Chapter 11
Learning Disabilities

11.1 Overview

The assessment of learning disabilities will be among the most common of your evaluations. Research shows that it comprises approximately 51 % of all special education classifications with 7.66 % of the school-aged population receiving a classification (Boyle et al., 2011). Two major classification systems address the needs of children and adolescents with learning disabilities (LD): the system based on special education law (e.g., Individuals with Disabilities Act (IDEA) and the system used by the clinical community (Diagnostic and Statistical Manual (DSM). The definition and classification approach from the two diagnostic systems lack specificity but has distanced itself from the discrepancy approach.

11.2 Historical Considerations

Researchers spanning nearly 100 years have investigated children's difficulties with learning to read, write, and perform mathematical operations (Hinshelwood, 1917; Kirk, 1981; Orton, 1925). To the consternation of some in the educational community, early definitions of learning disabilities (LD) were medically oriented (e.g., brain injured, perceptually impaired, dyslexic, and neurologically impaired). In an effort to move away from a medically oriented conceptualization, Samual Kirk, a professor of special education, introduced the term learning disability:

> A learning disability refers to a retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, writing, arithmetic, or other school subjects resulting from a psychological handicap caused by a possible cerebral dysfunction and/or emotional or behavioral disturbances. It is not the result of mental retardation, sensory deprivation, or cultural and instructional factors (Kirk, 1962, p. 263).

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Kirk's definition had a significant influence on subsequent generations of LD definitions within psychiatric (e.g., DSM) and educational (e.g., IDEA) taxonomies. Kirk's definition did not contain specific mention of a discrepancy between intellectual ability and achievement (Kirk & Bateman, 1962) but it was still considered too medically oriented (Mercer, Forgnone, & Wolking, 1976). In an effort to move away from a medically oriented LD definition that was less educationally relevant and to provide the field with a method to assess the construct, the field adopted the discrepancy model as a primary defining characteristic. Barbara Bateman (1965), one of Kirk's students, was the first to provide an LD definition that included a reference to a discrepancy between ability and achievement. This definition was thought to be more parsimonious and have greater educational relevance. Rutter and Yule (1975) and Yule (1973) wrote the first articles that provided what was then considered an empirical basis for the IQ–achievement discrepancy. Their research (i.e., the Isle of Wight study) influenced the field's conceptualization of LD and fostered incorporation of the discrepancy diagnostic heuristic into subsequent generations of DSM and IDEA LD classification taxonomy. However, numerous studies across the next 40 years challenged Rutter and Yule's conclusion that an IQ–achievement discrepancy model can be reliably and validly used for LD diagnosis and educational classification (Aaron, 1997; Dombrowski, Kamphaus, & Reynolds, 2004; Dombrowski, Ambrose, & Clinton, 2007; Dombrowski, Kamphaus et al., 2006).

Instead, most researchers have argued that the discrepancy model has made the LD definition just as educationally irrelevant as prior medically oriented definitions (Aaron, 1997; Dombrowski et al., 2004; Dombrowski & Gischlar, 2014; Lyon, 1995; Siegel, 1999). After more than four decades of use and when considering the accumulated research evidence against the discrepancy model, the research community and most practicing psychologists in the fields of school and clinical child psychology have finally cast aside the discrepancy approach as a means of classification.

11.3 Definition and Identification of Learning Disabilities

There are three learning disabilities definitions and identification procedures that will be presented including IDEA, DSM, and NJCLD. Keep in mind that you will need to adhere to your respective state's eligibility criteria when making a classification decision. State criteria are generally aligned with IDEA criteria.

IDEA Definition and Identification Procedures

(10) Specific learning disability. (i) General. 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.

(ii) Disorders not included. Specific learning disability does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

The multidisciplinary team may determine that a child has a specific learning disability if the child does not achieve adequately for the child's age or meet State-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child's age or state-approved grade–level standards:

- Oral expression.
- Listening comprehension.
- Written expression.
- Basic reading skills.
- Reading fluency skills.
- Reading comprehension.
- Mathematics calculation.
- Mathematics problem solving.

The child does not make sufficient progress to meet age or state-approved grade-level standards in one or more of the areas identified above when using a process based on the child's response to scientific, research-based intervention; or the child exhibits a pattern of strengths and weaknesses in performance, achievement, or both, relative to age, state-approved grade-level standards, or intellectual development.

Under IDEA a child cannot be classified as having a learning disability if it is determined that the child's struggles are the result of the following:

- A visual, hearing, or motor disability;
- Mental retardation;
- Emotional disturbance;
- Cultural factors;
- Environmental or economic disadvantage;
- Limited English proficiency;
- Lack of appropriate instruction.

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IDEA permits several approaches to identification of learning disabilities:

1. Response to scientific, research-based interventions (presumably intended to mean Response to Intervention);
2. A pattern of strengths and weaknesses in performance, achievement, or both, relative to age, State-approved grade-level standards, or intellectual development; or
3. Alternative research-based procedures.

Additionally, IDEA specifically references the discrepancy, but only by indicating that a state "must not require the use of a severe discrepancy between intellectual ability and achievement for determining whether a child has a specific learning disability." Some states continue to permit use of the discrepancy approach in its varied iterations.

[34 CFR 300.307] [20 U.S.C. 1221e-3; 1401(30); 1414(b)(6)]

Note that some of the LD categories specified in the IDEA definition cross over into the realm of speech-language (i.e., oral expression). Because of this the services of a speech-language therapist may need to be involved in assessment and eligibility determination for SLD.

DSM-5

Specific Learning disorder is defined in the DSM-5 (American Psychiatric Association, 2013) as follows (p66):

(A) Difficulties learning and using academic skills, as indicated by the presence of at least one of the following symptoms that have persisted for at least 6 months, despite the provision of interventions that target those difficulties.

1. Inaccurate or slow and effortful word reading (e.g., reads single words aloud incorrectly or slowly and hesitantly, frequently guesses words, has difficulty sounding out words).
2. Difficulty understanding the meaning of what is read (e.g., may read text accurately but not understand the sequence, relationships, inferences, or deeper meanings of what is read).
3. Difficulties with spelling (e.g., may add, omit, or substitute vowels or consonants).
4. Difficulties with written expression (e.g., makes multiple grammatical or punctuation errors within sentences; employs poor paragraph organization; written expression of ideas lacks clarity).

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5. Difficulties in mastering number sense, number facts, or calculation (e.g., has poor understanding of numbers, their magnitude, and relationships; counts on fingers to add single-digit numbers instead of recalling the math fact as peers do; gets lost in the midst of arithmetic computation and may switch procedures).
6. Difficulties with mathematical reasoning (e.g., has severe difficulty applying mathematical concepts, facts, or procedures to solve quantitative problems).

(B) The affected academic skills are substantially and quantifiably below those expected for the individual's chronological age, and cause significant interference with academic or occupational performance, or with activities of daily living, as confirmed by individually administered standardized achievement measures and comprehensive clinical assessment. For individuals age 17 years and older, a documented history of impairing learning difficulties may be substituted for the standardized assessment.

(C) The learning difficulties begin during school-age years but may not become fully manifested capacities (e.g., as in timed tests, reading or writing lengthy complex reports for a tight deadline, excessively heavy academic loads).

(D) The learning difficulties are not better accounted for by intellectual disabilities, uncorrected visual or auditory acuity, other mental or neurological disorders, psychosocial adversity, lack of proficiency in the language of academic instruction, or inadequate educational instruction.

Omitted from the DSM definition but included within IDEA is the notion of difficulties with listening comprehension and oral language. Included within the DSM definition are the customary rule outs (e.g., intellectual disability; environmental, socioeconomic, and cultural factors; lack of adequate instruction; hearing, vision or other disabling conditions).

The DSM-5 generally suggests that a learning disability is predicated upon the following areas of academic achievement.

1. Word Decoding and fluency.
2. Reading comprehension.
3. Spelling.
4. Written expression.
5. Mathematical calculation and operations.
6. Mathematical reasoning.

