessary to inform these decisions are already available. The data must also identify all the child’s special education needs and provide ample information to be able to design an appropriate IEP that will allow the child to be involved in and progress in the general education curriculum.

Full and Individual Evaluation

“Evaluation” is the procedure used in accordance with Section 4.02(4) of the ECEA Rules. It is the process by which a Multidisciplinary Evaluation Team (MET) determines whether a student has an educational disability, as well as eligibility for, entitlement to, and the nature and extent of the special education and related services that the child needs. [\[34 CFR §300.304\]](#)

A child may only be found eligible as a child with a disability under IDEA after a sufficiently comprehensive full and individual evaluation and subsequent determinations that the child meets the disability criteria and needs special education and related services in order to be involved in and progress in the general education curriculum. The full and individual evaluation begins with the request or referral for special education evaluation and signed consent to evaluate. The public agency is required to provide a full and individual evaluation for free, at no expense to parents.

The process of evaluation requires thorough analysis and interpretation of child centered data. Parents are integral partners in this process and vital members of the MET. The insight and information they provide are carefully considered throughout the problem solving and evaluation processes.

¹⁰ [Prior Written Notice and Consent for Evaluation \(DOC\)](#)

It is imperative to consider evaluation for specific learning disability in the greater context of a continuous problem-solving process within an RtI model and multi-tiered system of support (MTSS). A response to intervention framework is a service delivery model based on a data analysis and problem-solving process that begins with universal screening and includes a layered continuum of evidence-based practices and supports aligned with regular assessment and progress monitoring that inform instructional practices. A variety of assessment data and sources of information are essential in creating a comprehensive body of evidence (BoE) to support decision-making through the RtI process and during special education evaluation. The design of a special education evaluation plan for a suspected SLD must include RtI data, as part of the BoE, and provide information necessary:

1. to determine the student's achievement difference from the child's similar peer group and in relation to age or state-approved grade level standards in all relevant areas of the 8 academic domains;
2. for analysis of academic progress over time in response to instruction and supplemental and increasingly intensive intervention, in each of the 8 academic areas identified; and
3. to provide information about the educational conditions (instructional, curricular, environmental, and sensory) that optimize individual student success enabling progress and access to the curriculum.

Prior to and as part of the evaluation process, teams of educators must analyze data in relation to instruction and the individual needs of the child. As part of this data analysis process over time, the problem-solving team may engage different team members at different times

Teams should exercise care in conversations with parents and guardians and others to avoid eligibility predetermination. Although a child may have both a significant academic deficit and an insufficient rate of improvement, the presence of these two criteria does not automatically mean that a child has a disability, nor is the child automatically eligible for special education. A full and individual evaluation must be conducted by a multidisciplinary team to determine eligibility. However, the information collected during the RtI process is used as part of the body of evidence within the evaluation and eligibility process.

Should other areas of disability be suspected (other IDEA disability categories, in addition to SLD), PST may move forward with obtaining parental consent. However, the RtI process would begin and be conducted simultaneously with the evaluation process, if it has not been initiated previously, in all areas of suspected SLD. Within the timeframe of the evaluation process, progress monitoring data would be conducted simultaneously and reported to parents at reasonable intervals.

The full and individual evaluation must be completed within 60 calendar days of receiving parental consent for the evaluation [\[34 CFR §300.301\(c\)\]](#).

“... must adhere to the timeframes described ... unless extended by mutual written agreement of the child’s parents and a group of qualified professionals ... [\[34 CFR §300.309\(b\)\(2\)\(c\)\]](#)”

Extending Timeline for SLD Evaluation

If the team decides that more information is needed and/or there are questions that still need to be answered, the areas to be evaluated including the evaluation procedures, tests, records, or reports must be documented on the form. Any planned evaluation procedures need to be documented on the *Prior Written Notice and Consent to Evaluate* form and informed parental consent for evaluation obtained.

Mutual Written Agreement to Extend Timeline for SLD Evaluation

The multidisciplinary team and parents may agree to extend the 60-day timeline for evaluation, if additional information is needed (e.g., further progress monitoring data is needed to determine effectiveness of intensive intervention). The extension must be agreed upon and signed prior to the expiration of the 60-day evaluation timeline. If the parent does not agree to the extension, the Multidisciplinary team must complete the evaluation within the 60-day timeframe and may decide that the evaluation does not provide sufficient data to make eligibility determinations. This agreement to extend the timeline must be made in writing and may be documented using the form [Agreement to Extend Time Limit for Completion of Evaluation for a Specific Learning Disability¹¹](#) [\[34 CFR § 300.309\(c\)\]](#).

Neither federal nor state law mandates or limits the time for which an evaluation can be extended, however, extensions to the evaluation timeline may not be used to unnecessarily delay special education evaluations. Additionally, if other impairments are considered during the evaluation, and the parent and other members of the team mutually agree to extend the 60-day timeline for collecting data for SLD determination, the timeline extension applies to the entire evaluation. In this situation, the

¹¹ [CDE’s Agreement to Extend Time Limit for Completion of Evaluation for a Specific Learning Disability](#)

Multidisciplinary Team would meet to consider eligibility for SLD and any other impairments on the date agreed to by the parent.

Neither federal nor state law mandates or limits the time for which an evaluation can be extended, however, extensions to the evaluation timeline may not be used to unnecessarily delay special education evaluations. Additionally, if other impairments are considered during the evaluation, and the parent and other members of the team mutually agree to extend the 60-day timeline for collecting data for SLD determination, the timeline extension applies to the entire evaluation. In this situation, the Multidisciplinary Team would meet to consider eligibility for SLD and any other impairments on the date agreed to by the parent.

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.

However, with reevaluations 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 (e.g., specialized instruction no longer necessary). A reevaluation may occur not more than once a year, unless the parent and the public agency agree otherwise; and must occur at least once every 3 years, unless the parent and the public agency agree that a reevaluation is unnecessary ([34 CFR §300.303](#)).

The focus of the triennial reevaluation process and meeting is on existing student-centered data, such as ongoing assessments of progress and focused/diagnostic assessment that answers specific questions related to the child's learning. Important considerations and determinations include sufficiency of response to instruction/intervention provided; degree to which the current special education services are meeting the individual student needs; and any indicated changes to instruction and services.

The preamble to the 2006 Federal Regulations includes the following in reference to students initially identified under a different set of criteria than what is in place at the time of reevaluation.

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, particularly for a child who is in the final year(s) of high school. 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.

Special consideration should be made as to the documentation of evidence that a student continues to have a Specific Learning Disability and needs specific accommodations if the student will soon be transitioning from high school to a college or university. This does not mean that a specific assessment or a full battery of assessments needs to be administered just for the purpose of determining eligibility for accommodations in postsecondary educational settings. For more resources on how to assist in the successful transition of a student who may need disability services after graduation from high school can be found on the [CDE Secondary Transition Resources page](#).

Observation

Part of the process for the determination of a specific learning disability is the observation. The observer is looking for:

- current academic performance, indicating both strengths and areas of need;
- specific descriptive information on functional skills, including behavior, communication, motor, daily living or other skills related to school and age appropriate activities;
- specific needs that are a priority for the student's learning or support in the general education program; and
- the impact of the characteristics of the student's disability on his/her performance and access to the general education curriculum.

Observation must (Summary of [34 CFR §300.310](#)):

- be in the child's learning environment (including the regular classroom setting);
- document academic performance and behavior in the areas of difficulty;
- be from routine classroom instruction and monitoring prior to referral; or
- at least one member of the MET will conduct an observation of the child's academic performance in the regular classroom after consent for evaluation.

Section 4: SLD Determination

In this section:

- Criteria for Determination of SLD
 - Determining Significant Academic Skill Deficits
 - Evaluating Response to Scientific Research Based Intervention
 - Examples Positive, Questionable, and Poor Response to Intervention
 - Positive Response to Intervention
 - Questionable Rate of Improvement
 - Poor Rate of Improvement
 - Consideration of Exclusionary Factors
 - Visual Impairment, including blindness.
 - Hearing Impairment, including deafness
 - Orthopedic Impairment
 - Intellectual Disability (ID)
 - Serious Emotional Disability (SED)
 - Culturally and Linguistically Diverse Students
- Environmental or Economic Disadvantage
- Lack of Appropriate Instruction
- Observation
- Documentation Requirements

Criteria for the Determination of SLD

The following are the two major eligibility criteria that must be met (demonstrated through a body of evidence) to determine a student has a Specific Learning Disability:

1. The child does not achieve adequately for the child's age or to meet state approved grade-level standards and exhibits significant academic skill deficit(s) 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 ECEA 2.08(8)(b)(i):
 - oral expression
 - listening comprehension
 - written expression

- basic reading skill
- reading fluency skills
- reading comprehension
- mathematical calculation
- mathematics problem solving

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 identified in Section 2.08(8)(b)(i) when using a process based on the child's response to scientific, research-based intervention [ECEA 2.08(8)(b)(i)].

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 state-approved, grade-level benchmarks;
2. the student is making insufficient progress in response to [scientific, research-based interventions](SRBI); and
3. the student's learning difficulties are not PRIMARILY the result of visual, hearing, or motor disabilities; intellectual disability; serious emotional disability; cultural factors; environmental or economic disadvantage; or limited English proficiency.

In addition, as stated in the Federal Rules and Regulations pertaining to the identification of any disability, the findings cannot 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.

Determining Significant Academic Skill Deficits

Parameters given for determining the significance of a deficit are not intended to be hard and fast "cut-points" and the convergence of multiple sources of data needs to be considered by the eligibility team.

When building a body of evidence for and evaluation or reevaluation, it is considered best practice that at least one measure be norm-referenced in order to provide some consistency across schools and districts in the interpretation of "significance." A score at or below the 12th percentile or 1.5 standard deviations below the mean may be considered to represent a significant deficit. The results of a focused and norm-referenced, diagnostic assessment, specific to the suspected area of need,

will not only assist with the identification of a specific learning disability, but would provide valuable information for developing IEP goals and determining appropriate instruction/intervention.

Existing performance data from such sources as student work products, classroom and district assessments, state assessments, etc., all add to the body of evidence.

Criterion referenced measures of “mastery” may be one type of classroom assessment reflected in the body of evidence—a guideline is that if a student is performing at only 50% of mastery expectations for a particular skill or set of concept knowledge, it would be considered evidence of a significant deficit. For example, end of chapter comprehension or skill questions/tasks where the proficiency or mastery level set by the textbook or teacher is 80% or greater correct responses, a student who consistently scores at 40% or less correct may be considered to have a significant deficit in the particular skill or knowledge set being targeted.

Evaluating Response to Scientific Research Based Intervention (SRBI)

In addition to an academic skill deficit, teams must identify insufficient progress in one or more of the eight relevant areas to determine a Specific Learning disability. To determine insufficient progress, the progress monitoring tool must be linked to one of the eight areas of SLD.

Decision rules used to determine levels of response to intervention based on regular systematic progress monitoring 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 for determining responsiveness 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 achievement 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 achievement gap is not narrowing.
- c. Poor Response to Intervention: This condition exists anytime that the achievement gap

continues to widen.

