

OVERVIEW & SUMMARY:

Julio ELL Student is a bilingual 5th grade student at Exampleton Elementary. Julio's teacher, Ms. Goode, who has taught him since 3rd grade, is concerned with his development of academic skills, particularly his reading development. At the Student Intervention Team meeting 10/25/2012, Ms. Goode reported that "Julio is not learning...he can read out loud well, though he does not retain or comprehend what he reads. [In math] he does OK with addition, and [is] poor with subtraction." Interventionists that have worked with Julio, observed that he "needs step-by-step directions on a daily basis, even though previously taught the skills, [and he] does not appear to retain information from day to day." Interventions provided with fidelity to Julio include:

- Small group "book club" reading instruction with classroom teacher, from 2010 to present.
- Partner reading with classroom teacher, from 2011 to present.
- Use of tape recorder/listening center, form 2010 to 2011.
- ELL (English Language Learner) intervention from 2007 to present.
- Title I reading and math intervention from 2011 to present.

Using the Washington State Transitional Bilingual Database, Julio's performance on the state annual test, which measures reading, writing, speaking, and listening skills, Julio was compared with the other 7,474 bilingual children who started receiving ELL services at the same time and with the same level of English proficiency as Julio (he entered ELL in 2007 in kindergarten with an "Intermediate" (L2) level of English proficiency). Ninety percent of Julio's ELL peers across the state demonstrate stronger growth than Julio (as a general rule of thumb, when 70 percent of an ELL student's age peers demonstrate stronger performance, that is an indicator of concern). Julio has not been making the same rate of progress as other English language learners, and the Exampleton Student Intervention Team has questioned whether he may also have a learning disability.

Julio was referred for this initial evaluation to determine his eligibility and need for Special Education. This evaluation included record review, parent and student interview, gathering information and observations from teachers, and testing of Julio's cognitive, communication, and academic skills.

MAIN CONCLUSIONS:

- 1) Reading testing indicates that Julio can fluently read words and text, and can fluently decode unfamiliar words; however, he struggles with demonstrating comprehension of what he reads.
- 2) Writing testing indicates that Julio can use his phonics letter-sound knowledge to accurately spell words, and he can write a variety of grammatically correct sentences; however, he struggles with following a writing process to complete grade level writing assignments.
- 3) Math testing indicates that Julio can solve basic arithmetic fluently, but he struggles with multi-step calculations that most children his age can readily complete, and in class he struggles with completing multi-step applied math problems.
- 4) Language testing finds Julio's use of language is significantly delayed in both English and Spanish, and his understanding of language is mildly delayed.
- 5) Cognitive testing finds that Julio's profile of "brain skills" for learning include both strengths and challenge areas. Strengths include fluid reasoning, mental processing speed, visual processing, and auditory processing. However, Julio demonstrates critical weaknesses in crystallized knowledge and language skills, and in memory span and working memory. Adults can hold an average of 7 plus or minus 2 elements of information in short term memory. Julio's short term memory span is accurate for only 3 elements and sometimes 4 elements. When Julio must process that information in working memory, he can consistently process only 2 elements and sometimes 3-4 elements. All thinking occurs in working memory, and it is critical to all school learning, which explains why Julio is struggling with developing academic skills. Julio's memory span for motor patterns, however, is as strong as most children his age, which suggests that Julio's learning may be stronger with multi-modality instruction, such as pair oral input with movement patterns.

- 6) The evaluation group, including Julio's mother, carefully considered these results and concluded that Julio has learning disabilities, in addition to English language learning, impacting his learning success. The evaluation group determined that Julio is eligible for Special Education under the "Specific Learning Disability" (SLD) eligibility category based on severe discrepancy (for OSPI compliance) and patterns of strengths and weaknesses diagnostic of a specific learning disability.
- 7) It is recommended that an "Individual Education Program" (IEP) be developed for Julio with instructional goals that target reading, writing, and math skills. It is recommended that he continue to attend his general education class, and receive these IEP services through a "Resource Support Program."

HEALTH & DEVELOPMENTAL EVALUATION:

EXAMINER: School Psychologist

OVERVIEW: Information about Julio's health and developmental situation was obtained from record review, parent interview, and student interview.

FAMILY: Julio lives with his mother, stepfather, 8-year-old brother Juan, and 3-year-old sister Mary. Julio has mail contact with his birth father, who has been serving an 8-year jail sentence since Julio was 2.

Julio's family history is positive for learning problems and special education. Julio's mother reports that as a student in Mexico, she loved to read, but experienced challenges with math learning. She also reports that her niece does not talk and receives special education.