The National Joint Committee on Learning Disabilities (NJCLD) comprises 11 organizations that conduct research in LD and academic achievement. The NJCLD approach to classification is presented next and presents a solid framework for LD identification.

NJCLD Definition

Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance), or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences.

Instruments and Procedures for Comprehensive Assessment and Evaluation

To obtain a comprehensive set of quantitative and qualitative data, accurate and useful information about an individual student's status and needs must be derived from a variety of assessment instruments and procedures including RTI data, if available. A comprehensive assessment and evaluation should

1. Use a valid and the most current version of any standardized assessment.
2. Use multiple measures, including both standardized and nonstandardized assessments, and other data sources, such as

    - Case history and interviews with parents, educators, related professionals, and the student (if appropriate);
    - Evaluations and information provided by parents;
    - Direct observations that yield informal (e.g., anecdotal reports) or data-based information (e.g., frequency recordings) in multiple settings and on more than one occasion;
    - Standardized tests that are reliable and valid, as well as culturally, linguistically, developmentally, and age appropriate;
    - Curriculum-based assessments, task and error pattern analysis (e.g., miscue analysis), portfolios, diagnostic teaching, and other nonstandardized approaches;
    - Continuous progress monitoring repeated during instruction and over time.

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3. Consider all components of the definition of specific learning disabilities in IDEA 2004 and/or its regulations, including
   - Exclusionary factors;
   - Inclusionary factors;
   - The eight areas of specific learning disabilities (i.e., oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, reading fluency, mathematics calculation, mathematics problem solving);
   - The intra-individual differences in a student, as demonstrated by "a pattern of strengths and weaknesses in performance, achievement, or both relative to age, State-approved grade level standards or intellectual development" 34 CFR 300.309(a)(2)(ii).
4. Examine functioning and/or ability levels across domains of motor, sensory, cognitive, communication, and behavior, including specific areas of cognitive and integrative difficulties in perception; memory; attention; sequencing; motor planning and coordination; and thinking, reasoning, and organization.
5. Adhere to the accepted and recommended procedures for administration, scoring, and reporting of standardized measures. Express results that maximize comparability across measures (i.e., standard scores).
   Age or grade equivalents are not appropriate to report.
6. Provide confidence interval and standard error of measure, if available.
7. Integrate the standardized and informal data collected.
8. Balance and discuss the information gathered from both standardized and nonstandardized data, which describes the student's current level of academic performance and functional skills, and informs decisions about identification, eligibility, services, and instructional planning.

Source: Reproduced with permission. National Joint Committee on Learning Disabilities. (2010, June). *Comprehensive Assessment and Evaluation of Students With Learning Disabilities.* Retrieved on March 31, 2014 from www.ldonline.org/njcld.

NASP also produced a position statement regarding the identification of students with suspected learning disabilities. This position paper offers similar guidance to that of the NCJLD (e.g., comprehensive evaluation; rule out exclusionary features; does not mention use discrepancy; consider cultural and linguistic factors) but is slightly less specific.

NASP Position Regarding the Comprehensive Evaluation of Children with Suspected Specific Learning Disabilities

The National Association of School Psychologists (NASP) adopted a position statement on July 16, 2011 regarding the comprehensive evaluation of children with suspected learning disabilities. NASP indicates that the purpose of the evaluation for SLD is to gather relevant functional, developmental and academic information to determine eligibility and make recommendations regarding educational place and instructional interventions. The procedures recommended by NASP are presented below as adapted and reorganized.

1. Review data including prior evaluations, current classroom-based assessments, local or state assessments, classroom observations, and input from parents
2. Use a variety of assessments and other evaluation methods that must not be discriminatory on a racial or cultural basis and must be administered in the language that will yield accurate (i.e., reliable and valid) information.
3. Must consider whether the determining factor is the lack of appropriate instruction in reading or math, limited English proficiency, or cultural and linguistic differences.
4. Use assessment techniques that are culturally sensitive and adequately address the issues related to English language learners.
5. Identification and eligibility determinations should not be based on any single method or measure.
6. A comprehensive evaluation may include historical trends of performance and current measures of academic skills (norm-referenced, criterion-referenced, and/or curriculum-based), cognitive abilities and processes, and social–emotional competencies and oral language proficiency as appropriate; classroom observations; and indirect sources of data (e.g., teacher and parent reports).
7. When conducting the evaluation, look toward the evaluation's utility for subsequent intervention.

Source: Adapted from National Association of School Psychologists. (2011). *Identification of Students With Specific Learning Disabilities (Position Statement)*. Bethesda, MD: Author.

All major diagnostic taxonomies (i.e., IDEA and DSM) and agencies (e.g., NJCLD and NASP) recommend that LD be identified using a comprehensive evaluation based upon multiple methods of assessment and sources of data. NJCLD and DSM do not make reference to the IQ-Achievement discrepancy. IDEA permits use of the IQ-Achievement discrepancy. All three groups rule out visual, hearing and motor impairments along with intellectual disability and emotional issues. Additional rule outs include cultural factors, environmental factors, economic disadvantage and limited English proficiency.

11.4 General Guidance Regarding the Psychoeducational Assessment of Learning Disabilities

For psychologists working within a private practice or clinic the DSM is typically referenced for guidance regarding diagnosis. If the psychoeducational evaluation is conducted by an outside psychologist and is to be furnished to the school then the outside psychologist may wish to reference both IDEA and DSM when making a classification. This will increase the relevance of the outside evaluation and make a better case for an education classification when it is considered by the multidisciplinary team.

Outside clinicians are further cautioned about the need to observe the child within the school-based setting and acquire information from teachers including interview results and rating forms. These two features of assessment may be overlooked by the private practitioner, but will limit the relevance of the completed report.

Psychologists working in the schools should follow state guidelines when determining eligibility but may wish to consider the NJLCD's and NASP's position regarding identification of LD where flexibility of classification is offered. Whether the evaluation is conducted by a school psychologist or a psychologist in a private practice, the above two approaches offer appropriate guidance regarding assessment and identification. Of course, state guidelines, predicated upon IDEA, must be referred to when making a classification decision in the school.

11.5 Comment on Use of IQ Tests

Some argue that IQ is an unnecessary part of the comprehensive evaluation process. I am in disagreement with this perspective. IQ is one of the most extensively researched constructs in the field of psychology (Ceci & Williams, 1997; Dombrowski & Gischlar, 2014; Dombrowski et al., 2007; Kaufman & Litchenberger, 2006). It can be used to rule out ID and provides a sense of a child's academic trajectory. The literature is convincing in indicating that IQ is related to academic achievement. It may offer promise for some children and potentially set realistic expectations for others. It is a valuable metric and provides valuable information.

11.6 Conclusion

The assessment of LD in children is one of the most prevalent evaluations undertaken by child psychologists. Nearly 8 % of children in the schools are classified with an SLD. Assessment guidance is offered via agencies (e.g., NJCLD and NASP) and diagnostic systems (e.g., DSM and IDEA). Most systems and

organizations are united in their expectation for a comprehensive evaluation for the identification of LD. Even though the DSM-5 may provide a more empirically grounded definition and diagnostic approach, IDEA and state regulations supersede the diagnostic criteria offered by DSM when making classification decisions in US public schools.

Appendix: LD Report Example

Psychological Report
Confidential

Name: Nick Jones
Date of Birth: 4/10/2008
Grade: 2nd

Date of Report: March 22, 2016
Chronological Age: 7 years 11 months
School: Goodwin Public Schools

Name of Examiner: Stefan C. Dombrowski, Ph.D.

Parent Name and Address: Cynthia Jones
1234 State Street
Philadelphia, PA 19138

Phone: 215-555-1234

Reason for Referral:
Nick struggles with all basic academic skills (e.g., reading, writing and mathematics) in the second grade curriculum. Specifically, Nick struggles with word decoding and comprehension of written text. He also struggles with expressing ideas in writing and with both math reasoning and mathematics calculation skills. Nick was referred for a comprehensive evaluation to determine his present level of functioning and whether he might qualify for specially designed instruction.

