Simple Outline for XBA COGNITIVE REPORT:

EXAMINER: School Psychologist's Name

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

To answer these questions, on XX/XX and XX/XX/2013, Student completed a tailored battery of individually administered, cognitive tests that included portions of the *(list the tests you administered)* Wechsler Intelligence Scale for Children (WISC-4), Kaufman Assessment Battery for Children (KABC-2), and Comprehensive Test of Phonological Processing (CTOPP).

Student's results are judged to be valid and reliable as interpreted. She 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 her best effort overall. *If this is not true, explain any impacts on the validity and reliability of the results, and any modifications to the standardized protocol taken to ensure that the results indicate something meaningful about the student.*

- The results show how well Student 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.

You increase understanding for parents and teachers by eliminating things that obfuscate the results.

Why keep trying to explain to parents and teachers the difference between scale scores, T-scores, and standards score (e.g., "Your child scored a 50 on this test which is "average", and a 50 on this test which is very low")? Convert everything to standard scores using the provided conversion tables.

Why keep trying to explain to parents and teachers the different labels and ranges offered by test publishers for what is "average"? Keep it simple. Patterns of results between 85 and 115 are "average" and indicate the child's skills/abilities are LIKE most (i.e., 68%) children his/her age. Patterns of results below 85 indicate a "normative weakness" and patterns above 115 indicate a "normative strength."

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 are relevant to identifying "Intellectual Disability" (the new term for "mental retardation").

Student obtained a general intellectual ability score on the WISC-4 comparable to most children her age (Full-Scale SS=XX; XXth Percentile Rank; XX-XX = 95% Confidence Interval). Student does NOT have a general intellectual disability.

There is nothing else more that needs to be said other than you are ruling out mental retardation. There is no need to discuss the various composites or cluster scores, unless for some reason the full-scale score misrepresents what your professional judgment tells you is the child's true general intellectual ability level.

PROFILE OF COGNITIVE ABILITIES: Student completed assessments of seven broad cognitive abilities relevant to school learning (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.

   Student's crystallized knowledge and language skills are **as well developed** as most children her age. She demonstrated "average" performance on three different measures of crystallized knowledge and language skills (KABC-2 Verbal Knowledge SS=95, Riddles SS=105, Expressive Vocabulary SS=110). Overall, Student's breadth and depth of acquired knowledge is like most children her age, and she is capable of using language to communicate her knowledge with others.

   OR

   Student's crystallized knowledge and language skills are **like or stronger than** most children his age. He demonstrated language skills for explaining word meanings (DAS-2 Word Definitions SS=115) and conceptual similarities between sets of words (DAS-2 Verbal Similarities SS=115) on the upper cusp of the "average" range for children his age.

   OR *in the case of an outlier that you judge to be a fluke*

   Student's crystallized knowledge and language skills are **as well developed** as most children her age. She demonstrated "average" performance on four different measures of crystallized knowledge and language skills (KABC-2 Riddles SS=90, Expressive Vocabulary SS=100; DAS-2 Word Definitions SS=94, Verbal Similarities SS=91). Given Student's stronger performance on these measures, lower performance on a fifth measure (KABC-2 Verbal Knowledge SS=75) appears to have been an underestimate of Student's true skills. Overall, Student's breadth and depth of acquired knowledge is like most children her age, and she is capable of using language to communicate her knowledge with others.

   OR *in the case where you feel the need to explain in detail what student can/cannot perform*

   Student's crystallized knowledge and language skills are **not as well developed** as most children her age. When asked to define words, Student could define very simple words (like "chair" and "pencil"), but she was unable to explain words that most children her age readily define (DAS-2 Word Definitions SS=64). When asked to name objects in pictures, Student accurately identified 17 of 25 items tested, but her overall expressive vocabulary was well below most children her age (KABC-2 Expressive Vocabulary SS=65). When given three words and asked to explain how they are the same, Student demonstrated that she can identify many common categories (e.g., foods, animals, colors, shapes), but she struggled with explaining more complex verbal similarities that

most of her age-peers readily explain (DAS-2 Verbal Similarities SS=73). On a measure of Student's receptive language skills, Student demonstrated understanding of many English words and concepts (29 of 36 tested), but struggled with showing understanding of many words and concepts that most age-peers understand (KABC-2 Verbal Knowledge SS=75). Overall, Student's performance indicates that she is continuing to develop her crystallized knowledge and language skills, but her skills are not as well developed as most children her age.