LANGUAGE: Julio's parents are from Mexico and his family speaks Spanish. Spanish is the primary language at home. Julio's first language was Spanish, and he started learning English in kindergarten. Currently, Julio speaks Spanish with his mother, stepfather, and sister; he speaks English with his brother, stepfather, and friends, and prefers to watch English T.V. Julio reports that his stronger language is English.

Julio started receiving ELL (English language learner) services in kindergarten, with an "Intermediate" (L2) English proficiency level. In general, children at this level (according to the state) can use "language to communicate with different audiences on familiar matters, [use] general and some specific language in the academic content areas, [and use] expanded sentences in oral and written communication, making errors that impede the communication while retaining much of its meaning." Julio's English proficiency was measured with the Washington English Language Proficiency Assessment on 2/6/2012 to be at the "Intermediate" level overall. Julio is not yet at the "Transitional" (L4) level where students are exited from ELL services and judged to be "approaching comparability to that of English-proficient peers."

BIRTH HISTORY AND DEVELOPMENT: Julio's early history is unremarkable. He was a healthy full-term baby delivered in the U.S. without complication from a normal pregnancy free of exposure to alcohol or other substances. Julio spoke his first words at about 7 months, walked at about 14 months, and spoke in sentences by about 24 months. His mother noted that there were no developmental concerns and by age 3 Julio was speaking very clearly was speaking in full sentences and asking questions.

HEALTH: Julio's health history is unremarkable. He is reported to be in good general health, with a history of just one ear infection, and no allergies, serious physical illnesses, seizures, serious accidents, head injuries, operations, or continuing medical problems.

HEARING & VISION: Julio's hearing and vision were screened this school year to be satisfactory.

EDUCATION: Julio did not attend any preschool before entering kindergarten at Exampleton Elementary, where he has continued to attend school.

STUDENT INTERVIEW: Julio was interviewed by School Psychologist as part of developing rapport before testing. He was able to answer questions about himself, including spelling his first and last names, giving his age, birth date, grade, and all of his teacher's names K-5, and sharing information about his family, including who he lives with and his sibling's ages. Julio reported that he likes school, and that his strengths include tetherball and soccer, "reading books, spelling and writing." His challenge areas include basketball, math, specifically "division, multiplication, regrouping, and story problems," and "reading long words."

OBSERVATION:

Julio was observed by C. Goode, Teacher, and School Psychologist, in November 2012 to document his academic performance and behavior in the areas of difficulty.

Julio, who is finishing the 5th grade, is observed by his classroom teacher to be reading at a late 2nd grade level, based on professional observations and current testing results (Gates MacGinitie NCE 13; Fountas and Pinnell L/M; Measurement of Student Progress L1). In math, Julio is also well below grade level (Measurement of Student Progress L1). In writing, Julio is observed to show 3rd grade level skills.

Julio does not demonstrate any behavioral challenges impacting his learning. Ms. Goode notes that "behavior has never been an issue with Julio. He is social but in a positive, friendly way." Julio is observed to be helpful to peers, to have friends, to follow rules in games, and to refrain from saying hurtful things to others. Ms. Goode notes that "Julio is a very kind, well meaning student who is well like by peers and teacher."

Julio was observed at various times across a variety of classroom activities, including whole group math instruction, whole group reading instruction, and individual seat work. Despite his learning challenges, Julio presents as enthusiastic and eager to learn. He is observed to listen during whole group instruction and to do his best to participate in group and individual assignments. During classroom instruction, Julio is observed to be attentive and to show appropriate participation. He listens to the teacher, follows directions, and appears to work with his best effort on a variety of assignments. Julio is also very aware of his daily schedule, including when it is time for his specialists and intervention times. Overall, there are no behavioral contributions to the academic challenges Julio is experiencing.

COGNITIVE EVALUATION:

EXAMINER: School Psychologist

OVERVIEW: How does Julio's profile of cognitive "brain" skills for learning compare with others his age? What are his strengths and weaknesses?

To answer these questions, on 11/19, 11/20, and 11/26/2012 Julio completed a tailored battery of individually administered, cognitive tests that included portions of the Differential Ability Scales (DAS-2), Kaufman Assessment Battery for Children (KABC-2), and Comprehensive Test of Phonological Processing (CTOPP). Julio's results are judged to be valid and reliable as interpreted. He demonstrated an appropriate level of interest and cooperation with the standardized testing procedures, did not require any modifications to the standardized protocol, and appeared to be showing his best effort overall.

- The results show how well Julio performed compared to a group of students the same age from across the United States.
- Most children (68 in 100, or 68%) demonstrate skills in the "Average" range with Standard Scores (SS) from 85 to 115.
- Scores below 85 indicate a possible "Normative Weakness" that may impact school learning.

