# **Specific Learning Disability Identification**



# A Guide for Teams to Determine Eligibility

This document was created by practitioners in the Poudre School District during the 2009-2010 school year. We would like to thank the Fountain-Fort Carson School District in Fort Carson, Colorado, for allowing us to use their Specific Learning Disabilities Guide as a model for developing this document.

Sarah Belleau – Director of Special Education Laurie Corso – Principal, O'Dea Elementary Evelyn Jacobi – Student Success Coach John Passantino – Assessment & School Support Team Coordinator Cori Ann Ramirez – School Psychologist The purpose of this guide is to support teams in determining whether a student meets the criteria for an identification of a Specific Learning Disability. This document is based on the Colorado Department of Education Rules for the Administration of the Exceptional Children's Educational Act Specific Learning Disability Guidelines (2013).

It is required that the Student Success Team implements a comprehensive problem-solving process, including multi-tiered systems of support, prior to the evaluation for a Specific Learning Disability. State and Federal guidelines indicate that teams must determine that the child does not achieve adequately for the child's age or to meet state-approved grade-level standards, AND the child does not make sufficient progress to meet age or state approved grade-level standards when using a process based on the child's response to scientific, research-based intervention as determined by a body of evidence.

Teams must identify academic skill deficit **and** insufficient progress to determine a Specific Learning Disability through the collection of student achievement data over time that includes:

- Direct measures of academic performance in relation to grade level expectations and state standards, **and**
- Results monitoring the student's response to research-based intervention, and
- One or more assessments to identify academic skill deficits in one of the educationally relevant areas of SLD.

The most important expectation of identifying a specific learning disability is that a comprehensive school-wide problem-solving process is in place and utilized to support students who have an identified need. Schools should only use this guide after a comprehensive problem-solving process has been followed to support targeted and intensive interventions in the general education setting.

A parent does have the right to request an evaluation. When this occurs, the Integrated Services Staffing Team must formally consider this referral. If the team accepts the referral based upon educational relevance and sufficient data, then the Staffing Team would proceed with obtaining parent consent to evaluate and complete the evaluation within 60 calendar days of signed consent. If the Staffing Team determines there is not educational relevance related to the request and/or sufficient data are not present, they would complete a Prior Notice of a Special Education Action, thoroughly documenting the reasons for their decision not to evaluate. The Staffing Team would meet with school personnel involved with the student as well as the parents to determine next steps.

# Specific Learning Disability Exclusionary Factors Worksheet

As a team, determine the presence or absence of the exclusionary factors listed below. For each factor determined to be present for the student, the team must decide whether that factor is a PRIMARY factor for the student's inability to progress in the general education curriculum. If one or more factors are determined to be the primary cause, the student cannot be found eligible for special education services using the SLD identification.

	Not Present	Present	Primary Factor
1. The presence of Other Disabilities as Defined by Law			
Does the student meet criteria for any other special education disability category, including: visual impairment, including blindness; hearing impairment, including deafness; orthopedic impairment; intellectual disability; and serious emotional disability.			
impairment; intellectual disability; and serious emotional disability.			
2. Lack of Instruction in essential components of reading and math			
Does information obtained during the Response to Intervention process or regarding prior			
educational environments indicate that the student's inability to make progress academicall	y		
is a result of a lack of research-based instruction in reading or math?			
3. Limited English Proficiency			
Is there a language other than English spoken by this student?			
Is there a language other than English spoken in this student's home?			
Are there any specific dialect or cultural influences that would affect this student's ability to			
speak or understand English?			
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<b>4. Environmental, Cultural, or Economic Disadvantage</b> Does information obtained during the Response to Intervention process or regarding the	<u> </u>		
student's prior experiences indicate that a lack of opportunity to learn due to environmental	1		
cultural, or economic disadvantage.	-,		
5. Motivational Factors			
Was intervention necessary to increase the student's motivation to complete work and enga in academics?	ge		
Does information gathered indicate a lack of motivation is the determinant factor?			
If 'Yes' is indicated on either item above, please attach documentation of intervention and results			
6. Situational Trauma			
Has the student's academic performance fallen dramatically within the last 6-12 months?			
Is there knowledge of any situations within the student's life that would contribute to a drop	n in		
academic performance?	, 111		
Does the information obtained during the Response to Intervention process indicate that the	ρ		
student's inability to make progress academically is related to situational trauma?	5		
7. Atypical Educational History			
Has irregular school attendance impacted the student's ability to access research-based instruction on a consistent basis in order to make academic gains?			
Has attendance at multiple schools impacted the student's ability to access research-based			
instruction on a consistent basis in order to make academic gains?			
If 'Yes' is indicated on either item above, please attach educational history and attendance history	<u> </u>	<u> </u>	
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# **Insufficient Progress Checklist**