EXAMPLES: Positive, Questionable, and Poor Response to Intervention

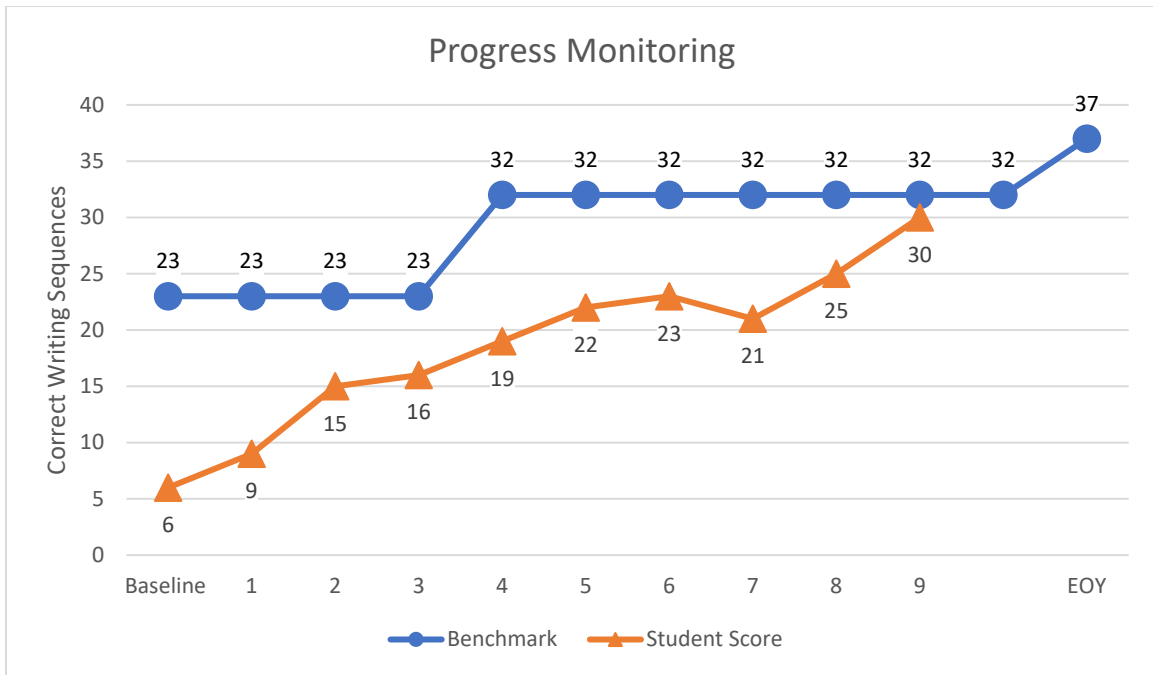
Positive Response to Intervention

The fourth-grade student was provided 9 weeks of small group instruction 1 hour/day, 5 days/week. Progress monitoring results indicated a 24-point increase, which equals a 2.6 CWS gain per week. At the current Rate of Improvement (ROI)¹², the student will “catch up” to 4th grade EOY benchmark (37) with an additional 3 weeks of instruction.

Progress Monitoring: Correct Writing Sequences (CWS) - Fourth Grade Benchmark

Week #	Time of Year	Benchmark 50%	Student's PM Score
Baseline	BOY	23	6
Week 1	BOY	23	9
Week 2	BOY	23	15
Week 3	BOY	23	16
Week 4	MOY	32	19
Week 5	MOY	32	22
Week 6	MOY	32	23
Week 7	MOY	32	21
Week 8	MOY	32	21
Week 9	MOY	32	30
	MOY	32	
	EOY	37	

¹² [Oregon Response to Instruction & Intervention “Calculating Rule of Improvement \(ROIs\) for directions and formulas for calculating ROIs](#)

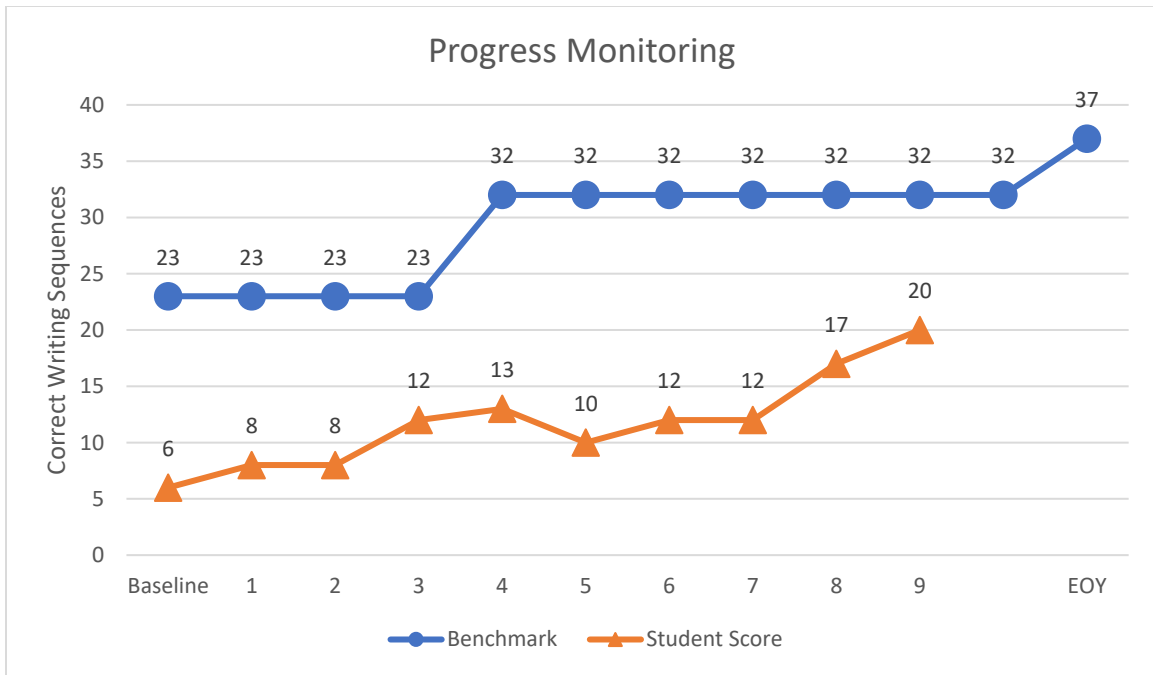


Questionable Rate of Improvement:

The fourth-grade student was provided 9 weeks of small group instruction 1 hour/day, 5 days/week. Progress monitoring results indicated a 14-point increase, which equals a 1.5 CWS gain per week. At the current rate of improvement, the student will “catch up” to 4th grade EOY benchmark (37) with an additional 1 weeks of instruction.

Progress Monitoring: Correct Writing Sequences (CWS) - Fourth Grade Benchmark

Week #	Time of Year	Benchmark 50%	Student’s PM Score
Baseline	BOY	23	6
Week 1	BOY	23	8
Week 2	BOY	23	8
Week 3	BOY	23	12
Week 4	MOY	32	13
Week 5	MOY	32	10
Week 6	MOY	32	12
Week 7	MOY	32	12
Week 8	MOY	32	17
Week 9	MOY	32	20
	MOY	32	
	EOY	37	

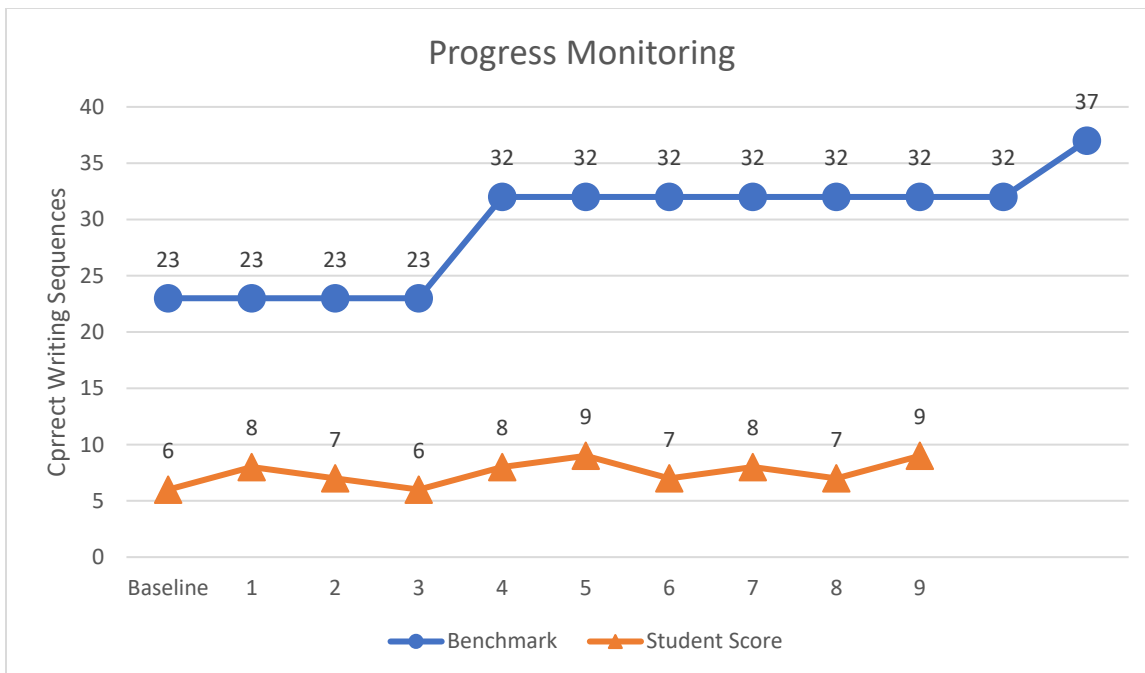


Poor Rate of Improvement

The fourth grade student was provided 9 weeks of small group instruction 1 hour/day, 5 days/week. Progress monitoring results indicated a 3-point increase, which equals a .33 CWS gain per week. At the current rate of improvement, the student will “catch up” to fourth grade EOY benchmark (37) with an addition 84 weeks of instruction.

Progress Monitoring: Correct Writing Sequences (CWS) - Fourth Grade Benchmark

Week #	Time of Year	Benchmark 50%	Student's PM Score
Baseline	BOY	23	6
Week 1	BOY	23	8
Week 2	BOY	23	7
Week 3	BOY	23	6
Week 4	MOY	32	8
Week 5	MOY	32	9
Week 6	MOY	32	7
Week 7	MOY	32	8
Week 8	MOY	32	7
Week 9	MOY	32	9
	MOY	32	
	EOY	37	



VALIDATION with other PM measures to support lack of progress over time in same area in Rt SRBI

Consideration of Exclusionary Factors

The ECEA Rules, in aligning with the Federal Regulations, require that the multidisciplinary eligibility team determine that its findings (that address the criteria for SLD) are not PRIMARILY the result of visual, hearing, or motor impairment; intellectual disability (ID); serious emotional disability (SED); cultural factors; environmental or economic disadvantage; or limited English proficiency. These factors are commonly referred to as “Exclusionary Factors.”

The team is required to take into consideration and document the effects of “exclusionary” factors in the evaluation and eligibility documents. 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.

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 SED and ID, 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 a SLD is the primary disability, even if the child, for example, also has an orthopedic 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.

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.

As with some of the other factors that must be ruled out, these disabilities may coexist with specific learning disabilities and must be addressed in the evaluation and eligibility documentation and in the planning of specially designed instruction 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. However, teams should provide evidence to support their determinations, including the educational impact of the factors that were ruled out as primary causes.

A student with a primary educational disability in the area of vision, hearing, and/or orthopedic 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. The team provides evidence of how this determination was made. Again, all the identified needs of the child must be addressed, whether or not typically linked to the child's primary disability.

The following subsections address all of these "exclusions" more specifically.

Visual Impairment, including blindness

A child with a Visual Impairment, including blindness, shall have a deficiency in visual acuity and/or visual field and/or visual functioning where, even with the use of lenses or corrective devices, he/she is prevented from receiving reasonable educational benefit from general education.

Additional information, guidance documents, and presentations are posted on [the CDE Exceptional Student Services webpage, Visual Impairment, including blindness](#).

Hearing Impairment, including deafness

A child with a Hearing Impairment, including deafness, shall have a deficiency in hearing sensitivity as demonstrated by an elevated threshold of auditory sensitivity to pure tones or speech where even with the help of amplification, the student is prevented from receiving reasonable educational benefit from general education.

Additional information, guidance documents, and presentations are posted on [the CDE Exceptional Student Services webpage, Hearing Impairment](#).

Orthopedic Impairment

A child with an Orthopedic Impairment has a severe neurological/muscular/skeletal abnormality that impedes mobility, which prevents the child from receiving reasonable educational benefit from general education.

Additional information, guidance documents, and presentations are posted on [the CDE Exceptional Student Services webpage, Orthopedic Impairment](#).

Intellectual Disability (ID)

This is probably the one “exclusionary factor” that would not typically be thought to co-exist with SLD. Rather, academic learning difficulties would be attributed to the intellectual disability. A child with an Intellectual Disability shall have reduced general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the development period, which prevents the child from receiving reasonable educational benefit from general education.