Assessment Methods and Sources of Data

Reynolds Intellectual Assessment Scale (RIAS)
Woodcock–Johnson Tests of Achievement, Fourth Edition (WJ-IV)
Bender Visual Motor Gestalt, Second Edition (Bender-2)
Comprehensive Test of Phonological Processing-Second Edition (CTOPP-2)
Wechsler Memory Scale-Fourth Edition (WMS-IV)
Behavior Assessment System for Children, Second Edition (BASC-2)

– Ms. Jenny McMahon (Second Grade Teacher)
Teacher Interview
– Ms. Jenny McMahon (Second Grade Teacher)
– Ms. Mia Riley (Reading Specialist)
Parent Interview
– Ms. Cynthia Jones (Mother)
Student Interview
– Nick Jones
Classroom Observations (2/10/16; 2/10/16)
Review of Academic Grade Reports
Review of School Records

Background Information and Developmental History
Nick is a 7-year-old second grade elementary school student who lives with his parents in Philadelphia, PA. He has received intensive intervention for his academic difficulties in the classroom but has failed to respond adequately to such intervention.

Prenatal, Perinatal, and Early Developmental History: Ms. Jones noted that Nick was born early at 32 weeks gestation weighing 4 lb 8 oz. She explained that Nick spent 11 days in the NICU and received bilirubin lights for jaundice. Ms. Jones was 35 years old at the birth of Nick. Ms. Jones indicated that Nick was evaluated for early intervention services but was not found eligible. Nick was slightly delayed in walking (14 months) but he sat up and rolled over at age expected limits. Ms. Jones indicated that Nick suffered from colic for the first 6 months of life and would scream most of the day over that time period. She explained that he began sleeping through the night at 8 months. Ms. Jones explained that Nick never really babbled as baby and just seemed to skip to talking. He spoke his first sentences at an age expected time period. Ms. Jones indicated that Nick was shy as a baby and protested vigorously when she left for work. All other early developmental milestones were attained within normal limits.

Medical: Nick's hearing is intact. He suffered from chronic otitis media and received hearing aids at age four as a result. Ms. Jones explained that Nick would continually be sick in daycare the first few years. She mentioned that he has fairly robust health but presently suffers from asthma. She notes that Nick contracted the RSV virus at 3 months of age and required hospitalization for a week. Nick wears glasses and has needed such since age 3. He has never suffered any head injury, and other infection.

Cognitive, Academic, and Language Functioning: Ms. Jones reports that Nick is a bright child but just struggles to understand basic academic skills. She noted that Nick can become frustrated as a result. Ms. Jones explained that she spends a great deal of time with Nick on his homework but that it just does not sink in. Ms. Jones wonders whether Nick has dyslexia. Ms. Jones explained that Nick really struggles with sounding out words and with spelling. She mentioned that he also struggles with mathematics and seems to confuse the signs. Ms. Jones noted that Nick receives support from the reading specialist but needs even more intense support. She explained that mathematics and writing are difficult for Nick as well.

Social-Emotional and Behavioral Functioning: Ms. Jones describes Nick as a quiet but well-liked child. He has many friends and gets along well with others. Ms. Jones indicated that Nick has never had a behavior problem at school. She commented on her concerns about his self-esteem, noting that Nick is beginning to feel badly about himself because of his difficulties at school.

Strengths: Nick is a compassionate and well-liked child with solid social skills. He participates in soccer and basketball. Nick is respectful of adults in the classroom. He is a gifted artist and loves drawing. Nick also plays piano.

Summary: Nick struggles with reading, writing, and mathematics, despite more intensive intervention in those areas. He is well behaved and gets along well with peers and adults alike. Nick is a competent artist and pianist.

Cognitive and Academic Functioning

Reynolds Intellectual Assessment Scale (RIAS)

Nick was administered the Reynolds Intellectual Assessment Scales (RIAS). The RIAS is an individually administered measure of intellectual functioning normed for individuals between the ages of 3 and 94 years. The RIAS contains several individual tests of intellectual problem solving and reasoning ability that are combined to form a Verbal Intelligence Index (VIX) and a Nonverbal Intelligence Index (NIX). The subtests that compose the VIX assess verbal reasoning ability along with the ability to access and apply prior learning in solving language-related tasks. Although labeled the Verbal Intelligence Index, the VIX is also a reasonable approximation of crystallized intelligence. The NIX comprises subtests that assess nonverbal reasoning and spatial ability. Although labeled the Nonverbal Intelligence Index, the NIX also provides a reasonable approximation of fluid intelligence and spatial ability. These two indexes of intellectual functioning are then combined to form an overall Composite Intelligence Index (CIX). By combining the VIX and the NIX into the CIX, a strong, reliable assessment of general intelligence *(g)* is obtained. The CIX measures the two most important aspects of general intelligence according to recent theories and research findings: reasoning or fluid abilities and verbal or crystallized abilities.

The RIAS also contains subtests designed to assess verbal memory and nonverbal memory. Depending upon the age of the individual being evaluated, the verbal memory subtest consists of a series of sentences, age-appropriate stories, or both, read aloud to the examinee. The examinee is then asked to recall these sentences or stories as precisely as possible. The nonverbal memory subtest consists of the presentation of pictures of various objects or abstract designs for a period of 5 s. The examinee is then shown a page containing six similar objects or figures and must discern which object or figure has previously been shown. The scores from the verbal memory and nonverbal memory subtests are combined to form a Composite Memory Index (CMX), which provides a strong, reliable assessment of working memory and may also provide indications as to whether or not a more detailed assessment of memory functions may be required. In addition, the high reliability of the verbal and nonverbal memory subtests allows them to be compared directly to each other.

Each of these indexes is expressed as an age-corrected standard score that is scaled to a mean of 100 and a standard deviation of 15. These scores are normally distributed and can be converted to a variety of other metrics if desired.

Following are the results of Nick's performance on the RIAS.

	Composite IQ	Verbal IQ	Nonverbal IQ	Memory index
RIAS index	94	95	96	92
Percentile	34	37	39	30
Confidence interval (95 %)	87–100	89–102	90–102	86–99

On testing with the RIAS, Nick earned a Composite Intelligence Index of 94. On the RIAS, this level of performance falls within the range of scores designated as average and exceeded the performance of 34 % of individuals at Nick's age. His Verbal IQ (Standard Score = 95; 37th percentile) was in the average range and exceeded 37 % of individuals Nick's age. Nick's Nonverbal IQ (Standard Score = 96; 39th percentiile) was in the average range, exceeding 39 % of individuals Nick's age. Nick earned a Composite Memory Index (CMX) of 92, which falls within the average range of working memory skills and exceeds the performance of 30 out of 100 individuals Nick's age.

Woodcock–Johnson Tests of Achievement-IV (WJ-IV)

The WJ-IV is an achievement test used to measure basic reading, writing, oral language, and mathematics skills. The Reading subtest includes letter and word identification, vocabulary, and comprehension skills. The Writing subtest includes spelling, writing fluency, and simple sentence writing. The Mathematics subtest includes calculation, practical problems, and knowledge of mathematical concepts and vocabulary.

Nick obtained the following scores in each of the areas of measurement:

	Standard score	Percentile	Descriptive classification
Broad reading	71	3	Below average
Letter-word ID	77	6	Below average
Sentence reading fluency	71	3	Below average
Passage comprehension	68	2	Below average
Broad writing	66	1	Below average
Sentence writing fluency	71	3	Below average
Writing samples	82	11	Low average
Spelling	67	1	Below average
Broad mathematics	76	5	Below average
Math facts fluency	71	3	Below average
Applied problems	78	8	Below average
Calculation	86	18	Low average

Standardized achievement test results revealed below average performance across all academic areas.