GENERAL INTELLECTUAL ABILITY: Formerly referred to as "IQ" (intelligence quotient), general intellectual ability is a one-number average that attempts to quantify the mental ability underlying results of various tests of cognitive ability. General intellectual ability scores below 70-75 are relevant to identifying "Intellectual Disability" (formerly called "Mental Retardation"). Also, academic achievement scores significantly below a general intellectual ability score (using the published OSPI tables) is one criterion Washington State recognizes for special education eligibility for "Specific Learning Disability."

Because Julio is a dual-language learner, nonverbal measures may provide a better estimate of general intellectual functioning. Julio obtained a Special Nonverbal Composite (SNC) score on the DAS-2 (SNC SS=88) in the "average" range for children his age, and above the range indicating Intellectual Disability. There is a 95 in 100 chance that if retested in the near future, Julio would score from 83 to 94. Julio score was as well or better than 21 percent of children his age in the national norm. Children who score in the average range (85 to 115) can generally be expected to be successful in school.

IMPACT OF LINGUISTIC AND CULTURAL DEMAND: Because Julio is a dual-language learner it is important to consider the impact of culture and language on test results. For example, if Julio performed better on cognitive tests with low cultural loading and linguistic demand, and less well on tests with more demands, this would suggest that his performance is more impacted by linguistic and cultural test demands than on his true profile of cognitive strengths and weaknesses. The Culture-Language Interpretive Matrix (C-LIM; Ortiz & Alfonso, 2001) was used to address this important issue. The results indicate that Julio's performance did not vary with cultural loading and linguistic demand, so is judged to reflect his true profile of cognitive strengths and weaknesses.

PROFILE OF COGNITIVE ABILITIES: Julio completed assessments of seven broad cognitive abilities relevant to school learning (For a picture of the results, see "Profile of Cognitive Skills for Learning" at end of report).

- 1) **CRYSTALLIZED KNOWLEDGE** includes the breadth and depth of a person's acquired knowledge, the ability to communicate one's knowledge, and the ability to reason using previously learned experiences or procedures.

Julio's crystallized knowledge and language skills are not as well developed as most children his age. When Julio was asked to point to pictures to show his receptive recognition of verbal concepts and knowledge in English (KABC-2 Verbal Knowledge SS=80), and when Julio was asked to listen to and solve orally presented riddles in English (KABC-2 Riddles SS=80), his performance was understandably lower than most English-only age-peers Julio's age because children learning two languages can generally be expected to show skills in their second language that are not as advanced as individuals learning just one language.

However, language testing in English and Spanish (tested separately; see "Communication Eval" section) finds that Julio's language use in both of his languages is well below expected levels for children his age, and his language understanding in both language is mildly delayed for children his age. While it is true that children learning two languages can experience regression in their first language as the new language interferes with the first language, Julio's very low expressive language development in both English and Spanish seems to be much lower than would typically be expected given his dual-language experience. When Julio's language growth is compared (using the Washington State Transitional Bilingual Database) with the 7,474 other English language learners with Julio's initial level of English proficiency who started receiving ELL services in kindergarten, Julio ranks very low at just the 10th percentile. Overall, Julio is learning two languages, and he is likely experiencing some typical aspects of learning two languages, but there are other cognitive challenges, including working memory limitations (see below), that are impacting Julio's language development and general learning.

- 2) **FLUID REASONING** includes the ability to reason, form concepts, and solve problems using unfamiliar information or novel procedures.

Julio's fluid reasoning skills are overall on the lower cusp of the typical range for children his age. On the DAS-2 Matrices test (SS=97), Julio demonstrated inductive reasoning skills as well developed as most children his age; however, on two other measures (KABC-2 Story Completion SS=85; Pattern Reasoning SS=80) he demonstrated performance on the lower cusp of the typical range. Julio also demonstrated quantitative reasoning skills (DAS-2 Sequential and Quantitative Reasoning SS=87) on the lower cusp of the typical range for children his age. Interestingly, on this later test, when Julio was asked to induce an underlying pattern between numbers and extend that pattern (e.g., 1-2, 5-6, 8-?), it was observed that Julio would usually accurately induce the underlying quantitative pattern, but then sometimes apply the reverse pattern (e.g., 2-1, 6-5, 9-?...Julio would say "down by one" and then answer 10). Such an error that may be attributed to over taxed working memory resources.

- 3) **MENTAL PROCESSING SPEED** is the ability to fluently perform mental tasks automatically, especially when under pressure to maintain focused attention or concentration.

Julio demonstrated mental processing speed as quick as most children his age (DAS-2 Speed of Information Processing SS=102). When Julio understands simple mental tasks, he is as able as most children his age at focusing his attention and concentration to quickly performing that task.

- 4) VISUAL PROCESSING is the ability to use visual information to learn, including perceiving, remembering, manipulating, and thinking with visual patterns.

