



Washington State Association  
of School Psychologists

**Revised Professional Practice Guidelines in the  
Evaluation of Students Suspected of  
Having a Specific Learning Disability**

**Approved for Open Comment by the WSASP Executive Board**

**Date:**

**Summary:**

The purpose of our practice guidelines is to inform school psychologists and evaluation teams of new practices supported by research and professional organizations in the identification of students suspected of having a specific learning disability in the area of Reading. The current paper includes general practice guidelines and is followed with three specific supporting guidance documents which provide recommendations and resources in:

- (1) Utilizing Multiple Sources of Data to Establish Underachievement in Reading;
- (2) Incorporating RTI Data into SLD Identification; and
- (3) Utilizing a Pattern of Cognitive and Academic Strengths and Weaknesses

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## Revised Professional Practice Guidelines in the Evaluation of Students Suspected of Having a Specific Learning Disability

### Background

School psychologists and other educational professionals work together to evaluate students suspected as having one or more Specific Learning Disabilities (SLD). The Individuals with Disabilities Educational Improvement Act of 2004 (IDEIA) and Washington Administrative Code (WAC) provide regulations for the evaluation and identification of students with SLD. These guidelines allow for flexibility in evaluation practices. The purpose of this document is to incorporate recent research in the identification of SLD and to share what the Washington State Association of School Psychologists (WSASP) sees as “best practice” in identifying and evaluating SLD. This document incorporates ideas from national researchers, current Washington practitioners, and the National Association of School Psychologists (NASP). As many states are moving toward new assessment models for SLD identification (Hauerwas, Brown, & Scott, 2013), we believe that Washington State must continue to lead the way in adopting progressive and positive practices. We hope to challenge school psychologists and others to move away from evaluation practices associated with the use of discrepancy tables and to adopt a problem-solving and diagnostic approach in identifying and evaluating SLD.

### Washington State Definition of SLD

The National Center for Learning Disabilities ([www.nclld.org](http://www.nclld.org)) describes students with SLD as having difficulties acquiring certain academic skills. Students with SLD often have intellectual strengths. They generally struggle with one or more cognitive abilities or processing skills necessary to complete academic tasks successfully. Currently, WAC 392-172A-01035 adheres closely to the federal (IDEIA) definition of SLD and states:

- (k)(i) Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia, that adversely affects a student's educational performance.
- (ii) Specific learning disability does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of intellectual disability, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

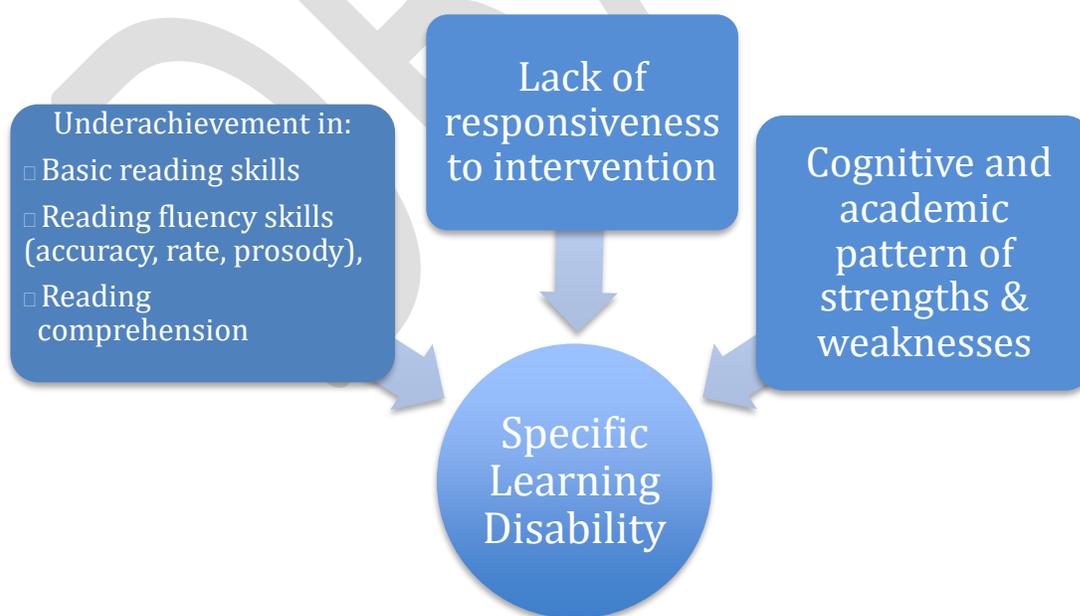
### Washington State Requirements for Evaluation of Students Suspected of Having SLD

**Evaluation Team.** (e.g., Multi-disciplinary Team – MDT) WAC 392-172A-03050 calls for a group of qualified professionals to determine whether a student is eligible for special education services in the SLD category. This group shall include: (1) the student’s parent; (2) the student’s general education classroom teacher or a general education classroom teacher qualified to teach a student of his or her age; and (3) “at least one individual qualified to conduct individual diagnostic examinations of students, such as school psychologist, speech language pathologist, or remedial reading teacher.”

**Current Guidance for Evaluation Teams.** NASP recently developed a position paper on the *Identification of Students with Specific Learning Disabilities* (NASP, 2011) and recommended that identification and evaluation decisions not be based on any single method or measure. NASP recommends the team:

- (1) conduct an individual comprehensive assessment, as prescribed by an evaluation team and as relevant to the development of interventions, which may include:
  - current levels of academic skills and historical trends of performance (using norm-referenced, criterion-referenced, and/or curriculum based);
  - cognitive abilities and processes;
  - social–emotional competencies;
  - oral language proficiency as appropriate;
  - classroom observations;
  - indirect sources of data (e.g., teacher and parent reports); **and**
- (2) use existing data (or new data developed for the purposes of evaluation) from a problem solving system, reflecting a student’s response to scientific, evidence-based interventions.

Washington State’s Office of Superintendent of Public Instruction (OSPI) continuously updates a guide, known as the *Identification of Students with Specific Learning Disabilities* ([http://www.k12.wa.us/SpecialEd/pubdocs/SLD\\_Guide.pdf](http://www.k12.wa.us/SpecialEd/pubdocs/SLD_Guide.pdf)). We refer to this document hereafter as the OSPI *SLD Guide*. OSPI developed the *SLD Guide* to assist qualified groups of individuals in evaluating and making decisions for students with SLD. The manual provides two options for determining eligibility for SLD: (1) using a severe discrepancy model or (2) using Response to Intervention (RTI). Consideration of a pattern of strengths and weaknesses may support the evaluation process. We are encouraging school psychologists and evaluation teams not to use the discrepancy approach. Yet, we also acknowledge that the second approach (RTI), while offering promising practices, is insufficient in fully evaluating students suspected of having SLD (e.g., Artiles, 2007; Flanagan, Ortiz, Alfonso, & Dynda, 2006; Sotelo-Dynega, Flanagan, & Alfonso, 2011). While RTI offers a strong instructional framework and means to identify and monitor at-risk students, RTI is not fully diagnostic in scope. We are proposing to build a comprehensive evaluation system that incorporates an RTI approach supported with the identification of a pattern of strengths and weaknesses (PSW), characteristic of a disorder in one or more of the basic psychological processes involved in learning.



WSASP recommends addressing criteria for SLD identification from an approach that takes into consideration: (1) student response to well documented, evidence-based interventions, (2) the underlying reasons for academic achievement and performance, and (3) identification of student strengths that may provide support for intervention development (often referred to in the literature as patterns of strengths and weaknesses).

**WSASP Suggested Guidelines: Follow the RTI Approach and fully evaluate the underlying reasons for academic underachievement and underperformance in reading. Evaluate and identify student strengths for the development of intervention development.**

We acknowledge there are many challenges associated with the transition to RTI. Nationally and across the state, schools and school districts are at various stages of implementation. Because many schools have made the most progress in screening, progress monitoring, and providing tiered intervention in reading, our **first** position paper will focus on identifying students with SLD in the area of **reading** using a pattern of strengths and weaknesses to support RTI. This is not intended to prevent schools that have noted progress in math and written language from using this approach. Guiding documents in the areas of mathematics and written expression will follow soon.

To begin with RTI, school building teams should **follow the requirement in WAC 392-172A-03060: At the building level, document how the Essential Components of RTI are developing.** The Essential Components include:

- Universal Screening for all students
- Progress Monitoring for students at risk and/or receiving supplemental instruction
- Multi-tiered Prevention/Intervention System (including research based core curriculum where components have research to support their inclusion and evidenced-based secondary level and tertiary level interventions that have been investigated in well controlled experimental studies)
- Data-based decision making processes

Buildings should have a plan to develop the Essential Components of RTI; however, lack of “full building level implementation” should not prevent a team from accessing data from multiple sources over time paired with a full evaluation of student cognitive and academic strengths and weaknesses.