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

Student's fluid reasoning skills are **as well developed** as most children her age. She demonstrated inductive fluid reasoning in the "average" range on two different measures (KABC-2 Pattern Reasoning SS=100, Story Completion SS=90). Overall, Student is as capable as most children her age at reasoning, forming concepts and solving problems.

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

Student's mental processing speed is **like** most children her age. She demonstrated fast performance at making simple quantitative comparisons (DAS-2 Speed of Information Processing SS=87).

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

Student's visual processing skills are **not as strong** as most children her age. Although she demonstrated "average" visual memory for copying line drawings from memory (DAS-2 Recall of Designs SS=90), she demonstrated "normative weaknesses" in her spatial skills for copying patterns from a model (DAS-2 Pattern Construction SS=84; KABC-2 Triangles SS=75), and in her spatial scanning and planning skills (KABC-2 Rover SS=75). Student's weaknesses with these skills may be related to her 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.

Student's auditory processing skills are **as well developed** as most children her age. She demonstrated "average" phonetic synthesis skills on the CTOPP Blending Words test (SS=100) that required her to synthesize auditory patterns (e.g., What word do these sounds make? /sh/ /ee/ /p/ = sheep). She also demonstrated "average" phonetic analysis skills on the CTOPP Elision test (SS=90) that required her to mentally segment the sounds in words (e.g., Say "cowboy" without saying "cow"; say "cup" without saying /k/), and on the CTOPP Sound Matching test (SS=90) that required her to identify starting and ending sounds in words that match. Overall, Student does not demonstrate weaknesses in auditory processing that are associated with reading disabilities.

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.

Student's short-term memory is **not as strong** as most children her age. On four different measures of memory span, Student 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, Student was able to accurately hold sequences of only 3 elements (orally spoken numbers or words) in short-term memory, and sometimes sequences of 4 elements, but never 5 elements. Adult memory span average 7 plus or minus 2 elements.

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

Student's memory span and working memory limitations may be limited to auditory information. When Student was asked to repeat sequences of motor actions (KABC-2 Hand Movements SS=90), her memory span for motor information was as strong as most children her age. This suggests that Student'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.

Student demonstrated free recall memory for things she had seen (DAS-2 Recall of Objects SS=87) and associative memory for learning new information (KABC-2 Atlantis SS=105, Rebus SS=95) **as well developed** as most children her age. When asked to remember information after about a 20 minute delay, Student's long-term memory was also like most children her age (DAS-2 Recall of Objects Delayed SS=96; KABC-2 Atlantis Delayed SS=105, Rebus Delayed SS=105), which means that she is capable of retaining information she has previously learned.

However, Student demonstrates a **significant normative weakness** in a specific type of long-term memory important for reading development called "rapid automatic naming" or "RAN". On the CTOPP-2 Rapid Naming tests, Student was asked to quickly name a series of digits or letters, and her performance was much slower than most children her age (Digits SS=75, Letters SS=80). Student's difficulty is not due to a lack of knowledge of number, letter, or color names (she knows this very well), rather a difficulty in the speed she can access and retrieve lexical or word information from long-term memory.

Scientists have found that some children with reading fluency disabilities are very slow on tasks that involve quickly naming lists of letters, numbers, or colors. To read effectively, a brain needs to retrieve at lightning speed considerable layers of lexical or word information from long-term memory, such as letters, sounds, phonics, whole-words, word meanings, and knowledge connected to the word and the word in context. If a brain is slower in retrieving the most basic of lexical information, such as letter names, this is indicative of broader deficit in lexical retrieval that may explain the reading fluency difficulties a Student may be experiencing.

SUMMARY: *Provide a brief summary and synthesis of the results…one that is simply written to be understood by parents, teachers, etc. This may be the only part that people read, so make it a usable synthesis.*

Student's profile of cognitive skills was assessed in Month 2013 using a cross-battery approach. Student's general intellectual ability is well within the "average" range. *Briefly that student does not have an intellectual disability.*

Student's profile of cognitive "brain skills" for learning indicates many important skills like most children his age, including fluid reasoning,…*list areas, that in your interpretation of the overall data, you conclude are "average." Avoid discussing small peripheral details, unless they are significantly relevant to helping others understand the student's learning needs.*

However, in the area of….Student demonstrates skills for….well below…not as well developed…not as strong…not as fast…as most children his age.   *Then explain how specific weaknesses may contribute to the learning challenges the student is experiencing.* Student's weaknesses explain *"may explain" if you are feeling cautious* why he is experiencing difficulty learning language skills, as well as, the school learning challenges he has been experiencing. Specifically,…