Guidelines for Identifying a Psychological Processing Deficit (Box 5 on the SLD Supplement)- Updated June 2019

A deficit may be considered when:

- A score is below average AND a significant intra-individual weakness (a score is statistically significant at the 0.05 level **and** the cumulative base rate, if available, is 5-10%),
- At least one area of cognitive processing is in the average range, and
- The area(s) of cognitive deficit(s) is/are related to the area(s) of academic concern.

Note: Follow publisher guidelines on test administration. Keep in mind that most assessments do not allow for individual subtest administration.

Processing Area	**Definition**	**Examples of Measures** (Keep in mind that a composite score or multiple subtest scores measuring similar constructs are essential. This data is necessary to provide patterns that document evidence of a possible processing problem.)
Auditory Comprehension (revised 6/19)	*The Auditory Comprehension Process* is not intended to be a measure of acuity of the sensory mechanism. Rather, it is intended to be the underlying cognitive mechanism involved in using auditory information for the purpose of comprehending and learning.	CELF-5 (Receptive Language); DAS-II (Auditory Processing); NEPSY-II (Auditory Attention and Response Set); OWLS-2 (Listening Comprehension); PPVT-5 (Auditory Processing, Receptive Language and Phonological Awareness); RESCA-E (Receptive Core); TOLD (Auditory Processing, Receptive Language and Phonological Awareness); TOLD-I:4; TAPs-4; WRAML 2 (Verbal Memory); WJ-IV Cognitive (Auditory Processing)
Language Use	*The Language Use Process* involves the individual's skill at using verbal information to define concepts and solve problems. Language Use includes both the understanding and production of meaningful speech and communication. Language Use may include measures of receptive language, expressive language, listening comprehension, and vocabulary development.	CAS 2 (Successive); CELF-5 (Expressive Language, Receptive Language Content); DAS-II (Verbal Ability); EVT-3 (Expressive); KABC-II NU (Knowledge); NEPSY-II (Comprehension of Instructions, Oromotor Sequences, Phonological Processing, Speeded Naming, Body Part Naming and Identification, Repetition of Nonsense Words); OWLS-2 (Oral Expression); PPVT-5 (Receptive); RESCA-E (Expressive Core); RIAS (Verbal Reasoning, Guess What); SB5 (Verbal Knowledge); WISC-V (Vocabulary, Similarities, Comprehension); WJ-IV Cognitive (Comprehension Knowledge)
Memory	*The Memory Process* involves the ability to store and retrieve information in a useful manner. Measures of this process include short-term memory, working memory, associative memory, recognition, and long-term retrieval.	BRIEF (Working Memory); CAS 2 (Successive); CEFI; CELF-5 (Language Memory); CMS (Verbal Memory); CTOPP-2 (Phonological Memory); DAS-II (Memory or Retrieval); KABC-II NU (Sequential or Learning); NEPSY-II (Memory for Names/Delayed, Word List Interference, Memory for Designs/Delayed, Narrative Memory, Sentence Repetition); RIAS (Verbal Memory, Nonverbal Memory); SB5 (Working Memory); TAPS-3 (Memory); UNIT-2 (Memory or Symbolic); WISC-V (Working Memory, Letter-Number Sequencing, Auditory Working Memory, Symbol Translation); WRAML2; WJ-IV Cognitive (Short-term Working Memory, Long-term Retrieval)
Mental Control	*The Mental Control Process* may be thought of as an individual's ability to manage and prioritize perceptions to facilitate decision-making and problem solving. Mental control allows the individual to recognize the nature of a problem, plan a course of action, and sequence multiple actions to solve a problem. Mental control abilities may be identified through measures of executive functioning, planning, organization and self-regulation.	BRIEF; CAS 2 (Planning, Attention); CEFI; CTOPP-2 (Rapid Naming); KABC-II NU (Planning, Sequential); NEPSY-II (Auditory Attention and Response Set, Inhibition, Statue); Social Language Development Test Elementary (Interpersonal Negative); Social Language Development Test Adolescent (Problem Solving); SB5 (Fluid Reasoning Index); VMI-6