While many teams make statements such as “we do not have an RTI school,” such statements are generally not accurate. Many schools have portions of the RTI Essential Components in place due to other initiatives such as Professional Learning Communities (PLC; DuFour, DuFour, Eaker, & Many, 2008) and may be using common state practices for screening. To document a school building’s progression with RTI, teams should utilize a self-assessment or third party evaluation of the building’s current practices. Teams may utilize the RTI Integrity Rubric (found under “Fidelity” on the OSPI Website: <http://www.k12.wa.us/rti/>), the National Association of State Directors of Special Education’s RTI Blueprint Self-Assessment (<http://www.nasdse.org/LinkClick.aspx?fileticket=0XXmIiiQOG0%3D&tabid=36>), or other current readiness inventories (e.g., [http://www.maine.gov/education/rti/jim\\_wright\\_survey.pdf](http://www.maine.gov/education/rti/jim_wright_survey.pdf)). While districts are undertaking elements of the

RTI framework, we encourage every district to make fidelity the foremost priority. Without fidelity in each Essential Component of RTI (screening, progress monitoring or intervention delivery), data are suspect. We believe that evaluating students suspected of SLD is a complex process. Further, to replace the discrepancy model with RTI only, given the variation in implementation across the state, would not improve our practices. Instead, we recommend conducting a comprehensive evaluation that includes an analysis of the students' pattern of cognitive strengths and weaknesses. To evaluate a student suspected of having a specific learning disability in the area of reading, teams should document:

**1. The following possible causes of underachievement have been ruled out (SLD Exclusionary Factors (WAC 392-172A-01035 (k)(ii)):**

- A visual, hearing, or motor disability
- Intellectual disability (formerly known as mental retardation)
- Emotional or behavioral disability
- Cultural factors
- Environmental or economic disadvantage
- Limited English proficiency
- Lack of appropriate instruction

To rule out lack of appropriate instruction teams must use data to show that prior to, or as a part of the referral process, the student was provided with appropriate instruction in the general education setting that was delivered by qualified personnel; **and** that repeated, valid assessments of progress were completed at reasonable intervals to assess the student's academic growth. **NOTE: According to WAC 392-172A-03055, this is a requirement for all teams evaluating SLD, regardless of which approach the team uses (i.e., even teams utilizing a discrepancy approach are required to document use of repeated, valid assessments, as well as the adequacy of the instruction the student received).**

**2. The team should utilize three steps in the identification process:**

- (1) **Establish underachievement and/or underperformance in reading compared to his or her same grade or class peers in one or more of the following areas** (see Guidance Document 1):
  - Basic reading skills
  - Reading fluency skills (accuracy, rate, and prosody)
  - Reading comprehension
- (2) **Establish lack of response to evidence-based interventions by documenting a dual discrepancy (level and slope; see Guidance Document 2).**
- (3) **Establish a pattern of strengths and weaknesses considering the following** (see Guidance Document 3):
  - The greater scheme of the evaluation should focus on the cognitive pattern rather than the composite (or full scale) IQ.

- The cognitive pattern evidences specific cognitive ability/processes that are weaknesses compared to peers and relatively low compared to other abilities/processes in the student's overall profile\*.
- The cognitive pattern should reflect a profile that is consistent with the reason for referral. In the case of reading, for example, one would expect weaknesses in phonological processing, rapid naming, short-term memory, and/or vocabulary. In this manner, we are looking for consistency cognitive abilities/processes and the academic difficulty rather than discrepancy.
- The pattern should also reveal intact academic skills and cognitive abilities that are within the average range of functioning.
- A multi-disciplinary team (e.g., Literacy Specialist, Special Education Teacher, Speech/language Pathologist, School Psychologist, Parent, and relevant others) should link the student's PSW to an individual educational plan (IEP).

\*The academic underachievement of a student who demonstrates low performance in all academic and psychological processing areas is likely not due to a specific learning disability, and the team may wish to consider other disability categories such as Intellectual Disability.

#### **Observation (WAC 392-172A-03075)**

School districts must also ensure that a student suspected of having a SLD is observed in the student's learning environment, including the general education classroom setting, to document the student's academic performance and behavior in the area of difficulty. If an observation has already been conducted as part of an instructional intervention process (such as RTI), that observation may be used to meet this requirement. Additionally, the individual who conducted the observation must be a member of the evaluation team.

**Appendix: Guidance Documents**

1. Utilizing Multiple Sources of Data to Establish Underachievement in Reading in the Identification of Students Suspected of Having a Specific Learning Disability	10
2. Incorporating RTI Data into SLD Identification	17
3. Utilizing a Pattern of Cognitive and Academic Strengths and Weaknesses in the Identification of Students Suspected of Having a Specific Learning Disability	24

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## **Guidance Document 1: Utilizing Multiple Sources of Data to Establish Underachievement in Reading in the Identification of Students Suspected of Having a Specific Learning Disability**

### **Summary:**

The purpose of this Guidance Document is to provide technical assistance regarding the identification of underachievement in reading using multiple sources of data in order to perform a more comprehensive evaluation.

### **A. Identifying a Specific Learning Disability (SLD) in Reading: Establishing Underachievement**

The intent of this first Guidance Document is to inform school psychologists and evaluation teams how multiple data sources may be used to reach a decision regarding the existence of underachievement in reading. It has always been the guideline that special education eligibility be based on more than one source of data, but the existence of a discrepancy model that is dependent on the comparison of an achievement level to an ability level lent itself to the habit of relying on one source of achievement data and one source of ability data. If there was disparity between the result of the discrepancy comparison and other sources of data, such as classroom or state assessment performance, confusion and frustration occurred regarding the actual existence of underachievement. Our Guidance Documents reaffirm the notion that when using multiple sources of data for identification of SLD, such decisions be the result of the best professional judgment of a multidisciplinary team (MDT) understanding the student holistically through a comprehensive evaluation.

#### **A-1. Common Core State Standards for Reading**

**The mastery of Washington’s common core standards must represent the long-term goal for special education students as represented on their IEPs. To be an effective advocate for students with disabilities, School Psychologists must familiarize themselves with these standards.**

“The common core state standards for literacy are the culmination of an extended, broad-based effort to fulfill the charge issued by the states to create the next generation of K-12 standards to help insure that all students are college and career ready in literacy no later than the end of high school. The standards also draw on the most important international models as well as research and input from numerous sources including state departments of education, scholars, assessment developers, professional organizations, educators from kindergarten through college and parents, students and other members of the public” (RCW 28A.150.210; Office of the Superintendent of Public Instruction-Washington, 2010).

The following list of literacy standards represents the broad aims and will vary only in terms of age and attainment appropriate terms with respective grade levels.

#### **A. Key Ideas and Details**

- 1.** Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
- 2.** Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
- 3.** Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

**B. Craft and Structure**

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how word choices shape meaning or tone.
5. Analyze the structure or texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a second, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

**C. Integration of Knowledge and Ideas**

7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

**D. Range of Reading and Level of Text Complexity**

10. Read and comprehend literary and informational texts independently and proficiently.

**E. Print Concepts**

11. Demonstrate understanding of the organization and basic features of print.

**F. Phonological Awareness**

12. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

**G. Phonics & Word Recognition**

13. Know and apply grade-level phonics and word analysis skills in decoding.

**H. Fluency**

14. Read on-level text with purpose and understanding.
15. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings
16. Use context to confirm or self-correct word recognition and understanding, rereading as necessary

**B. Establishing underachievement in one or more of the three SLD areas pertinent to reading**

Under IDEA 2004, the underlying premise of the SLD identification criteria is found in the beginning of the section labeled “Determining the existence of a specific learning disability” (§300.309(a)). This section states that in order to meet the SLD criteria, three conditions must be met: 1) The existence of a disability, 2) an adverse impact of that disability with respect to learning, and 3) the need for specially designed instruction. The first condition is underachievement in one or more of eight specified academic areas. For the purpose of this Guidance Document, we focus on three specified academic areas, including: 1) Basic reading skills, 2) Reading fluency skills, and 3) Reading comprehension.

As Adams (1990, p. 3) notes, “skillful reading is not a unitary skill. It is a whole complex system of skills and knowledge.” Underachievement is defined by the phrase, “The child does not achieve adequately for the child’s age or to meet State-approved grade-level standards...when provided with learning experiences and instruction appropriate for the child’s age or State-approved grade level standards” (§300.309(a)(1)).

The reference to state-approved grade-level standards is in keeping with the federal effort to align IDEA with Elementary and Secondary Education Act (ESEA; the No Child Left Behind Act of 2001). One aspect of this involves gauging performance against criterion-based curricular expectations rather than comparing the child to others in the class or in the school district. As stated in the Analysis of Comments and Changes, “The

performance of classmates and peers is not an appropriate standard if most children in a class or school are not meeting State-approved standards” (p. 46652).

We encourage Washington school psychologists and evaluation teams to collect multiple sources of potential data, all of which should be considered when establishing underachievement and later in discussing the development of a possible individualized education plan (IEP). We propose five critical sources of data be collected and considered when establishing underachievement. These five data sources include:

- 1) norm-referenced tests,
- 2) state assessment data from the Measurement of Student Progress (MSP) and High School Proficiency Exam (HSPE),
- 3) common assessments,
- 4) grades/classroom performance, and
- 5) universal screening data.

**B-1. Data Source I: Norm-Referenced Tests**

The first source of data comes from the same norm-referenced tests that have been used since the inception of PL94-142 and the utilization of the Discrepancy Model. The difference is that we are now conducting the academic achievement assessment with the Common Core State Standards in Reading in mind and the criteria of 10%ile rank, regardless of overall cognitive functioning. We are also treating this data point as just one data point in the judgment decision as to whether there is a significant underachievement to warrant an SLD in reading diagnoses.