Teams must identify insufficient progress in one or more of the 8 educationally relevant areas to determine a Specific Learning Disability. **Please attach the following documentation to demonstrate insufficient progress:** 

relativ docun • • • •	nt Success Team Document identifying research-based interventions we to the area(s) of deficit. The following should be included in this nent: The student has had consistent access to universal core instruction Universal instruction for ELL learners has been delivered utilizing best practices (ELA and/or MCAT has been involved) Research-based interventions have been implemented Interventions were selected based on the skill deficit identified Interventions were monitored for fidelity of implementation A progress monitoring tool was used to monitor the efficacy of the interventions The interventions were modified based on the results of the progress monitoring tool ary of interventions, including duration, frequency and intensity
Does t provid	of progress monitoring data he evidence suggest that an evaluation should occur at this time? Please le a rationale for either accepting or declining the referral for special tion evaluation:

# **SLD Academic Skill Deficit Worksheet**

# To qualify a student as eligible for Special Education services under the SLD label, the student must meeting the following criteria:

"The child does not achieve adequately for the child's age or does not meet state-approved grade-level standards in one or more of the areas identified below, when provided with learning experiences and instruction appropriate for the child's age or state-approved grade-level standards <u>AND</u> the child does not make sufficient progress to meet age state-approved grade-level standards in the area(s) identified when using a process based on the child's response to scientific, research-based intervention as determined by a body of evidence demonstrating academic skill deficit(s) and insufficient progress in response to scientific, research-based intervention."

Subject Area	<b>P.M. Tool</b> (DIBELS, Aimsweb, EasyCBM, MBSP, etc.)	Typical Student's Score or percentile	Is there adequate progress?	Is student receiving significant support?
			Yes No	Yes No
			Yes No	Yes No
			Yes No	Yes No
			Yes No	Yes No
			Yes No	Yes No

#### Part I – Progress Monitoring Data

Part II-Based on the student's like-population peers (ethnicity, SES, ELL, etc.) how does this student compare?

Similar to like-population?	Significantly different from like-population?	

# Part III-Based on the body of evidence that has been collected, circle the student's suspected area(s) of deficit:

Oral Expression	Basic Reading	Math Calculation
Language Comprehension	Reading Comprehension	Math Problem Solving
Written Expression	Reading Fluency	

#### Part IV-What additional diagnostic assessments need to be administered to determine if an SLD exists?

Assessment	Targeted Skill	Student's Score	Deficit Marker	Is there a deficit?

### **Determining SLD Academic Skill Deficit**

Qualified assessment staff may use the following measures to determine a student's academic skill deficit. Listed below are measure options that include appropriate ages for each assessment. 1 ½ to two standard deviations below the mean is a general guideline for determining skill deficit. The deficit markers identified below are not intended to be hard cut-points but rather a guide for evaluating the student's performance within a body of evidence. The body of evidence should demonstrate that the student is performing significantly below his/her peers. Consideration should be given to the level of intervention, including duration/frequency/intensity, when determining eligibility.

