



**British Columbia Association of School  
Psychologists (BCASP)**

**Best Practice Guidelines for the Assessment,  
Diagnosis and Identification of Students with  
Learning Disabilities**

**(2007)**

**Preliminary Working Paper**

**In response to the recently revised Ministry of Education operational definition of Learning Disabilities (2006), the British Columbia Association of School Psychologists has developed the following best practice guidelines for the assessment, diagnosis and identification of students with learning disabilities in the Province of B.C.**

### **Theoretical Definition**

"Learning Disabilities" refer to a number of disorders which may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disorders affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning. As such, learning disabilities are distinct from global intellectual deficiency.

Learning disabilities result from impairments in one or more processes related to perceiving, thinking, remembering or learning. These include, but are not limited to: language processing; phonological processing; visual spatial processing; processing speed; memory and attention; and executive functions (e.g. planning and decision-making).

Learning disabilities range in severity and may interfere with the acquisition and use of one or more of the following:

- oral language (e.g. listening, speaking, understanding);
- reading (e.g. decoding, phonetic knowledge, word recognition, comprehension);
- written language (e.g. spelling and written expression); and
- mathematics (e.g. computation, problem solving).

Learning disabilities may also involve difficulties with organizational skills, social perception, social interaction and perspective taking.

Learning disabilities are generally lifelong. The way in which they are expressed may vary over an individual's lifetime, depending on the interaction between the demands of the environment and the individual's strengths and needs. Learning disabilities are suggested by unexpected academic underachievement or achievement which is maintained only by unusually high levels of effort and support.

Learning disabilities are due to genetic and/or neurobiological factors or injury that alters brain functioning in a manner which affects one or more processes related to learning. These disorders are not

due primarily to hearing and/or vision problems, socio-economic factors, cultural or linguistic differences, lack of motivation or ineffective teaching, although these factors may further complicate the challenges faced by individuals with learning disabilities. Learning disabilities may co-exist with various conditions including attention, behaviour and emotional disorders, sensory impairments or other medical conditions.

For success, individuals with learning disabilities require early identification and timely specialized assessments and interventions involving home, school, community and workplace settings. The interventions need to be appropriate for each individual's learning disability subtype and, at a minimum, include the provision of:

- specific skill instruction;
- individual curriculum accommodations;
- compensatory strategies; and
- self-advocacy skills.

References:

*“LD Defined: Official Definition of Learning Disabilities”*

*By the Learning Disabilities Association of Canada*

[http://www.ldac-taac.ca/Defined/defined\\_new-e.asp](http://www.ldac-taac.ca/Defined/defined_new-e.asp)

## **Screening and Interventions for Students “At-risk”**

### **Initial Screening and Interventions**

Children entering kindergarten programs arrive with diverse experiences, and widely varying levels of developmental maturity. Although the majority of these children adapt to the level of programming offered during the early school years, a minority of them show evidence of learning difficulties that place them significantly behind their peers in key areas of readiness for the acquisition of appropriate literacy and numeracy skills. These learning difficulties may arise due to a myriad of factors, including physical, biological, personality, emotional, family, and socio-cultural issues, which may singly or in combination influence how learning difficulties are expressed in academic, home, or social settings. The extent of such learning difficulties can be established by comparing individuals to their same-age peers on various global and standardized measures of academic progress, or by determining highly significant variances in cognitive and academic abilities.

From the results of such comparisons, specific criteria may be applied in order to determine which children are at risk of failure, for whatever reason, and for whom additional support will be provided. Such a screening is non-categorical in nature; that is, children are determined simply to be "at-risk" without specifying a particular diagnostic category or identification label. Specific programming can then be implemented, either within the classroom in general, or to small groups of children with common learning needs, geared toward skill-building in preparation for entry to the Grade 1 program. The degree of success will usually depend to a great extent on the specific types of difficulty, the causes of the difficulty, the timeliness of the intervention, and the appropriateness of fit of the remedial programs used.