Bender Visual-Motor Gestalt Test, Second Edition (Bender-II)

The Bender-II measures visual-motor integration skills, or the ability to see and copy figures accurately. A quantitative and qualitative analysis of Nick's drawings suggests that his visual-motor integration abilities (e.g., fine motor skills for paper and pencil tasks) are high average (Copy Standard Score = 114; 82nd percentiile).

Comprehensive Test of Phonological Processing-Second Edition (CTOPP-2)

The CTOPP-2 is a standardized test of phonological processing that yield three composite scores: (1) Phonological Awareness; (2) Phonological Memory; and (3) Rapid Naming. The Phonological Awareness composite measures a student's ability to access the phonological structure of oral language. The Phonological Memory composite measures the ability to code information phonologically for temporary storage in working or short-term memory. The Rapid Naming Composite measures a student's ability to retrieve phonological information from memory and the ability to complete a sequence of operations quickly and repeatedly. Nick's performance across the three index composite areas was as follows:

	Scaled Score	Percentile	Description
Phonological awareness	71	3	Below average
Phonological memory	66	1	Below average
Rapid naming	77	6	Below average

Nick's profile on the CTOPP-2 revealed a child who falls within the below range. The current test administration appears to provide an accurate estimate of Nick's present phonological processing.

Wechsler Memory Scale-Fourth Edition (WMS-IV)

The WMS-IV is an individual memory test that yields five index scores: (1) Auditory Memory; (2) Visual Memory; (3) Visual Working Memory; (4) Immediate Memory; and (5) Delayed Memory. The Auditory Memory Index measures a student's ability to listen to oral information, repeat it immediately, and then repeat it again after a 20–30 min delay. The Visual Memory Index is a measure of visual details and spatial location. The Visual Working Memory Index is a measure of a student's ability to temporarily hold and manipulate spatial locations and visual details. The Immediate Memory Index measures recall of verbal and visual information immediately after a stimulus is presented. The Delayed Memory Index measures a student's ability to recall visual and verbal information after a 20–30 min delay.

Nick obtained the following scores in each of the areas of measurement:

	Standard score	Percentile	Confidence Interval (95 %)	Descriptive classification
Auditory memory	98	45	92–104	Average
Visual memory	95	37	90–101	Average
Visual working memory	103	58	96–110	Average
Immediate memory	105	63	99–111	Average
Delayed memory	88	31	82–95	Low average

Standardized memory test results revealed that Nick scored in the average range for all Indexes, with the exception of Delayed Memory which was in the Low Average range (88; 31st percentile).

Social-Emotional and Behavioral Functioning

Behavior Assessment System for Children, Second Edition (BASC-2)

The Behavior Assessment System for Children, Second Edition (BASC-2) is an integrated system designed to facilitate the differential diagnosis and classification of a variety of emotional and behavioral conditions in children. It possesses validity scales and several clinical scales, which reflect different dimensions of a child's

personality. *T*-scores between 40 and 60 are considered average. Scores greater than 70 ($T > 70$) are in the Clinically Significant range and suggest a high level of difficulty. Scores in the At-Risk range (*T*-Score 60–69) identify either a significant problem that may not be severe enough to require formal treatment or a potential of developing a problem that needs careful monitoring. On the Adaptive Scales, scores below 30 are considered clinically significant while scores between 31 and 40 are considered at-risk.

	Ms. McMahon	
Clinical scales	*T*-score	Percentile
Hyperactivity	50	50
Aggression	45	35
Anxiety	62*	86
Depression	63*	89
Somatization	67*	93
Atypicality	48	47
Withdrawal	56	77
Attention problems	49	48
Adaptability	49	49
Social skills	57	65
Functional communication	45	35
Externalizing problems	48	47
Internalizing problems	64*	91
Behavioral symptoms index	51	53
Adaptive skills	53	62

*At-risk rating

BASC-2 ratings suggested an at-risk elevation on the internalizing behaviors composite with an average rating on the behavioral symptoms index and externalizing composite. BASC-2 rating suggested an at-risk elevation on the anxiety, depression and somatization clinical scales.

Interview Results

Student Interview (March 18, 2016): Nick was interviewed to ascertain impressions of his progress at school. Nick indicated that he likes school "because of the teachers." Nick explained that he struggles with reading and writing. He said that his progress in mathematics is "okay." When asked about his behavioral and social progress at school, Nick noted that his behavior at school is good and he generally does not get into trouble. He explained that he is a generally happy child. Nick discussed his fears. He noted that he is afraid of the dark. He also said that he is "not that smart." Nick stated that he has a number of friends at school. Nick stated that

his strengths include sports, math, and drawing. He indicated that his hobbies include playing sports and playing video games.

Parent Interview (March 15, 2016): Ms. Cynthia Jones, Nick's mother, was interviewed to ascertain her impressions of Nick's cognitive, academic, social, and behavioral progress. Ms. Jones noted that Nick is "okay with mathematics." Ms. Jones explained that Nick struggles with mathematics when there are words problems. She explained that math today is different when she grew up in that it includes a lot of reading. Ms. Jones indicated, however, that Nick's main struggles are with reading, writing, and his memory. She also noted that his confidence level is down because of his academic struggles. Ms. Jones commented that socially, Nick is a very a very shy child and needs to speak up a bit more. Ms. Jones explained that Nick has always been a pleasant student to have in the classroom. This year, Ms. Jones explained that Nick seems to be a bit more defiant in class, noting that he has had two letters sent home which is different from prior years. Nick's strengths include being a pleasant and kind child and video games. She explained that he also plays piano. Ms. Jones also indicated that Nick can be very motivated about a task that interests him. Ms. Jones expressed concerns about the possibility that Nick will be retained. Ms. Jones stated that she is concerned that Nick will become resentful if he is retained. On the other hand, Ms. Jones explained that she does not want him to lose out on important academic information.

Teacher Interview (March 23, 2016): Ms. Jennifer McMahon, Nick's second grade teacher, was interviewed regarding Nick's academic, behavioral, emotional, social, and adaptive functioning. Ms. McMahon explained that Nick struggles with reading and she is really concerned about this. Ms. McMahon indicated that any language-based topic is difficult for Nick. Ms. McMahon explained that Nick regressed in reading this past summer and had forgotten his pre-reading/pre-literacy skills. Ms. McMahon indicated that phonological skills are a problem for Nick. She also mentioned that Nick has low sight word knowledge and places at the pre-primer level. Ms. McMahon explained that Nick's writing is also low. Ms. McMahon stated that Nick does okay in mathematics, but word problems (number stories) are hard for him. Ms. McMahon explained that Nick's strengths include his behavior, his pleasant demeanor, and his cheerful attitude about school despite his struggles. She also noted that Nick is imaginative and draws well.

Teacher Interview (April 5, 2016): Ms. Mia Riley, reading specialist, was asked to furnish her impressions of Nick's progress in school. Ms. Riley indicated that Nick is eager to learn and willing to try whatever is put in front of him. However, Ms. Riley explained that Nick struggles with phonological awareness and with sight word decoding. Ms. Riley comments that this impacts his comprehension of written text. Additionally, Ms. Riley stated that Nick struggles with spelling and writing at a grade expected level. She noted that he has good handwriting but really struggles with conveying information on paper. Ms. Riley explained that she has been working on fostering Nick's basic understanding of phonemic awareness skills.

Observations

Classroom Observation (March 25, 2016): Nick was observed for thirty minutes during math instruction led by Ms. McMahon's student-teacher. For the first ten minutes of the class, Nick was observed to be engaging in the whole group instruction. He was occasionally active at his seat where he would fidget with items and shift around. About ten minutes into the whole group instruction, Nick started working on math problems in his workbook though he also directed his gaze toward the student-teacher. Nick also was noted to occasionally doodle on a piece of paper during the instructional activity. After the math instruction, the class transitioned to the carpet area. Nick appropriately followed classroom rules, packed up his desk and went to the carpet. He sat attentively listening to the teacher read at story about being a good sport on a team. Two students near Nick were talking, but Nick continued to listen to the teacher read to the class. Impressions of the observation were that Nick was attentive to class instructions and engaged in the activity of the class.