Julio's visual processing skills may be like most children his age, although his performance varies greatly by the specific task. On the KABC-2 Rover test (SS=100), Julio demonstrated spatial scanning and planning skills as well developed as most children his age; however, on the KABC-2 Block Counting test (SS=75) he demonstrated visualization skills well below most children his age. Also, on the DAS-2 Pattern Construction test (SS=93) Julio demonstrated spatial skills for copying patterns from a model as well developed as most children his age; however, on the KABC-2 Triangles test (SS=75) he demonstrated skills on a this similar task well below most children his age. On a measure of visual-spatial memory for reproducing increasingly complex line drawings from immediate memory (DAS-2 Recall of Designs SS=85), Julio demonstrated performance on the lower cusp of the typical range. Julio's highly variable performance of visual spatial skills may reflect impacts of working memory limitations.

- 5) AUDITORY PROCESSING is the ability to use sound information to learn, including perceiving, analyzing, and synthesizing auditory patterns. This includes the ability to identify, isolate, and mentally analyze speech sounds (i.e., phonological awareness), which is important for reading development.

Julio demonstrates auditory processing skills as well developed, if not stronger, than most children his age. On the CTOPP Elision test, Julio was asked to delete syllables (e.g., Say 'toothbrush' without saying 'tooth' = 'brush') and sounds (e.g., Say 'cup' without saying /k/ = 'up') from spoken words. Julio demonstrated phonetic analysis skills (SS=90) as well developed as most English-only children his age.

On the CTOPP Blending Words test, Julio was asked to synthesizing auditory patterns (e.g., What word do these sounds make? ham-er = hammer; sh-ee-p = sheep). Julio accurately synthesized syllables and phoneme sounds into words, and demonstrated phonetic synthesis skills (SS=125) very well developed and significantly stronger than most English-only children his age.

Julio does not demonstrate the phonetic weaknesses experienced by some children with reading difficulties/disabilities. Julio's strengths in auditory processing explain why he has been developing fluent word decoding skills.

- 6) SHORT-TERM MEMORY is the ability to take in and hold information in memory, and then use it within a few seconds. This includes memory span (remembering elements in order) and working memory (holding information in memory while mentally processing that information). All thinking occurs in working memory, so it is critical to all school learning.

Julio's short-term memory is not as strong as most children his age. On four different measures of memory span, Julio demonstrated performance well below most children his age (CTOPP Memory for Digits SS=70; KABC-2 Number Recall SS=70; DAS-2 Recall of Digits Forward SS=67; KABC-2 Word Order SS=75). Across all of these measures, Julio was able to accurately hold sequences of 3 elements (orally spoken numbers or words) in short-term memory, and sometimes sequences of 4 elements, but never 5 elements. Average adult memory span is 7 plus or minus 2 elements.

When Julio was asked to process the oral information in working memory, he demonstrated performance below most children his age on two different measure (DAS-2 Recall of Digits Backward SS=82, Recall of Sequential Order SS=75). Julio demonstrated that is able to accurately process sequences of only 2 elements, and is sometimes accurate with 3 or 4 element sequences.

Julio's memory span and working memory limitations may be limited to auditory information. When Julio was asked to repeat sequences of motor actions (KABC-2 Hand Movements SS=90), his memory span for motor information was as strong as most children his age. This suggests that Julio's learning may be stronger with multi-modality instruction, such as pair oral input with movement patterns.

- 7) LONG-TERM MEMORY is the ability to store and efficiently retrieve newly learned or previously learned information. This includes recall memory, associative memory, and rapid naming.

Julio's long-term associative memory is also like most children his age. On the KABC-2 Atlantis test, Julio was taught the names of fish, plants, and shells. His immediate memory for that new information was like most children his age (SS=90), as was his delayed memory about 15 minutes later (SS=85). On the KABC-2 Rebus test, Julio was taught to associate words with pictures, then asked to "read" sequences of symbol sentences. His immediate memory for that new information was like most children his age (SS=85), as was his delayed memory about 15 minutes later (SS=85).

Julio's rapid retrieval of word information from long-term memory is like most children his age. On the CTOPP Rapid Digit Naming (SS=115) and Rapid Letter Naming (SS=105) tests, Julio demonstrated performance like most children his age. Julio does not demonstrate the rapid naming experienced by some children with reading disabilities. Julio's strengths in rapid naming explains why he has been developing fluent word decoding skills.