Additional information, guidance documents, and presentations are posted on the Exceptional Student Services/Colorado ID webpage, *Intellectual Disabilities*:
<https://www.cde.state.co.us/cdesped/sd-intellectual>

Serious Emotional Disability (SED)

A child with a Serious Emotional Disability shall have emotional or social functioning, which prevents the child from receiving reasonable educational benefit from general education. There are times when students present with both a significant learning disability and serious emotional/behavioral concerns. When this occurs, teams often struggle with deciding which disability is primary or has a greater impact on the student’s access to education.

The following are considerations regarding decision-making related to a Serious Emotional Disability:

- Does the student have emotional difficulties in addition to a specific learning disability? Learning disabilities can occur co-morbidly with a serious emotional disability. In this situation, the team needs to discuss which disability is having a greater impact on the student or is a greater barrier to their accessing the general education curriculum and their education. Regardless of the decision, the team

should provide coordinated instruction and support related to both the learning deficits and the emotional challenges across instructional tiers.

- Are the student's emotional difficulties so severe that they are influencing general functioning, and thus cause the student to have limited access to instruction? These students need intensive intervention to address their emotional needs as well as instruction in academic skills.

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 behavior interventions and supports, And other strategies, to address that behavior.

(§300.324 Federal Register)

Additional information, guidance documents, and presentations are posted on [the CDE Exceptional Student Services webpage, Serious Emotional Disability](#).

Culturally and Linguistically Diverse Students

Cultural, economic, and environmental factors are more complex and, thus, more difficult to address in examining the primary cause of poor achievement. These conditions 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). In order to rule out limited English proficiency as the primary cause of learning difficulties, IEP teams must document and examine multiple measures/points of evidence that guide IEP teams in determining if the language difference is a learning disability.

To ensure appropriate identification of an individual with a SLD, unbiased assessment procedures should be used. Most importantly, we must consider the students' English language proficiency in determining appropriate assessments and other evaluation materials. A referral to special education evaluations may not be delayed due to the students' English language proficiency or the students' participation in a language instruction educational program. Appropriate disability identification processes that evaluate the students' disability-related educational needs and NOT the students' English language skills will help school personnel to accurately identify students in need of special education services. In addition, educators need to ensure a students' special education evaluation is provided and administered in the students' native language or other mode of communication and in the form most likely to yield accurate information about what the student knows and can do, unless it is not feasible to do so. Assessing whether a student has a disability in his or her native language

determine if a need stems from the lack of English language proficiency and/or a students' disability-related educational need. Various cultures may hold unique views regarding the level of functioning and skills expected of children at certain ages. Therefore, school teams must be culturally responsive in identifying a student with a SLD. Unbiased assessment is not a particular test or instrument, but rather a process of gathering information about an individual through a problem-solving approach that considers the influence of culture and language. Evaluation of culturally and linguistically diverse students should be conducted in the student's dominant spoken language or alternative communication system. All student information should be interpreted in the context of school expectations with consideration given to the student's socio-cultural background and the home and neighborhood setting in which he or she is functioning. The use of evaluations printed in the student's native language is preferred. It is more valid and reliable to use an evaluator who is fluent in the student's dominant language than to use an interpreter.

Additional information about SLD and Multilingual Learners can be found in section 6.

Environmental or Economic Disadvantage

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. A review of assessment data for individual schools and districts may also be beneficial in considering the effects of these two factors. The team would be reviewing assessment results that have been disaggregated based on Socio-Economic Status (SES) as indicated by qualification for free/reduced lunch.

Lack of Appropriate Instruction

A child must not be determined to be a child with a disability if the basis for that decision is a lack of appropriate instruction in reading, including the essential component of reading instruction or a lack of appropriate instruction in math. Although the previous statement is true to the determination of any disability, additional documentation is required when considering the presence of a specific learning disability.

A. Lack of appropriate instruction in reading, including in the essential components of reading instruction (as defined in Elementary and Secondary Education Act):

1. Phonemic Awareness

2. Phonics
3. Vocabulary Development
4. Reading Fluency including oral reading skills
5. Reading Comprehension Strategies

B. Lack of appropriate instruction in math); (National Mathematics Advisory Panel, National Research Council, 2008) consider adding tenets from Principles to Action:

1. Conceptual Understanding
2. Procedural Fluency
3. Strategic Competence
4. Adaptive Reasoning
5. Productive Responses

School personnel are responsible for obtaining evidence that effective instruction was provided within the general education classroom and the provision of appropriately supplemental interventions aligned to the area(s) of concern were delivered in a timely manner. A body of evidence is gathered that demonstrates that the child is not responding to research-based curricula and instruction that is meeting the needs of most students. Additionally, information from a variety of sources is carefully documented and considered in deciding eligibility. The team considers 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. 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, behavior concerns, 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.

A school system should be cognizant of the Adequate Yearly Progress data for all disaggregated groups. If most students within a school setting who are of a particular ethnic group, low SES, or at a similar level of English language acquisition are achieving poorly, it might be inappropriate to label an individual student from one of these groups as having a disability based on similar poor performance.

The system should be striving to provide (universal/core) instruction in such a way as to improve the achievement of all students.

Observation

Part of the process for the determination of a specific learning disability is the observation. The observer is looking for:

- current academic performance, indicating both strengths and areas of need;
- specific descriptive information on functional skills, including behavior, communication, motor, daily living or other skills related to school and age appropriate activities;
- specific needs that are a priority for the student's learning or support in the general education program; and
- the impact of the characteristics of the student's disability on his/her performance and access to the general education curriculum.

Observation must (Summary of [34 CFR § 300.310](#))

- be in the child's learning environment (including the regular classroom setting);
- document academic performance and behavior in the areas of difficulty;
- be from routine classroom instruction and monitoring prior to referral; or
- at least one member of the MET will conduct an observation of the child's academic performance in the regular classroom after consent for evaluation.

Documentation Requirements

The attached evaluation report MUST contain documentation of the following:

1. A body of evidence that demonstrates
 - a. academic skill deficitsand
 - b. insufficient progress in response to scientific research-based intervention in the area(s) identified above.
2. 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 must be included in the evaluation report.

3. 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).
4. 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.
5. The team considered and documented that the eligibility is not due to a lack of appropriate instruction in math, delivered by qualified personnel.
6. A complete description of the instructional strategies used.
7. The student-centered data collected including documentation of repeated assessments or achievement at reasonable intervals (Progress Monitoring data).
8. The educationally relevant medical findings exist and are described **or** do not exist.
9. The documentation that the parents were notified about:
 - a. The State’s policies regarding the amount/nature of student performance data collected and general education services provided. ¹³
 - b. Strategies for increasing the student’s rate of learning.
 - c. Results of repeated assessments of student’s progress.
 - d. The right to request an evaluation.

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).

¹³ This statement 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.

Section 5: 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 to 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.

In this section:

- Oral Expression and Listening Comprehension
- Written Expression
- Basic Reading Skill
- Reading Fluency Skills
- Reading Comprehension
- Mathematical Calculation and 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.

Oral Expression and Listening Comprehension

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

Definition and Implications of 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 of 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*).
- Difficulty learning and using vocabulary, both academic and conversational.
- 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 reading comprehension 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 of 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 for 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 non-standardized 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),
- 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), and
- 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 criterion-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 for Oral Expression and Listening Comprehension

The speech-language pathologist can provide both direct and consultative services in collaboration with 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 students to keep their eyes on the speaker, make a picture in their heads, 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 are 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 by Grade

Kindergarten

Oral Expression	Listening Comprehension
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

Oral Expression	Listening Comprehension
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.

Second Grade

Oral Expression	Listening Comprehension
Uses increasingly complex sentences.	Follows 3-4 step directions in sequence.
Clarifies and explains words and ideas.	Understands direction words for location, space and time.
Uses oral expression to inform, persuade and to entertain.	Answers questions about grade level story or theme correctly.
Opens and closes conversation appropriately.	
Experiments with vocabulary.	

Third Grade

Oral Expression	Listening Comprehension
Summarizes a story accurately.	Listens attentively in group situations.
Uses content area vocabulary.	Understands grade level material.
Explains what he/she 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

Oral Expression	Listening Comprehension
Understands some figurative language.	Listens to and understands information presented by others.
Participates in group discussions.	Forms opinions based in evidence.
Makes effective oral presentations.	Listens for specific purpose.
Identifies main idea and supporting details.	Asks clarifying questions.
Chooses vocabulary appropriate to the message.	Uses listening skills to understand directions.

Oral Expression	Listening Comprehension
Uses grammatically correct speech	

Fifth Grade

Oral Expression	Listening Comprehension
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.
Reports about information gathered in group activities.	

Middle School

Oral Expression	Listening Comprehension
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

Oral Expression	Listening Comprehension
Supports a point of view using various forms of persuasion.	Self-evaluates oral presentations.

Oral Expression	Listening Comprehension
Incorporates materials from a wide range of sources (newspapers, books, technical materials, etc.).	Recognizes a speaker’s point of view, purpose, and 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](#)

[Language Development in Children](#)

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.

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

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

Colorado Content Standards for Language Arts.

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 the 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.

It is important to remember that IEP teams may "not use any single measure or assessment as the sole criterion for determining whether a child is a child with a disability and for determining an appropriate educational program for the child" (Section 300.304 (b)). Eligibility determination should be informed by a comprehensive body of evidence comprised of a variety of formal and informal data.

The information presented below examines spelling, handwriting and composition separately as the components of writing for a depth of understanding and is not indicative of separate areas of eligibility within written expression.

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 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 constraints writing development (Fletcher, Lyon, Fuchs, & Barnes, 2007).

Handwriting Definition and Implications

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 effect 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*.

Handwriting Characteristics

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.

Handwriting should be evaluated for related service by an OT and not as a stand-alone eligibility category for written expression.

There are three common forms of graphomotor dysfunction:

- difficulty recalling the sequence of strokes needed to form a specific letter;
- use of the larger muscles of the wrist and forearm rather than small muscles of the fingers to form letters; and
 - *finger agnosia*, in which a student must 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)

Spelling Characteristics

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:

- inflected ending omission (i.e., *dressest* for *dresses*) or substitution (i.e., “dropt__for *dropped*);
- misplacement or omission of /l/ and /r/ (i.e., “backboard” for *blackboard* or “fog” for *frog*);
- omission of non-salient consonants, including in consonant blends (i.e., “sip” for *slip* or “med” for *mend*);
- 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
- weak syllable deletion (i.e., “xplak” for *explicate*).

Handwriting Assessment/Progress Monitoring

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 the 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.

Spelling Assessment

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
- *Weshsler Individual Achievement Test (WIAT-II): Spelling & Written Expression*
- WJ-IV: Spelling sounds
- *Wide Range Achievement Test (WRAT 3): Spelling*

Handwriting Intervention

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 of 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 strict adherence to any particular model “are likely to frustrate not only themselves but their students as well” (Graham, 1999, p. 84).

Spelling Intervention

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).

Spelling Progress Monitoring

One type of CBM for spelling is correct letter sequence (CLS) using dictated, grade-level word lists. Another way to progress monitor spelling is to total the 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 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); and
- 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 the following three procedures:

- total words written (TWS),
- words spelled correctly (WSC), and
- 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), has 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, and
- multi-paragraph essays.

Written Expression References

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 [International Dyslexia Association Fact Sheets](#).

- 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., & Lieberman, I. Y. (1972). Misreading: A search for causes. In J. F. Kavanaugh & 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

Reading is a critical ingredient in school success. According to IDEA, three aspects of reading can be considered a source of an SLD: *basic reading skill*, *reading fluency*, and *reading comprehension*. This section covers basic readingskill.

IDEA does not define *basic reading skill*, though the term is commonly understood to refer to the ability to accurately identify written words (Fletcher, Lyon, Fuchs, & Barnes, 2018). Difficulties in basic reading skill and reading fluency (next section) together comprise what researchers call *word-level reading difficulties*. A word-level reading difficulty is the most common type of learning disability (Fletcher et al., 2018). It is present in about 80% to 85% of students designated as having an SLD.

Characteristics

There are two central features of basic reading skill. The first is the ability to accurately identify unfamiliar words based upon the letters in a word and the sounds associated with those letters. This is often called *phonic decoding*. The second feature of basic reading skill is the ability to efficiently develop a pool of words that are *instantly recognized*. Students with SLD in basic reading skill typically struggle with both phonic decoding and instant word recognition. Such deficits are the central features of difficulties in basic reading skill.

