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FINE UNTIL KINDERGARTEN

A Parent's First Guide to Learning Differences™



Book Excerpt: Appendix A: What's Inside Your Child's Diagnosis?

APPENDIX A:

What's Inside Your Child's Diagnosis?

Even after sending your child to a professional for a diagnosis, many parents report that they're confused about their child's LD. Sometimes it can take years to understand what a diagnosis really means. Three things to remember:

- You can think of a diagnosis as a set of weaknesses that form a pattern
- Some weaknesses appear in more than one diagnosis
- Children are often diagnosed with more than one LD

In addition to figuring out a diagnosis, parents want to figure out the next steps. How can you translate your child's diagnosis into an action plan for education support or therapy?

This chapter lists the most common diagnoses, in picture form. We've gathered together the most common weaknesses that make up each diagnosis and listed them in each picture. If your child is diagnosed with an LD, you can sit down with your child's test results and your child's doctor, and check off which weaknesses apply to your child. If there are more weaknesses involved, you can add them to the picture. You can also mark which are the most severe weaknesses.

Some weaknesses, such as fine motor skills, executive function, and planning and organization skills, respond well to therapies.¹⁵² Other weaknesses can strengthen with maturity. You can ask your doctor specific questions about how to support each weakness, and you can use this diagram as your work with your teacher to support your child's learning.

For a comprehensive overview of the characteristics of all LDs, see the *Characteristics of Children with Learning Disabilities report*, put out by the National Association of Special Education Teachers¹⁵³. The website www.Understood.com, sponsored by the National Center for Learning Disabilities, has additional information about each type of LD and learning challenge.

The last page of this appendix contains a glossary of terms.

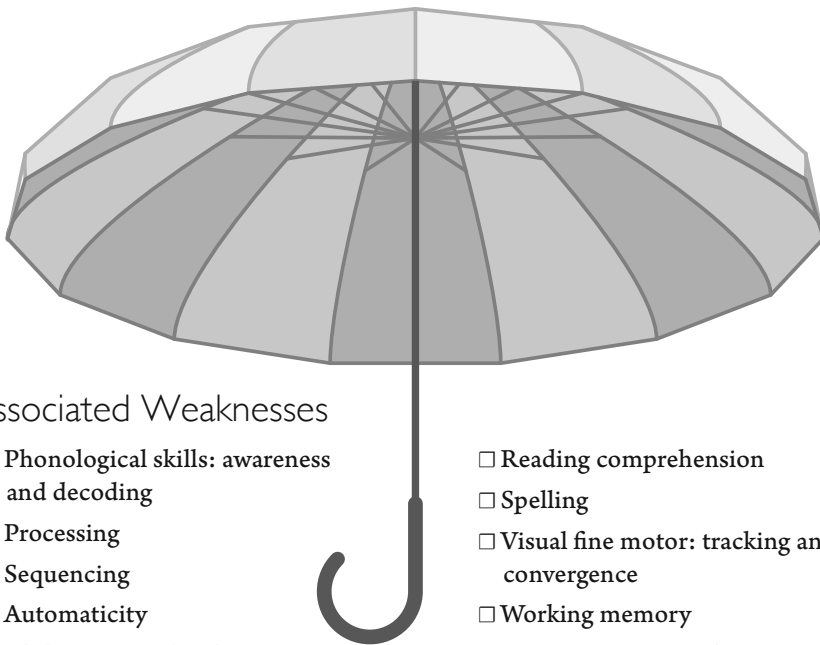
Dyslexia

85% of learning differences are considered dyslexia. Only around 1/4 of dyslexics are ever diagnosed. Because dyslexia is a language disorder, not a reading disorder, it affects not just reading, but writing, spelling, processing, perceiving, and attention.

Explicit, systematic, multisensory education, such as Orton Gillingham-based methods, have helped many dyslexic children read and succeed in the school system.

My Notes:

What's Inside of a Dyslexia Diagnosis?