While generic intervention programs may result in improvements in some individuals, there will be a subgroup of children who will require more in-depth assessment to pinpoint each child's specific areas of difficulty related to learning and individualize intervention programs so that the probability of success is maximized. Therefore, it is strongly recommended that appropriate screening of all children be undertaken in kindergarten, and again in grade 1 using measures associated with the development of early literacy and numeracy skills. This would normally include measures of phonological, orthographic, and morphological awareness, visual-motor integration, and number sense.

Screening should also evaluate possible medical or biological causes for learning difficulties, such as vision or hearing impairments, genetic disorders, etc. By this means, all children who are “at-risk” for learning failure, regardless of cause, may be identified, and then provided with appropriate supports and interventions. Those children, whose learning problems are remediable or are due to factors other than a learning disability, would then receive appropriate assistance in a timely manner.

Ongoing and dynamic screening and intervention throughout the school year is also recommended to constantly evaluate how well the remediation programs are working, and to adjust the delivery or method as required. The screening process can be executed effectively by teachers, and subsequent remediation may be provided by qualified personnel within the school system (e.g., speech and language pathologists, and early literacy specialists). When such screening and dynamic interventions are in place during kindergarten and grades 1 and 2, it will be more readily apparent which children are still failing to benefit from assistance, despite appropriate remediation efforts.

References:

*“Recommended Best Practices for the Early Identification and Diagnosis of Children with Specific Learning Disabilities in Ontario”*

*By Allyson G. Harrison*

<http://www.queensu-hcde.org/rarc/publications.html>

*“Recommended Practices for Assessment, Diagnosis and Documentation of Learning Disabilities”*

*By the Learning Disabilities Association of Ontario*

<http://www.ldao.ca/resources/education/pei/defsupp/index.php>

**Response to Interventions (RTI)**

“Response to Intervention” refers to a process that emphasizes how well students respond to changes in instruction. The essential elements of an RTI approach are: the provision of scientific, research-based instruction and interventions in general education; monitoring and measurement of student progress in response to the instruction and interventions; and use of these measures of student progress to shape instruction and make educational decisions. The core features of an RTI process as follows:

- High quality, research-based instruction and behavioural support in general education;

- Universal (school-wide or district-wide) screening of academics and behaviour in order to determine which students need closer monitoring or additional interventions;
- Multiple tiers of increasingly intense scientific, research-based interventions that are matched to student need;
- Use of a collaborative approach by school staff for development, implementation, and monitoring of the intervention process;
- Continuous monitoring of student progress during the interventions, using objective information to determine if students are meeting goals;
- Follow-up measures providing information that the intervention was implemented as intended and with appropriate consistency;
- Documentation of parent involvement throughout the process.

References:

*“Response to Intervention (RTI): A Primer for Parents”*

*By Mary Beth Klotz, PhD, NCSP, and Andrea Canter, PhD, NCSP*

*National Association of School Psychologists*

[\(<http://www.nasponline.org/resources/factsheets/rtiprimer.aspx>\)](http://www.nasponline.org/resources/factsheets/rtiprimer.aspx)

For further references about Response to Intervention

*“Response to Intervention References and Weblinks”*

*By the National Association of School Psychologists*

<http://www.nasponline.org/advocacy/rtireference.pdf>

## **Assessment – Identification Process**

### **Psycho-Educational Assessments**

Students who fail to respond to significant school-based interventions (i.e. learning assistance over a period of 2 to 3 years), or who may otherwise be “at-risk” of having a learning disability may be referred for a psycho-educational assessment. The process of assessment is described in a written psycho-educational report. Any assessment report documenting the presence of a learning disability should include all of the following components, unless valid rationale is provided for not doing so:

1. A specific clear diagnostic statement that the individual has a learning disability;
2. Information about home language use (original language, dialect, language(s) spoken in the home);
3. Relevant medical/developmental/family history, including results of any vision/hearing evaluations;
4. Relevant information from other professional evaluations (e.g., speech-language, occupational therapy, educational consultant, etc.) including previous psychological assessments;
5. Examiner's statement regarding the validity of the present assessment results;
6. Behavioural observations during the testing sessions, as well as available observations (both anecdotal and from rating scales) from parents, teachers, classroom visits, etc.;
7. Reporting and interpretation of formal test results, including a description of the individual's strengths and needs, an indication of how the observed pattern of abilities and achievement demonstrates the presence of a specific disability, and adequately documented evidence as to the cause of the learning difficulties;
8. Based on the individual's strengths and needs, recommendations / suggestions / indications for further action and intervention in the areas of skill instruction, compensatory strategies, and self-advocacy skills, along with requirements for appropriate accommodations at home, and in school, community and/or workplace settings;
9. Signature of an appropriately qualified psychologist, such as a certified school psychologist, a registered psychologist, or a registered psychological associate. The qualified psychologist must be present (preferably in person or in real-time audio or visual connection) when oral diagnostic reports are delivered.

## **Diagnosis and Identification**

For the purposes of making the definition of learning disabilities operational, a clear distinction must be made between **diagnosis** which is made by an appropriately qualified psychologist, and **identification** which is made by an authorized administrative officer of a school district. Appropriately qualified school psychologists include certified school psychologists, registered psychologists, and registered psychological associates. School board personnel working in the special education field must familiarize themselves with the differentiation between diagnosis and identification. This is necessary so that they can accurately communicate the information expected and needed by parents, students and those who develop programming for students with learning disabilities, based on the results of assessments.

### *Diagnosis*

In order for a diagnosis of Learning Disability to be made, consistent with the Canadian Association of LD, **all** of the following criteria must be met unless valid rationale is provided:

1. A non-random, clinically significant discrepancy (i.e. base rates below 10%) between abilities essential for thinking and reasoning, and one or more of the psychological processes logically related to learning (phonological processing; memory and attention; processing speed; language processing; memory and attention; perceptual-motor integration; visual-spatial processing; executive functions). (see Appendix A, Appendix C, and Appendix E)
2. Academic achievement that is unexpectedly low relative to the individual's thinking and reasoning abilities OR academic achievement that is within expected levels, but is sustainable only by extremely high levels of effort and support. (See Appendix A, Appendix B, and Appendix E)
3. Evidence that learning difficulties are logically related to observed deficits in psychological processes.
4. Evidence that learning difficulties cannot primarily be accounted for by:
  - Other conditions, such as global developmental delay, primary sensory deficits (e.g., visual or hearing impairments), or other physical difficulties;
  - Environmental factors, such as deprivation, abuse, inadequate or inappropriate instruction, socio-economic status, or lack of motivation;
  - Cultural or linguistic diversity, including developmental levels of ESL.
5. If a coexisting condition is present, the learning difficulties cannot primarily be accounted for by this coexisting disorder. (See Appendix D)

### *Identification*

Based on the Ministry of Education guidelines, BCASP recommends that students identified for funding in the LD category should be identified by the school system through a progressive assessment and systematic documentation process as follows

1. Comprehensive assessment of learning needs and use of alternate instructional strategies by classroom teacher;
2. Consultation with the parent and student about possible screening to investigate whether there is a health basis for the learning difficulty;
3. Collaboration with school-based personnel to develop additional assessment and intervention strategies;
4. Referral to SBT for further assistance in implementing strategies or coordination of support services;
5. Consultation with a certified school psychologist, registered psychologist, registered psychological associate to develop additional assessment and intervention strategies;
6. Referral to a certified school psychologist, registered psychologist, registered psychological associate to obtain a written statement of diagnosis;

### **“Average” Ability**

In order to be identified as having a learning disability in B.C., the Ministry of Education uses a Canadian definition that stipulates that students must be of at least “average” ability on a measure of cognitive ability, or, on a norm referenced measure of reading comprehension, math reasoning, or written language. In addition, students must have persistent difficulties in the acquisition of academic skills and significant weakness in one or more cognitive processes. It should be noted that the DSM-IV-TR does not stipulate or define “average” ability.

The stipulation of “average” ability in the Canadian definition of LD poses a number of conceptual and methodological problems for psychologists. First, notwithstanding the correlation between cognitive ability and measures of reading comprehension, mathematical reasoning or written expression, the latter are not synonymous with cognitive ability, and their inclusion as measures of “average” intelligence is potentially misleading. For example, a student with a nonverbal learning disability might score below average on measures of reading comprehension, math reasoning, or written language, while their verbal intelligence on an intelligence test may be well within or above average. Children with language-based learning disabilities might struggle in all three areas, while showing above average nonverbal reasoning abilities.