**B2.**

*Table 1 Alignment of Reading Areas with Standards and Academic Subtests*

	Common Core State Standards for Reading (K-12)	WIAT-III Subtests	WJ-III Subtests	KTEA-II Subtests
<b>Basic Reading Skills</b>	E, F, G	<ul style="list-style-type: none"> <li>• Early Reading Skills</li> <li>• Word Reading</li> <li>• Pseudoword Decoding</li> </ul>	<ul style="list-style-type: none"> <li>• Letter-Word Identification</li> <li>• Word Attack</li> <li>• Sound Awareness</li> <li>• Spelling of Sounds</li> </ul>	<ul style="list-style-type: none"> <li>• Letter-Word Recognition</li> <li>• Nonsense Word Decoding</li> <li>• Phonological Awareness</li> </ul>
<b>Reading Comprehension</b>	A, B, C	<ul style="list-style-type: none"> <li>• Reading Comprehension</li> </ul>	<ul style="list-style-type: none"> <li>• Passage Comprehension</li> <li>• Reading Vocabulary</li> </ul>	<ul style="list-style-type: none"> <li>• Reading Comprehension</li> <li>• Associational Fluency</li> </ul>
<b>Reading Fluency</b>	D, H	<ul style="list-style-type: none"> <li>• Oral Reading Fluency</li> </ul>	<ul style="list-style-type: none"> <li>• Reading Fluency</li> </ul>	<ul style="list-style-type: none"> <li>• Word Recognition</li> <li>• Naming Facility</li> <li>• Decoding Fluency</li> </ul>

Note. Letters in Common Core State Standards for Reading (K-12) column (Table 1) correspond to the Common Core State Standards literacy standards listed in section B-1. **In all cases where norm-referenced assessments are used (mean-100; std. dev-15), the criteria for significant underachievement should be a standard score of less than or equal to 81, which translates to the 10<sup>th</sup> %ile.**

## Data Source II: State Assessment Data from the MSP and HSPE

Student state assessment performance history, such as the MSP and HSPE, are significant sources of data to establish underachievement. While an important source of data to establish underachievement, there are several shortcomings with state assessments:

- Interpreting a history of MSP performance: The inter-correlations between grade level tests are not common knowledge and the reliability between grade level tests is not sufficient to predict success on future tests. High School students may be at risk for poor reading based on recent MSP scores despite repeated success early in their educational career. A review of the history of state assessment results might permit us to rule out SLD based on trends after all, it is difficult to argue for a reading disability if the standards were met on state assessments during formative reading years.
- Establishing a cut score that supports SLD eligibility decision: MSP and HSPE scores are not reported as percentiles and therefore do not have scores that correspond exactly to the 10<sup>th</sup> percentile. However, a general rule of thumb will be to use Level 1 as the criterion for significant deficit. Approximately 8-9% of Washington students scored Level 1 in 2011-2012 on reading for all grades. Teams should be reluctant to view scores at Level 2 (Below Standard) as representing significant underachievement. Our goal is to be consistent in identifying the lowest 10<sup>th</sup> percentile of the population as having a potential disability.
- Use of ‘passing’ vs. ‘failing’ to meet the standard is arbitrary and of little value. A score of 401 is within a standard error of difference of 398. While the first meets standard the latter doesn’t. For that reason, the focus should be on performance of students at the 10<sup>th</sup> percentile and below.
- There is a tendency to interpret state assessment result with classmates as frame of reference. As with general underachievement, “doing better than peers is not a source of pride if all peers are below standard.” In reading, approximately 70% of Washington’s students, at any grade, are meeting standard.

### B-3. Data Source III: Common Assessments

Professional Learning Communities (PLCs) and school districts have been busy at work creating common assessments and utilizing curriculum (unit) tests to judge progress toward the standards as being taught in their own school district. While these tests are not standardized, they do represent student responsiveness to instruction and are a valuable source of data to help determine if the student is underachieving with respect to the standards. Without supportive data, there is a risk associated with the use of local norms as benchmarks, namely the limited and skewed sample. To illustrate this risk, imagine a student who performs average on a common assessment while everyone else in the building or district performs above average. This student will stand out and gain the attention of the special education referral team despite scores that are not characteristic of SLD. Given the link with standards, this is an especially valuable source of data. The limitations due to local norms should be resolved through discussion and validation with other sources of data. It might prove helpful for districts to develop local norms and identify the 10<sup>th</sup> percentile. While such cut scores may not reliably identify students in the lowest 10<sup>th</sup> percentile compared to a normed sample, it will be of assistance in identifying students who are relatively low compared to peers, and will certainly be helpful in establishing non-eligibility for special education services. A student, whose reading levels are suspect in terms of standards, but does well on a common assessment in history for example, probably does not have a reading deficit sufficiently severe to adversely impact the comprehension of history curriculum.

### B-4. Data Source IV: Grades/Classroom Performance

While grades and classroom performance data are probably the primary sources of referral and therefore the most visible, they also represent the most problematic sources of data in terms of interpretation and analysis. Grades and classroom performance are a result of a number of factors, and probably reflect deficits in areas other than a result of learning disability. For example, grades are often (especially at the secondary level) dependent upon assignment completion (in timely fashion), lab notebooks, taking of accurate class notes, and attendance. In the elementary level, behavior, volunteerism, and performing extra credit all contribute to the final grade and are independent of standards mastery. Discussions around eligibility for special education, that include classroom grades, need to be carefully evaluated in terms of contributing factors to the grade that might be non-related to a learning disability. Often grades are not in congruence with other key input such as state assessment. Given the various factors, besides mastery of content, that enter a final grade, this is not surprising.

Grades are one more piece to the puzzle and should be considered along with data from the other sources. The move by many districts toward 'Standards Based Grading' lends additional credence to the use of grades as a source of data for SLD eligibility. A review of grade history can be quite beneficial in terms of identifying if there was a period of time in the student's educational history when grades took a sudden turn for the worse. That might be more indicative of an environmental upheaval as opposed to the presence of a disability. At the secondary level, attention should be paid to the relationship between areas of poor grades and area of suspected disability. Discussion should revolve around the demands of a specific class and the potential adverse impact of the disability.

Observations of the student are required by WAC 392-172A-03075. Such observations should be made in the area of suspected disability and should be active in the sense that the student's work could be evaluated and student questioned during independent seat-work. Ysseldyke and Christensen (2002) proposed the use of a "Functional Assessment of Academic Behavior" in place of a traditional observation. The assessment represents an attempt, using structured observations (multiple settings) and interviews (teacher, parent, and student) to assess the learning environment of the student. Many concerns regarding existence of a possible learning disability are actually 'breakdowns' in the learning environment. Thus, an accurate hypothesis with linked intervention can resolve the issue without further assessment. Of primary concern is the percentage of time a student is actively engaged in learning. Academic engagement time has been shown repeatedly to predict academic success. Lack of academic engagement time should be viewed as symptomatic of At-Risk.

#### **B-5. Data Source V: Universal Screening**

Numerous criterion-referenced assessments are being employed in the schools to identify students who may be At-Risk for reading. There are commercially available tools (e.g. DIBELS, AIMSWEB, MAP, etc.) as well as locally developed tools. The intent of this section is to address how best to utilize data collected from such sources. Criteria-referenced assessments typically assess the student's skills at grade level utilizing grade level reading selections. As such, they are useful for getting a quick 'screen' of potentially At-Risk students. The cut scores provided by screening tools such as these are designed to 'over-identify' students in order to catch all who might need additional help. Our purpose (assisting in the decision of whether or not there is a significant underachievement) requires the employment of a significantly low cut score. We are recommending that significant underachievement be defined as "at or below the 10<sup>th</sup> percentile." This cut score is represented as:

- DIBELS – "Well Below Benchmark" ranking (red zone)
- AIMSweb – 10<sup>th</sup> percentile for the selected General Outcome Measure based on grade level within the school
- MAP -  $\leq 10^{\text{th}}$  percentile using the RIT score to percentile rank conversion chart

In conclusion, our focus has been to illustrate how a multitude of data sources could be used collectively to identify an area of significant underachievement. Once identified, this area of underachievement needs to be linked to the grade-level standards, and validated through classroom observation and performance data. The goal of this part of the assessment is to identify significant deficits in reaching grade level standards. It was not our intent to provide an ‘alternative discrepancy table’ but rather to encourage teams to utilize all available data, engage in thoughtful discussion about the meaning of the data, and then use their best professional judgment to reach decision.

### **C. Frequently Asked Questions (FAQs) Regarding the Establishment of Underachievement**

#### **C-1. What if the data from our five sources are inconsistent? Should one source have more weight than another?**

Underachievement is NOT to be determined by any one source of data. The burden is on the multidisciplinary team to examine all sources of data and seek out consistency by attempting to understand the basis for each data point considered. In the end, it is the best professional judgment of the team that will decide if a significant underachievement and ultimately a SLD exists. *Sources closest to the measurement of progress toward standard would be the data of greatest weight.*

#### **C-2. How flexible is the criterion of 81 on a norm-referenced test in determining significant underachievement?**

81 is being used, as it separates the lowest 10% (*approximately*) of the population. This arbitrary cutoff is being proposed, as it represents a conservative (compared to the state-funded 12.7%) estimate of students in need of specially designed instruction. It recognizes the value of an efficient data-based, decision-making model based on responsiveness of students to evidence-based intervention delivered with fidelity. Washington districts that have been piloting such a model report significant decreases in the numbers of students identified as SLD once a model of a multi-tiered intervention design and progress-monitoring system has been developed and implemented. A standard-score of 81 or below is NOT fixed. It represents a single data point among many that helps guide the decision as to whether a SLD is likely.

#### **C-3. Do we need to be monitoring progress more than three times per year (when universal screening is conducted)?**

We are proposing to continue the current position that SLD identification MUST be determined in part by deficit performance over repeated measurements and not a single data point. Universal screening is a means of formative assessment, but differs from progress monitoring. Data from progress monitoring are necessary for a decision regarding the possible existence of a SLD (see Guidance Document 2-Incorporating RTI Data into the SLD Identification decision)

#### **C-4. Is a significant deficit in the area of Reading Fluency sufficient for an area of underachievement?**

Reading Fluency does represent one of eight areas for potential SLD. The qualification of a student as SLD in the sole area of fluency should be accompanied by the same question as with all eight areas, namely, “Is this deficit creating an adverse impact on the student’s progress toward and mastery of, general education standards?” If reading fluency levels are low, but not leading to an inability of the student to learn adequately and progress to standard, then there is no adverse impact of this specific deficit. Care should be taken to consider whether the reading fluency deficit is indicative of a broader, impactful, processing speed disorder. This represents a good example of how our assessment should be fluid, responding to current data and hypothesis formation.