Oral Expression				
Test	Type	Age	Deficit	
		Range		
OWLS	NR	5 - 21	<u>&lt;</u> 12%ile	
TOLD-4	NR	4 - 17.11	<u>&lt;</u> 12%ile	
CASL	NR	3 - 21	<u>&lt;</u> 12%ile	
CELF-4	NR	6 - 21	<u>&lt;</u> 12%ile	
CELF-PS	NR	3 - 6	<u>&lt;</u> 12%ile	
PLSI	NR	5 - 12.11	<u>&lt;</u> 12%ile	
PLS-4	NR	0 - 6	<u>&lt;</u> 12%ile	
WIAT-III	NR	4 - 50.11	<u>&lt;</u> 12%ile	
TOPL-2	NR	6 - 18.11	<u>&lt;</u> 12%ile	
TNL	NR	5.11 - 12	<u>&lt;</u> 12%ile	
CCC-2	NR	4 - 16.11	<u>&lt;</u> 12%ile	
K-SEALS	NR	3 - 6.11	<u>&lt;</u> 12%ile	

Basic Reading					
Test	Туре	Age Range	Deficit		
TEDA 2	ND	24.04	109/ 1		
TERA-3	NR	3.6 - 8.6	<u>&lt;</u> 12%ile		
СТОРР	NR	5 - 24.11	<u>&lt;</u> 12%ile		
WIAT-III	NR	4 - 50.11	<u>&lt;</u> 12%ile		
Reading Fluency					
Test	Туре	Age Range	Deficit		
GORT-4	NR	6 - 18.11	< 12%ile		

# GOR 1-4 NR 6 - 18.11 <12%/le</th> TOWRE NR 6 - 24 <12%/le</td> WIAT-III NR 4 - 50.11 <12%/le</td>

#### **Reading Comprehension**

Test	Туре	Age Range	Deficit
GORT-4	NR	6 - 18.11	<u>&lt;</u> 12%ile
TORC-4	NR	7 - 17.11	<u>&lt;</u> 12%ile
GRADE	NR	preK-12 <sup>™</sup>	<u>&lt;</u> 12%ile
WIAT-III	NR	4 - 50.11	<u>&lt;</u> 12%ile

#### Listening Comprehension

Test	Туре	Age Range	Deficit
CELF-4	NR	6 - 21	<u>&lt;</u> 12%ile
PLS-4	NR	0 - 6	<u>&lt;</u> 12%ile
CASL	NR	3 - 21	<u>&lt;</u> 12%ile
TOLD-4	NR	4 - 17.11	<u>&lt;</u> 12%ile
WIAT-III	NR	4 - 50.11	<u>&lt;</u> 12%ile
СТОРР	NR	5 - 24.11	<u> </u>
BBSC-R	NR	2.6 - 8	<u>&lt;</u> 12%ile

#### Written Expression

Test	Туре	Age Range	Deficit	
OWLS	NR	5 - 21	<u>&lt;</u> 12%ile	
TOWL-4	NR	9 - 17.11	<u>&lt;</u> 12%ile	
TEWL-2	NR	3 - 10.11	<u>&lt;</u> 12%ile	
TOWE	NR	6.6 - 14.11	<u>&lt;</u> 12%ile	
WIAT-III	NR	4 - 50.00	<u>&lt;</u> 12%ile	

#### Math Calculation Test Type

Test	Туре	Age Range	Deficit
TEMA-3	NR	PreK-3 <sup>rd</sup>	<u>&lt;</u> 12%ile
TOMA-2	NR	3 <sup>rd</sup> - 12 <sup>th</sup>	<u>&lt;</u> 12%ile
Key Math 3	NR	K - 12 <sup>th</sup>	<u>&lt;</u> 12%ile
WIAT-III	NR	4 - 50.11	<u>&lt;</u> 12%ile

#### Math Problem Solving

Test	Туре	Age Range	Deficit
			Marker
TEMA-3	NR	PreK-3 <sup>rd</sup>	<u>&lt;</u> 12%ile
TOMA-2	NR	3 <sup>rd</sup> - 12 <sup>th</sup>	<u>&lt;</u> 12%ile
Key Math 3	NR	K - 12 <sup>th</sup>	<u>&lt;</u> 12%ile
WIAT-III	NR	4 - 50.11	<u>&lt;</u> 12%ile