SUMMARY: Julio's profile of cognitive skills was assessed in November 2012 using a cross-battery approach. Julio is a dual-language learner, and nonverbal indicators of Julio's general intellectual ability are above the range indicative of an intellectual disability. Julio's profile of "brain skills" for learning include both strengths and challenge areas. Strengths include fluid reasoning, mental processing speed, visual processing, and auditory processing. However, Julio demonstrates critical weaknesses in crystallized knowledge and language skills, and in memory span and working memory. Adults can hold an average of 7 plus or minus 2 elements of information in short term memory. Julio's short term memory span is accurate for only 3 elements and sometimes 4 elements. When Julio must process that information in working memory, he can accurately process only 2 elements consistently, and sometimes 3-4 elements. All thinking occurs in working memory, and it is critical to all school learning, which explains why Julio is struggling with developing academic skills. Julio's memory span for motor patterns, however, is as strong as most children his age, which suggests that Julio's learning may be stronger with multi-modality instruction, such as pair oral input with movement patterns.

READING EVALUATION:

EXAMINER: School Psychologist

OVERVIEW: Julio's reading skills were evaluated using a combination of classroom assessments and teacher observations, and standardized testing.

CLASSROOM/TEACHER OBSERVATIONS: Julio's classroom teacher is concerned with his reading development. Ms. Goode reported that "he can read out loud well, though he does not retain or comprehend what he reads." Recent reading observations indicate Julio is reading at a mid-2nd grade level. In the Fountas & Pinnell Benchmarking System, Julio is reading level L/M (2nd grade) books. On the Gates-MacGinitie reading test, Julio demonstrates skills at the 2nd grade level. On the 4th grade Measurement of Student Progress, Julio scored at Level 1 (Level 3 is meeting standard).

TESTING: Julio completed select tests of the Woodcock Johnson Tests of Achievement (WJ-III) and the Test of Word Reading Efficiency (TOWRE) on 11/20/2012 with School Psychologist. Julio's results are judged to be valid and reliable as interpreted. He demonstrated an appropriate level of interest and cooperation with the standardized testing procedures, did not require any modifications to the standardized protocol, and appeared to be showing his best effort overall.

- The results show how well Julio performed compared to a group of students the same age from across the United States.
- Most children (68 in 100, or 68%) demonstrate skills in the "Average" range with Standard Scores (SS) from 85 to 115. Scores below 85 indicate a possible "Normative Weakness."
- Grade equivalent scores (GE) are also given, which are the least reliable of scores, and should be viewed only as general estimates of the level at which Julio might be instructed.

SCORES:

WJ-III Basic Reading Skills Composite: SS=90, GE=3.9

- Letter Word Identification: SS=85, GE=3.5
- Word Attack: SS=98, GE=4.9

WJ-III Reading Comprehension Composite: SS=75, GE=2.5

- Reading Vocabulary: SS=73, GE=2.1
- Passage Comprehension : SS=84, GE=2.9

Other Reading Tests:

- WJ-III Reading Fluency: SS=94, GE=4.7
- TOWRE Sight Word Efficiency: SS=94, GE=4.8
- TOWRE Phonemic Decoding Efficiency: SS=91, GE=4.0

SKILLS DEMONSTRATED: Julio demonstrated fluent decoding of familiar and unfamiliar words. When reading simple text passages, Julio makes few if any miscues, and he readily demonstrates comprehension. As the passage complexity and length increases, Julio's comprehension decreases. Julio demonstrated that he can read words and text with comprehension to about a 2nd grade level.

DISCREPANCY: Although "severe discrepancy" is not supported by research as a scientifically valid approach to identifying learning disabilities, academic achievement composite scores significantly below a general intellectual ability score (using the published OSPI tables) is one criteria Washington State recognizes for special education eligibility for "Specific Learning Disability" (See "Discrepancy Analysis" at end of report).

Julio's standard score in basic reading skills (SS=90) does NOT, and in reading comprehension (SS=75) DOES meet the Washington State specific learning disability "severe discrepancy" criterion (for Julio: SS=<75).

MARKERS FOR LEARNING DISABILITY: Julio demonstrates weaknesses with reading comprehension. Julio also demonstrates significant weakness in his expressive language development, with mild weaknesses in his receptive language development, and significant weaknesses in his working memory, which is associated with reading development.

IEP RECOMMENDATIONS: Julio requires a Special Education "Individual Education Program" (IEP) with goals for increasing his reading skills, including:

- 1) Demonstrating comprehension of reading words by explaining word meanings (e.g., giving a synonym or antonym, using word in a sentence).
- 2) Demonstrating comprehension of a variety of texts (e.g., informational/expository, literary/narrative) including stating main idea, summarizing, making inferences and predictions, organizing information that supports a prediction or inference, explaining sequences, and analyzing story elements (e.g., point of view, setting, plot, cause and effect).

MATHEMATICS EVALUATION:

EXAMINER: School Psychologist

OVERVIEW: Julio's math skills were evaluated using a combination of classroom assessments and teacher observations, and standardized testing.