Difficulties in basic reading skills have been examined in thousands of studies in the last 40 years. One clear and consistent finding is that basic reading skill difficulties are primarily due to deficits in *phonological skills*. This is often referred to as the *phonological core deficit*.

Phonology refers to the *sound system in spoken language*. Those with poor word reading skills typically do not have difficulty with the sounds of whole, spoken words. Rather, it is when they are expected to make use of parts of spoken words that they struggle. The ability to notice that words are made up of smaller sound units is called *phonological awareness*. The most sophisticated level of phonological awareness is phoneme awareness, the ability to discriminate individual speech sounds within spoken words.

Many children naturally develop phoneme awareness. Strong phoneme awareness allows a child to pull apart the sounds in spoken words and, with phonics instruction, align those sounds with the grapheme (letter or letters) that represent those sounds in text. This is essential for both reading and spelling. However, students with poor basic reading skills typically have poor phoneme awareness. This disrupts their ability to learn to decode and encode written words accurately and efficiently.

Additional problems with phonological processing may be indicated by difficulties with rapid automatized naming (RAN) tasks and phonological working memory. RAN represents the rapid retrieval of names of objects, letters, numbers. Students with slower naming speed tend to struggle with basic reading skills. Phonological working memory refers to the temporary memory buffer for the information we are thinking about at any given moment. Compared with their same-aged peers, many students with deficits in basic reading skills have difficulties holding phonological information in working memory. This appears to have a disruptive effect on learning to read.

When difficulties in one or more of these three phonological skills disrupt the reading process, this is called the phonological-core deficit. Based upon many scientific studies in the last few decades, the phonological-core deficit appears to be the primary source of difficulties in basic reading skills.

It should be noted that word-level reading skills have little to do with visual skills, as long as the letters are legible to the reader. Once an individual sees a group of letters that comprise a written word, visual memory does not appear to be involved in retrieving that word from long term memory. Rather, orthographic memory (memory for specific letter sequences), phonological memory (memory for speech sounds), and semantic memory (memory for word meanings) appear to be responsible for written word recognition. The notion that we remember written words based upon visual memory is inconsistent with current scientific findings.

Studies show that basic reading skills do not correlate with visual memory, but word-reading skills correlate substantially with phonological skills. Scientists have determined that we store a memory for specific letter sequences in our long-term memory (a combination of orthographic, phonological, and semantic memory; see definitions in the glossary), rather than an image of the “visual look” of the word.

Another scientific finding is that phonology is directly involved in remembering written words, not just in sounding out unfamiliar words. Letter sequences become stored in long-term memory by becoming associated with the word’s oral pronunciation at the phoneme level (Ehri 2005, 2014). The evidence suggests that instant, automatic access to the phonemes within spoken words contributes to efficient memory for written words (Kilpatrick, 2015). This is precisely a skill that poor readers typically lack.

Because of its impact on the ability to access phonological information needed for reading words, the phonological-core deficit negatively affects both phonic decoding skills and the ability to build a pool of familiar words for instant word recognition.

Thus, two presenting symptoms of an SLD in basic reading skills are poor nonsense word reading (sometimes called pseudoword reading) and a limited sight vocabulary (orthographic lexicon).

Assessment

Assessment for basic reading skill difficulties can take many forms. First, many studies show that in the fall of kindergarten, poor letter-name knowledge and letter-sound knowledge and/or poor early phonological skills (rhyming, first sound awareness, syllable segmentation) are highly predictive of later reading difficulties. Another well-established factor is family history. Students with a first-degree relative (i.e., a biological parent, biological sibling, biological grandparent, or biological aunt or uncle) with a history of reading difficulties are at greater risk than those without such a history. A combination of family history and weakness in letter knowledge and early phonological skills in kindergarten combine to be a powerful indication that a student will struggle in reading. Such students should begin receiving additional help in letter-sound skills and phonological awareness. There is extensive research to show that early intervention in these two skill areas can prevent later reading problems (see below).

For an assessment to be useful in understanding the source of reading difficulties and to also inform instruction, the component skills necessary for competency in basic reading skills should be assessed. These include letter-sound knowledge, phonological awareness, RAN, phonological working memory, and oral vocabulary. While many children with weak vocabulary skills develop

competent basic reading skills (e.g., some students with intellectual disabilities, speech-language deficits), oral vocabulary nonetheless helps facilitate the development of basic reading skills and should therefore be assessed.

Letter-Sound Skills

In kindergarten and early first grade, letter-sound knowledge can be assessed by having students identify phoneme/grapheme correspondences (sound/letter connections), through teacher designed assessments or formal assessments. Typically, kindergarten students will learn short and long vowel sounds, all consonant sounds and some digraphs (ch, ph, sh, th). First grade students will continue to progress through vowel digraphs, diphthongs, r-controlled vowels and consonant blends. By early to mid-first grade, the best assessment tool for measuring phoneme/grapheme correspondences is a nonsense word reading test (e.g., *mip, blat, prup*). Nonsense word reading not only assesses letter-sound knowledge, it also assesses phonological blending (i.e., the ability to blend sounds together).

Knowledge and proficiency are not the same, though knowledge is required for proficiency. Many students with difficulties in basic reading skills eventually develop letter-sound knowledge but do not achieve letter-sound proficiency. Proficiency means that letter-sound skills are automatic and effortless. Some of the best tools available to evaluate letter-sound proficiency are the *Phonemic Decoding* subtest from the *Test of Word Reading Efficiency-Second Edition* (TOWRE-2), and the *Decoding Fluency* subtest from the *Kaufman Test of Educational Achievement-Third Edition* (KTEA-3). Many other tests and test batteries have nonsense word reading subtests, but most are untimed and can assess accuracy but not proficiency. Some universal screeners have timed nonsense word reading, but they do not all provide progressively more difficult nonsense words as found on the TOWRE-2 and KTEA-3 and thus may be most well suited for first grade.

Phonological Skills

There are many phonological/phonemic awareness tests available. The *Comprehensive Test of Phonological Processing-Second Edition* (CTOPP-2) assesses phonological awareness, RAN, and phonological working memory. It is thus the most complete battery for assessing for the phonological-core deficit. At current writing, a free assessment called the *Phonological Awareness Screening Test* (PAST; Kilpatrick, 2016; not to be confused with another free test with the same acronym called the *Phonological Awareness Skills Test*) is the only test that addresses proficiency of phonological awareness responses and may function as a useful supplement to phonological skills batteries like

the CTOPP-2, the *Phonological Awareness Test-Second Edition* (PAT-2), or other achievement batteries that have phonological awareness subtests.

In common practice, assessments of phoneme awareness are often discontinued after first grade, despite extensive evidence that phonemic awareness continues to develop beyond first grade and has an important influence on building the pool of words needed for instant recognition (Kilpatrick, 2015; Vaessen & Blomert, 2010). As a result, assessment of the phonological-core skills of phonemic awareness, rapid automatized naming, and phonological working memory should be an integral component to any assessment of students who display difficulties in basic reading skills. The CTOPP-2, for example, has norms up to age 21.

Instant Word Recognition

With each higher grade level, proficiency becomes more and more relevant for determining basic reading skills deficits. Timed assessments such as the *Sight Word Efficiency* subtest from the TOWRE-2, the *Word Recognition Fluency* subtest from the KTEA-3, and the *Test of Silent Word Reading Fluency-Second Edition* (TOSWRF-2) can be useful in this regard. Untimed single-word reading subtests from various normed test batteries can also be useful. However, it must be recognized that many students “figure out” words they did not already know on untimed tests, so such tests confound instant word recognition and phonic decoding while timed tests more specifically assess instant word recognition.

Vocabulary

Oral vocabulary can be formally assessed in many ways. School psychologists typically have available oral vocabulary tests within their cognitive test batteries. More precise oral vocabulary information can be gleaned from the test batteries used by speech-language pathologists. But even presenting an isolated subtest, for example the Vocabulary subtest from one of the Wechsler scales, can serve as a screening that may be followed up by a speech-language evaluation.

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 based upon the diagnostic assessments administered.

There are many phonics programs available. It is important that any phonics curriculum presents letter-sound instruction in an explicit and systematic manner. A recent review of the word-reading intervention literature (Kilpatrick, 2015) reinforced the findings of the National Reading Panel (NRP, 2000) that the keys to the remediation of word reading difficulties include explicit and systematic training in phonemic awareness and phonic decoding, and this instruction must be combined with ample opportunities to practice reading using developmentally appropriate text that reinforces the phonemic awareness and phonics skills being taught.

Research suggests that it is not enough to assess and train the basic phoneme awareness skills of segmentation and blending. As foundational as they are, they only reflect an ending first grade level of phonemic skills. Research shows that phoneme skills continue to develop and become more proficient throughout second and third grade, with some studies showing such skills continue to develop up until fourth to fifth grade (Vaessen & Blomert, 2010). Also, studies of struggling readers that trained the phonemic skills to more sophisticated levels displayed the strongest word-reading results in the reading intervention literature (Kilpatrick 2015). By contrast, studies of struggling readers that did not include training in phonemic awareness yielded very limited results. In between these two, studies that only trained phonemic awareness to an ending first grade level (i.e., trained phoneme segmentation and blending) had results better than not training phonemic awareness, but less than the studies that trained phonemic skills to a higher level of proficiency (Kilpatrick, 2015).

The method of training phonemic skills across these more highly successful studies involved phonemic manipulation, typically phoneme deletion or substitution, across all the possible phoneme positions within words (i.e., beginning, middle, or ending sound, and splitting blends). Several programs, including commercially available programs and experimenter-designed programs, all achieved similar results. What was common among them is they trained phoneme awareness skills to approximately the level of proficiency of typically developing third grade readers using these phoneme manipulation tasks.

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)

When teaching phonics, all 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; and
- read decodable sentences and books for fluency and meaning. (Moats p. 19-20)

While interventions for basic reading skill 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)

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 appears to be a byproduct of the size of a student’s sight vocabulary, also called the student’s *orthographic lexicon* (Kilpatrick, 2015; Torgesen, Rashotte, Alexander, Alexander, & MacPhee, 2003). “The most important key to fluent reading of any text is the ability to automatically recognize almost all of the words in the text” (Torgesen et al., 2003, p. 293).

The orthographic lexicon, commonly called the sight-word vocabulary, refers to the pool of words in memory that an individual already knows. If a student knows all or almost all the words in the text, he or she can move fluently through the text. If there are numerous words in the text with which the student is unfamiliar, he or she must sound out or guess those words. This compromises their ability to fluently move through text.

Poor word-level readers have much smaller orthographic lexicons than their typically developing peers because they are not as adept at remembering the words they read. While commonly practiced, simple practice strategies for such struggling readers have not been shown to close the gap between such readers and their typically achieving peers. For students who are not skilled at remembering the words they read, text passage practice alone is of limited benefit. In contrast, for students who are adept at remembering the words they read, reading practice is the most efficient way to become a more fluent reader. This is because they encounter more and more words to be remembered, which allows them to build up their sight vocabulary, which in turn means there are fewer and fewer unfamiliar words in any given text to slow them down.

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 they can comprehend, make connections to the text, and acquire new vocabulary. Not surprisingly, students who cannot read fluently often 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 deficit and a reading fluency deficit. The first includes students who struggle with accuracy, rate, and prosody, while the second comprises those who struggle with rate and prosody only. Based upon research since the National Reading Panel, it appears that these two profiles differ in terms of their developmental levels of word reading skills.

Two key skills in reading words are 1) accurately sounding out unfamiliar words (phonic decoding) and 2) remembering the words one reads (sight-word acquisition). Research on orthographic learning (i.e., studies of how we remember the words we read) have clearly shown that accuracy in phonic decoding precedes efficient sight word memory. While students with poor phonic decoding may genuinely remember some words, their ability to do so is compromised and far below the rate of their typically developing peers. Scientific reading research has clearly shown that the letter-sound skills behind phonic decoding are also centrally important for remembering words.