#### NR = Norm Referenced Assessment

# Targeted Assessments For the 8 Areas of SLD

## **Oral Expression**

- **1. Oral and Written Language Scale (OWLS)** offers an assessment of written language skills in children and young adults. Its wide age range (5-21) gives you a broad-based record of growth. Three important skill areas are assessed:
  - a. Use of conventions (handwriting, spelling, punctuation)
  - b. Use of syntactical forms (modifiers, phrases, sentence structure)
  - c. Ability to communication meaningfully (relevance, cohesiveness, organization)
- **2. Test of Language Development, Fourth Edition (TOLD-4)** provides six subtests that measure different components of spoken language:
  - a. Sentence Combining
  - b. Picture Vocabulary
  - c. Word Ordering
  - d. Relational Vocabulary
  - e. Morphological Comprehension
  - f. Multiple Meanings
- **3.** Comprehensive Assessment of Spoken Language (CASL) assesses ages 3-21. Fifteen subtests measure language-processing skills-comprehension, expression, and retrievalin four language structure categories: Lexical/Semantic, Syntactic, Supralinguistic, and Pragmatic.
- 4. Clinical Evaluation of Language Fundamentals, Fourth Edition in English & Spanish (CELF-4) is used to assess ages 6-21. Composite scores include Core Language, Receptive Language, Expressive Language, Language Structure, Language Content, Language Memory, and Working Memory Indexes as standard scores. New subtests include Expressive Vocabulary, Word Definitions, Number Repetition, Phonological Awareness, Pragmatics Profile, and the Observational Rating Scale.
- Clinical Evaluation of Language Fundamentals, Preschool Version (CELF-Preschool) is used to comprehensively measure the language skills of children ages 3-6. Includes a variety of subtests including a pre-literacy scale, that provides an in-depth assessment of a child's language skills.
- **6. Pragmatic Language Skills Inventory (PLSI)** is a norm-referenced rating scale used to assess pragmatic language in children ages 5-12.11.

- 7. The Preschool Language Scale, Fourth Edition in English & Spanish (PLS-4) is an individually administered test for identify children from birth through 6 years who have a language disorder or delay and features updated norms and expanded language coverage. PLS-4 targets receptive and expressive language skills in the areas of attention, play, gesture, vocal development, social communication, vocabulary, concepts, language structure, integrative language skills, and phonological awareness.
- 8. Test of Pragmatic Language, Second Edition (TOPL-2) is an individually administered test used to assess individual's ages 6-0 to 18-11. The TOPL-2 allows you to assess the effectiveness and appropriateness of a student's pragmatic language skills. Administered in approximately 45-60 minutes, it tests six core subcomponents of pragmatic language: physical setting, audience, topic, purpose (speech acts), visual-gestural cues, and abstraction. Raw scores, percentiles, standard scores, and age equivalents are provided.
- **9. Test of Narrative Language (TNL)** is used with children ages 5-11 to 12 years of age and assesses a child's ability to answer literal and inferential comprehension questions. The TNL utilizes three narrative formats to assess a child's language skills (no picture cues, sequence picture cues, and single picture cues).
- **10.Children's Communication Checklist, Second Edition (CCC-2)** is a 70-item questionnaire used with children ages 4-0 to 16-11. The CCC-2 assesses for speech, vocabulary, sentence structure, and social language skills. It also screens for general language impairments as well as pragmatic language impairment.
- **11. Kaufman Survey of Early Academic and Language Skills (K-SEALS)** is an instrument designed to measure children's expressive and receptive language skills, pre-academic skills and articulation. Normed for ages 3-6, the K-SEALS is used to test for school readiness, to identify gifted children, and to evaluate early intervention programs. Individually administered in 15-25 minutes, the test includes four scales (expressive, receptive, number, and letter/word skills), three subtests (vocabulary, numbers/letters/words, and articulation survey) and a composite score (early academic and language skills).
- **12. Wechsler Individual Achievement Test (WIAT-III)** is used to assess academic achievement in individuals ages 4-0 to 50-11. The Expressive Vocabulary, Oral Word Fluency, and Sentence Repetition subtests may be utilized as part of the body of evidence when evaluating deficits in the area of Oral Expression.