**C-5. If a student has poor grades, poor state assessment scores, poor common core standards test scores but earns a standard score over 81 in reading areas, can he/she qualify as SLD?**

The intent of this position paper and supplemental Guidance Document is to encourage the use of multiple sources to assist a team in making a decision using their best professional judgment. Often data will be inconsistent. It is then the responsibility of the team to consider ALL the data and not make decisions based on data from any one source.

**C-6. Why should one not use CBA screening data for eligibility without supporting data?**

CBAs/CBMs are effective at measuring current performance of students in areas such as reading, and at identifying students who are At-Risk for learning difficulties. However, these tools are brief measures that merely provide a snapshot of a student's current performance and do not provide a global view of the factors that contribute to a student's current level of functioning (i.e., learning environment, test anxiety, etc.). Therefore, while CBAs/CBMs are important components to include when assessing students, results should be interpreted in conjunction with the aforementioned factors to determine underachievement and students' eligibility for qualification with SLD. The current paper addresses the establishment of underachievement using multiple sources of data; the following two Guidance Documents address the use of Progress Monitoring Data in establishing a Dual Discrepancy (student lower in rate and level on progress monitoring tool) and the use of a Patterns of Strengths and Weaknesses Approach for diagnostic assessment of a suspected SLD.

## Guidance Document 2: Incorporating RTI Data into SLD Identification

### Summary:

The purpose of this second Guidance Document is to provide technical assistance regarding the incorporation of RTI data into SLD Identification.

### A. Identifying a Specific Learning Disability (SLD) in Reading: Incorporating RTI Data

The intent of this second Guidance Document is to encourage school psychologists and evaluation teams to use progress monitoring data consistently in decision making for “lack of responsiveness to intervention.”

We view RTI as a prevention and risk assessment model that relies on a multi-tiered instructional model aimed at improving the teaching & learning experience for all students. The features of RTI intended to improve instruction for all students include: emphases on improved instructional quality, early identification of students at-risk for poor outcomes, the provision of evidence-based interventions, and data-based decision-making. Districts and schools not invested in the RTI process are most likely incorporating some of these features in their practices, which lend themselves to using data to guide decision-making in a similar fashion as advocated for in these papers.

#### A-1. Definition of RTI : Part I – WAC 392-172A-03060 Requirements

The National Center on Response to Intervention (NCRTI) defines RTI as a framework that “integrates assessment and intervention within a school-wide, multi-level prevention system to maximize student achievement.” Students identified at-risk for learning difficulties (see SLD Guidance Document 1: Underachievement) are provided with a series of increasingly intensive, individualized, and focused interventions, with progress data collected over time.

**WAC 392-172A-03060 states that** school districts using an RTI approach should adopt procedures to ensure that such process includes the following elements:

- a) “Universal screening and/or benchmarking at fixed intervals at least three times throughout the school year;
- b) A high quality core curriculum designed to meet the instructional needs of all students;
- c) Scientific research-based interventions as defined in WAC [392-172A-01165](#) are identified for use with students needing additional instruction;
- d) Scientific research-based interventions used with a student are appropriate for the student's identified need and are implemented with fidelity;
- e) A multi-tiered model is developed for delivering both the core curriculum and strategic and intensive scientific research-based interventions in the general education setting;
- f) Frequent monitoring of individual student progress occurs in accordance with the constructs of the multi-tiered delivery system implemented in the school consistent with the intervention and tier at which it is being applied; and
- g) Decision making using problem solving or standard treatment protocol techniques is based upon, but not limited to, student centered data including the use of curriculum based measures, available standardized assessment data, intensive interventions, and instructional performance level.”

Note: Most schools are not fully implementing RTI, but have many components established, as these components are a part of many school improvement initiatives. To document your site’s progression with RTI, school based

teams should complete a self-assessment or third party evaluation of the building's current practices. Teams may utilize the RTI Integrity Rubric (found under "Fidelity" on the OSPI Website: <http://www.k12.wa.us/rti/>), the RTI Blueprint Self-Assessment (<http://www.nasdse.org/LinkClick.aspx?fileticket=0XxmIiiQOG0%3D&tabid=36>), or other current readiness inventories (e.g., [http://www.maine.gov/education/rti/jim\\_wright\\_survey.pdf](http://www.maine.gov/education/rti/jim_wright_survey.pdf)).

**WAC 392-172A-03060** requires the previous elements, because school districts must show that:

- a) "The student's general education core curriculum instruction provided the student the opportunity to increase her or his rate of learning
- b) Two or more intensive scientific research-based interventions, identified to allow the student to progress toward his or her improvement targets, were implemented with fidelity and for a sufficient duration to establish that the student's rate of learning in the general education setting, in addition to or in place of the core curriculum, did not increase or allow the student to reach the targets identified for the student;
- c) The duration of the intensive scientific research-based interventions that were implemented was long enough to gather sufficient data points below the student's aim line to demonstrate student response for each of the interventions through progress monitoring to determine the effectiveness of the interventions."

OSPI has developed guidelines for using RTI to assist districts in developing the procedures required under this section. These are available at: <http://www.k12.wa.us/specialed/pubdocs/rti/rti.pdf>. The state model evaluation form may be found under "Supplementary report for SLD (response to scientific, research-based interventions)" at <http://www.k12.wa.us/specialed/Data/ModelStateForms.aspx>. Additionally, the NCRTI offers self-paced learning of the Essential Components of RTI at: <http://www.rti4success.org/rti-implementer-series-self-paced-learning-modules>

## **B. Clarification and Resources to Support WAC 392-172A-03060 Requirements**

### **B-1. Universal Screening**

Best practices for universal screening include that districts use screening tools three times across the year with ALL students. These screening tools should be reliable and valid and should accurately predict risk status for students. The NCRTI maintains a chart to help schools consider the adequacy of their screening tools: <http://www.rti4success.org/screeningTools>. Screening data, along with other data used to identify the student as underachieving, should be incorporated in evaluation reports for SLD to support evidence of lack of adequate achievement (also see SLD Guidance Document-1, Establishing Underachievement. School based teams would benefit from using the current state model form at: <http://www.k12.wa.us/specialed/Data/ModelStateForms.aspx>. The NCRTI also offers self-paced study of screening practices at: <http://www.rti4success.org/rti-implementer-series-self-paced-learning-modules/screening>.

### **B-2. High quality core curriculum designed to meet the instructional needs of all students**

High quality core curriculum is: a) standards-based, and b) includes components shown in research to be essential for the teaching of subject matter. In reading, high quality core curriculum covers the big five ideas in Reading, identified by the National Reading Panel (NICHD, 2000) and further clarified by the University of Oregon's Big Ideas in Reading: <http://reading.uoregon.edu/>. Schools should be using high quality core curriculum that is appropriate for the population of learners at the school and have methods of checking for fidelity of implementation, which may include peer to peer observations, discussion through Professional

Learning Communities (PLCs), coaching, and principal observations. We recommend a proactive model of assuring fidelity of implementation across all components of an RTI System. A plan of monitoring fidelity is presented by the National Research Center for Learning Disabilities (NRCLD) at:

[http://www.nrclid.org/rti\\_manual/pages/RTIManualSection4.pdf](http://www.nrclid.org/rti_manual/pages/RTIManualSection4.pdf). Additionally, teachers should: 1) articulate learning within and across grades so that all students have opportunity for strong learning experiences; 2) differentiate learning experiences so that students are receiving core instruction with appropriate accommodations and not at frustration level; and 3) receive strong professional development to support their implementation of core curriculum.

### **B-3. Scientific research-based interventions for students needing additional instruction**

WAC [392-172A-01165](#) defines scientifically based research as:

1. “Research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and
2. Includes research that:
  - a) Employs systematic, empirical methods that draw on observation or experiment;
  - b) Involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
  - c) Relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;
  - d) Is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the condition of interest, with a preference for random assignment experiments, or other designs to the extent that those designs contain within condition or across condition controls;
  - e) Ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; and
  - f) Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.”

Several websites offer reviews of supplemental reading programs, including: The National Center for RTI: <http://www.rti4success.org/instructionTools>, Best Evidence Encyclopedia: <http://www.bestevidence.org/>, and the What Works Clearinghouse: <http://ies.ed.gov/ncee/wwc/>

Additionally, interventions utilized for supplemental (strategic or Tier II) interventions should be (1) well aligned with the core curriculum and teach/support foundational skills for students to be successful in the core curriculum, (2) delivered with fidelity (see resources in C-2 above), (3) led by well-trained staff and have group optimal size (according to program’s manual and research), and 4) be offered through additional time (not during core instructional time).

### **B-4. Frequent progress monitoring and data-based decision making**

When students are identified as needing supplemental (strategic or Tier II) interventions, schools must set goals for students to determine the program’s effectiveness. In an RTI system, goals are generally measured with curriculum based measures (CBM). Progress monitoring tools should have multiple alternate forms of equal and controlled difficulty and have evidence of reliability and validity for performance level and slope, specify minimum acceptable growth, and provide benchmarks for end of the year performance. The NCRTI reviews progress monitoring tools at: <http://www.rti4success.org/progressMonitoringTools>, and the National Center for Student Progress Monitoring provides resources and online training:

<http://www.studentprogress.org/>. Teams must use systematic means to **set goals** for students using end of the year benchmarks or national norms for rate of improvement. Intervention Central's website provides schools with assistance in setting goals using research norms, at [http://www.interventioncentral.org/sites/default/files/RTI\\_Classroom\\_Teacher\\_First\\_Responder\\_Excerpt.pdf](http://www.interventioncentral.org/sites/default/files/RTI_Classroom_Teacher_First_Responder_Excerpt.pdf). See the FAQ section below for setting goals with students who are English Language Learners (ELLs).