Observation during Assessment: Throughout the assessment process, Nick was engaged and task persistent. He seemed to enjoy the one-on-one attention he received. At one point, Nick asked to use the restroom but returned and quickly resumed engagement in the testing activities. Nick was responsive to the evaluator's questions of him. His affect and mood were positive. He maintained a high energy level. The results appear to be a valid representation of his abilities.

Conceptualization and Classification

Multiple data sources and methods of assessment inform the conceptualization of Nick's cognitive, academic, social-emotional, and behavioral functioning including whether he qualifies for special education support. Details in support of these findings are offered below.

Cognitive and Academic Functioning: Nick's overall cognitive ability is in the average range (Standard score = 94; 34th percentiile). According to cognitive assessment results, Nick's working memory abilities fall in the average range (Standard score = 92; 30th percentiile). Nick struggled on a measure of phonological awareness generally scoring in the low average to below average range on this measure (CTOPP-2). His standardized academic achievement test results were similarly below average across the reading, writing and mathematics clusters. Nick faces considerable struggles with the academic curriculum. He has received additional, more intensive intervention via the reading specialist. Nick receives outside tutoring support.

Social-Emotional and Behavioral Functioning: Nick is a well-liked child who gets along with peers and adults alike. He can be compassionate and caring. Nick has several close friends and a host of extracurricular activities including athletics, drawing, and piano. Nick is a quiet child who is anxious and self-conscious about his performance in school. This is supported by interview results and BASC-2

ratings in the at-risk range on anxiety. Nick is also beginning to struggle with self-esteem and feel badly about himself. Again, this is consistent with elevations of the BASC-2 and supported by parent interview results. Nick's difficulty with anxiety and self-esteem should continue to be monitored.

Summary: Based upon multiple methods and sources of evaluation including the dual academic deficit model of learning disabilities supported by clinical judgment, the IEP team concludes that Nick qualifies for special education services under a diagnosis of learning disabilities.

Summary and Recommendations

Nick's overall cognitive ability falls within the average range. Nick's performance on measures of academic achievement (WJ-III Achievement) was in the average to low average range. Based on teacher interview results, review of academic records, standardized test performance, student observations, parent interview results, and current classroom performance, Nick qualifies for special education services under a diagnosis of learning disabilities.

Considering Nick's performance on measures of achievement and cognitive ability, combined with actual classroom performance, academic grade reports, parent interviews, behavior observations, and teacher interviews, Nick continues to be eligible for special education support. The team concludes that specially designed instruction is called for at this time. The following recommendations might benefit Nick.

1. *Support for Difficulties with Reading Comprehension, Phonological Awareness, Sight Word Recognition, Word Decoding, and Reading Fluency*: Nick struggles with all aspects of reading including word decoding, phonological/phonemic awareness, reading fluency and reading comprehension. Nick requires specially designed instruction for his reading difficulties as noted below.

   (a) *Phonological Awareness and Sight Word Knowledge Skills*. Nick will benefit from continued intervention with basic phonemic awareness skills, such as emphasizing instruction on basic rimes (ack, ame, all, ake). Nick would be well served to increase his familiarity with reading fundamentals through a focus on words via alliteration lessons (e.g., tongue twisters), a personal dictionary of sight words (i.e., most frequently used words), and word family study (e.g., neat, beat, heat; noise, poise, choice).

   (b) *Reading fluency.* Nick should practice oral reading fluency. Accordingly, Nick will benefit from repeated reading of the passage until an appropriate grade level fluency rate is attained. The research literature suggests that improvements in oral reading fluency via repeated passage reading generalizes to improvements in overall reading ability.

(c) *Reading Comprehension.* Nick struggles with the comprehension of written text and will benefit from pre-reading and organizational strategies that attempt to improve this skill area. Following are a few suggestions that will likely benefit Nick:

(i) Before reading, preview the text by looking at the title and illustrations.
(ii) Encourage the creation of a possible story from the illustrations.
(iii) Make predictions about the story based on story features prior to reading the story.
(iv) During reading, generate questions about the story that are directly related to the text and that require thinking beyond the text.
(v) After reading, spend time reflecting upon the material and relating it to experiences and events the child has encountered.
(vi) After reading, have Nick engage in the reading material using text summarizing.

2. *Difficulties with Writing*: Nick struggles with written expression including spelling. Accordingly she will benefit from the following recommendations.

(A) *Written Expression*: Nick struggles with expressing her ideas in written form. The recommendations may be appropriate for her:

(i) Assist Nick in generating ideas about a topic and then show him how to put the ideas in an outline.
(ii) Demonstrate for Nick outlining principles. Have him practice what you just demonstrated so that he can distinguish between main ideas and supporting ideas.
(iii) Assist Nick in creating a paragraph and then show him that that paragraphs require an introduction, a middle, and a conclusion. Require that Nick generate his own paragraph and offer corrective feedback.
(iv) Require Nick to proofread his written work and provide corrective feedback when appropriate.

(B) *Spelling*: Nick struggles with spelling words in a phonetically plausible manner and the following recommendations may be appropriate for him:

(i) Have Nick practice spelling words each day that require selected phonetic sounds. Introduce new words as Nick has mastered the old words. The Cover, Copy, Compare or Folding-in techniques are appropriate for this purpose and have strong research support learning new spelling words.
(ii) Ensure that Nick hears correctly the sounds in the words that she misspells. Require Nick to read the words aloud to determine whether he recognizes the letter units or phonemes in the words.

(iii) Require Nick to use a phonetic approach to spelling any words he does not know how to spell.
(iv) Permit Nick to practice spelling through a computer software program that provides immediate corrective feedback.

(C) *Math Word Problems*: Nick struggles with mathematics word problems and will benefit from the following recommendations.

(a) Ask Nick to identify the primary question that is to be answered to solve the word problem. Make sure the student understands that extraneous information is sometimes included in a math word problem.
(b) Teach Nick to look for hint words in word problems that indicate the mathematical operations.
(c) Have Nick restate the math word problem in his own words.
(d) Teach Nick to break down the math word problem into specific steps before attempting to solve it.
(e) Provide Nick a list of phrases or word that usually indicate an addition (e.g., sum, in all, total, altogether) and subtraction (e.g., difference, how many left, how many remain).

3. *Self-Esteem*: Background information suggests that Nick's academic difficulties have contributed to reduced self-confidence and a tendency to give up more readily when faced with tasks he perceives as difficult. Nick should be offered additional support, encouragement, and praise for effort made toward completing tasks.

Stefan C. Dombrowski, Ph.D.
Licensed Psychologist
Certified School Psychologist

LD Report Example 2 with Concurrent ADHD Diagnosis

Psychological Report
Confidential

Name: Matthew Osbourne
Date of Birth: 11/1/2006
Grade: 1
Name of Examiner: Stefan Dombrowski

Date of Report: October 30, 2013
Chronological Age: 7
School: Hopewell Public School

Parent and Address: Sharon Osbourne

Phone: (609) 555-1234

Reason for Referral:
Background information and teacher reports reveal that Matthew struggles with reading and writing. Specifically, Matthew experiences difficulty with oral reading fluency and comprehension of written information. He also struggles with quickly and efficiently producing written work. Additionally, Matthew's faces difficulties with attention, hyperactivity and distractibility. Matthew was referred for a comprehensive evaluation to determine his present level of functioning and whether or not he might qualify for specially designed instruction.