CLASSROOM/TEACHER OBSERVATIONS: Julio's classroom teacher is concerned with his math development. Ms. Goode reported that "he does OK with addition, and [is] poor with subtraction." In math, Julio is also well below grade level (Measurement of Student Progress L1). In class, Julio struggles with applied math problems, possibly due to challenges with calculation skills, as well as, challenges with reading comprehension.

TESTING: Julio completed select tests of the Woodcock Johnson Tests of Achievement (WJ-III) on 11/20/2012 with School Psychologist. Julio's results are judged to be valid and reliable as interpreted. He demonstrated an appropriate level of interest and cooperation with the standardized testing procedures, did not require any modifications to the standardized protocol, and appeared to be showing his best effort overall.

- The results show how well Julio performed compared to a group of students the same age from across the United States.
- Most children (68 in 100, or 68%) demonstrate skills in the "Average" range with Standard Scores (SS) from 85 to 115. Scores below 85 indicate a possible "Normative Weakness."
- Grade equivalent scores (GE) are also given, which are the least reliable of scores, and should be viewed only as general estimates of the level at which Julio might be instructed.

SCORES:

WJ-III Math Calculation Skills Composite: SS=83, GE=4.1

- Calculation: SS=78, GE=3.5
- Math Fluency: SS=103, GE=6.1

WJ-III Math Reasoning Composite: SS=80, GE=3.2

- Applied Problems: SS=88, GE=3.8
- Quantitative Concepts: SS=68, GE=2.4

SKILLS DEMONSTRATED: Julio demonstrated that he can solve addition, subtraction, multiplication, and division facts, and that is fluent with recalling math facts. On a timed test of mixed addition, subtraction, and multiplication facts, Julio accurately solved 76 out of 80 attempted problems in one minute, a level of performance typical of children his age and children nationally in the 6th grade.

Despite his arithmetic fluency, Julio struggles with multi-step calculations that most children his age can readily complete. He can solve multi-digit addition and subtraction without grouping, but does not demonstrate accuracy when regrouping is required. Because multi-digit multiplication division requires regrouping, Julio is inaccurate with this, and he openly acknowledges that he cannot yet perform long division, which also requires regrouping.

Julio demonstrated that he can apply his math calculation skills to solving a variety of applied math story problems, including problems requiring addition, subtraction, multiplication, and division. Julio employed a variety of strategies to accommodate for his challenges with multi-step arithmetic, including drawing pictures and diagrams, and using adding of multidigits to solve multiplication problems (e.g., to solve 20×3 he might add $20+20+20=$) which worked as long as he did not need to regroup. Julio demonstrated knowledge shapes, size and order concepts, names of calculation signs, calendar use skills, reading time to the hour, reading temperature from a thermometer, and emerging money skills. He identified coins, and sometimes accurately added coins under a dollar, but sometimes confused the value of nickel and dime. Julio did not demonstrate knowledge of measurement abbreviations or early geometry concepts. Julio did demonstrate solid understanding of number relationships, such that he could readily solve forward and reverse number patterns (e.g., 3,4,5,___?) by 1s, 2s, and 3s.

DISCREPANCY: Although “severe discrepancy” is not supported by research as a scientifically valid approach to identifying learning disabilities, academic achievement composite scores significantly below a general intellectual ability score (using the published OSPI tables) is one criteria Washington State recognizes for special education eligibility for “Specific Learning Disability” (See “Discrepancy Analysis” at end of report).

Julio’s standard scores in math calculation skills (SS=83) and math reasoning (SS=80) do NOT meet the Washington State specific learning disability “severe discrepancy” criterion (for Julio: SS=<80). However, although not shown by the application of the table procedure, given the standard error of measurement with both the general intellectual ability score and academic composites, there is a strong likelihood that there is a severe discrepancy.

MARKERS FOR LEARNING DISABILITY: Despite his arithmetic fluency, Julio struggles with multi-step calculations that most children his age can readily complete, challenges that are understandable given his limitations with short-term memory span and working memory. For example, if Julio can only accurately process two elements in working memory, his working memory resources are over-taxed by longer problems that involve coordinating multiple calculations and multiple procedures for carrying and borrowing to move values in calculation procedures.

IEP RECOMMENDATIONS: Julio requires a Special Education “Individual Education Program” (IEP) with goals for increasing his math skills, including:

- 1) Multi-digit addition, subtraction, multiplication, and division with regrouping.
- 2) Applying calculation skills to solving a variety of applied story problems

WRITTEN LANGUAGE EVALUATION:

EXAMINER: School Psychologist

OVERVIEW: Julio's writing skills were evaluated using a combination of classroom assessments and teacher observations, and standardized testing.