For timely and effective **decision making** in RTI, we suggest that data teams or PLC teams collaborate to monitor and adjust Tier II interventions. Teams are typically comprised of grade level or department teacher teams, plus building reading specialists and other intervention specialists (such as an ELL teacher, school psychologist, etc). This insures consistent implementation of interventions and progress monitoring across grade level/department and helps to increase reliability. A highly effective model at the elementary school level calls for grade level PLCs to meet weekly to allow for discussion of Tier I implementation and student progress, then trouble shoot any pressing Tier II/Tier III issues. Each grade level then meets every six weeks with a building level team to make decisions about students in Tier II/III level interventions. Lehigh University has developed a video that summarizes this practice within an entire building data-based decision making framework: <http://www.youtube.com/watch?v=g6vuc0jC-w>.

School based data teams or PLC teams should monitor Tier II interventions at least twice monthly. We recommend weekly progress monitoring when making decisions about response to intervention. The NCRTI offers self-paced study of progress monitoring practices at: <http://www.rti4success.org/rti-implementer-series-self-paced-learning-modules/progress-monitoring>. It is important that teams utilize progress monitoring tools that are measuring the skills taught in the intervention, that are sensitive to change, and that are not at a frustration level. While schools should administer benchmark (screening) tools with grade level probes to all students, they should use progress monitoring tools that are at instructional level for the student.

To follow procedures consistent with WAC **392-172A-01165**, school based teams must look at data from a first intervention phase and utilize decision-making rules regarding progress monitoring data. If a student does not demonstrate adequate progress utilizing a 4 data point (looking at the last 4 data points with at least 6 data points of intervention required) or trend line rule (comparing the trend line to the goal line with at least six data points), the school should consider making a change in the intervention. School based Data/PLC teams should utilize a problem solving process involving consultation from individuals with knowledge and experience with reading interventions. The team may choose to intensify the intervention in five possible ways (or combinations thereof), including changes in:

1. Frequency of the intervention (increase the sessions of intervention per week)
2. Duration of the intervention (increase the time of sessions per week)
3. Group size (decrease the group size to provide more individualized instruction and feedback)
4. Interventionist (consider using an instructional coach or teacher with more experience)
5. Program used for intervention (utilize a different program)

After the second phase of intervention, the school based team may again apply one of the two decision making rules (4 data point rule or trend line analysis). If the student is demonstrating significantly **lower rate of improvement and level of performance** compared to peers, the team may refer for a more comprehensive evaluation utilizing multiple diagnostic tools, focusing on specific reasons for lack of progress in reading (see Guidance Document-3 for Evaluation of Pattern of Strengths and Weaknesses [PSW]).

A note about Tier III (Intensive) Intervention: Tier III interventions are typically provided for students who do not make adequate progress with Tier II interventions. The school based team may determine that a student at this place in the intervention process will best be served by having a comprehensive evaluation and specially designed instruction (SDI). By definition, Tier III interventions are more frequent, longer in duration, and occur one-on-one or in a very small group (no more than three students). In addition, the interventionist should

be highly qualified (often a Resource and/or ELL teacher/interventionist). Tier III Intervention programs are highly targeted toward the student's specific area of need(s) and utilize research-supported materials taught with fidelity. However, Tier III interventions may be applied differently for a period of time. For example, an ELL who speaks very limited or no English may be served most effectively by starting with Tier III intervention targeted at vocabulary development (functional English), along with Tier I/core instruction. As the ELL student gains proficiency in English, he/she can move into Tier II intervention. Weekly progress monitoring should accompany all Tier III intervention efforts, in order to ensure that adequate progress is being made.

To document student responsiveness to Tier III interventions and student eligibility for SLD using an RTI approach, school psychologists and evaluation teams may utilize the OSPI state form, "Supplementary report for SLD (response to scientific, research-based interventions)." This form is available in MS Word, was updated 10/13, and may be accessed at <http://www.k12.wa.us/SpecialEd/Data/ModelStateForms.aspx>. We encourage school psychologists and evaluation teams to use this form, along with data from PSW in a Comprehensive Evaluation Report, to document student eligibility for the SLD category of special education.

### C. Frequently Asked Questions (FAQs) Regarding RTI

**C-1. We have been hearing about RTI for years and years, but with so many budget cuts, there haven't been any training opportunities. If RTI will be mandatory for eligibility under SLD (and other eligibility categories), how can districts who have avoided implementing RTI up to this point get up to speed, quickly, in order to make this change? Will districts have access to "free" training? Will there be individuals in the state who can come into districts to consult with evaluation groups, teachers, administrators, school psychologists, etc.?**

We (WSASP) will make extensive training opportunities available for school psychologists and teams that want to learn procedures for progress monitoring and data based decision making (efficient teaming, setting goals and making decisions). OSPI, supported by the NCRTI, has established a trainer of trainers' model for RTI in the state. Over 30 trainers have been approved by OSPI/NCRTI; many of these are from Educational Service Districts (ESDs) and may provide affordable training in screening, progress monitoring, and/or multi-tiered prevention and intervention systems. A list of trainers is available here:

<http://www.k12.wa.us/RTI/TrainerBios.aspx#Screening>. Additionally, free training is available through multiple modules at the Vanderbilt Iris Center: <http://iris.peabody.vanderbilt.edu/> (click RTI on right), and through the NCRTI's self-paced learning of the Essential Components of RTI at: <http://www.rti4success.org/rti-implementer-series-self-paced-learning-modules>.

**C-2. Over the last three to five years (with NCLB and all of the high stakes testing, etc.) I have had more initial referrals at the high school level than ever. How will RTI differ between elementary and secondary levels? Will there be some kind of "grandfather clause" where students in elementary must experience RTI while initial referrals at the secondary level can be done "the old way?"**

We suggest starting with reading across all grades. At the secondary level, the focus should be primarily on providing a schedule that provides a multi-tiered system of interventions. Several strong middle and high schools may serve as models for other in the state, and WSASP will make these models available to members. At the secondary level, RTI is even more important in ruling out instructional deficiencies.

**C-3. For those students already eligible for services under SLD, what will reevaluations look like?**

Students in special education should be monitored for progress across the year, with goals on IEPs that may be measured through progress monitoring. Re-evaluations involve the use of a comprehensive evaluation to determine if continued eligibility for sped services exists. There are no distinct criteria for eligibility in case of

reevaluation compared to initial eligibility. The severe-discrepancy model especially does not make sense in a reevaluation; we would hope that special education services is “closing the gap,” yet a student may continue to evidence adverse impact and need for specially designed instruction. The proposed comprehensive evaluation now provides a rationale for good decision-making by the team. Additionally, focus on slope and level in progress monitoring assists with determining IEP goal attainment.

**C-4. If a student is evaluated by an outside provider who uses IQ and academic assessments to assess learning disabilities (and suppose it is an Independent Educational Evaluation [IEE] or a lawsuit is brewing), will districts be required to go with the IEE results, or can they say that RTI was not used and, therefore, the student isn't eligible?**

Eligibility for special education is a decision made by a school-based multidisciplinary team, regardless of an outside evaluation. The independent evaluation brings data to be taken into account when the decision regarding eligibility is made. That the independent evaluation focused on discrepancy and not RTI is irrelevant. The evaluation will include data to be considered and contributes to the final decision. It does not represent THE final decision. An IEP team may decide that additional data are needed for consideration. That being said, WSASP will make an effort to provide additional training for community providers regarding RTI practices and procedures.

**C-5. Under what circumstances will IQ testing continue to be valuable?**

WSASP recognizes that RTI is a preventive approach (often called an instructional model) that will assist in determining a student’s level and rate of learning compared to peers. We advocate that an RTI approach is necessary, but not sufficient in identifying students with SLD. The IQ test (but not the Full Scale IQ) will contribute to the determination of a PSW that will be used to support the existence of an SLD (See SLD GUIDANCE DOCUMENT-3).

**C-6. What role, exactly, will school psychologists have in RTI? Many psychologists have been practicing "the same way" for their entire careers. With RTI replacing old practices...many may believe that they need go back to school. Who will keep all of the data? Who will ensure that RTI is being implemented correctly? Should buildings have RTI teams? Who would be on these teams?**

Districts that have adopted RTI procedures have found greater use for school psychologists. RTI requires multiple professionals to support data collection, analysis, interpretation and decision-making. School psychologists are in the position to assist at every turn as they have been trained to do all of the above, particularly in hypothesis formation and diagnostic assessment with PSW (see SLD Guidance Document-3). The proposed comprehensive model requires a team member to hypothesize the existence of psychological processes that represent both strengths and weaknesses and then link findings with observed patterns of cognitive functioning and academic achievement.

**C-7. There will always be those individuals who want to refer students who have not had any interventions whatsoever. Teachers often feel that they "know" when a student will qualify for special education services. I can hear teachers saying, "this is a waste of time" and "I need this student out of my class." How can psychologists address these types of concerns?**

The pre-referral process has always assumed the existence of interventions prior to special education assessment. To assess a student for special education without concern for whether there has been adequate instruction and exposure to general education curriculum is unprofessional (and is inconsistent with the WACs). If a student from another culture with English as second language or a student with frequent moves or inadequate instruction moves to your district, it is unprofessional to simply test him or her for special education.

**C-8. What if our building is not ready for RTI?**

We recognize that every district is in a different place from an RTI point of view. Our intent is to train psychologists to use all available data in a systematic way and to assist their teams in progress monitoring students suspected of having SLD. We anticipate that teams will begin to see that there are additional data which would prove to be helpful if collected and analyzed.