Second, it has been argued that children with learning disabilities tend to do poorly on measures of intelligence as a result of cumulative deficit or what has been termed “Matthew Effect” (Stanovich, 1986). Essentially, it is argued that IQ tests are measures of prior learning, largely language-related, and are heavily influenced by cultural and socio-economic factors. Children with LD have difficulty learning and, therefore, may score lower on tests of measured intelligence than other children. Moreover, children with LD may perform at lower levels on IQ tests than other children because their processing deficits, especially in the areas of processing speed and memory, interfere with test performance.

Third, it has been demonstrated that the distinguishing feature between children with reading disabilities and low achievers is not intelligence, rather a weakness in one or more specific cognitive processes (e.g., phonological awareness, working memory). Therefore, the stipulation that only children of average intelligence can be considered as having a learning disability is possibly erroneous and unjust. Children with below average ability (IQ below 70) are typically identified as having mild intellectual disabilities. However, children whose ability falls within the “gray area” between “average” ability and mild range intellectual disability will be ineligible for special education services, despite having specific processing weaknesses.

Thus, it has been argued that IQ tests are controversial, particularly in the assessment of learning disabilities (e.g. Gardner, 1993; Gould, 1996; Klassen, Neufeld, and Munro, 2005; Siegel, 1989; Valencia and Suzuki, 2001). It is beyond the scope of this position paper to resolve these complex issues.

### **Beyond “Average”**

Another problem associated with the use of “average” ability and discrepancy formulae involves problems with the psychometric properties of the tests used, as well as influences from statistical phenomena such as regression to the mean. The use of tests that measure ability and achievement, based upon different normative samples, greatly complicates the degree to which scores from these tests can be meaningfully compared. In addition, due to their imprecision, the use of age-equivalents and grade-equivalents as a basis for comparison between tests is indefensible and contributes to serious under- as well as over-estimation of students with learning problems.

The best practice would be to compare standard scores from co-normed tests of ability and achievement (i.e., tests based upon the same normative sample), using proper statistical procedures and tables for comparing the degree of discrepancy and the frequency of such a discrepancy among the normative sample.

Some of these psychometric issues are especially problematic in the assessment of students who are outside the traditional “average ability range” as far as standardized scores are concerned. It is generally accepted that the diagnosis of learning disabilities calls for greater diagnostic and clinical judgement when the student’s full scale measured I.Q. is more than one standard deviation from the mean, i.e., is below 85 (16<sup>th</sup> percentile) and above 115 (84<sup>th</sup> percentile). BCASP contend that a good assessment, based on information collected from a variety of test and non-test sources and augmented by clinical judgement, will focus on identifying the primary causes of the difficulties and the most appropriate forms of intervention. A key requirement is to ensure that in the diagnosticians’ judgement, the manifestations of academic and other difficulties that can logically be attributed to the observed psychological processing deficits and that neither can be more accurately ascribed to another condition.

### **Summary**

Identification involves consideration of a variety of information in order to determine whether a pupil meets the criteria for funding under the Ministry of Education’s definition of “learning disability”, as an area of special needs. Information used to make that identification includes reports from teachers, parents, and appropriately qualified psychologists. Schools and School boards are responsible for determining the appropriate special education category.

On the other hand, the term “learning disability” constitutes a diagnosis when it is used to provide an explanation for a learning problem through a classification, formulation or causal statement linking it to a neuropsychological disorder. Particularly, when this information is communicated to individuals, or to their personal representatives under circumstances in which they could be expected to rely upon the diagnosis (i.e., generally in a face-to-face meeting or through a written report).

**Conclusion:**

It is the position of the British Columbia Association of School Psychologists (BCASP) that learning disabilities are formally diagnosed in school systems by qualified psychologists, in particular members of BCASP, **prior to** identifications being made through a school based team or other district based policy or procedure. This will ensure that all relevant factors and other possible conditions are considered and minimize the likelihood of students being misdiagnosed or mislabeled.