Associated Weaknesses

- Phonological skills: awareness and decoding
- Processing
- Sequencing
- Automaticity
- Ability to visualize letters
- Ability to visualize stories
- Oral fluency
- Reading comprehension
- Spelling
- Visual fine motor: tracking and convergence
- Working memory
- Time awareness and management
- Self-organization

May Include:

- Handwriting/Dysgraphia
- Dyscalculia
- ADHD
- Executive Function
- Immature sensory system

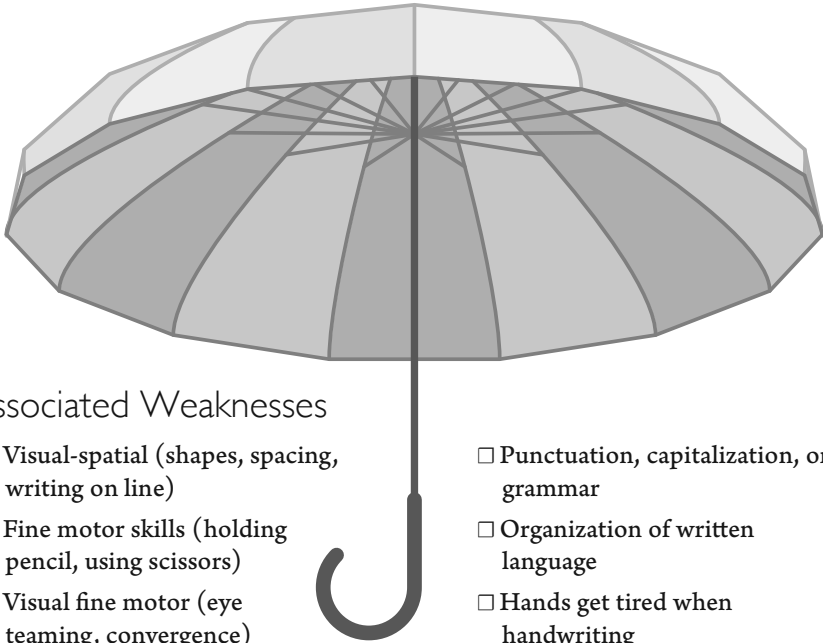
Dysgraphia (Handwriting Disorder)

Dysgraphia can be a big barrier to success in school. Therapy can make a big difference for children with handwriting challenges, and typing accommodations can change failure into success.

Parents sometimes say that stealth dyslexia¹⁵⁴, defined as dyslexia with high reading ability, ends up looking like dysgraphia. Occupational therapy can address many issues with dysgraphia, although not necessarily all.

My Notes:

What's Inside of a Dysgraphia Diagnosis?



Associated Weaknesses

- Visual-spatial (shapes, spacing, writing on line)
- Fine motor skills (holding pencil, using scissors)
- Visual fine motor (eye teaming, convergence)
- Bilateral integration
- Language processing
- Automaticity
- Spelling
- Punctuation, capitalization, or grammar
- Organization of written language
- Hands get tired when handwriting
- Working memory
- Communicates much better with speech than text

May Include:

- Immature sensory system
- Executive Function
- Dyslexia

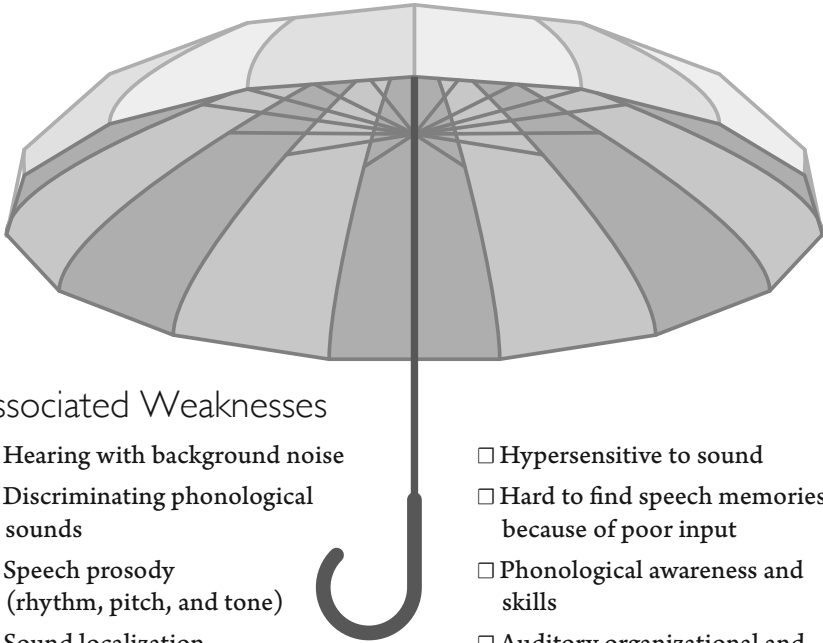
Auditory Processing Disorder

Auditory processing disorder (APD) is not yet covered by IDEA, although it is identified by audiologists, teachers, and educational therapists. Many APD children use hearing aids approved through a 504 plan. APD parents often have to work hard to educate teachers on how to support children with APD.