DRAFT

### Guidance Paper 3: Utilizing a Pattern of Cognitive and Academic Strengths and Weaknesses in the Identification of Students Suspected of Having a SLD

#### Summary

This third feature of the 2014 WSASP SLD Practice Guidelines is intended to offer guidance to multi-disciplinary teams (MDT) using the PSW approach to enhance the comprehensive evaluation for students suspected of SLD. Further, we are encouraging teams to connect their assessment results with instructional recommendations designed to address the reasons the student did not respond to high quality intervention. It is WSASP's position that using the proposed PSW model will improve the SLD diagnostic outcome for students.

#### A. Utilizing PSW in SLD Identification

The three-pronged approach to SLD evaluation (establishing underachievement in reading, measuring responsiveness, and using PSW) may be used whether teams are still using the discrepancy model or the RTI approach. That is, even teams practicing in districts requiring discrepancy to meet eligibility can still draw upon the rich instructional information a team can obtain when a student participates in the RTI process. We encourage teams to answer the questions: "Why didn't this student respond to high quality instruction and intervention in reading?" and, "Given that what we were doing didn't work, what instruction does the student need?"

To answer these questions, we suggest it is more important for teams to measure the relevant cognitive abilities and processes to literacy than it is to derive an intelligence quotient (IQ). We are asking practitioners to:

1. Develop hypotheses about why a student did not respond to the reading instruction
2. Then, based upon these hypotheses, measure the broad cognitive abilities and processes related to the reading skills of concern
3. And, to look for patterns of consistency that relate to the referral rather than discrepancy from a composite (IQ) score

We propose "Five Key Evaluative Features" for teams to consider when using PSW to evaluate students suspected of learning disabilities. The essential features of this comprehensive evaluation are:

1. Establishing that the underachievement is unexpected
2. The presence of dual discrepancy (using RTI to determine slope and level discrepancies)
3. The existence of spared or intact abilities
4. A pattern of consistency
5. A de-emphasis of Full-Scale IQ

#### B. Relationship of WACs to Assessment of PSW

WSASP recommends review of and reference to the below mentioned WACs when identifying the basic psychological processes associated with the referred student's difficulties learning to read. Assessment focused on identifying a pattern of strengths and weaknesses lies in the **definition of SLD (WAC 392-172A-01035)**:

"Specific learning disability means a disorder in one of 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, that adversely affects a student's educational performance.”

#### **WAC 392-172A-03055. Specific learning disability – Determination**

“(2) (b) and, When considering eligibility under (a) of this subsection, the group may also consider whether the student exhibits a pattern of strengths and weaknesses in performance, achievement, or both, relative to age, state grade level standards, or intellectual development, that is determined by the group to be relevant to the identification of a specific learning disability, using appropriate assessments, and through review of existing data.”

#### **WAC 392-172A-03080. Specific documentation for the eligibility determination of students suspected of having specific learning disabilities.**

“(C) If used as part of the eligibility determination under (A) or (B) of this subsection, a discussion of the student's pattern of strengths and weaknesses in performance, achievement or both, relative to age, state grade level standards, or intellectual development.”

We encourage school psychologists across the state to focus on evaluating the broad cognitive abilities and processes related to reading instead of pursuing a Full Scale IQ score to establish discrepancy. Comprehensive assessment of broad abilities and processes require the measurement of at least two qualitatively different narrow abilities within each broad cognitive ability assessed. Depending on the practitioner's choice of instrument, the examiner will likely have to cross batteries. In many circumstances, the examiner may not need to administer more subtests than if they were testing for an overall composite score.

One research-based, contemporary model of intelligence that offers heuristic value for an analysis of PSW is the Cattell-Horn-Carroll Theory (CHC Theory). In CHC Theory, the MDT attempts to measure eight to ten broad cognitive abilities and processes, depending on the nature of concern (reason for referral). As this paper offers guidance to PSW-Reading, the MDT would be wise to attend to the relevant six broad cognitive abilities significantly related to early literacy and reading.

### **C. Guidelines of Utilizing PSW in Comprehensive Evaluations**

1. **Unexpected underachievement** in reading is established by the team. Student performance is compared to age and grade level expectations and standards as well as the performance of class and grade mates. Teams are often skilled in assessing how an individual student does relative to state and district standards and expectations, but evaluating the referred student relative to his or her grade-mates introduces additional complexity. One of the key features of unexpected underachievement is the concept that most of the other students are doing well in the same learning environment. To accomplish this type of ecological assessment of the student's learning environment, WSASP recommends considering the student's performance relative to the health of the core instruction provided to all the students at the school, grade, and classroom. Strategies to assess the health of the universal core include benchmarking, universal screening, common formative assessments that are guided by effective professional learning communities, and Smarter Balanced Assessment Consortium tests (replacing MSP & HSPE). See Guidance Papers 1 & 2 for guidance in how teams establish the existence of unexpected underachievement in reading.

**2. The presence of dual discrepant features.** The dual discrepant features of the student profile require below average achievement in basic reading, reading fluency, and/or reading comprehension relative to peers, grade mates, and standards, as well as relative to his or her own rate of learning when provided targeted research-based instruction.

**3. The student possesses spared or intact cognitive abilities and processes.** Explicit in the definition of learning disability is the existence of processing disorder. Implied is the belief that this processing disorder will manifest in cognitive assessment. One of the challenges practitioners face when evaluating students, however, is the possibility that the disorder impacts student performance across multiple subtests, bringing down the composite score. This attenuating affect can create dissonance with the definitional requirement that SLD manifests within an overall average or near average Full Scale IQ. The existence of some average abilities as “spared” or “intact” cognitive abilities and processes is an alternate conceptualization of SLD. In other words, which cognitive abilities, processes, and academic skills appear free of the impact of the student’s information processing disorder.

Some school districts are recommending that a student possess at least two spared/intact broad abilities, others are recommending the student manifest three spared/intact broad cognitive abilities or processes. The book, *Essentials of Cross Battery Assessment, Third Edition*, provides a disk that assists practitioners in analyzing broad and narrow ability scores to ascertain a “g value” that assists in determining this level of intactness.

**4. The student demonstrates a pattern of consistency rather than discrepancy.** Before the MDT begins cognitive and academic assessment, practitioners begin by looking for a pattern of strengths and weaknesses that make sense in light of the referral. Some broad cognitive abilities are more strongly associated with literacy than others. When evaluating students suspected of learning disabilities in reading, practitioners can expect to find the student’s cognitive profile to reflect this.

For example, it is well established that early language development and vocabulary contribute to successful early literacy. Thus, it stands to reason that in addition to low average achievement in basic reading skills, reading fluency skills, and/or reading comprehension, the broad cognitive abilities and processes associated with phonological processing, language development, and/or vocabulary would also be among the pattern of weaknesses for students suspected of SLD-reading. See Table 2 for this linkage between broad cognitive abilities and subtests that would be expected to show deficits.

**5. The team does not need to obtain a Full Scale or composite IQ to establish the existence of SLD.** A composite score is not necessary because the student demonstrates a disability not through discrepancy, but by manifesting a consistent pattern of strengths and weaknesses, as evidenced by all the following:

- An academic weakness in relation to his or her age or grade level standards (e.g. district benchmarks, standard scores below the 10<sup>th</sup> percentile).
- A psychological processing weakness in relation to his or her peers that is relevant to the academic weakness.
- Areas of weakness in academic performance, cognitive abilities, or psychological processing exist in an otherwise normal pattern (spared/intact abilities); and,
- Relative strengths in some cognitive, processing, and academic abilities.

## **D. Frequently Asked Questions (FAQs)**

**D-1. What is CHC Theory?** “CHC Theory is an integration of Cattell and Horn’s Gf-Gc theory and Carroll’s three-stratum theory of the structure of intelligence” (Flanagan, Ortiz, & Alfonso, 2013, p. 7). It is a compilation of decades of education measurement, research, and theory that many intelligence test publishers are now using as a blueprint for test development. See Table 1 (p.32) for definitions of the nine broad cognitive abilities, adapted from McGrew & Flanagan (1998) and Flanagan et al. (2013), and the executive functioning construct relevant to educators.

### **D-2. What is meant by spared or intact cognitive abilities and processes?**

Spared or intact cognitive abilities cluster within the average range (or higher). Standard scores of 85 – 115 are considered within normal limits (WNL). Almost 70% of the population falls within this range on standardized, norm-referenced tests. Therefore, whenever we administer a well-standardized, norm-referenced test, we expect that the examinee will perform WNL. Most psychological test publishers, however, report scores of 90 – 109 as average, making interpretation of scores falling between 85 – 90 problematic. This means scores that fall between 85 – 90 should be interpreted carefully and in light of additional data. Scores in this range may represent weaknesses adversely affecting academic performance and impede learning. Whenever performance falls below the average, other data sources are necessary to either rule in, or rule out, difficulty in the ability or process represented by below-average scores. This is known as convergence of data.

### **D-3. How many of the 8 to 10 broad cognitive abilities must be “spared?”**

In looking at Table 2, practitioners will see that six broad cognitive abilities are strongly related to reading. In some circumstances with some students, many or even all of these may be involved in the student’s disability. We recommend establishing that the student possess at least two cohesive, average, broad cognitive abilities, processes, or academic skill areas for SLD consideration.

### **D-4. Which broad and narrow cognitive abilities are known to support reading achievement?**

See Table 2 (p. 33) for an overview of broad and narrow cognitive abilities related to reading (adapted from Flanagan et.al, 2013).

### **D-5. How do I organize my CHC-based PSW evaluation?**

We recommend practitioners begin by collaboratively designing their evaluation from the hypotheses generated during the MDT intake process. The team will want to assign assessment responsibilities in an attempt to figure out why a student is struggling with reading, and, in particular, why they were unresponsive to high quality reading instruction.

The attached charts are intended to assist practitioners in determining how well their “go to” test battery covers the CHC abilities and processes. Most batteries do not adequately “cover” all areas thoroughly, and some tools measure some abilities multiple times.