## References

*“LD Defined: Official Definition of Learning Disabilities”*

*By the Learning Disabilities Association of Canada*

[http://www.ldac-taac.ca/Defined/defined\\_new-e.asp](http://www.ldac-taac.ca/Defined/defined_new-e.asp)

*“Recommended Best Practices for the Early Identification and Diagnosis of Children with Specific Learning Disabilities in Ontario”*

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<http://www.queensu-hcde.org/rarc/publications.html>

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*National Association of School Psychologists*

<http://www.nasponline.org/resources/factsheets/rtiprimer.aspx>

*Learning Disabilities Association of Ontario, “Learning Disabilities: A New Definition”:*

<http://www.ldao.ca/resources/education/pei/defsupp/index.php>

*BC Ministry of Education Special Education Services: A Manual of Policies, Procedures and Guidelines*

[http://www.bced.gov.bc.ca/specialed/ppandg/planning\\_3.htm](http://www.bced.gov.bc.ca/specialed/ppandg/planning_3.htm)

## Further references for Response to Intervention (RTI) research

*“Response to Intervention References and Weblinks”*

*By the National Association of School Psychologists*

<http://www.nasponline.org/advocacy/rtireference.pdf>

**Further references for calculating a non-random, clinically significant discrepancy**

*“Severe Discrepancy Determination by Formula”*

By Ron Dumont, Fairleigh Dickinson University and John Willis, River College

[http://alpha.fdu.edu/psychology/severe\\_discrepancy\\_determination.htm](http://alpha.fdu.edu/psychology/severe_discrepancy_determination.htm)

*“Method for documenting severe discrepancy”*

By the Washington State Legislature

<http://apps.leg.wa.gov/WAC/default.aspx?cite=392-172-132>

*“Issues in Severe Discrepancy Measurement: A Technical Assistance Paper for Special Educators”*

By Richard D. Baer, Ph.D.; Center for Persons with Disabilities Utah State University

<http://www.usu.edu/teachall/text/iep/tapaper.pdf>

**Further references on the controversies with IQ tests:**

*“Howard Gardner and multiple intelligences”*,

By Mark K Smith (*The Encyclopaedia of Informal Education 2002*)

<http://www.infed.org/thinkers/gardner.htm>.

*“IQ Test: Where Does It Come From and What Does It Measure”*

By Jan Strydom, M.A., H.E.D., D.Ed. & Susan Du Plessis, B.D., B.A. Hons (psychology)

[http://www.audiblox2000.com/dyslexia\\_dyslexic/dyslexia014.htm](http://www.audiblox2000.com/dyslexia_dyslexic/dyslexia014.htm)

*“IQ Tests: Throwing Out the Bathwater, Saving the Baby”*

By James H. Borland

[http://www.geniusdenied.com/articles/Record.aspx?NavID=13\\_12&rid=11468](http://www.geniusdenied.com/articles/Record.aspx?NavID=13_12&rid=11468)

Gardner, Howard (1983; 1993) *Frames of Mind: The theory of multiple intelligences*, New York: Basic Books.

Gould, S. J. (1996) *The Mismeasure of Man*, New York: W. W. Norton and Company

- Klassen, R. M., Neufeld, P., and Munro F. (2005) ‘When IQ is Irrelevant to the Definition of Learning Disabilities’, *School Psychology International* 26(3):297-316.
- Siegel, L. S. (1989) ‘IQ is Irrelevant to the Definition of Learning Disabilities’, *Journal of Learning Disabilities* 22:469-29.
- Valencia, R. R. and Suzuki, L. A. (2001) *Intelligence Testing and Minority Students: Foundations, Performance Factors, and Assessment Issues*. Thousand Oaks, CA: Sage Publications, Inc.

**Further references on the “Matthew Effect”**

“*The Matthew Effects*” By Dr. Kerry Hempenstall

[http://www.readbygrade3.com/matthew\\_effects\\_kerry\\_hempenstal.htm](http://www.readbygrade3.com/matthew_effects_kerry_hempenstal.htm)

“*Matthew Effects in Reading*” By Sebastian Wren, Ph.D.