Assessment Methods and Sources of Data

Reynolds Intellectual Assessment Scale (RIAS)
Woodcock–Johnson Tests of Achievement, Fourth Edition (WJ-IV)
Bender Visual Motor Gestalt, Second Edition (Bender-2)
Behavior Assessment System for Children—Second Edition (BASC-2)

– Ms. Mindy Kaling (First Grade Teacher)
– Ms. Sharon Osbourne (Mother)

Teacher Interview
– Ms. Mindy Kaling (First Grade Teacher)

Parent Interview
– Ms. Sharon Osbourne

Student Interview
– Matthew Osbourne

Classroom Observations (10/2/2013)
Review of Academic Grade Reports
Review of School Records

Background Information and Developmental History

Matthew Osbourne is a 7-year-old child in the first grade at the Hopewell Public School (HPS). Matthew faces difficulty with paying attention, organization, and remaining on task. Background information revealed difficulty with reading comprehension. Ms. Osbourne indicates that Matthew has been diagnosed with Attention-Deficit/Hyperactivity Disorder (ADHD) and Oppositional Defiant Disorder (ODD). Matthew is not presently taking any medication for the management of his symptoms, but Ms. Osbourne reports that he is scheduled for a psychotropic medication evaluation in mid-October.

Prenatal, Perinatal, and Early Developmental History: Ms. Osbourne noted that she had gestational diabetes. Matthew was born with Erb's Palsy at 37 weeks weighing 9 lb. He had a 2 week stay in the Neonatal Intensive Care (NICU). Matthew's early developmental milestones were generally attained within normal limits with the exception of walking. Matthew was slightly delayed and did not walk until 14 months of age.

Medical: Ms. Osbourne indicated that Matthew is not currently taking any medications but suffers from migraines. Matthew will be evaluated by a child psychiatrist mid-October for possible psychotropic medication. Matthew's hearing and vision are intact. Ms. Osbourne reported no incidence of head injury or major infection.

Cognitive, Academic, and Language Functioning: Background information and teacher reports indicate that Matthew struggles with reading and writing. Ms. Kaling commented that Matthew's reading is below level, noting that he rarely stays focused on the lesson or during independent reading time. Ms. Kaling also mentioned that Matthew's writing is similarly below level again noting that he rarely stays focused on the lesson or during independent writing time. Teacher reports confirmed difficulties with these academic areas. Background reports indicated that Matthew's mathematics progress is at grade level. She indicated that he has a good understanding of the current unit (e.g., addition, although he sometimes misses parts of problems because he does not (or cannot) read all of the instructions).

Social-Emotional and Behavioral Functioning: Ms. Kaling indicated that Matthew is a friendly child. Every once in a while he gets upset and stomps/throws pencils/slams his book. He usually calms down but he can sulk for a long time. She noted that he needs to pay attention to whole class instruction, stay focused on independent work, keep his body under control by not bothering those around him, and listen to and follow teachers' instructions. Ms. Kaling indicated that Matthew has been sent to the ReSet room numerous times and this sometimes seems to help his behavior.

Strengths: Matthew's strengths include helping out around the classroom when asked by a teacher. He has also been described as a child with good artistic ability, a good sense of humor and one who enjoys life.

Summary: Matthew struggles with symptoms of inattentiveness, hyperactivity, and impulsivity. He also struggles with comprehension of written text. Matthew enjoys helping in the classroom and wants to do well at school. He struggles with both academics and behavior at school.

Interview Results

Parent Interview (October 6, 2013): Ms. Sharon Osbourne was contacted to ascertain impressions of Matthew's academic, behavioral, and social-emotional functioning at school. Ms. Osbourne commented first regarding Matthew's behavioral issues. She noted that he has been diagnosed with ADHD and ODD. Commenting next on Matthew's academic progress, Ms. Osbourne noted that Matthew struggles with reading and his handwriting can be sloppy. Ms. Osbourne indicated that his mathematics is okay. She indicated that her concerns are "more behavioral than academic." Ms. Osbourne commented that at school Matthew was suspended last year in kindergarten. She noted that his records indicated that Matthew hit the teacher, although Matthew has a different account of what happened. Ms. Osbourne explained that she has tried to get the suspension removed from his record, but the teacher is no longer working at the school so the school would not remove the suspension. Ms. Osbourne indicated that Matthew has a few additional instances of not listening, not controlling his body, being put in time out from recess, and where he had to be picked him up early from school. Ms. Osbourne explained that he was sent home once thus far this year. She noted that Matthew has some good days. Commenting next on his social progress, Ms. Osbourne indicated that socially Matthew is okay as long as other kids do not do anything to trigger his anger. Ms. Osbourne discussed Matthew's areas of strength and need. She noted that he can focus for long periods if he is interested in a topic. Ms. Osbourne also indicted that Matthew likes to draw and play outside. She noted that Math is one of his strengths. She also mentioned that Matthew is very athletic and loves to play all types of sports.

Student Interview (October 10, 2013): Matthew was interviewed to ascertain impressions of his progress at HCS. Matthew stated that he likes HCS especially discovery, art and recess. When asked about his academic progress, Matthew explained that mathematics is sometimes difficult for him, but reading and writing are good. Matthew next discussed his behavior at school. He explained that he sometimes gets into trouble for "doing something bad." When asked to elaborate, Matthew indicted that he once went to CARES for making noises with his throat. Matthew indicated that he has several friends. He stated that he enjoys going outside and playing.

Teacher Interview (June 3, 2013): Ms. Mindy Kaling, Matthew's first grade teacher, was interviewed regarding Matthew's academic, behavioral, emotional, and social functioning. Ms. Kaling provided the following information. She stated that Matthew's reading and writing are both below grade level. Ms. Kaling explained

that Matthew can demonstrate some level of competence if a teacher is able to sit with him and coach him.

Observations

Classroom Observation (October 2, 2013): Matthew was observed for 15 min in Ms. Kaling's classroom. The observation occurred during a reading activity where students were being instructed on how to make connections between books with a partner. During this whole group instruction, Matthew was observed to sit attentively and listen to Ms. Kaling. When the activity shifted and students were asked to partner with another student to share their connections, Matthew again complied with this request. Impressions of the observation were that Matthew was on task and compliant with teacher requests.

Observation during Assessment: Matthew was very compliant during the beginning of assessment, though he struggled in both cognitive and achievement tests. Matthew grew frustrated during the passage comprehension subtest of the WJ-III and was furnished with encouragement for his efforts on this subtest. Matthew responded well to encouragement and was engaged in the subtest. Test results are considered a valid representation of Matthew's abilities.

Cognitive and Academic Functioning

Reynolds Intellectual Assessment Scale (RIAS)

Matthew was administered the Reynolds Intellectual Assessment Scales (RIAS). The RIAS is an individually administered measure of intellectual functioning normed for individuals between the ages of 3 and 94 years. The RIAS contains several individual tests of intellectual problem solving and reasoning ability that are combined to form a Verbal Intelligence Index (VIX) and a Nonverbal Intelligence Index (NIX). The subtests that compose the VIX assess verbal reasoning ability along with the ability to access and apply prior learning in solving language-related tasks. Although labeled the Verbal Intelligence Index, the VIX is also a reasonable approximation of crystallized intelligence. The NIX comprises subtests that assess nonverbal reasoning and spatial ability. Although labeled the Nonverbal Intelligence Index, the NIX also provides a reasonable approximation of fluid intelligence and spatial ability. These two indexes of intellectual functioning are then combined to form an overall Composite Intelligence Index (CIX). By combining the VIX and the NIX into the CIX, a strong, reliable assessment of general intelligence *(g)* is obtained. The CIX measures the two most important aspects of general intelligence according to recent theories and research findings: reasoning or fluid abilities and verbal or crystallized abilities.

The RIAS also contains subtests designed to assess verbal memory and nonverbal memory. Depending upon the age of the individual being evaluated, the verbal

memory subtest consists of a series of sentences, age-appropriate stories, or both, read aloud to the examinee. The examinee is then asked to recall these sentences or stories as precisely as possible. The nonverbal memory subtest consists of the presentation of pictures of various objects or abstract designs for a period of 5 s. The examinee is then shown a page containing six similar objects or figures and must discern which object or figure has previously been shown. The scores from the verbal memory and nonverbal memory subtests are combined to form a Composite Memory Index (CMX), which provides a strong, reliable assessment of working memory and may also provide indications as to whether or not a more detailed assessment of memory functions may be required. In addition, the high reliability of the verbal and nonverbal memory subtests allows them to be compared directly to each other.