For example, the Wechsler Intelligence Scale for Children, Fourth Edition, (WISC-IV) thoroughly measures the broad cognitive ability, Gc. In fact, there is redundancy with several WISC-IV verbal subtests measuring the same narrow abilities within the Gc construct. Similarities, Vocabulary, and Word Reasoning, all measure lexical knowledge. This is something examiners (and their students) may wish to avoid or consider when psychologists partner with SLP’s during the comprehensive evaluation. Many of the tests SLP’s give students

thoroughly measure Gc. If the MDT includes an SLP, teams are encouraged to consider distributing assessment responsibilities in a manner that reduces redundancy.

When designing a CHC-based PSW evaluation, practitioners need to measure broad cognitive abilities with two qualitatively different measures. In keeping with the Gc construct, one can see from the chart used to answer FAQ D-4 that there are at least three qualitatively different narrow abilities within Gc that are significantly related to reading skill acquisition. If the WISC-IV subtests: Similarities, Vocabulary, and Word reasoning all measure the same narrow ability, examiners may want to cross batteries to obtain a more robust measure of Gc.

We have attached charts (see Tables 3-6, pp. 34-37) for each of the most popularly used intelligence tests in the state to assist practitioners assess the strengths and limitations of each test relative to this model. As you will see, the need to “cross” batteries exists with many of our tools.

**D-5. What if I don't see a consistent PSW? What if the student performs below average in most or all cognitive abilities and processes?**

A student who does not possess sets of cohesive broad cognitive abilities within the average range (spared or intact abilities) would not be considered a student with a specific learning disability when using the PSW model. This means the cause of the academic underachievement of a student who demonstrates low performance in all academic and psychological processing areas is likely not due to specific learning disability.

**D-6. How many subtests of how many different cognitive batteries constitute a pattern? In other words, how many test kits do I need?**

Planning who is doing what during the MDT intake staffing can improve the efficiency of teams as they embark on the PSW enhanced comprehensive evaluation. Practitioners are asked to begin their assessment by hypothesizing which broad cognitive abilities are related to the area of concern (for this paper, it would be reading). Then, teams measure broad cognitive abilities and processes with two qualitatively different measures to establish representation of that ability. We will likely administer eight to ten subtests (not necessarily from one battery) to begin establishing PSW. It is important to realize that most cognitive batteries do not adequately assess all the CHC broad cognitive abilities and processes. Consequently, practitioners will likely need to have access to a second battery. The WJIII is grounded in CHC Theory and is designed to measure each broad ability and processes with at least two subtests per CHC construct that measure two qualitatively different narrow abilities. Thus, examiners may not need to cross batteries when using the WJIII.

**D-7. Are scaled scores on subtests sufficient to calculate a pattern or do I need to convert them to standard scores?**

We have included a standard score conversion table (See Table 7, p. 38) to enable practitioners to establish a common metric when attempting to determine the existence of a pattern. The following conversion table is adapted from Flanagan et al. (2013).

**D-8. Why are reading, writing, and math considered among the pattern of strengths and weaknesses?**

The WACs include the option of considering achievement as well as intellectual development when using PSW. Practitioners are encouraged to consider the eight to ten broad abilities along a continuum in which we look for a pattern that makes sense in light of the referral.

**D-9. I do not know that much about cross-battery assessment. How do I learn more?**

The WSASP Spring Lecture Series, 2014, will focus on this topic.

The WSASP 2014 Summer Institute in Seattle in Aug 22<sup>nd</sup> & 23<sup>rd</sup>, watch for announcement in SCOPE and at [wsasp.org](http://wsasp.org)) will feature sessions on this paper as well.

*The Essentials of Cross-Battery Assessment, 3<sup>rd</sup> Edition* (Flanagan et al., 2013) offers a good starting point. In addition, the website [www.crossbattery.com](http://www.crossbattery.com) offers much guidance for practitioners.

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## References/Resources

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Artiles, A. J., (2007). *Challenges to Response to Intervention (RTI) models: Equity & cultural considerations* [PowerPoint slides]. Retrieved from: [http://www.nccrest.org/publications/position\\_statements.html](http://www.nccrest.org/publications/position_statements.html).
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2008). *Learning by doing: A handbook for professional learning communities at work*. Bloomington, IN: Solution Tree Press.
- Elliott, C. D. (2007). *Differential Ability Scale-Second Edition*. San Antonio, TX: Harcourt Assessment.
- Fiorello, C. A., Hale, J. B., & Synder, L. E. (2006). Cognitive hypothesis testing and response to intervention for children with reading problems. *Psychology in the Schools*, 43(8), 2006. DOI: 10.1002/pits.20192.
- Flanagan, D.P., & Alfonso, V.C. (2011). *Essentials of specific learning disability identification*. Hoboken, NJ: John Wiley & Sons.
- Flanagan, D. P., Ortiz, S. O., & Alfonso, V. C. (2013). *Essentials of cross-battery assessment, third edition*. Hoboken, NJ: John Wiley & Sons.
- Flanagan, D. P., Ortiz, S.O., Alfonso, V. C., & Dymda, A. M. (2006). Integration of Response to Intervention and norm-referenced tests in learning disability identification: Learning from the Tower of Babel. *Psychology in the Schools*, 43, 807-825. DOI: 10.1002/pits.20190.
- Hauerwas, L.B., Brown, R., & Scott, A.N. (2013). Specific learning disability and Response to Intervention: State-level guidance. *Exceptional Children*, 80, 101-120.
- Kaufman, A. S., & Kaufman, N. L. (2004). *Kaufman Assessment Battery for Children-Second Edition*. Circle Pines, MN: AGS.
- McGrew, K.S., & Flanagan, D.P. (1998). *Intelligence test desk reference. (ITDR): The Gf-Gc cross-battery assessment*. Boston, MA: Allyn & Bacon.
- National Association of School Psychologists. (2011). *Identification of Students with Specific Learning Disabilities* (Position Statement). Bethesda, MD: Author.
- National Association of State Directors of Special Education (2008). *Response to Intervention blueprints for implementation: Building level*. Retrieved from: <http://www.nasdse.org/LinkClick.aspx?fileticket=0XXmIiiQOG0%3D&tabid=36>
- National Center for Response to Intervention (2011). *RTI Essential Components Integrity Rubric*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Center on Response to Intervention.
- National Center for Response to Intervention (n.d.). *RTI implementer series training modules*. Retrieved from: <http://www.rti4success.org/resource/type/rti-implementer-series-modules>.
- National Center for Learning Disabilities (n.d.). *General info LD*. Retrieved from: <http://www.nclld.org/types-learning-disabilities/what-is-ld>.

- National Institute of Child Health and Human Development [NICHD]. (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 subgroups* (NIH Publication No. 00-4754). Washington, DC: U.S. Government Printing Office.
- Office of Superintendent for Public Instruction (2011). *Identification of students with specific learning disabilities*. Retrieved from: [http://www.k12.wa.us/SpecialEd/pubdocs/SLD\\_Guide.pdf](http://www.k12.wa.us/SpecialEd/pubdocs/SLD_Guide.pdf).
- Office of Superintendent for Public Instruction, *Using Response to Intervention (RTI) for Washington's Students* (June, 2006). Retrieved from: <http://www.k12.wa.us/CurriculumInstruct/pubdocs/RTI.pdf>.
- Office of Superintendent for Public Instruction (n.d.). *Response to Intervention (RTI)*. Retrieved from: <http://www.k12.wa.us/Rti/default.aspx>
- Roid, G. H. (2003). *Stanford Binet Intelligence Scales-Fifth Edition*. Itasca, IL: Riverside.
- RTI\_WIRE (2006). *Response to Intervention school readiness survey*. Retrieved from: [http://www.maine.gov/education/rti/jim\\_wright\\_survey.pdf](http://www.maine.gov/education/rti/jim_wright_survey.pdf)
- Sotelo-D, M., Flanagan, D. P., & Alfonso, V. C. (2011). Overview of specific learning disabilities. In D.P. Flanagan & V.C. Alfonso (Eds.), *Essentials of specific learning disability identification* (pp. 1-19). Hoboken, NJ : John Wiley & Sons.
- Wechsler, D. (2003). *Wechsler Intelligence Scale for Children- Fourth Edition*. San Antonio, TX: Psychological Corporation.
- Woodcock, R. W., McGrew, K. S., & Mather, N. (2001, 2007). *Woodcock-Johnson III Normative Update Tests of Cognitive Abilities*. Itasca, IL: Riverside.
- Ysseldyke, J., & Christensen, S. (2002). *Functional assessment of academic behavior: Creating successful learning environments*. Longmont: CO, Sopris West, Inc.

Table 1.

*CHC Broad Cognitive Abilities*

Broad CHC Ability	CHC Code	Definition
Fluid Reasoning	Gf	The deliberate but flexible control of attention to solve novel, on-the-spot problems. Mental operations used when faced with novel tasks that cannot be performed automatically.
Crystallized Intelligence	Gc	The depth and breadth of a person's acquired knowledge of a culture and the effective application of this knowledge. Verbal or language-based abilities.
Quantitative Knowledge	Gq	The depth and breadth of knowledge related to mathematics. The ability to use quantitative information and to manipulate numeric symbols.
Visual Processing	Gv	The ability to manipulate, transform, and think with visual patterns and stimuli.
Auditory Processing	Ga	Cognitive abilities that process/utilize sound. Ga subsumes most of those abilities referred to as phonological awareness/processing.
Short-term memory	Gsm	The ability to encode, maintain, and manipulate information in one's immediate awareness.
Long-term Storage & Retrieval	Glr	The ability to store, consolidate, and retrieve information over time (minutes, days, years). Idea production and ideational fluency is included in this construct.
Processing Speed	Gs	The ability to perform simple, repetitive cognitive tasks quickly and fluently
Reading & Writing	Grw	The depth and breadth of knowledge and skills related to written language.
Executive Functioning	EF	Initiating and completing complex tasks, involves working memory, attentional control, cognitive flexibility, and self-monitoring/self-regulation

Note. Adapted from McGrew & Flanagan (1998) and Flanagan et al. (2013).