<http://www.balancedreading.com/matthew.html>

- Stanovich, K. E. (1986) ‘Matthew Effects in Reading, Some Consequences of Individual Differences in the Acquisition of Literacy’, *Reading Research Quarterly* 21, 360-406.

**Table I (Assessment – Diagnosis – Identification)**

<p><b>Psycho-educational Assessment</b></p>	<p><b>Formal Diagnosis of a Learning Disability</b></p>	<p><b>Ministry Identification Process</b></p>
<p>All of the following components must be included, unless valid rationale is provided for not doing so:</p> <ol style="list-style-type: none"> <li>1. A specific clear diagnostic statement that the individual has a learning disability;</li> <li>2. Information about home language use (original language, dialect, language(s) spoken in the home);</li> <li>3. Relevant medical/developmental/family history, including results of any vision/hearing evaluations;</li> <li>4. Relevant information from other professional evaluations (e.g., speech-language, occupational therapy, educational consultant, etc.) including previous psychological assessments;</li> <li>5. Examiner’s statement regarding the validity of the present assessment results;</li> <li>6. Behavioural observations during the testing sessions, as well as available observations (both anecdotal and from rating scales) from parents, teachers, classroom visits, etc.;</li> <li>7. Reporting and interpretation of formal test results, including a description of the individual’s strengths and needs, an indication of how the observed pattern of abilities and achievement demonstrates the presence of a specific disability, and adequately documented evidence as to the cause of the learning difficulties;</li> <li>8. Based on the individual’s strengths and needs, recommendations / suggestions / indications for further action and intervention in the areas of skill instruction, compensatory strategies, and self-advocacy skills, along with requirements for appropriate accommodations at home, and in school, community and/or workplace settings;</li> <li>9. Signature of an appropriately qualified psychologist, such as a certified school psychologist, a registered psychologist, or a registered psychological associate. The qualified psychologist must be present (preferably in person or in real-time audio or visual connection) when oral diagnostic reports are delivered</li> </ol>	<p>All of the following criteria must be met unless valid rationale is provided:</p> <ol style="list-style-type: none"> <li>1. A non-random, clinically significant discrepancy (i.e. base rates below 10%) between abilities essential for thinking and reasoning, and one or more of the psychological processes logically related to learning (phonological processing; memory and attention; processing speed; language processing; memory and attention; perceptual-motor integration; visual-spatial processing; executive functions), (see Appendix A, Appendix C, and Appendix E)</li> <li>2. Academic achievement that is unexpectedly low relative to the individual’s thinking and reasoning abilities OR academic achievement that is within expected levels, but is sustainable only by extremely high levels of effort and support. (See Appendix A, Appendix B, and Appendix E).</li> <li>3. Evidence that learning difficulties are logically related to observed deficits in psychological processes.</li> <li>4. Evidence that learning difficulties cannot primarily be accounted for by: <ul style="list-style-type: none"> <li>o Other conditions, such as global developmental delay, primary sensory deficits (e.g., visual or hearing impairments), or other physical difficulties;</li> <li>o Environmental factors, such as deprivation, abuse, inadequate or inappropriate instruction, socioeconomic status, or lack of motivation;</li> <li>o Cultural or linguistic diversity, including developmental levels of ESL.</li> </ul> </li> <li>5. If a coexisting condition is present, the learning difficulties cannot primarily be accounted for by this coexisting disorder. (See Appendix D)</li> </ol>	<p>Most students included in the Learning Disabilities category will be identified by the school system through the progressive assessment and systematic documentation process:</p> <ol style="list-style-type: none"> <li>1. Comprehensive assessment of learning needs and use of alternate instructional strategies by classroom teacher;</li> <li>2. Consultation with the parent and student about possible screening to investigate whether there is a health basis for the learning difficulty;</li> <li>3. Collaboration with school-based personnel to develop additional assessment and intervention strategies;</li> <li>4. Referral to SBT for further assistance in implementing strategies or coordination of support services;</li> <li>5. Consultation with a certified school psychologist, registered psychologist, registered psychological associate to develop additional assessment and intervention strategies;</li> <li>6. Referral to a certified school psychologist, registered psychologist, registered psychological associate to obtain a written statement of diagnosis;</li> </ol>