## **Listening Comprehension:**

- 1. Clinical Evaluation of Language Fundamentals, Fourth Edition in English & Spanish (CELF-4) is used to assess individuals ages 6-21. Composite scores include Core Language, Receptive Language, Expressive Language, Language Structure, Language Content, Language Memory, and Working Memory Indexes as standard scores. New subtests include Expressive Vocabulary, Word Definitions, Number Repetition, Phonological Awareness, Pragmatics Profile, and the Observational Rating Scale.
- 2. The Preschool Language Scale, Fourth Edition in English & Spanish (PLS-4) is an individually administered test for identify children from birth through 6 years who have a language disorder or delay and features updated norms and expanded language coverage. The PLS-4 targets receptive and expressive language skills in the areas of attention, play, gesture, vocal development, social communication, vocabulary, concepts, language structure, integrative language skills, and phonological awareness.
- **3.** Comprehensive Assessment of Spoken Language (CASL) assesses ages 3-21. Fifteen subtests measure language-processing skills-comprehension, expression, and retrievalin four language structure categories: Lexical/Semantic, Syntactic, Supralinguistic, and Pragmatic.
- **4. Test of Language Development, Fourth Edition (TOLD-4)** provides six subtests that measure different components of spoken language:
  - a. Sentence Combining
  - b. Picture Vocabulary
  - c. Word Ordering
  - d. Relational Vocabulary
  - e. Morphological Comprehension
  - f. Multiple Meanings
- **5.** Wechsler Individual Achievement Test (WIAT-III) is used to assess academic achievement in individuals ages 4-0 to 50-11. The Receptive Vocabulary, Oral Discourse Comprehension subtests may be utilized as part of the body of evidence when evaluating deficits in the area of Listening Comprehension.
- 6. Bracken Basic Concept Scale-Revised (BBSC-R) is a diagnostic scale used with children ages 2.6 to 8 years of age to measure basic concept acquisition and receptive language skills.
- **7. Comprehensive Test of Phonological Processing (CTOPP)** was developed to aid in the identification of individuals from kindergarten through 21 years of age who may benefit from instructional activities to enhance their phonological skills. The CTOPP

contains the following subtests: Elision, Blending Words; Sound Matching; Memory for Digits; Onward Repetition; Rapid Color Naming; Rapid Digit Naming; Rapid Letter Naming; Rapid Object Naming; Blending Onwards; Phoneme Reversal; Segmenting Words; Segmenting Nonwords. The CTOPP has four primary uses:

- a. to identify individuals who are significantly below their peers in important phonological abilities;
- b. to determine strengths and weaknesses among developed phonological processes;
- c. to document an individual's progress in phonological processing as a consequence of special intervention programs; and
- d. to serve as a measurement device in research studies investigating phonological processing

## Written Expression:

**1. Oral and Written Language Scale (OWLS)** offers an assessment of written language skills in children and young adults. Its wide age range (5-21) gives you a broad-based record of growth. Three important skill areas are assessed:

- a. Use of conventions (handwriting, spelling, punctuation)
- b. Use of syntactical forms (modifiers, phrases, sentence structure)
- c. Ability to communication meaningfully (relevance, cohesiveness, organization)
- 2. Test of Written Language-Fourth Edition (TOWL-4) is used with students ages 9-0 to 17-11 to assess the conventional, linguistic, and conceptual aspects of writing. It includes seven subtests—five using contrived formats (vocabulary, spelling, punctuation, logistical sentences, sentence combining) and two requiring spontaneous writing samples (contextual conventions and story composition).
- **3. Test of Early Written Language, Second Edition (TEWL-2)** includes two forms, each with a Basic Writing and a Contextual Writing Subtest. It can be used as an individual assessment for children ages 4-10. It allows items to be profiled for diagnosis of strengths and weaknesses. It also provides direction for interpretation and instruction.
- **4. Test of Written Expression (TOWE)** can be administered to individuals or groups of students. It uses two assessment methods to evaluate a student's writing skills. The first method involves administering a series of 76 items that assess different skills associated with writing. The second method requires students to read or hear a prepared story starter and use it as a stimulus for writing an essay (i.e., the beginning of the story is provided and the writer continues the story to its conclusion). The TOWE provides a source of writing samples that can be used independently in a norm-referenced assessment of writing or as a component of a student's portfolio of written products.