CLASSROOM/TEACHER OBSERVATIONS: Julio's classroom teacher is concerned with his writing development. Ms. Goode observes that Julio demonstrates 3rd grade level writing skills and he cannot yet write a cohesive paragraph. Interventionists that have worked with Julio, observed that when trying to teach him a writing-frame process that is used during daily intervention sessions, unlike other students, he "needs step-by-step directions on a daily basis, even though previously taught the skills, [and he] does not appear to retain information from day to day."

TESTING: Julio completed select tests of the Woodcock Johnson Tests of Achievement (WJ-III) on 11/20/2012 with School Psychologist. Julio's results are judged to be valid and reliable as interpreted. He demonstrated an appropriate level of interest and cooperation with the standardized testing procedures, did not require any modifications to the standardized protocol, and appeared to be showing his best effort overall.

- The results show how well Julio performed compared to a group of students the same age from across the United States.
- Most children (68 in 100, or 68%) demonstrate skills in the "Average" range with Standard Scores (SS) from 85 to 115. Scores below 85 indicate a possible "Normative Weakness."
- Grade equivalent scores (GE) are also given, which are the least reliable of scores, and should be viewed only as general estimates of the level at which Julio might be instructed.

SCORES:

Written Expression Composite: SS=96, GE=5.1

- Writing Fluency: SS=91, GE=4.5
- Writing Samples: SS=102, GE=6.2

Other Writing Tests:

- Spelling: SS=84, GE=3.1
- Spelling of Sounds: SS=92, GE=3.8

SKILLS DEMONSTRATED: Julio demonstrated that he can write a variety of complex sentences, including sentences with details, explanations, and lists, and his sentences include correct capitalization and punctuation with a period. He does not yet use commas. Julio is very fluent in his writing and can quickly write grammatically correct sentences. Julio's handwriting is neat and readable, and he can spell many words up to about a 3rd grade level nationally. Julio also applies his phonics letter-sound knowledge to spelling unfamiliar words.

DISCREPANCY: Although "severe discrepancy" is not supported by research as a scientifically valid approach to identifying learning disabilities, academic achievement composite scores significantly below a general intellectual ability score (using the published OSPI tables) is one criteria Washington State recognizes for special education eligibility for "Specific Learning Disability" (See "Discrepancy Analysis" at end of report).

Julio's standard score in written expression (SS=96) does NOT meet the Washington State specific learning disability "severe discrepancy" criterion (for Julio: SS=<75).

MARKERS FOR LEARNING DISABILITY: Julio demonstrates a significant weakness in his expressive language skills (in both English and Spanish), and in his working memory – all skills significantly related to writing development.

IEP RECOMMENDATIONS: Julio requires a Special Education "Individual Education Program" (IEP) with goals for increasing his writing skills, specifically:

- 1) Using a writing process (e.g., four square) to organize his ideas with the goal of writing paragraphs of related sentences, working toward writing short essays or stories of 3-4 related paragraphs.

DISCUSSION:

Julio does not achieve adequately for children his age or meet grade level standards in reading, writing, and math. The causes of Julio's academic challenges are multi-causal. One contributing factor is Julio's limited English proficiency. He has been learning English for over 5 years now, and yet his English proficiency was measured with the Washington English Language Proficiency Assessment on 2/6/2012 to be at the "Intermediate" level overall. Julio is not yet at the "Transitional" (L4) level where students are exited from ELL services and judged to be "approaching comparability to that of English-proficient peers."

This most definitely impacts his learning success in his English-only classroom.

However, there are other disability-related factors also contributing to Julio's academic challenges. Julio's profile of "brain skills" for learning include both strengths and challenge areas. Strengths include fluid reasoning, mental processing speed, visual processing, and auditory processing. However, Julio demonstrates critical weaknesses in crystallized knowledge and language skills, and in memory span and working memory. Adults can hold an average of 7 plus or minus 2 elements of information in short term memory. Julio's short term memory span is accurate for only 3 elements and sometimes 4 elements. When Julio must process that information in working memory, he can accurately process only 2 elements consistently, and sometimes 3-4 elements. All thinking occurs in working memory, and it is critical to all school learning, which explains why Julio is struggling with developing academic skills.

It is important to note that the results on which these conclusions are based are not due to limited English proficiency impacts on test performance. The number-recall tasks used to measure Julio's short-term memory were valid assessments. Although there is some degree of linguistic demand, this is not the case for Julio who knows English number names very well and who can rapidly name English numbers as well as 84 percent of English speaking children his age. Overall, the testing results indicate valid mild weaknesses in working memory.

The evaluation group, including Julio's mother, carefully considered these results and concluded that Julio does have learning disabilities, in addition to English language learning, impacting his learning success. The evaluation group determined that Julio is eligible for Special Education under the "Specific Learning Disability" (SLD) eligibility category based on severe discrepancy (for OSPI compliance) and patterns of strengths and weaknesses diagnostic of a specific learning disability.