Words are remembered based upon orthographic memory, not visual memory (Ehri, 2005, 2014; Kilpatrick, 2015). Orthographic memory involves remembering the precise letter order of words so that as a unit, a group of letters (i.e., a printed word) is instantly recognizable without requiring

phonic decoding or guessing. To do so effectively, the brain must make phonological connections to the letter sequences in a word to “map” the word for instant recognition. This is called “orthographic mapping.” The visual features of the word are not relevant (e.g., uppercase, lowercase, font, printed or cursive handwriting), as long as the letters are legible to the reader. Without letter-sound skills, memory for words becomes very inefficient.

With proper letter-sound instruction, many students with reading difficulties can develop phonic decoding skills, but they lack the more refined letter-sound automaticity and phonemic proficiency to orthographically map the words they read for later instant recall. As a result, they do not develop the large and ever-growing sight vocabulary that their typically developing peers develop. Their limited sight vocabulary appears to be the primary reason for their poor fluency. Also, for some students, weakness in *rapid automatized naming* (RAN) also appears to have a negative impact on reading fluency. This skill can be tested and involves the rapid naming of letters, numbers, colors, or objects. Despite over 30 years of research into RAN, researchers are still uncertain as to how RAN affects reading and how it interacts with the development of the sight vocabulary.

Fluency deficits may compound other reading deficits. Dysfluent readers are exposed to significantly fewer words than those who are strong readers. If these skills are not remediated 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. Some examples of assessments that measure fluency or that include fluency measures are Test of Word Reading Efficiency–Second Edition (TOWRE-2); Test of Silent Word Reading Fluency–Second Edition (TOSWRF-2); Gray Oral Reading Test-5 (rate and accuracy scaled score combined); AIMSweb progress monitoring measures; Dynamic Indicators of Basic Early Literacy Skills (DIBELS); Qualitative Reading Inventory-4 (QRI-4); Texas Primary Reading Inventory (TPRI), among others.

In addition to direct measures of fluency, it will also be important to assess the underlying skills that contribute to reading fluency, to better understand why a student has a fluency problem. There are several measures of RAN available, such as on the Comprehensive Test of Phonological Processing–Second Edition, among others. Letter-sound proficiency can best be assessed by a timed nonsense

word reading, such as the Phonemic Decoding subtest of the TOWRE-2 or the Decoding Fluency from the Kaufman Test of Educational Achievement-Third Edition. As of this writing, the only test to directly assess phonemic proficiency is the Phonological Awareness Screening Test, which is a free assessment. Most tests of phonological awareness focus on accuracy, not proficiency (timed segmentation tests on universal screeners only evaluate skills up to the first grade). Other assessments capable of assessing phonemic proficiency will be available in the near future.

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). Dr. Joseph 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 effect 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 developing the letter-sound skills and phonemic skills to automaticity, plus opportunities to practice reading. 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 TOWRE-2 has multiple forms designed to monitor progress. The key to progress monitoring paragraph 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.

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 the topic of increasing study in the last 20 years. This research has suggested 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 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. It tends to be less common for a student to have a comprehension-only deficit, but these do 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.

Note: English Language Learners can often quickly acquire the code of written English but may have difficulty comprehending text as their overall English vocabulary is still emerging. While their progress with text comprehension should be monitored as they develop proficiency with English, these students should not be considered to have comprehension deficits related to a learning disability unless additional evidence emerges.

Characteristics

Reading comprehension encompasses a multi-faceted set of skills. Oakhill, Cain, and Elbro (2015) detail the key features of reading comprehension difficulties. First, and foremost, children with a comprehension deficit may have more basic struggles in the area of oral language, including new vocabulary development. If a student struggles with acquiring oral language, this will likely impair his ability to comprehend written language. Typically, students who struggle with oral language often use smaller words and need significantly more exposure to new words to add them to their lexicon. These students may also be challenged by how to orally form proper sentences. Their ability to understand what makes a complete sentence and what order to put words in may be impaired.

For some students with breakdowns in language comprehension, phonological processing is 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,” a complex skill poor readers often lack. Comprehension monitoring is one of the most important and effective strategies used by effective readers, yet students who are poor comprehenders 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 structural 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 often do not attend to these details.

Assessments

Unfortunately, there are no single 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 Edition (DAR-2), Qualitative Reading Inventory-IV (QRI-IV), Developmental Reading Assessment 2 (DRA-2), and other Informal Reading Inventories. DIBELS also has benchmark and progress monitoring MAZE assessment (called DAZE). DIBELS DEEP CFOL assessment is a diagnostic targeting multiple aspects of comprehension, fluency, and oral language. Also, most traditional academic achievement batteries have a reading comprehension subtest. Passage reading assessments that are related to reading comprehension include the AIMSweb Maze CBM or other CBM maze passages.

Intervention and Progress Monitoring

Although 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 that 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 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, Ed Checkup and DIBELS DAZE do have maze progress monitoring tools that measure overall comprehension.

References for 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.
- Dehaene, S. (2010). *Reading in the brain: The new science of how we read*. New York, NY: Penguin.
- Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2018). *Learning disabilities: From identification to intervention—Second edition*. New York, NY: Guilford Press.
- Kilpatrick, D. A. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. Hoboken, NJ: Wiley & Sons.
- 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 Institute of Child Health and Human Development. (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: Reports of the sub-groups* (NIH Publication No. 00-4754). Washington, DC: U.S. Government Printing Office.
- 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.
- Oakhill, J., Cain, K., & Elbro, C. (2015). *Understanding and teaching reading comprehension: A handbook*. New York: Routledge.
- 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.
- Torgesen, J. K., Rashotte, C. A., Alexander, A., Alexander, J., & MacPhee, K. (2003). Progress toward understanding the instructional conditions necessary for remediating reading difficulties in older children. In B. R. Foorman, (Ed.), *Preventing and remediating reading difficulties: Bringing science to scale* (pp. 275-297). Baltimore, MD: York Press.

Mathematical Calculation and Problem Solving

Definition and Implications

Mathematics proficiency is essential for daily, successful adult living, especially as our global society becomes more technologically driven. Mathematical competencies have implications for individual quality of life including socio-economic status and life-time earning potential. To participate fully in society, mathematics must be accessible, if it is not, opportunity and competence are hindered (Artzi, 2014). Equitable mathematics instruction provides all students critical preparation for college, career, and life. Mathematics education is important to support career opportunities in fields that drive innovation and research in science, technology, engineering and math. The development of students' mathematical competencies has implications for our nation's future in the global economy, as well. Mathematics education contributes to foundational knowledge and skills that will support and drive solutions to current and future societal issues in our nation and globally.

For this reason, it is imperative we understand how to identify a math disability early and provide effective, targeted, research-based interventions, and specially designed instruction.

The federal and state statutes identify two specific areas of math disability: mathematical calculation and mathematical problem solving. 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. 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 mathematics disability” (Fletcher et al., 2007).

It is important to mention that there are high comorbidity rates between math disabilities and reading and spelling disabilities.

Characteristics

It is important to know that not all students who exhibit mathematical difficulties have a math disability. A mathematical disability “is hypothesized to be due to an inherent weakness in mathematical cognition not attributable to sociocultural or environmental causes” (As cited in Soares, Evans, and Patel., 2018). Recent studies that include neuroimaging have provided new insights to the origins of math disabilities. Because of this, math disability “is considered a neurodevelopmental disorder, involving dysfunction in specific brain regions that are implicated in math skills” (Soares, Evans, and Patel., 2018). This research is not as well established as research around reading disorders and is ongoing. Presently, there are multiple theories.

Yet, there are telltale signs of math disability that parents and educators can watch for to determine if further assessment and interventions may be necessary. The table below provides some symptoms of math disability to look for at various stages of development. The list is by no means exhaustive, but it provides some guidance for parents and educators around what to be aware of.

Mathematical Disability Symptoms by Grade

Age	Symptoms of MD
Toddlers and Preschoolers	Difficulty learning to count
	Difficulty sorting
	Difficulty corresponding numbers to objects
	Difficulty with auditory memory of numbers (e.g., phone number)
Kindergarten	Difficulty counting
	Difficulty subitizing
	Trouble with number recognition
	Difficulty with magnitude comparison

Age	Symptoms of MD
1st-3rd grade (early elementary)	Trouble learning math facts
	Difficulty with math problem-solving skills
	Over reliance on finger counting for more than basic sums
	Anxiety during math tasks
4th-8th grade (late elementary through middle)	Difficulties with precision during math work
	Difficulty remembering previously encountered patterns
	Difficulty sequencing multiple steps of math problem
	Difficulty understanding real-world representation of math formulae
	Anxiety during math tasks
High school	Struggle to apply math concepts to everyday life, including money matters, estimating speed and distance
	Trouble with measurements
	Difficulty grasping information from graphs or charts
	Difficulty arriving at different approaches to same math problem
	Anxiety during math tasks
(Soares, et al. 2018)	

Instruction and Interventions

Instruction

In Colorado, on average, about 80% of students with SLD spend 80% or more of their school day in a general education setting (NCLD). To ensure students with disabilities will progress adequately, specially designed instruction in mathematics should always be aligned to grade-level standards.

Colorado Academic Standards

The Colorado Academic Standards in mathematics are the topical organization of the concepts and skills every Colorado student (including those with disabilities) should know and be able to do throughout their preschool through twelfth grade experience. The standards of mathematics are:

1. Number and Quantity
2. Algebra and Functions
3. Data Analysis, Statistics and Probability
4. Geometry

Number and Quantity

From preschool through high school, students are continually extending their concept of numbers as they build an understanding of whole numbers, rational numbers, real numbers, and complex numbers. As they engage in real-world mathematical problems, they conceive of quantities, numbers with associated units. Students learn that numbers are governed by properties and understand these properties lead to fluency with operations.

Algebra and Functions

Algebraic thinking is about understanding and using numbers, and students' work in this area helps them extend the arithmetic of early grades to expressions, equations, and functions in later grades. This mathematics is applied to real-world problems as students use numbers, expressions, and equations to model the world. The mathematics of this standard is closely related to that of Number and Quantity.

Data Analysis, Statistics, and Probability

From the early grades, students gather, display, summarize, examine, and interpret data to discover patterns and deviations from patterns. Measurement is used to generate, represent and analyze data. Working with data and an understanding of the principles of probability lead to a formal study of statistics in middle in high school. Statistics provides tools for describing variability in data and for making informed decisions that take variability into account.

Geometry

Students' study of geometry allows them to comprehend space and shape. Students analyze the characteristics and relationships of shapes and structures and engage in logical reasoning. Students learn that geometry is useful in representing, modeling, and solving problems in the real world as well as in mathematics.

Modeling Across the High School Standards

Modeling links classroom mathematics and statistics to everyday life, work, and decision making. Modeling is the process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions. When making mathematical

models, technology is valuable for varying assumptions, exploring consequences, and comparing predictions with data. Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards.

Colorado Standards for Mathematical Practice

The Colorado Academic Standards include not just statements about the mathematical content students should learn, but also the eight *Standards for Mathematical Practice*, or SMPs. The SMPs describe the nature of students' mathematical thinking and activity that will help them develop a positive and skillful approach to learning and doing mathematics. The eight SMPs are the following:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

A high-quality curriculum should focus both on the development of content knowledge *and* student engagement in these practices.

NCTM Guidance

The National Council for Teachers of Mathematics (NCTM) provides guidance for decisions made by teachers and administrators about mathematics programming and instruction. This guidance includes the six mathematics principles and eight effective teaching strategies.

The six Principles address overarching themes. Because 80% of students with SLD in Colorado spend 80% or more of their instructional time in the general education classroom, it is important that administrators consider these principles when designing school wide instruction and intervention, and teachers consider these principles when designing their classroom learning (NCTM, 2014).

- Equity. Excellence in mathematics education requires equity—high expectations and strong support for all students.
- Curriculum. A curriculum is more than a collection of activities: it must be coherent, focused on important mathematics, and well-articulated across the grades.
- Teaching. Effective mathematics teaching requires understanding what students know and need to learn, then challenging and supporting them to learn it well.

- Learning. Students must learn mathematics with understanding, actively building new knowledge from experience and prior knowledge.
- Assessment. Assessment should support the learning of important mathematics and furnish useful information to both teachers and students.
- Technology. Technology is essential in teaching and learning mathematics; it influences the mathematics that is taught and enhances students' learning.