Table 2.

*Broad and Narrow Cognitive Abilities Related to Reading*

Broad CHC Ability	Code	Narrow CHC Abilities	Code	Reading Skill
Crystallized Intelligence	Gc	Language Development Lexical Knowledge Listening Ability	LD VL LS	Basic Reading, <i>Reading Fluently</i> , & Reading Comprehension
Short-term Memory	Gsm	Memory Span within the context of Working Memory	MS MW	Basic Reading & Reading Comprehension
Auditory Processing	Ga	Phonetic Coding	PC	Basic Reading
Long-term Storage & Retrieval	Glr	Naming Facility Associative Memory Meaningful Memory	NA MA MM	Basic Reading, <i>Reading Fluently</i> , & Reading Comprehension
Processing Speed	Gs	Perceptual Speed	P	Basic Reading & <i>Reading Fluently</i>
Fluid Reasoning	Gf	Inductive Reasoning General Sequential Reasoning	I RG	<i>Reading Comprehension</i>

Note. Adapted from Flanagan et al., 2013; reading skills written in regular face are evidence-based and skills written in italics are logically inferred.

**Table 3.**  
**Constructs on the *Differential Ability Scales-Second Edition* (Elliot 2007)**

Broad CHC Ability	code	Narrow CHC Abilities	code	Subtests
Crystallized Intelligence	Gc	listening ability	LS	Verbal Comprehension Naming Vocabulary
		lexical knowledge	VL	Word Definitions Early Number Concepts Verbal Similarities
Fluid Reasoning	Gf	Inductive Reasoning	I	Matrices Picture Similarities Verbal Similarities
		Quantitative Reasoning	RG	Sequential & Quantitative Reasoning
Short-term Memory	Gsm	Memory Span	MS	Recall of Digits - Forward
		Working Memory Capacity	MW	Recall of Digits - Backward
Long-term Storage & Retrieval	Glr	Naming Facility	NA	Rapid Naming
		Free Recall	M6	Recall of Objects
Processing Speed	Gs	Perceptual Speed	P	Speed of Information Processing
		Rate of test taking	R9	Rapid Naming
Auditory Processing	Ga	Phonetic Coding	PC	Phonological Processing
Visual Processing	Gv	Visual Memory	MV	Recognition of Pictures Recall of Designs
		Visualization	Vz	Copying Pattern Construction
Quantitative Knowledge	Gq	Mathematical Achievement	A3	Early Number Concepts
Reading & Writing	Grw			
Executive Functioning	EF	Concept Recognition		Picture Similarities Verbal Similarities
		Planning		Matrices

**Table 4.**  
**Constructs on the Kaufman Assessment Battery for Children-Second Edition**  
**(Kaufman & Kaufman, 2004)**

<b>Broad CHC Ability</b>	<b>code</b>	<b>Narrow CHC Ability</b>	<b>code</b>	<b>Subtest</b>
Crystallized Intelligence	Gc	General Verbal Information	KO	Story completion Verbal Knowledge Riddles
		Lexical Knowledge	VL	Verbal Knowledge Expressive Vocabulary
Fluid Reasoning	Gf	Inductive Reasoning	I	Pattern Reasoning Conceptual Thinking
		General Sequential Reasoning	RG	Story completion Riddles Rover
Short-term Memory	Gsm	Memory Span	MS	Hand Movements
		Working Memory Capacity	MW	Word Order
Long-term Storage & Retrieval	Glr	Associative Memory	MA	Atlantis
				Atlantis-Delayed Rebus Rebus-Delayed
<b>Processing speed</b>				
<b>Auditory processing</b>				
Visual processing	Gv	Spatial Scanning	SS	Rover Conceptual Thinking
		Visualization	Vz	Block Counting Pattern Reasoning Triangles
		Visual Memory	MV	Hand Movements Face Recognition
		Flexibility of Closure	CS	Gestalt Closure
Quantitative Knowledge Reading & Writing				
Executive Functioning	EF	Planning		Pattern Reasoning Rover Story completion

**Table 5.**  
**Constructs on the *Stanford-Binet Intelligence Scales-Fifth Edition (Roid, 2003)***

Broad CHC Ability	code	Narrow CHC Ability	code	Subtest
Crystallized Intelligence	Gc	General Verbal Information	KO	Nonverbal Knowledge Verbal Visual-Spatial Processing
		Lexical Knowledge	VL	Verbal Knowledge Verbal Visual-Spatial Processing
		Listening Ability	LS	Nonverbal Knowledge
		Communication Ability	CM	Verbal Fluid Reasoning
Fluid Reasoning	Gf	Inductive Reasoning	I	Nonverbal Fluid Reasoning Verbal Fluid Reasoning
		General Sequential Reasoning	RG	Nonverbal Knowledge Verbal Fluid Reasoning
		Quantitative Reasoning	RQ	Nonverbal Quantitative Reasoning Verbal Quantitative Reasoning
Short-term Memory	Gsm	Memory Span	MS	Nonverbal Working Memory Verbal Working Memory
		Working Memory Capacity	MW	Nonverbal Working Memory Verbal Working Memory
Long-term Storage & Retrieval	Glr			
Processing Speed	Gs			
Auditory Processing	Ga			
Visual Processing	Gv	Visualization	Vz	Nonverbal Visual-Spatial Processing Verbal Visual-Spatial Processing
Quantitative Knowledge	Gq	Mathematical Achievement	A3	Nonverbal Quantitative Reasoning Verbal Quantitative Reasoning
Reading & Writing	Grw			
Executive Functioning	EF	Planning		Nonverbal Fluid Reasoning Verbal Fluid Reasoning

**Table 6.**  
**Constructs on the *Wechsler Intelligence Scale for Children-Fourth Edition***  
**(Wechsler, 2003)**

<b>Broad CHC Ability</b>	<b>code</b>	<b>Narrow CHC Ability</b>	<b>code</b>	<b>Subtest</b>
Crystallized Intelligence	Gc	General Verbal Information	KO	Comprehension Information Picture Completion
		lexical knowledge	VL	Similarities Vocabulary Word Reasoning
Fluid Reasoning	Gf	Induction	I	Matrix Reasoning Similarities Word Reasoning Picture Concepts
		Sequential & Quantitative Reasoning	RQ	Arithmetic
Short term memory	Gsm	Memory Span	MS	Digit Span Arithmetic
		Working Memory Capacity	MW	Letter-Number Sequencing Digit Span
Long-term Storage & Retrieval	Glr			
Processing Speed	Gs	Rate of Test-Taking	R9	Coding
		Perceptual Speed	P	Cancellation Symbol Search
Auditory Processing	Ga			
Visual Processing	Gv	Flexibility of Closure	CF	Picture Completion
		Visualization	Vz	Block Design
Quantitative Knowledge	Gq			
Reading & Writing	Grw			
Executive Functioning	EF	Concept Recognition		Similarities
		Planning		Matrix Reasoning Picture Concepts

**Table 7. Percentile Rank and Standard Score Conversion Table**

<b>WJ-R/Standard</b> (M=100; SD=15)	<b>DAS</b> (M=50; SD=10)	<b>WISC</b> <b>K-ABC</b> <b>KAIT</b> (M=10; SD=3)	<b>Percentile Rank</b>
160	90		99.99
159	89		99.99
158	89		99.99
157	88		99.99
156	87		99.99
155	87		99.99
154	86		99.99
153	85		99.98
153	85		99.98
152	85		99.97
151	84		99.96
150	83		99.95
149	83		99.94
148	82		99.93
147	81		99.93
146	81		99.89
145	80	19	99.87
144	79		99.84
143	79		99.80
142	78		99.75

141	77		99.70
140	77	18	99.64
139	76		99.57
138	75		99
138	75		99
137	75		99
136	74		99
135	73	17	99
134	73		99
133	72		99
132	71		98
131	71		98
130	70	16	98
129	69		97
128	69		97
127	68		97
126	67		96
125	67	15	95
124	66		95
123	65		94
123	65		93
122	65		92
121	64		92
120	63	14	91
119	63		89

118	62		88
117	61		87
116	61		86
115	60	13	84
114	59		83
113	59		81
112	58		79
111	57		77
110	57	12	75
109	56		73
108	55		71
108	55		69
107	55		67
106	54		65
105	53	11	65
104	53		62
103	52		57
102	51		55
101	51		52
100	50	10	50
99	49		48
98	49		45
97	48		43
96	47		40
95	47	9	38

94	46		35
93	45		33
93	45		31
92	45		29
91	44		27
90	43	8	25
89	43		23
88	42		21
87	41		19
86	41		17
85	40	7	16
84	39		14
83	39		13
82	38		12
81	37		11
80	37	6	9
79	36		8
78	35		8
78	35		7
77	35		6
76	34		5
75	33	5	5
74	33		4
73	32		3
72	31		3

71	31		3
70	30	4	2
69	29		2
68	29		2
67	28		1
66	27		1
65	27	3	1
64	26		1
63	25		1
63	25		1
62	25		1
61	24		.49
60	23	2	.36
59	23		.30
58	22		.25
57	21		.20
56	21		.16
55	20	1	.16
54	19		.11
53	19		.09
52	18		.07
51	17		.06
50	17		.05
49	16		.04
48	15		.03

48	15		.02
47	15		.02
46	14		.01
45	13		.01
44	13		.01
43	12		.01
42	11		.01
41	11		.01
40	10		.01

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