SEVERE DISCREPANCY: Although severe discrepancy is not supported by research as a scientifically valid approach to identifying learning disabilities, academic achievement composite scores significantly below a general intellectual ability score (using the published OSPI tables) is one criteria Washington State recognizes for special education eligibility for "Specific Learning Disability" (See "Discrepancy Analysis" at end of report).

Using the State of Washington Severe Discrepancy Tables (See "Discrepancy Analysis" at end of report) with professional judgment (the tables require full-scale intelligence score, but because Julio is a dual-language learner nonverbal measures provide a more valid estimate of his general intellectual functioning) and Julio's DAS-2 Special Nonverbal Composite (SS=88), Julio DOES meet the "severe discrepancy" criterion (for Julio: SS=<75) in reading comprehension (SS=75). Julio's standard scores in math calculation skills (SS=83) and math reasoning (SS=80) do NOT meet the criterion; however, given the standard error of measurement with both the general intellectual ability score and academic composites, there is a strong likelihood that there is a severe discrepancy.

PATTERNS OF STRENGTHS AND WEAKNESS:

Reading: Julio demonstrates weaknesses with reading comprehension. Julio also demonstrates significant weakness in his expressive language development, with mild weaknesses in his receptive language development, and significant weaknesses in his working memory, which is associated with reading development.

Writing: Julio demonstrates a significant weakness in his expressive language skills (in both English and Spanish), and in his working memory – all skills significantly related to writing development.

Math: Despite his arithmetic fluency, Julio struggles with multi-step calculations that most children his age can readily complete, challenges that are understandable given his limitations with short-term memory span and working memory. For example, if Julio can only accurately process two elements in working memory, his working memory resources are over-taxed by longer problems that involve coordinating multiple calculations and multiple procedures for carrying and borrowing to move values in calculation procedures.

LEARNING PROBLEMS ARE NOT CAUSED BY OTHER FACTORS: The evaluation group determined that the Julio's learning difficulties are NOT primarily the result of other factors including:

- 1) A lack of appropriate instruction in reading or math: Julio HAS received appropriate instruction in reading and mathematics provided by qualified personnel, including additional targeted intervention in reading and math skills through differentiated classroom instruction and intervention. He HAS received repeated assessments of achievement at reasonable intervals which was provided to parents through his report card and parent conferences.
- 2) A visual, hearing, or motor disability: Julio does NOT have visual, hearing, or motor disabilities.
- 3) Intellectual disability (formerly called "mental retardation"): Julio does NOT demonstrate an intellectual disability.
- 4) Emotional disturbance: Julio does NOT demonstrate any significant emotional or behavioral disturbances.
- 5) Cultural factors: There are no cultural factors that would be the PRIMARY cause of Julio's learning difficulties. There are many other children from similar cultural and linguistic backgrounds who are experiencing learning success.
- 6) Environmental or economic disadvantage: There are no environmental or economic factors present that would be the PRIMARY cause of Julio's learning difficulties.
- 7) Limited English proficiency: Although this is an important factor, it is NOT the PRIMARY factor for Julio's learning challenges (See top of discussion).

Adverse Educational Impact:

Julio's learning disability, which includes critical weaknesses in crystallized knowledge and language skills, and in memory span and working memory, has an adverse impact on his learning success in reading, writing, and math.

Relate Results to General Education:

Because of the identified disability and adverse educational impact, Julio has needs that cannot be addressed exclusively through education in general education classes with or without individual accommodations, and he needs Special Education.

Specially designed instruction should take into consideration Julio's emerging English proficiency, and use gestures and visuals paired with verbal input to increase understanding, and provide increased time to process verbal input before responding.

Specially designed instruction should take into consideration Julio's working memory weaknesses, including:

- 1) Helping Julio focus on the necessary information, for example by projecting the information onto a screen or writing it on a page in front of him. It is also important to minimize the factors that will interfere with Julio's attention to the presentation of information.
- 2) Helping Julio get information into working memory by feeding smaller amounts of information at a time, breaking information into smaller parts; by helping him to chunk the information into more meaningful parts; and by directing his attention to the important elements in the presentation, for example, by highlighting key words, by pointing to crucial items, or by saying "Look at this!" or "This is important!"
- 3) Helping Julio keep information in working memory, by rehearsing the information often while the he is working on it, for example, rephrasing key points often enough to keep them active in working memory; by having Julio restate and paraphrase the information (for example, directions or summary of what he just listened to). Presenting information with visual cues can also be helpful.
- 4) Julio's short-term memory for motor information is as strong as most children his age. Julio's learning may be stronger with multi-modality instruction, such as pairing oral input with movement patterns.