The NCTM has identified eight high-leverage teaching practices that affect student learning in mathematics, including for those students with SLD (NCTM, 2014).

- **Establish mathematics goals to focus learning:** Effective teaching of mathematics establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions.
- **Implement tasks that promote reasoning and problem solving:** Effective teaching of mathematics engages students in solving and discussing tasks that promote mathematical reasoning and problem solving and allow multiple entry points and varied solution strategies.
- **Use and connect mathematical representations:** Effective teaching of mathematics engages students in making connections among mathematical representations to deepen understanding of mathematics concepts and procedures and as tools for problem solving.
- **Facilitate meaningful mathematical discourse:** Effective teaching of mathematics facilitates discourse among students to build shared understanding of mathematical ideas by analyzing and comparing student approaches and arguments.
- **Pose purposeful questions:** Effective teaching of mathematics uses purposeful questions to assess and advance students' reasoning and sense making about important mathematical ideas and relationships.
- **Build procedural fluency from conceptual understanding:** Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems.
- **Support productive struggle in learning mathematics:** Effective teaching of mathematics consistently provides students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships.

- **Elicit and use evidence of student thinking:** Effective teaching of mathematics uses evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning.

Common Core State Standards 3 Aspects of Rigor

When designing instruction and interventions for students with mathematics disabilities, it is important to meet students' unique needs without sacrificing rigor. Yet, despite the frequent use of the word rigor, there seems to be conflicting definitions about what rigor is. To add clarity to the conversation around rigor in mathematics instruction, the Common Core State Standards Initiative has defined rigor and identified three aspects of rigor:

Rigor: Pursue conceptual understanding, procedural skills and fluency, and application with equal intensity.

Rigor refers to deep, authentic command of mathematical concepts, not making math harder or introducing topics at earlier grades. To help students meet the standards, educators will need to pursue, with equal intensity, three aspects of rigor in the major work of each grade: conceptual understanding, procedural skills and fluency, and application.

- **Conceptual understanding:** The standards call for conceptual understanding of key concepts, such as place value and ratios. Students must be able to access concepts from several perspectives to see math as more than a set of mnemonics or discrete procedures.
- **Procedural skills and fluency:** The standards call for speed and accuracy in calculation. Students must practice core functions, such as single-digit multiplication, to have access to more complex concepts and procedures. Fluency must be addressed in the classroom or through supporting materials, as some students might require more practice than others.
- **Application:** The standards call for students to use math in situations that require mathematical knowledge. Correctly applying mathematical knowledge depends on students having a solid conceptual understanding and procedural fluency.

Assessment

Diagnostic Assessment

Diagnostic assessments are implemented to determine the extent of current skills and knowledge, identify issues relating to the student's lack of success in mathematics (root cause

analysis), and help to pinpoint areas for instruction/intervention. Diagnostic assessments can also be used to establish a baseline, identify appropriate starting points for instruction, and guide intervention design, planning and goal setting. The usefulness of diagnostic assessments is not limited to interventions but should also inform instructional decisions.

There are two common types of diagnostic assessments in mathematics: norm referenced, and observation/interview protocols.

Norm-referenced tests include the KeyMath 3 assessment, the Test of Early Mathematics Ability (TEMA-3), or the Test of Mathematical Abilities (TOMA-3), as well as the mathematical sections of Wechsler Individual Achievement Test (WIAT-III) and Woodcock Johnson Tests of Achievement, IV. This list is not exhaustive.

Diagnostic assessments are critically important for refining understanding of a student's grasp of critical math skills and concepts. The results of these assessments serve a variety of purposes:

- to select or design appropriate interventions/specially designed instruction for students;
- to craft goals of an intervention;
- to inform instructional decisions; and
- to inform in a possible SLD identification process.

The other major category of diagnostic assessments are observation and interview protocols. These protocols which are not normed, and therefore do not provide reliable peer referenced performance scales, are designed to assess a student's use of strategically selected procedures and reveal conceptual understandings. These assessments generally require a trained and skilled assessor, who can listen and watch for key behaviors within the protocol and incorporate deeper inquiry to isolate understanding and/or misunderstandings of concepts. The *US Math Recovery Council* provides training and assessment kits for diagnosticians (Mathrecovery, 2017). Other interview-based diagnostic assessments include Kathy Richardson's *Assessing Math Concepts* (2017), Marilyn Burn's *Math Reasoning Inventory*, and the *New Zealand Maths Numeracy Project*, which provides online training and resources that align well with the Colorado Academic Standards (NZMaths, 2017).

Progress Monitoring

For several reasons, effective progress monitoring in mathematics is challenging. Because of this, progress is best monitored through a Body of Evidence approach. Progress monitoring Bodies of Evidence (BOE) are a varied collection of artifacts directly related to the established goal. Evidence can include qualitative and quantitative, informal, and formal artifacts. Ideally, the Progress Monitoring

BOE includes evidence of progress related to the three aspects of rigor in mathematics: procedural skills and fluency, conceptual understanding, and application (CoMMIT, 2016).

The goal of Targeted and Intensive Progress Monitoring is to determine whether a student is making significant progress toward the goals of the intervention(s) and instruction.

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 tap 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, Pr-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 through 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 are being 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).

It is important to consider that CBMs do not constitute comprehensive progress monitoring systems in and of themselves. Most CBMs in mathematics focus exclusively on procedural skills and fluency, to the exclusion of the other two aspects of rigor and must, therefore, always be considered within the context of the larger BOE. Triangulation of data is essential for identification and eligibility decisions, as well as for planning appropriate programming. CBMs in mathematics are an important type of assessment but must be integrated with a variety of other assessments as part of the BOE. There are

critical concepts in mathematics that undermine a student's ability to progress in mathematics for which there is no adequate CBM available to teachers. For instance, a conceptual understanding of place value is necessary for students to use ten to add, subtract, multiply, and divide. A lack of understanding will adversely affect a student's learning from second grade on. There is no adequate CBM and this requirement would prevent us from identifying a student who has this gap in critical understanding. An over reliance on CBM without connection to conceptual understanding, generalization, and application may lead to inaccurate interpretations of student achievement and need. This could ultimately lead to misinformed instructional decisions that could be detrimental to student growth. However, when a student is being evaluated for SLD identification having data from these quick and easy standardized, normed assessments with documented reliability and validity adds valuable perspective when added to the larger BOE.

Informal progress monitoring can be both qualitative and quantitative. The artifacts that are selected to include in the BOE should be selected to demonstrate a student's progress (or lack of progress) towards the identified goal. The evidence might include results of teacher-made assessments, anecdotal observations of mathematical behaviors during instruction, video or images, and parent reports of progress toward the goals of the instruction. These informal measures are sometimes the most powerful for providing formative information for educators and for communicating progress to families.

Interventions

Research on effective math interventions is emerging, but still 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. 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 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)

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 a table 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; Soares, et al. 2018):

- Focus intensely on whole numbers in kindergarten through grade five, and on rational numbers in grades four through eight.
- Instruction should include at least ten minutes devoted to building fluent retrieval of facts.
- Instruction should be explicit and systematic.
- Explicit and systematic instruction should include providing models, verbalization of thought process, and guided practice.
- Practice activities provide students with multiple opportunities to respond using the target mathematics concept or skill.
- 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 (UDL).¹⁴
- Students should have the opportunity to work with visual representations of mathematical ideas.
- The teacher continually monitors students as they practice, providing corrective feedback and positive reinforcement for accuracy and effort.
- Practice activities include a process for measuring individual student performance.
- 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

¹⁴ [CAST – The UDL Guidelines](#)

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)

Mathematics References

Allsopp, D.H., Kyger, M.M., & Lovin, L.H. (2007). *Teaching Mathematics Meaningfully*. Paul H. Brookes.

Artzi, L., Jackson, D., & Marshall, A. (2014). Course Enhancement Module: Multi-tiered systems of supports in mathematics. Gainesville, FL: The CEEDAR Center. Retrieved from <http://cedar.education.ufl.edu/>

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.

Key Shifts in Mathematics. (n.d.). Retrieved from [Common Core State Standards Initiative](#).

Math Recovery®. (n.d.). Retrieved November 08, 2017, from [Math Recovery](#)

New Zealand Maths Numeracy Projects Mathematics Assessment. (n.d.). Retrieved November

08, 2017, from [NZMaths Assessment Tools](#).

Principles To Actions: Ensuring Mathematical Success for All. Reston, VA: NCTM, National Council of Teachers of Mathematics, 2014.

Richardson, K. (n.d.). Assessing Math Concepts for K-3 Mathematics. Retrieved November 08, 2017, from [Assessing Math Concepts](#).

Recommendations for Progress Monitoring in Mathematics. Denver, CO: CoMMIT, Colorado Metro Math Intervention Team, 2016, from [Council for Learning Disabilities : Recommendations for Progress Monitoring in Mathematics CoMMIT \(Colorado Metro math Intervention Team\) \(PDF\)](#).

Section 6: Special Considerations

In this Section:

- Preschool/Young Children
 - Older (Secondary) Students
 - Twice Exceptional
 - Twice-Exceptional Learners & RtI
 - Gifted and SLD Determination/Eligibility
 - Speech-Language Impairment (SLI) and Specific Learning Disability (SLD) Determination
 - Culturally and Linguistically Diverse Students
-

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.

Preschool/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. Ruth Ryder of the Office of Special Education Programs issued a Memorandum¹⁵ on April 29, 2016, to State Directors, Preschool Coordinators, and Head Start Directors stating that RtI cannot be used to delay-deny an evaluation and urging states and LEAs to examine their procedures and practices to ensure that preschool children suspected of having a disability do not face delays or denials for timely initial evaluations. To support all children to enter school ready to learn and to fulfill each child’s potential, early identification of significant delays or disability is critical. Preschool aged children in need of special education who are not timely located and identified have lost valuable instruction and service time by school entry. While the Colorado Department of Education is not aware of specific instances in which RtI has been used to delay- deny evaluations for preschool special education under IDEA in Colorado, if RtI is being used with very young children in LEAs, they should ensure that local practices do not delay or deny initial evaluations for special education services. It is also important to point out several other important messages within the memorandum that influence local child find policies, procedures, and practices in Colorado. Specifically, local practices should 1) permit referrals for evaluation from any source, 2) seek parental consent within a reasonable period after the referral for evaluation, and 3) ensure that informed parental consent is obtained prior to conducting individualized screening activities, following IDEA requirements when screening is conducted after the initiation of the special education referral process.¹⁶

Preschool programs in Colorado offer inclusive settings where children with and without disabilities learn together. Because of this philosophical approach that is supported by funding from the Colorado Preschool Program, Head Start, and Preschool Special Education 619, most professionals in local school systems routinely work with children in inclusive settings and can discuss instructional strategies for every child on teams who are all engaged with children in early learning environments. If a child with an IEP is in an early childhood setting, early childhood general and special educators and related services personnel often work together to implement evidence-based strategies. These teams with all children within the integrated setting and participate on data-driven decision-making teams that make referrals when there is a concern about the development of a child.

¹⁵ [OSEP Memo on Preschool RtI](#)

¹⁶ [CDE response to OSEP Memo](#)

Young children have distinct developmental trajectories 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, children’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 social emotional learning, environment, and the experiences of young children cannot be understated as it relates to development. Young children are just beginning to show preferences and are also learning to self-regulate. It is often difficult to distinguish preferences from experiences or lack of exposure to rich learning environments. 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 aged child who has been identified with a disability under the eligibility category of *Developmental Delay*¹⁷ turns nine years of age, the multidisciplinary team must have chosen a different eligibility category under IDEA. If a specific learning disability is suspected after the child has turned six, the Rtl process must be implemented as this is a component of eligibility and the new eligibility must be in place by the ninth birthday. Because academic skills are just beginning to develop in young children, it is often difficult to validly determine a specific academic deficit during the

¹⁷ [The CDE Technical Assistance on Development Delay \(PDF\)](#)

early childhood years. The category of *Developmental Delay* reduces inaccurate disability categories being determined for children between the ages of six and nine years.