Each of these indexes is expressed as an age-corrected standard score that is scaled to a mean of 100 and a standard deviation of 15. These scores are normally distributed and can be converted to a variety of other metrics if desired.

Following are the results of Matthew's performance on the RIAS.

	Composite IQ	Verbal IQ	Nonverbal IQ	Memory index
RIAS index	84	79	93	97
Percentile	14	8	32	42
Confidence interval (95 %)	79–90	73–87	87–100	91–103

On testing with the RIAS, Matthew earned a Composite Intelligence Index of 84. On the RIAS, this level of performance falls within the range of scores designated as low average and exceeded the performance of 14 % of individuals at Matthew's age. His Verbal IQ (Standard Score = 79; 8th percentile) was in the below average range and exceeded 8 % of individuals Matthew's age. Matthew's Nonverbal IQ (Standard Score = 93; 32nd percentile) was in the average range, exceeding 32 % of individuals Matthew's age. Matthew earned a Composite Memory Index (CMX) of 97, which falls within the average range of working memory skills and exceeds the performance of 42 out of 100 individuals Matthew's age.

Woodcock–Johnson Tests of Achievement-IV (WJ-IV)

The WJ-IV is an achievement test used to measure basic reading, writing, oral language, and mathematics skills. The Reading subtest includes letter and word identification, vocabulary, and comprehension skills. The Writing subtest includes spelling, writing fluency, and simple sentence writing. The Mathematics subtest includes calculation, practical problems, and knowledge of mathematical concepts and vocabulary.

Matthew obtained the following scores in each of the areas of measurement:

	Standard score	Percentile	Descriptive classification
Broad Reading	79	8	Below average
Letter-word ID	89	23	Low average
Passage comprehension	79	8	Below average
Sentence reading fluency	77	7	Below average
Broad writing	87	20	Low average
Sentence writing fluency	79	8	Below average
Writing samples	92	29	Average
Spelling	92	30	Average
Broad mathematics	93	32	Average
Math facts fluency	95	38	Average
Applied problems	99	48	Average
Calculation	90	25	Average

Standardized achievement test results revealed below average performance across broad reading cluster, low average broad writing performance and average performance on the mathematics cluster.

Bender Visual-Motor Gestalt Test, Second Edition (Bender-II)

The Bender-II measures visual-motor integration skills, or the ability to see and copy figures accurately. A quantitative and qualitative analysis of Matthew's drawings suggests that his visual-motor integration abilities (e.g., fine motor skills for paper and pencil tasks) are low average (Copy Standard Score = 81; 10th percentiile).

Comprehensive Test of Phonological Processing-Second Edition (CTOPP-2)

The CTOPP-2 is a standardized test of phonological processing that yield three composite scores: (1) Phonological Awareness; (2) Phonological Memory; and (3) Rapid Naming. The Phonological Awareness composite measures a student's ability to access the phonological structure of oral language. The Phonological Memory composite measures the ability to code information phonologically for temporary storage in working or short-term memory. The Rapid Naming Composite measures a student's ability to retrieve phonological information from memory and the ability to complete a sequence of operations quickly and repeatedly. Matthew's performance across the three index composite areas was as follows:

	Scaled Score	Percentile	Description
Phonological awareness	121	92	Above average
Phonological memory	100	50	Average
Rapid naming	118	88	High average

Matthew's profile on the CTOPP-2 revealed a child who falls within the average range. The current test administration appears to provide an accurate estimate of Sofia's present phonological processing.

Social-Emotional and Behavioral Functioning

Behavior Assessment System for Children, Second Edition (BASC-2)

The Behavior Assessment System for Children, Second Edition (BASC-2) is an integrated system designed to facilitate the differential diagnosis and classification of a variety of emotional and behavioral conditions in children. It possesses validity scales and several clinical scales, which reflect different dimensions of a child's personality. Scores in the Clinically Significant range (*T*-Score >70) suggest a high level of difficulty. Scores in the At-Risk range (*T*-Score 65–69) identify either a significant problem that may not be severe enough to require formal treatment or a potential of developing a problem that needs careful monitoring. On the Adaptive Scales, scores below 30 are considered clinically significant while scores between 31 and 35 are considered at-risk.

	Ms. Kaling		Ms. Osbourne	
Clinical scales	*T*-Score	Percentile	*T*-Score	Percentile
Hyperactivity	85**	99	72**	95
Aggression	72**	95	66*	92
Conduct problems	85**	99	71**	93
Anxiety	43	26	54	67
Depression	47	51	59	85
Somatization	46	46	45	44
Attention problems	73**	99	75**	96
Learning problems	73**	99	73**	99
Atypicality	43	19	45	23
Withdrawal	55	74	53	70
Adaptability	30**	3	32*	5
Social skills	40	20	40	22
Leadership	47	43	45	40
Study skills	38*	15	–	–
Functional communication	43	25	44	28
Activities of daily living	–	–	41	26
Externalizing problems	83**	99	74**	96
Internalizing problems	44	30	45	32
Behavioral symptoms index	66*	93	64*	90
Adaptive skills	38*	12	40	14
School problems	67*	94	–	–

*At-risk rating
**Clinically significant rating

The above results indicate clinically significant elevations on externalizing problems composite with an at-risk score on the adaptive skills composite and behavioral symptoms index. The above results also indicate clinically significant elevations on the hyperactivity, aggression, conduct problems, attention problems, learning problems, and adaptability (at-risk for parent rating) clinical scales.

Conceptualization and Classification

Multiple data sources and methods of assessment inform the conceptualization of Matthew's cognitive, academic, social-emotional, and behavioral functioning including whether he qualifies for special education support. Details in support of these findings are offered below.

Cognitive and Academic Functioning: Matthew's present performance on measures of cognitive ability was low average (Composite IQ = 84, 14th percentile; VIQ = 79, 8th percentile; NIQ = 93, 32nd percentile). Matthew's performance on the WJ-IV Achievement was below average in reading, low average in writing and average in mathematics. This performance is consistent with teacher reports where Matthew was noted to struggle with reading, perform higher in writing with structure and support, and be at grade level in mathematics.

Social and Emotional Functioning: Matthew is described as a child who struggles with attention, loss of focus, distractibility, and hyperactivity. This is consistent with BASC-2 results where he scored in the clinically significant range on the inattention and hyperactivity clinical scales. Background information and standardized behavior rating scales revealed that Matthew sometimes disregards classroom rules and teacher requests and needs structure and support for these difficulties. Although Matthew will sulk when redirected, he is generally able to gather himself and return to the task required of him. Matthew can be a helpful child when a teacher requests his assistance.

Summary: Based upon multiple methods and sources of evaluation including the dual academic deficit model of learning disabilities supported by clinical judgment, the IEP team concludes that Matthew qualifies for special education services under a diagnosis of learning disabilities. Matthew will also benefit from support for his attention-related difficulties.

Summary and Recommendations

Matthew's overall cognitive ability falls within the low average range. Matthew's performance on measures of academic achievement (WJ-III) was in the below average to average range. Based on teacher interview results, review of academic records, standardized test performance, student observations, parent interview results, and current classroom performance, Matthew qualifies for special education services under a diagnosis of learning disabilities. The team concludes that specially designed instruction is called for at this time. The following recommendations might benefit Matthew.

1. *Strategies for difficulties with Attention, Distractibility, and Loss of Focus*: Background reports indicate that Matthew experiences difficulty with attention and distractibility. As such, the following recommendations might be beneficial for him:

   (A) *Seating:* Matthew should continue to sit in a location where there are minimal distractions.

   (B) *Provision of Directions by Teacher:* When Matthew's teachers interact with him, he should be encouraged to repeat and explain instructions to ensure understanding. The provision of directions to Matthew will be most effective when the teacher makes eye contact, avoids multiple commands, is clear and to the point, and permits repetition of directions when needed or asked for.