**5.** Wechsler Individual Achievement Test, Third Edition (WIAT-III) is used to assess academic achievement in individuals ages 4-0 to 50-11. The Alphabet Writing, Spelling, Sentence Composition, and Essay Composition (word count, theme development, text organization, grammar & mechanics) subtests may be utilized as part of the body of evidence when evaluating deficits in the area of Written Expression.

# **Basic Reading:**

**1. Test of Early Reading Ability-Third Edition (TERA-3)** is a direct measure of the reading ability of young children ages 3-8. Rather than assessing children's "readiness" for reading, the TERA-3 assesses their mastery of early developing reading skills. Standard scores are provided for each subtest. An overall Reading Quotient is computed using the following three subtests:

- a. Alphabet: measures knowledge of the alphabet and its uses
- b. Conventions: measures knowledge of the conventions of print
- c. Meaning: measures the construction of meaning from print

**2. Comprehensive Test of Phonological Processing (CTOPP)** was developed to aid in the identification of individuals from kindergarten through 21 years of age who may benefit from instructional activities to enhance their phonological skills. The CTOPP contains the following subtests: Elision, Blending Words; Sound Matching; Memory for Digits; Onward Repetition; Rapid Color Naming; Rapid Digit Naming; Rapid Letter Naming; Rapid Object Naming; Blending Onwards; Phoneme Reversal; Segmenting Words; Segmenting Nonwords. The CTOPP has four primary uses:

- a. to identify individuals who are significantly below their peers in important phonological abilities;
- b. to determine strengths and weaknesses among developed phonological processes;
- c. to document an individual's progress sin phonological processing as a consequence of special intervention programs; and
- d. to serve as a measurement device in research studies investigating phonological processing

**3.Wechsler Individual Achievement Test (WIAT-III)** is used to assess academic achievement in individuals ages 4-0 to 50-11. The Early Reading Skills subtest may be utilized as part of the body of evidence when evaluating deficits in the area of Basic Reading Skills.

## **Reading Fluency:**

**1. Gray Oral Reading Test, Fourth Edition (GORT-4)** provides a measure of growth in oral reading and an aid in the diagnosis of reading difficulties. Five scores give you information on a student's reading skills in terms of:

a. Rate: the amount of time taken by a student to read a story

- b. Accuracy: the student's ability to pronounce each word in the story correctly
- c. Fluency: the student's rate and accuracy scores combined

d. Comprehension: the student's ability to correctly answer questions related to the content of the story read.

e. Overall Reading Ability: a combination of the student's fluency and comprehension scores.

**2.Test of Word Reading Efficiency (TOWRE)** is used with individuals ages 6-24 to measure their ability to pronounce printed words accurately and fluently. The TOWRE is a quick and efficient way to assess two skills that are critical to overall reading proficiency-the ability to sound out words quickly and accurately and the ability to recognize familiar words as whole units. The TOWRE includes two subtests (sight word efficiency and phonetic decoding efficiency), each available in two equivalent forms. The TOWRE generates percentiles, standard scores, age equivalents, and grade equivalents.

**3. Wechsler Individual Achievement Test (WIAT-III)** is used to assess academic achievement in individuals ages 4-0 to 50-11. The Reading Accuracy, Oral Reading Rate, Psuedoword Decoding and Word Reading subtests may be utilized as part of the body of evidence when evaluating deficits in the area of Reading Fluency.

# **Reading Comprehension:**

**1. Gray Oral Reading Test, Fourth Edition (GORT-4)** provides a measure of growth in oral reading and an aid in the diagnosis of reading difficulties. Five scores give you information on a student's reading skills in terms of:

- a. Rate: the amount of time taken by a student to read a story
- b. Accuracy: the student's ability to pronounce each word in the story correctly
- c. Fluency: the student's rate and accuracy scores combined

d. Comprehension: the student's ability to correctly answer questions related to the content of the story read.

e. Overall Reading Ability: a combination of the student's fluency and comprehension scores.