Orthographic Processing (added 6/19)	Orthography refers to the conventional spelling system of language and includes rules around letter order and combinations. Orthographic processing is the ability to form, store, and access these rules and recognize when words contain correct and incorrect spellings.	Note: There is overlap between these two processing disorders; therefore, many tools may be appropriate to explore either or both. CTOPP-2 (Rapid Naming); DAS-2 (Phonological Processing supplemental subtest, Rapid Naming supplemental subtest); FAR (Orthographical Processing); NEPSY-II (Phonological Processing , Speeded Naming); PAL-II (Orthographic Coding); PAT-2 NU (phoneme/grapheme subtest); TAPS-4 (Phonological Processing Composite); TOPA-2; WISC-V (Naming Speed, Automated Rapid Naming); WISC-V (Rapid Naming supplemental subtest); WJ-Achievement (Spelling, Spelling of Sounds, Word Attack); WJ-IV Cognitive (Auditory Processing, Memory for Sound Patterns, Speed of Lexical Access, Phonological Processing)
Phonological Processing	*Phonological Processing* skills include phonological awareness, phonological memory, and rapid naming skills. Phonological awareness is the awareness of and access to the phonological structure of oral language. Phonological memory is the ability to code information phonologically for temporary storage in working or short-term memory. Rapid naming skills consist of efficient retrieval of phonological information from long-term memory by executing a sequence of operations quickly and repeatedly.	
Problem-Solving/ Judgment	The *Problem-Solving* process is a complex activity. The Problem-Solving Process is defined by an individual's skill at analysis and synthesis of multiple elements to resolve problems. Measures of Problem-Solving and Judgment include reasoning skills, decision-making, and fluid reasoning.	BRIEF (Organization, Self-Monitoring); CAS 2 (Simultaneous); DAS-II (Nonverbal Reasoning); KABC-II NU (Simultaneous); SB5 (Fluid Reasoning); WISC-V (Comprehension); WJ-IV Cognitive (Fluid Reasoning)
Processing Speed	*Processing Speed* can be globally defined as the ability to make efficient and rapid decisions or quickly perceive distinctions in stimuli. Processing speed involves input and output mechanisms, and is frequently demonstrated under timed conditions. Measures of processing speed include automaticity and rapid decision-making.	CAS 2 (Planning); CTOPP-2 (Rapid Naming); DAS-II (Processing Speed); KABC-II NU (Planning); NEPSY-II (Speeded Naming); VMI-6; WISC-V (Symbol Search, Cancellation, Coding); WJ-IV Cognitive (Processing Speed)
Visual	*The Visual Process* is defined by cognitive mechanisms that are involved in the retention, processing, and organization of visual information so as to demonstrate accurate perception. These should not be confused as a measure of the sensory mechanism of sight, but rather as indicators of the more complex underlying cognitive activities. Measures of visual processing may include factors such as spatial awareness, visual perceptual skills, perceptual organization, visual mental manipulation and perceptual discrimination.	DAS-II (Spatial); KABC-II NU; Motor Free Visual Perceptual Test-3; NEPSY-II (Design Copying, Picture Puzzles); SB5 (Nonverbal Fluid Reasoning); Test of Visual Perceptual Skills-3, UNIT-2 (Non-symbolic); VMI-6, WISC-V (Block Design, Visual Puzzles, WRAML2 (Visual Memory), Matrix Reasoning, Figure Weights); WJ-IV Cognitive (Visual Processing),
Visual Motor Integration	*Visual-motor integration* refers to the coordination and assimilation of visual perception (visual information processing skills) and fine motor output or movement. Visual-motor integration may include measures of visual-motor integration and motor speed.	Bender Gestalt II; NEPSY-II (Manual Motor Sequences, Visuomotor Precision, Imitating Hand Positions); SB5 (Nonverbal Visual Spatial Processing and Fluid Reasoning,); VMI-6; WISC-V (Block Design, Coding); WRAVMA

Most of these processing deficit areas and their definitions were taken from the work of the Eugene 4J School District, 2010. Measures were identified by the SLD Workgroup. Please note that this is not an exhaustive list.