## Appendix A

### Thinking and Reasoning Abilities

#### Wechsler Intelligence Scales for Children-IV (WISC-IV)

- Full Scale IQ
- Verbal Comprehension Index
- Perceptual Reasoning Index
- General Ability Index

#### Wechsler Adult Intelligence Scale-III (WAIS-III\_

- Full Scale IQ
- Verbal IQ
- Performance IQ

#### Wechsler Preschool and Primary Scale of Intelligence-III (WPPSI-III)

- Full Scale IQ
- Verbal IQ
- Performance IQ

#### Wechsler Nonverbal Scale of Ability (WNV)

#### Kaufman Assessment Battery for Children – II

- Mental Processing Composite
- Fluid Crystallized Index
- Mental Processing Index
- Nonverbal Index

#### Woodcock-Johnson-III Tests of Cognitive Ability

- Broad and/or Extended Cognitive Ability
- Thinking Ability
- Fluid Reasoning

#### Stanford Binet Intelligence Scales Fifth Edition

- Full Scale IQ
- Verbal IQ
- Nonverbal IQ

#### Differential Abilities Scale Second Edition (DAS II)

- GCA

- Verbal IQ
- Spatial IQ
- Nonverbal IQ

Leiter-Revised

Universal Nonverbal Intelligence Test (UNIT)

## Appendix B

### Academic Achievement

#### *General Achievement Batteries*

Wechsler Individual Achievement Test - II (WIAT - II)  
Woodcock Johnson - III Tests of Achievement  
Kaufman Test of Educational Achievement-II (KTEA-II)  
Peabody Individual Achievement Test – Revised (PIAT)

#### *Oral Language*

Listening Test  
Test of Problem Solving (TOPS)  
Word Test – Revised  
Oral Language on the WIAT-II  
Oral Language, Standard or Extended on the WJ-III Tests of Achievement  
Listening Comprehension on the WJ-III Tests of Achievement  
Oral Language on the Kaufman Test of Educational Achievement - II

#### *Reading*

Woodcock Reading Mastery – Revised  
Gray Oral Reading Test – Fourth Edition  
Test of Reading Comprehension – Third Edition  
Wide Range Achievement Test – Third Edition  
Wechsler Individual Achievement Test - II  
Woodcock Johnson - III Tests of Achievement  
Kaufman Test of Educational Achievement-II (KTEA-II)

#### *Reading Rate*

Woodcock Johnson - III Tests of Achievement

- Reading Fluency

Kaufman Test of Educational Achievement-II (KTEA-II)

- Fluency (Semantic and Phonological)
- Timed Nonsense Word Decoding

Gray Oral Reading Test – Third Edition (GORT-III)

#### *Reading Decoding*

Woodcock Reading Mastery – Revised

- Letter Word Identification
- Word Attack
- Word Reading

Kaufman Test of Educational Achievement-II (KTEA-II)

- Letter and Word Recognition
- Nonsense Word Decoding
- Rapid Automatized Naming
- Timed Letter and Word Recognition
- Phonological Awareness

*Written Language*

Test of Written Language – Third Edition (TOWL-III)

Written Expression on the WIAT-II

Written Expression on the WJ-III Tests of Achievement

Written Expression on the KTEA-II

*Spelling*

Test of Written Spelling – Fourth Edition (TWS-4)

Spelling on the WIAT-II

Spelling on the WJ-III Tests of Achievement

Spelling on the KTEA-II

Spelling on the Wide Range Achievement Test 3 (WRAT3)

*Mathematics*

Key Math-Revised

Stanford Tests of Mathematical Ability

Mathematics on the WIAT-II

Math on the WJ-III Tests of Achievement

Math on the KTEA-II

## Appendix C

### **Psychological Processes Related to Learning**

#### *Phonological Processing*

Test of Phonological Awareness (TOPA)