   (C) *Positive Reinforcement and Praise for Successful Task Completion:* Matthew's teachers should provide positive reinforcement and immediate feedback for completion of desired behaviors or tasks. Initially, praise and reinforcement should be offered for successful effort on a task or behavior regardless of quality of performance.

   (D) *Time on Task*: Communicate to Matthew how long he will need to engage in or pay attention on a particular task. Open ended expectations can be distressing to any child, let alone one with attentional difficulties.

   (E) *Prepare Student Discreetly for Transitions*: Furnish Matthew with verbal prompts and visual cues that a new activity or task is about to start. This should be accomplished discreetly so as to avoid student embarrassment.

   (F) *Recess Time*: Matthew should be permitted to participate in recess. Recess should not be a time to complete unfinished classwork or homework.

   (G) *Extended Time, Teacher Check In's, and Frequent Breaks*: Matthew should be permitted additional time to complete academic tasks and projects. Matthew's teachers should also consider review of classwork as Matthew progresses on an assignment or project to assist Matthew in avoiding careless mistakes. More frequent breaks than what is typical may also reduce careless mistakes and help to maintain focus.

2. *Support for Difficulties with Reading Comprehension, Phonological Awareness, Sight Word Recognition, Word Decoding, and Reading Fluency*: Matthew struggles with all aspects of reading including word decoding, phonological/phonemic awareness, reading fluency and reading comprehension. Matthew requires specially designed instruction for his reading difficulties, as noted below.

   (A) *Phonological Awareness and Sight Word Knowledge Skills*. Mattthew will benefit from continued intervention with basic phonemic awareness skills, such as emphasizing instruction on basic rimes (ack, ame, all, ake). Mattthew would be well served to increase his familiarity with reading fundamentals through a focus on words via alliteration lessons (e.g., tongue twisters), a

personal dictionary of sight words (i.e., most frequently used words), and word family study (e.g., neat, beat, heat; noise, poise, choice).

(B) *Reading fluency.* Mattthew should practice oral reading fluency. Accordingly, Mattthew will benefit from repeated reading of the passage until an appropriate grade level fluency rate is attained. The research literature suggests that improvements in oral reading fluency via repeated passage reading generalizes to improvements in overall reading ability.

(C) *Reading Comprehension.* Matthew struggles with the comprehension of written text and will benefit from pre-reading and organizational strategies that attempt to improve this skill area. Following are a few suggestions that will likely benefit Mattthew:

(i) Before reading, preview the text by looking at the title and illustrations.
(ii) Encourage the creation of a possible story from the illustrations.
(iii) Make predictions about the story based on story features prior to reading the story.
(iv) During reading, generate questions about the story that are directly related to the text and that require thinking beyond the text.
(v) After reading, spend time reflecting upon the material and relating it to experiences and events the child has encountered.
(vi) After reading, have Matthew engage in the reading material using text summarizing.

3. *Support for Writing*: Matthew struggles with written expression, which requires sustained attention and organization, but performs better with support and structure. Matthew will require additional assistance in this area.

(A) *Written Expression*: Mattthew struggles with expressing her ideas in written form. The recommendations may be appropriate for him:

(i) Assist Matthew in generating ideas about a topic and then show him how to put the ideas in an outline.
(ii) Demonstrate for Matthew outlining principles. Have him practice what you just demonstrated so that he can distinguish between main ideas and supporting ideas.
(iii) Assist Matthew in creating a paragraph and then show him that that paragraphs require an introduction, a middle, and a conclusion. Require that Mattthew generate him own paragraph and offer corrective feedback.
(iv) Require Matthew to proofread him written work and provide corrective feedback when appropriate.

(B) *Spelling*: Matthew struggles with spelling words in a phonetically plausible manner and the following recommendations may be appropriate for him:

(i) Have Matthew practice spelling words each day that require selected phonetic sounds. Introduce new words as Matthew has mastered the

old words. The Cover, Copy, Compare or Folding-in techniques are appropriate for this purpose and have strong research support learning new spelling words.

(ii) Ensure that Matthew hears correctly the sounds in the words that he misspells. Require Matthew to read the words aloud to determine whether he recognizes the letter units or phonemes in the words.

(iii) Require Matthew to use a phonetic approach to spelling any words he does not know how to spell.

(iv) Permit Matthew to practice spelling through a computer software program that provides immediate corrective feedback.

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References

Aaron, P. G. (1997). The impending demise of the discrepancy formula. *Review of Educational Research, 67*, 461–502.

Bateman, B. (1965). Learning disabilities: An overview. *Journal of School Psychology, 3*(3), 1–12.

Boyle, C. A., Boulet, S., Schieve, L. A., Cohen, R. A., Blumberg, S. J., Yeargin-Allsopp, S. V., & Kogan, M. D. (2011). Trends in the prevalence of developmental disabilities in US Children, 1997–2008. Pediatrics. Retrieved May 22, 2014 from http://pediatrics.aappublications.org/content/early/2011/05/19/peds.2010-2989

Ceci, S. J., & Williams, W. M. (1997). Schooling, intelligence, and income. *American Psychologist, 52*, 1051–1058.

Dombrowski, S. C., Ambrose, D. A., & Clinton, A. (2007). Dogmatic insularity in learning disabilities diagnosis and the critical need for a philosophical analysis. *International Journal of Special Education, 22*(1), 3–10.

Dombrowski, S. C., & Gischlar, K. L. (2014). Ethical and empirical considerations in the Identification of learning disabilities. *Journal of Applied School Psychology, 30*, 68–82.

Dombrowski, S. C., Kamphaus, R. W., et al. (2006). The Solomon Effect in learning disabilities diagnosis: Have we not yet learned from history? *School Psychology Quarterly, 21*(3), 359–373.

Dombrowski, S. C., Kamphaus, R. W., & Reynolds, C. R. (2004). After the demise of the discrepancy: Proposed approach to learning disabilities classification. *Professional Psychology: Research and Practice, 35*(4), 364–372.

Hinshelwood, J. (1917). *Congenital word blindness*. London: HK Lewis.

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), Pub. L. No. 108–446, 118 Stat. 2647 (2004). [Amending 20 U.S.C. §§ 1400 et seq.].

Kaufman, A. S., & Litchenberger, E. O. (2006). *Assessing adolescent and adult intelligence* (3rd ed.). Hoboken, NJ: Wiley.

Kirk, S. A. (1962). *Educating exceptional children*. Boston: Houghton Mifflin.

Kirk, S. A. (1981). Learning disabilities: A historical note. *Academic Therapy, 17*(1), 5–11.

Kirk, S. A., & Bateman, B. (1962). Diagnosis and remediation of learning disabilities. *Exceptional Children, 29*(2), 73–78.

Lyon, G. R. (1995). Toward a definition of dyslexia. *Annals of Dyslexia, 45*, 3–27.

Mercer, C. D., Forgnone, C., & Wolking, W. D. (1976). Definitions of learning disabilities used in the United States. *Journal of Learning Disabilities, 9*, 376–386.

National Association of School Psychologists. (2011). *Identification of students with specific learning disabilities (position statement)*. Bethesda, MD: Author.

National Joint Committee on Learning Disabilities. (2010, June). Comprehensive assessment and evaluation of students with learning disabilities. Retrieved March 31, 2014 from www.ldonline.org/njcld

Orton, S. (1925). Word blindness in school children. *Archives of Neurology and Psychiatry, 14*, 581–613.

Rutter, M., & Yule, W. (1975). The concept of specific reading retardation. *Journal of Child Psychology and Psychiatry, 16*, 181–197.

Siegel, L. S. (1999). Issues in the definition and diagnosis of learning disabilities: A perspective on Guckenberger v. Boston University. *Journal of Learning Disabilities, 32*(4), 304–319.

Yule, W. (1973). Differential prognosis of reading backwardness and specific reading retardation. *British Journal of Educational Psychology, 43*, 244–248.