**2. Test of Reading Comprehension, Fourth Edition (TORC-4)** tests silent reading comprehension that can be used to identify children and adolescents who score significantly below their peers and to document student progress in remedial programs. The test has five subtests, all of which measure word identification and contextual meaning:

- a. Relational
- b. Sentence Completion
- c. Paragraph Construction
- d. Text Comprehension
- e. Contextual Fluency

**3. Group Reading Assessment and Diagnostic Evaluation (GRADE)** is a normative diagnostic reading assessment that determines developmentally what skills students pre-K through 12<sup>th</sup> grade have mastered and where they need instruction or intervention.

4. Wechsler Individual Achievement Test (WIAT-III) is used to assess academic achievement in individuals ages 4-0 to 50-11. The Reading Comprehension subtest may be utilized as part of the body of evidence when evaluating deficits in the area of Reading Comprehension.

# Math Calculation:

**1.Test of Early Math Abilities, Third Edition (TEMA-3)** measures the mathematical performance of children between the ages of 3-8. It is also helpful for older children who have learning difficulties in mathematics. It can be used as a norm-referenced measure or as a diagnostic instrument to determine specific strengths and weaknesses. The test measures both formal and informal concepts and skills in the following domains: numbering skills, numbercomparison facility, and numeral literacy, mastery of number facts, calculation skills, and understanding of concepts. It has two parallel forms, each containing 72 items.

2.Test of Math Abilities, Second Edition (TOMA-2) was developed for use with students in grades 3<sup>rd</sup> through 12<sup>th</sup>. It measures math performance on the two traditional major skill areas in math (i.e., story problems and computation) as well as attitude, vocabulary, and general application of mathematics concepts in real life. This norm-referenced test can be used to monitor progress, evaluate programs and do research. The TOMA-2 has four core subtests (vocabulary, computation, general information and story problems) and one supplemental subtest (attitude toward math).

**3.Key Math-3** is a comprehensive, norm-referenced measure of essential mathematical concepts and skills. Key Math-3 covers the full spectrum of math concepts and skills that are typically taught in kindergarten through 9<sup>th</sup> grade and can be used with individuals 4-21 years of age who are functioning within the K-9 instructional level. The items are grouped into 10 subtests that represent three general math content areas (basic concepts/conceptual knowledge, operations/computations skills; and applications/problem solving).

4.Wechsler Individual Achievement Test (WIAT-III) is used to assess academic achievement in individuals ages 4-0 to 50-11. The Numerical Operations, Math Fluency with Addition, Subtraction & Multiplication subtests may be utilized as part of the body of evidence when evaluating deficits in the area of Math Fluency.

## Math Problem Solving:

**1. Test of Early Math Abilities, Third Edition (TEMA-3)** measures the mathematical performance of children between the ages of 3-8. It is also helpful for older children who have learning difficulties in mathematics. It can be used as a norm-referenced measure or as a diagnostic instrument to determine specific strengths and weaknesses. The test measures both formal and informal concepts and skills in the following domains: numbering skills, number-

comparison facility, and numeral literacy, mastery of number facts, calculation skills, and understanding of concepts. It has two parallel forms, each containing 72 items.

**2. Test of Math Abilities, Second Edition (TOMA-2)** was developed for use with students in grades 3<sup>rd</sup> through 12<sup>th</sup>. It measures math performance on the two traditional major skill areas in math (i.e., story problems and computation) as well as attitude, vocabulary, and general application of mathematics concepts in real life. This norm-referenced test can be used to monitor progress, evaluate programs and do research. The TOMA-2 has four core subtests (vocabulary, computation, general information and story problems) and one supplemental subtest (attitude toward math).

**3. Key Math-3** is a comprehensive, norm-referenced measure of essential mathematical concepts and skills. Key Math-3 covers the full spectrum of math concepts and skills that are typically taught in kindergarten through 9<sup>th</sup> grade and can be used with individuals 4-21 years of age who are functioning within the K-9 instructional level. The items are grouped into 10 subtests that represent three general math content areas (basic concepts/conceptual knowledge, operations/computations skills; and applications/problem solving).

**4. Wechsler Individual Achievement Test (WIAT-III)** is used to assess academic achievement in individuals ages 4-0 to 50-11. The Math Problem Solving subtest may be utilized as part of the body of evidence when evaluating deficits in the area of Math Problem Solving.