Comprehensive Test of Phonological Processing (CTOPP)

Auditory Processing Factor (Ga) from the WJ-III Tests of Cognitive Ability

Phoneme-Grapheme knowledge factor from the WJ-III Tests of Achievement

DAS-II Phonological Processing

NEPSY Phonological Processing

#### *Memory and Attention*

NEPSY

- Memory
- Attention/Executive Functioning

Test of Memory and Learning

Children's Memory Scale

Wechsler Memory Scale-Third Edition (WMS-III)

Wide Range Assessment of Memory and Learning II

Working Memory Index of WISC-IV or WAIS-III

Detroit Tests of Learning Aptitude - IV

Short-term memory factor (Gsm) from the WJ-III

Long-term memory factor (Glm) from the WJ-III

Rey-Osterreith Complex Figure

Learning / Glr score on the Kaufman Assessment Battery for Children – II

Sequential / Gsm score on the Kaufman Assessment Battery for Children – II

Working Memory on the Stanford-Binet V

DAS II

- Working Memory
- Recall of Objects

Informal measures: Rosner Test of Auditory Analysis

*Processing Speed*

Processing Speed Index on the WISC-IV or WAIS-III  
Processing Speed factor (Gs) on the WJ-III Tests of Cognitive Ability  
Detroit Tests of Learning Aptitude – IV  
DAS II Processing Speed

*Language Processing*

Clinical Evaluation of Language Fundamentals – Fourth Edition (CELF-4)  
Test of Oral Language Development  
Verbal IQ on the WPPSI-III or WAIS-III  
Verbal Comprehension Index on the WISC-IV  
Knowledge / Gc on the Kaufman Assessment Battery for Children – II  
Knowledge on the Stanford-Binet V  
Peabody Picture Vocabulary Test – Third Edition (PPVT-III)  
Expressive Vocabulary Test (EVT)  
NEPSY Language

*Perceptual-Motor Processing*

Beery-Buktenica Developmental Test of Visual-Motor Integration V  
Beery-Buktenica Developmental Test of Motor Coordination V  
Beery-Buktenica Developmental Test of Visual Perception V  
Bender Visual Motor GestaltGestalt Test – Second Edition  
Gardner Test of Visual Perception Skills  
Gardner Test of Visual-Motor Skills  
Evaluation Tool of Children’s Handwriting (ETCH)  
Test of Visual Perceptual Skills (TVPS-R)  
DAS II Recall of Design

*Visual-Spatial Processing*

Performance IQ on the WPPSI-III or WAIS-III  
Perceptual Reasoning Index on the WISC-IV  
Visual-Spatial Thinking on the WJ-III Tests of Cognitive Ability  
Planning / Gf on the Kaufman Assessment Battery for Children – II  
Visual Spatial Processing on the Stanford-Binet V  
Test of Nonverbal Intelligence Third Edition  
NEPSY Visual Spatial Sensorimotor

*Executive Functions*

Token Test  
Wisconsin Card Sort Test  
Executive Processes on the WJ-III Cognitive  
Planning subtest on the WJ-III  
Word fluency Tests  
Design fluency Tests  
Categories Test  
Tower of London  
NEPSY Attention/Executive Functioning

## Appendix D

### *Coexisting Psychological Conditions*

#### *Personality, Behavioral, and Emotional Functioning*

Piers-Harris Children's Self-Concept Scale - 2

Children's Apperception Test

Robert's Apperception Test

Rorschach Test, Comprehensive System

Conners' Rating Scales – Revised

Achenbach Child Behavior Checklists

Vineland Adaptive Behavior Scales - II

Behavior Assessment System for Children- II

Trauma Symptom Checklist for Children (TSCC)

Children's Dissociative Experiences Scale (CDES)

Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and

Lifetime Version (K-SADS-PL)

The Multidimensional Anxiety Scale for Children (MASC)

Children's Depression Inventory (CDI)

Beck Youth Inventories

#### *Adaptive Functioning*

Vineland Adaptive Behavior Scales – II

Adaptive Behavior Assessment System – II (ABAS-II)

Scales of Independent Behavior – Revised (SIB-R)