The Division of Early Childhood of the Council for Exceptional Children, the National Association for the Education of Young Children, and the National Head Start Association issued a joint paper to define early childhood response-to-intervention frameworks and to promote a broader understanding and discussion of the topic in 2013. [Frameworks for Response to Intervention in Early Childhood: Description and Implications](#)¹⁸ includes 1) a broad definition and defining features of evolving RtI frameworks in early childhood settings, 2) descriptions of common misconceptions about RtI in these settings, and 3) identification of future research and practice directions. In the few short years since paper was released, it has been referenced widely, promoting more effective and efficient instructional systems of support to all young children. The position statement is under current review and revision to expand the focus to a Multi-Tiered System of Supports (MTSS). This new paper should be released in the fall of 2019. The current Frameworks paper continues to be relevant in that it addresses each child as having differing needs and that instructional and behavioral systems of supports must match and address those needs. For more in depth information on identifying young children, see the [Guidelines for Identifying Young Children with Special Needs](#).¹⁹

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

¹⁸ [Division for Early Childhood of the Council for Exceptional Children Position Statement Frameworks for Response to Intervention in Early Childhood: Descriptions and Implications \(PDF\)](#)

¹⁹ [CDE Guidelines for Identifying Young Children with Special Needs \(PDF\)](#)

available, a gap can be determined, and a timeline is agreed upon, Rtl 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 they respond adequately to that instruction.

It should also be noted that a major component of Rtl 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 state standardized assessments 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 Rtl 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

Twice-exceptional students are those who are identified as gifted according to state criteria in one or more of the categories of giftedness (cognitive, academic, creative, leadership, or arts)

AND

Identified with a disability according to federal/state criteria, and the disability qualifies them for either an IEP or a 504 plan.

Historically, many twice-exceptional (2e) students with learning disabilities were overlooked for services, either gifted programming or services and accommodations to support the disabilities. This was due to several issues, including perceptions that a student identified with a learning disability cannot also be gifted, or vice versa, that a gifted learner cannot also have a learning disability. These students were also often not identified because of the gifted student's ability to mask a deficit by compensating with the use of an area of strength 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 many students going unidentified for needed services.

Under the discrepancy model for identification of Perceptual/Communicative Disabilities (now known as SLD), it was possible for students who were recognized as gifted to also be identified for special education. Under this discrepancy model, essentially there had to be a significant gap between the student's IQ and achievement. The problem with the discrepancy formula is that for many impacted students, the IQ score was already depressed or in some cases, even fell over time as the disability continued to interfere with performance. To become eligible for special education services under this model, the student would have to wait to be far enough behind (or "wait to fail") 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 Learners & RtI:

In contrast, the Response to Intervention (RtI) model creates more opportunities for twice-exceptional students to receive support. Screening is built-in so that these students may receive interventions and specialized instruction long before they would have been in the past.

The problem-solving process of RtI can address a variety of academic and behavioral difficulties that are often present in twice-exceptional students (e.g., Attention Deficit Hyperactivity Disorder, anxiety, lack of motivation, obsessive compulsive disorder, difficulties in reading or writing, etc.) through focused interventions. Instead of immediately evaluating for special education, educators on the problem-solving team, (which should include general education teachers as well as family members and other educators knowledgeable about gifted, special education, and/or twice-exceptionality), use data to initiate the implementation of interventions that make both instructional and diagnostic sense.

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.

Twice-exceptional students who are good at masking their disability may be picked up through this screening process and interventions are prescribed and implemented without the need of a special education label. Screening that assesses specific academic skill attainment (such as phonemic awareness and decoding) may pick up on difficulties early, when targeted intervention is most effective, whereas global outcome assessments may not detect these specific areas of underachievement. In some cases, though, the talents and strengths of twice-exceptional students may help them compensate such that they score just below or at benchmarks on these screening tools even in areas of disability. However, when paired with observation and other instructional data, the results of these screening tools may still suggest a need for targeted interventions.

Many of the attributes of an Rtl model are helpful to twice-exceptional students. Educators can use interventions and SMART goals to support the strength area of these students; strengths-based programming is empowering for twice-exceptional students. Plus, for those twice-exceptional students for whom the identified disability is overshadowing the gifted area, the attributes of Rtl, particularly the use of SMART goals, targeted interventions, and progress monitoring, provide an opportunity to meet the needs of these gifted students. Family, school and community 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 major advantage to providing interventions at the earliest indication of difficulty is that twice-exceptional students greatly benefit from both early screening of specific skills or content and the provision of targeted interventions. Given the talents and strengths of some twice-exceptional students as noted above, these students may progress quickly through appropriate and targeted instructional interventions. In other cases, twice-exceptional students will still benefit, but they may struggle as the instructional interventions target a truly impacted area of deficit or they may require a variety of research-based interventions be attempted in order to show growth in the deficit area.

As indicated in the Colorado definition of “twice-exceptional,” Section 504 plans are appropriate for many twice-exceptional students. Under the eligibility requirements for Section 504 plans, the identified disability impacts the twice-exceptional students in one or more major life activities, including learning. Typically, what this means is that the disability is found to interfere with the

student’s access to learning opportunities and the Section 504 plan “levels the playing area.” Twice-exceptional students need accommodations (e.g., extended time, use of assistive technology, preferential seating, etc.) within their learning environment to be successful. A student need not be determined eligible for special education—Section 504 plans can serve to protect and identify specific accommodations that will benefit them throughout their schooling.

For those students formally identified within their district as gifted, a plan must be written. This gifted plan (called an Advanced Learning Plan in Colorado) should align with other learning plans in the building. Ideally, not only should the ALP reference the Section 504 plan or IEP, but the IEP or Section 504 plan should sync with the strength areas identified in the ALP so that accommodations, interventions, and services are designed to support growth in both the areas of disability and giftedness. (In Colorado, there is an emphasis on strengths-based goals in both ALPs and IEPs, which is truly best practices for twice-exceptional students.) Advanced Learning Plans also must include an affective goal addressing the social-emotional needs of the twice-exceptional learner.

Gifted and SLD Determination/Eligibility

Eligibility for special education services in the category of SLD will still be appropriate for some twice-exceptional 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, twice-exceptional students will have had instructional opportunities to address, and possibly 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 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 (SLI) and Specific Learning Disability (SLD)

With the inclusion of oral expression and listening comprehension as two areas of need that may identify a student with Specific Learning Disability, confusion has occurred among eligibility teams when determining whether a student should be identified as having a speech or language impairment or a specific learning disability. This document is intended to provide guidance to eligibility teams in making eligibility decisions.

Oral Expression and Listening Comprehension are two foundational language skills for learning. Both comprehension and expression are essential to academic achievement in all content areas (Aram & Nation, 1980; Catts, Fey, Zhang & Tomblin, 1999; Catts, Fey, Tomblin, & Zhang, 2002; 2010-1).

Oral expression refers to a person's ability to express or communicate their wants, needs, thoughts, and ideas. This is accomplished by using appropriate syntactic, pragmatic, semantic, and phonological language structures. In the school setting, this is important not only for communicating basic wants and needs and developing social relationships, but also to perform classroom assignments and activities related to higher order language skills, such as answering questions, making predictions, comparing and contrasting ideas, expressing ideas, explaining thoughts, retelling stories, categorizing, making references, and verbal problem solving.

Listening comprehension refers to a person's ability to understand spoken language. This includes not only the explicit meaning of a message, but also the implications and underlying assumptions that may be unspoken. Listening comprehension skills directly impact the ability to follow directions, comprehend questions, and comprehend academic concepts taught in the classroom through discussion or lecture. Listening comprehension also includes the ability to make connections to previous learning and is directly affected by a student's auditory processing skills as well (auditory attention, auditory memory, and auditory perception).

Skill deficits in the areas of Oral Expression and Listening Comprehension frequently impact other areas of learning such as reading comprehension, reading fluency, written expression, as well as a student's behavior, and/or social interactions. For example, listening comprehension skills are the foundation on which reading comprehension is built. Therefore, if a student shows deficits in reading comprehension, the problem-solving team should also look at the student's listening comprehension skills.

Early receptive and expressive language delays may be predictive of later developing academic difficulties. Typically, students would not be identified as having SLD prior to receiving formal academic instruction. If language deficits are present, the identification of SLI may be more appropriate in earlier grades. As the language demands of the curriculum increase, consideration should be given to Oral Expression or Listening Comprehension as a specific learning disability in order to meet educational needs related to curricular standards.

Assessment Considerations

If a student has deficits in the areas of oral expression and/or listening comprehension that are identified through language assessments administered by a speech-language pathologist (SLP), the eligibility team should consider the student's response to interventions and decide whether the disability is a language impairment or a specific learning disability.

A speech or language impairment is indicated when a student's language skills are significantly below those of same aged peers as determined through normative assessment. And, there is evidence that the student's language needs have an adverse effect on educational performance.

A specific learning disability (SLD) is indicated when a student demonstrates a deficit, documented through normative assessment measures, that does not respond as expected to targeted and/or intensive interventions. Students previously identified with speech or language impairment who have been receiving services targeting oral expression and/or listening comprehension will have response to intervention data from the interventions provided by the SLP and may qualify for special education services under the SLD disability category. During any subsequent evaluation, the team may determine that the student qualifies as having a specific learning disability rather than a speech or language impairment. The student may continue to receive services from the SLP under either category if there is a documented need for the services for the student to receive FAPE.

The IEP team may want to consider the specific learning disability eligibility category if the student is:

- not making sufficient progress with the level of services provided by the speech-language pathologist,
- not achieving at the expected rate with language-based academics, and
- not progressing with reading, writing skills on grade level,

It is known that children with specific language impairment are at risk for later academic difficulties, in particular, for reading disabilities. Studies have indicated that as many as 40-75% of children with SLI will have problems in learning to read, presumably because reading depends upon a wide variety of

underlying language skills, including all the component language abilities, such as grammar and syntax, semantics, and phonological skills.

Identification from speech or language impairment to specific learning disability: oral expression and/or listening comprehension may occur in a variety of ways:

1. The student is suspected of having a language disability age an early age and the evaluation process reveals a Speech or Language Impairment (SLI). As the student progresses through the grades his/her academics lag behind peers indicating that the language impairment may be interfering with the student's ability to learn at expected rates. The team should consider if the student needs additional services to intensify the interventions (e.g., special education support); or, a re-evaluation to determine if this is a language-based learning disability.
2. The student has been supported through differentiated and targeted interventions to address the oral expression or listening comprehension deficits and is not responding as expected. Skill deficits in listening comprehension (LC) and oral expression (OE) may manifest in basic reading skills, reading fluency, and reading comprehension, as well as in written expression. Listening comprehension is closely linked to reading comprehension. The progress from the targeted interventions provides data for the decision-making for a Specific Learning Disability (SLD) determination.

Culturally and Linguistically Diverse Students

Just like with native English speakers, a culturally and/or linguistically diverse student may be determined to have a Specific Learning Disability that prevents the child from receiving reasonable educational benefit from general education if a body of evidence demonstrates the following criteria are met:

- (1) The child does not achieve adequately for the child's age or to meet state-approved grade-level standards and exhibits significant academic skill deficit(s) 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: Oral expression; Listening comprehension; Written expression; Basic reading skill; Reading fluency skills; Reading comprehension; Mathematical calculation; Mathematics problem solving; 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 identified ... <above> ...when using a process based on the child's response to scientific, research-based intervention.

Colorado ECEA Rule 2.08 (8) (b)

However, it is important to remember that Specific Learning Disability does not include learning problems that are primarily the result of... cultural factors...or limited English proficiency.

Colorado ECEA Rule 2.08 (8) (a).

Cultural, economic, and environmental factors are more complex and, thus, more difficult to address in examining the primary cause of poor achievement. These conditions 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). When speaking about students that are culturally and linguistically diverse, it is important to consider that a student's linguistic ability falls on a continuum and therefore is not limited to students who are identified as English learners. However, specific to ELs is the fact that language proficiency needs to be determined by a multitude of factors which is why a robust body of evidence including formal and informal data is essential. In order to rule out limited English proficiency as the primary cause of learning difficulties, IEP teams must document and examine multiple measures/points of evidence that guide them in determining if the language difference is a learning disability.

To ensure appropriate identification of an individual with a SLD, unbiased assessment procedures should be used. Most importantly, we must not only consider the students' English language proficiency, but also consider cultural factors in determining appropriate assessments and other evaluation materials. A referral to special education evaluations may not be delayed due to the students' English language proficiency or the students' participation in a language instruction Educational program. Appropriate disability identification processes that evaluate the students' disability-related educational needs and NOT the students' English language skills will help school personnel to accurately identify students in need of special education services. In addition, educators need to ensure a students' special education evaluation is "provided and administered in the students' native language or other mode of communication and in the form most likely to yield accurate information about what the student knows and can do, unless it is not feasible to do so" [34 C.F.R. § 300.304(c) (ii)]. Assessing whether a student has a disability in his or her native language can in specific circumstances help to determine if a need stems from the lack of English language proficiency and/or a students' disability-related educational need. Evidence of a disability would be found across languages just as it would across content areas.

Various cultures may hold unique views regarding the level of functioning and skills expected of children at certain ages. Therefore, school teams must be culturally responsive in identifying a student with a SLD. Unbiased assessment is not a particular test or instrument, but rather a process of gathering information about an individual through a problem-solving approach that considers the influence of culture and language. Furthermore, norm-referenced standardized assessments may not be adequately normed on groups with a similar demographic profile as an individual student calling into question these tools' validity and reliability. Evaluation of culturally and linguistically diverse students should be conducted in the student's dominant spoken language or alternative communication system. However, in the case of suspicion of a specific learning disability, the IEP team should first determine the scope of exposure to instruction in both the native language and English. This will also inform the team's decision to assess a student in one language or another or in both. All student information should be interpreted in the context of school expectations with consideration given to the student's socio-cultural background and the home and neighborhood setting in which he or she is functioning. The use of evaluations printed in the student's native language is preferred. It is more valid and reliable to use an evaluator who is fluent in the student's dominant language than to use an interpreter.

Additional information, guidance documents, and presentations are posted on the Exceptional Student Services/Colorado CLD webpage, [Multilingual Learners Identified or Suspected of Having Educational Disabilities](#).

Key Points

- AUs must identify, locate, and evaluate MLs with disabilities in a timely manner.
- AUs must consider the English language proficiency, cultural background and prior academic experiences, cultural background and prior academic experience of MLs with or suspected of having or suspected of having disabilities in determining appropriate assessments and other evaluation materials for an effective assessment plan for an effective evaluation plan.
- Reliability of native language assessment results is dependent upon the MLs prior academic experiences, home language practices and current language of instruction.
- AUs must provide and administer special education evaluations in the child's native language, unless it is clearly not feasible to do so, to ensure that a student's language needs can be distinguished from a student's disability-related needs.
- AUs **MUST NOT** identify or determine that ML students are students with disabilities

because of their limited English language proficiency.

- AUs must provide ML students with disabilities with both the language assistance and disability-related services they are entitled to under federal law. ([OELA Toolkit 2016](#))

Furthermore, specialized instruction should always incorporate linguistic scaffolds and supports as they relate to a student’s level of language proficiency ([2021 Dear Colleague letter](#))

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

When Rtl is implemented with culturally and linguistically diverse learners, it is critical that the prereferral intervention process is culturally and linguistically responsive; that is, educators must ensure students’ socio-cultural, linguistic, racial/ethnic, and other relevant background characteristics are addressed at all stages, including reviewing student performance, considering reasons for student difficulty or failure, designing alternative interventions, and interpreting assessment results (Ortiz, 2002). Furthermore, a body of evidence from an RTI process should also comprehensively articulate the scope of ELD services provided to the student, results of progress monitoring data, level of motivation and engagement of the student in ELD and across content areas. There should also be documentation of academic interventions provided, their duration, the rate of growth, and a description of layered linguistic supports provided to ensure comprehensibility for the ML. Without such considerations, prereferral intervention practices may not result in improved student outcomes and may result in disproportionate representation in special education.

- In the general classroom, teacher planning and curriculum are aligned with the Colorado English Language Proficiency Standards (CELP) and the Colorado grade level academic content standards.
- The selection of interventions must be culturally responsive and linguistically appropriate instruction taking into consideration the MLs level of English language proficiency.
- Professionals with training, and expertise, in second language acquisition and how to differentiate between the student’s needs stemming from a disability or lack of English language proficiency should be part of the Rtl and eligibility process to ensure a layering of linguistic supports on top of academic or behavioral interventions.
- Involve an interpreter when discussing strategies, supports, and/or special education eligibility to ensure that the student’s family understands the proceedings of the team meeting. A thorough medical, social/cultural and academic history is an important 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, gender, age, time in the country 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. Using comparative data from the district should be used to make decisions if an ML student needs a referral to a Tier II or III intervention and/or special education evaluation.

Data for English language learners should always include the home language survey, informal language proficiency scores, and ACCESS scores, when available. This information should be reviewed with professionals who have training, and expertise in second language acquisition and instruction in order to differentiate between the student's needs resulting from a disability or lack of English language proficiency. This will also help to determine instructional implications for appropriate scaffolding and support for the student to access instruction.

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. In many instances these stages are not linear, therefore ongoing collaboration and consultation with an ELL specialist may be necessary to account for progress monitoring data around the student's English language development progress.

ELD 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.

We need to ask ourselves, "What does it mean when MLs do not respond to 'research-based' instruction" and consider the following guiding questions:

- To what extent might students be struggling because of limited English proficiency?
- To what extent might students be struggling due to issues of acculturation?
- Has adequate support in English language development been provided?
- To what extent has the "research-based" instruction been validated with MLs?
- Are most of the MLs in the classroom succeeding, while just one or two are not? Or, are most MLs struggling?
- How should we decide what additional support to provide?
- What linguistic supports have been embedded within evidence-based instruction?
- Has the student engaged in formal education in their native language?

When it comes to assessment and determining eligibility for special education, consider the following:

- assessments must yield valid and reliable results with the population they are being

administered to, be culturally responsive to the culture of the student, 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 when assessing in the native language is appropriate.
- If the student has not received formal education in their native language, it may not be appropriate to assess the child in their native language.
- When it has been determined that the student has received any amount of instruction in their native language, best practices should be to assess them in both English and their native language.
- Translation and interpretation of any standardized assessment inherently undermine the validity and reliability of the assessment tool and any resulting data. Therefore native language assessment administered by bilingual personnel that are trained in evaluation is considered the gold standard.

Section 7: Frequently Asked Questions Related to SLD Identification

In this section:

- [What is the relationship between dyslexia and SLD?](#)
- [Why might a child diagnosed as having dyslexia not be found eligible for special education within the category of Specific Learning Disability?](#)
- [How do an RtI framework and the new SLD eligibility requirements affect the transition process of school to community and/or post-secondary education?](#)
- [What impact does the new SLD eligibility criteria have on “slow learners”?](#)
- [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?](#)
- [If a child has been retained, how should a multidisciplinary team determine low academic achievement?](#)
- [What should happen when a child transfers schools and he/she is in the RtI/Problem-Solving Process and/or SLD is suspected?](#)
- [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?](#)
- [How can an Independent Educational Evaluation be conducted considering the role of the RtI process in the determination of SLD?](#)

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 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.

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.

Why might a child diagnosed as having dyslexia not be found eligible for special education within the category of Specific Learning Disability?

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 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—particularly in the SLD area of “Basic Reading Skill.” (8 areas of SLD are specified in both federal and state regulations/rules.)

Disagreements as to special education eligibility sometimes arise when a parent or other advocate believes that because a child exhibits characteristics of dyslexia, that child should automatically be identified as having a specific learning disability (SLD) and be found eligible for special education services, even if the child is performing at or near grade level in the area or areas of concern. Often, the rationale given is that the child has also been assessed to have an above average IQ and, therefore, should have above average academic skills. Another common rationale given is that learning is difficult for the child because of the dyslexia, even though the child is achieving at or close to age/grade level standards.

Although school personnel do not typically diagnose dyslexia, screening of the five components of reading (including word level reading skills) and providing research-based intervention at the first detection of difficulty should be occurring through an effective Rtl 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 (as compared to age or grade-level norms/standards) even after targeted/intensive interventions and who are making insufficient progress after reasonable attempts at remediation through these interventions.

While specific learning disabilities, which may include dyslexia, cannot be cured, explicit instruction can promote reading success and alleviate many difficulties associated with them. Instruction for individuals with reading disabilities/deficits 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.

Partnering with families to address academic concerns is essential, regardless of the eligibility decision that is made. The provision of specific instruction/intervention to address an identified need may be addressed through a general education problem-solving process (e.g., as part of a school-wide *Multi-Tiered System of Support and Response to Intervention* approach). Furthermore, some students not found eligible for special education may be appropriately determined to require accommodations through a 504 Plan.

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.

Colleges and other post-secondary training institutions, common settings for high school graduates who have specific learning disabilities, usually do not administer 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 Rtl 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 intellectual disability (ID), 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 Rtl 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 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. Based on 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.]

(71 FR 44656)

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

Assessment Types

There are four major types of assessment used to drive instructional decisions. They are 1) screening, 2) progress monitoring, 3) diagnostic, 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) using 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 several factors, including the program or strategy 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.

Orthographic Memory

This refers to the memory for the specific letter order of a word or part of a word. Orthographic memory allows readers to instantly and effortlessly recognize a word as familiar without

sounding it out or guessing. It also applies to familiar word parts, whether they are phonetically regular (e.g., *–ent*) or irregular (e.g., *–ough*). A more precise orthographic memory is required for spelling than is required for reading. For example, more adults can instantly recognize words like *colonel*, *licorice*, and *rendezvous* than can accurately spell them.

Phoneme

The written characters (i.e., letters) in alphabetic languages are designed to represent units of sound called *phonemes*. Phonemes are the smallest units of speech. For example, the word *sat* has three phonemes, /s/ /a/ /t/. In most alphabetic languages, phonemes align closely with the written letters. English has many exceptions to that. For example, *shoe* has four letters but only two phonemes, /sh//u/.

Phonological Memory

When we hear a word we have heard before, and recognize it as familiar, it is because that word resides in our phonological memory. When we hear a word we have never heard before, we will create a phonological memory of that word so it will sound familiar the next time we hear it. Typically, we know the meaning of such familiar-sounding words, but we sometimes hear words we have heard before but do not quite know what they mean. This is particularly true of English Learners who routinely hear words for which they have yet to know the word's meaning. Nonetheless, they know they have heard it before because it is in their phonological memory. If they knew the word's meaning, it would be in their semantic memory.

Problem-Solving Process

The problem-solving process is an interdisciplinary, collaborative team process 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 (PST)

A collaborative team (which includes parents and 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.

Semantic Memory

The word *semantic* denotes “meaning.” Semantic memory refers to the memory for the meaning of words and phrases. Some words have multiple meanings and thus multiple entries in semantic memory (e.g., *ring, match*). Many phrases or expressions have their meaning in the whole phrase, not the individual words (e.g., to “show someone the door” means to ask them to leave, not to ask them to examine the wood, hinges, and door handle).

Sight Vocabulary (Orthographic Lexicon)

An individual’s sight vocabulary refers to the pool words a person already knows so they are instantly and effortlessly recognized “on sight.” It does not matter whether the word is phonetically regular (e.g., *cake, sit*) or irregular (e.g., *of, put*). It also does not matter if it is a high frequency word (e.g., *hat, one*), or a low frequency word (e.g., *ambidextrous, catapult*).

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.

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.

[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.

Colorado Department of Education. (2017, July) *IEP Procedural Guidance*. Retrieved from [CDE Procedural Guidance](#)

Colorado Department of Education. Materials from RtI Implementation Team (2006–2007).

Colorado Department of Education. Materials from Specific Learning Disability Committee (2006–2007).

Center on Response to Intervention. (n.d.). Progress Monitoring. Retrieved from <https://rti4success.org/essential-components-rti/progress-monitoring>.

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.

Florida's Problem Solving/Response to Intervention (PS/Rtl) Project. (n.d.). Problem-Solving using the ICEL/RIOT Matrix. Retrieved from [University of South Florida's Florida Problem Solving/Response to Intervention Project](#).

Fountain–Ft. Carson School District Rtl 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.

Kilpatrick, D. A. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. Hoboken, NJ: Wiley.

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](#)."

[Pikes Peak Literacy Strategies Project](#)

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.