There are some therapies available for APD, but there is no data showing large-scale success.

My Notes:

What's Inside of an Auditory Processing Disorder Diagnosis?



Associated Weaknesses

- Hearing with background noise
- Discriminating phonological sounds
- Speech prosody (rhythm, pitch, and tone)
- Sound localization
- Slow auditory processing
- Auditory memory
- Auditory closure (the ability to fill in missing parts of sound)
- Hypersensitive to sound
- Hard to find speech memories because of poor input
- Phonological awareness and skills
- Auditory organizational and sequencing skills
- Expressive language skills
- Pragmatic language and social skills

May Include:

- Social Skills

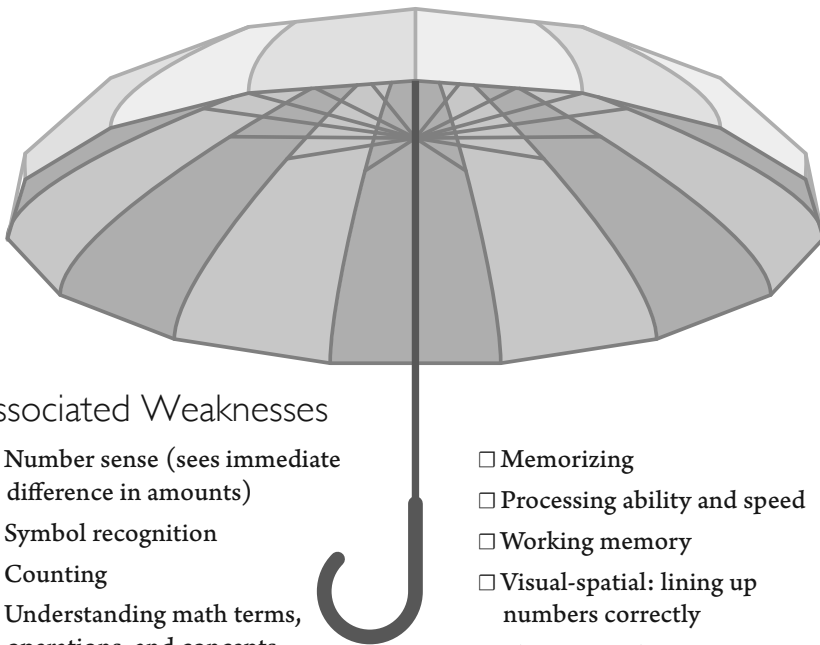
Dyscalculia (Math Disorder)

This diagram shows some of the skills involved in performing math.¹⁵⁵ Chris Woodin, head of Math Studies at the Landmark School (for dyslexic children), says that when math remediation works best, it “employs the same best practices that are used to address reading struggles.”¹⁵⁶

Therapies provided by an educational therapist can help with dyscalculia weaknesses.

My Notes:

What's Inside of a Dyscalculia Diagnosis?



Associated Weaknesses

- Number sense (sees immediate difference in amounts)
- Symbol recognition
- Counting
- Understanding math terms, operations, and concepts
- Grouping and sorting
- Following sequences of steps
- Memorizing
- Processing ability and speed
- Working memory
- Visual-spatial: lining up numbers correctly
- Planning and Sequencing
- Internal idea of time
- Ability to read a clock

May Include:

- Immature sensory system
- Handwriting (dysgraphia)
- Executive Function

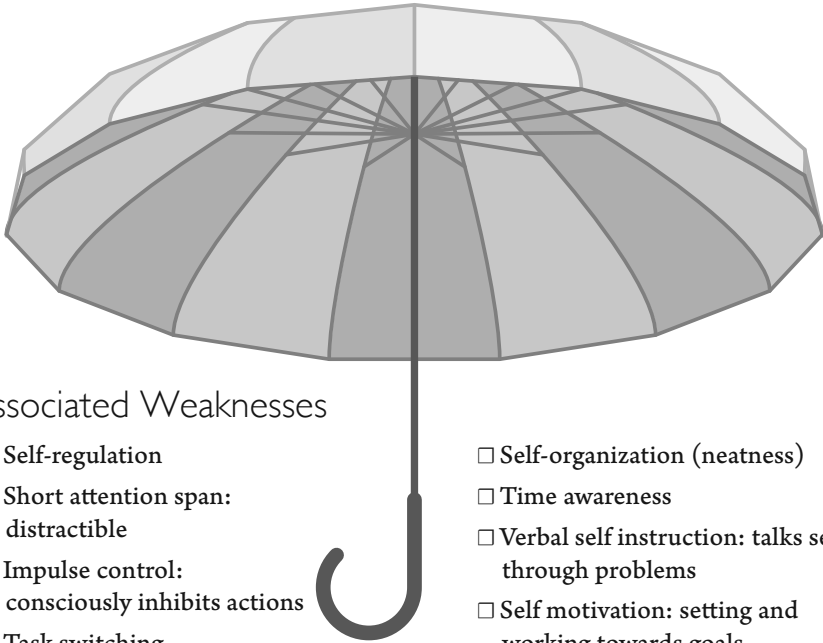
ADHD

ADHD diagnosis can be difficult. Many parents use the Whole-Child Method of diagnosis, described in Appendix C, to rule out causes like allergies, auditory processing disorder or sensory integration.

This diagram lists common weaknesses associated with a diagnosis of ADHD. Many of these weaknesses can be strengthened through exercise and therapy, including cognitive behavior therapy (CBT).

My Notes:

What's Inside of an ADHD Diagnosis?



Associated Weaknesses

- Self-regulation
- Short attention span:
distractible
- Impulse control:
consciously inhibits actions
- Task switching
- Working memory
- Problems regulating: loudness,
energy, emotions
- Self-organization (neatness)
- Time awareness
- Verbal self instruction: talks self
through problems
- Self motivation: setting and
working towards goals
- Problems listening to and
following directions

May Include:

- Executive function
- Immature sensory system

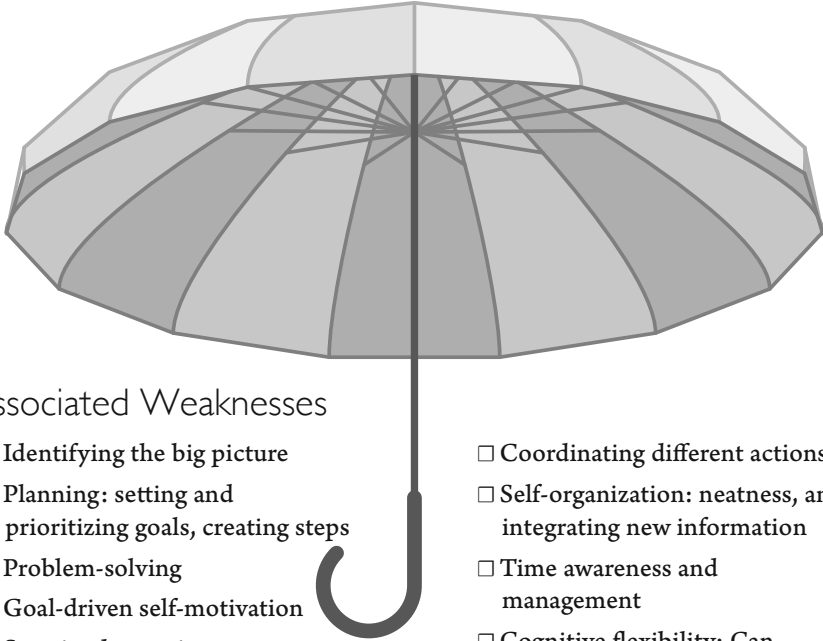
Executive Function Disorder

Executive function disorder is the ability to identify a goal and work towards it. Some specialists say that executive function disorder has more of an effect on success than ADHD.

Weaknesses in the executive function diagnosis can be exercised by working with a therapist or tutor.

My Notes:

What's Inside of a Executive Function Disorder Diagnosis?



Associated Weaknesses

- Identifying the big picture
- Planning: setting and prioritizing goals, creating steps
- Problem-solving
- Goal-driven self-motivation
- Sustained attention: follow-through, and attention to detail
- Memory: encoding, retrieval, processing, and working memory
- Coordinating different actions
- Self-organization: neatness, and integrating new information
- Time awareness and management
- Cognitive flexibility: Can change approach or perspective
- Self-monitoring: tracking progress and checking work

May Include:

- Social Skills
- ADHD

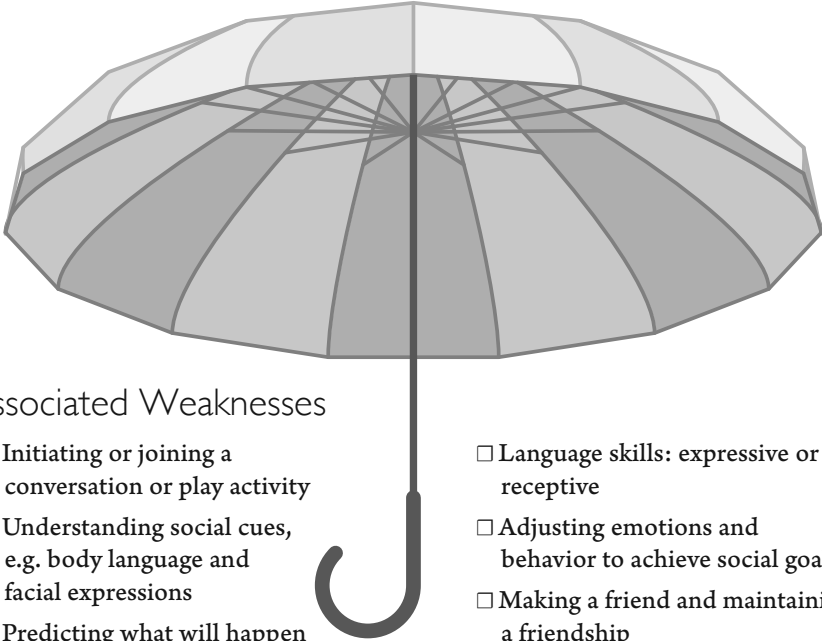
Social Skills

Social skills are important. About 75% of students with learning differences also have problems with social skills.¹⁵⁷ The ability to get along with others is one of the keys to success in the world.

Investing in a social skills class can be a huge benefit to a child. For more information, see “Speech and Language” in Appendix C.

My Notes:

What's Inside of a Social Skills Problem Diagnosis?



Associated Weaknesses

- Initiating or joining a conversation or play activity
- Understanding social cues, e.g. body language and facial expressions
- Predicting what will happen as a result of action.
- Understanding things that are implied but not stated explicitly
- Adapting language, tone, and volume to different situations
- Understanding and setting social goals
- Language skills: expressive or receptive
- Adjusting emotions and behavior to achieve social goals
- Making a friend and maintaining a friendship
- Understanding the perspective of others
- Resolving conflict or losing in a game
- Working in a group
- Self-esteem
- Anxiety or shyness

May Include:

- Immature Sensory System
- ADHD
- Auditory Processing Disorder
- Dyslexia
- Executive Function

Sensory Processing and Immature Sensory Development

Sensory Processing Disorder (SPD) happens when the senses mature unevenly. This can result in discomfort with receiving any form of input, such as vision, auditory, language, taste, and how clothing feels. Many children with LDs experience immature sensory development.

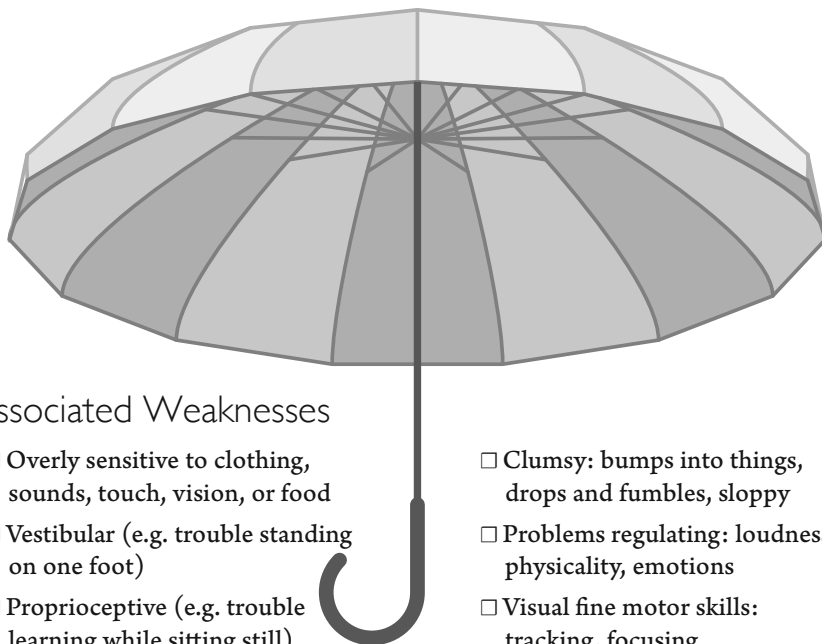
Sensory development issues can affect a child's ability to know where his body is in space, and to move his body. Many activities, such as getting dressed and properly using a knife and fork, require mature sensory processing skills.¹⁵⁸

If sensory abilities are immature, the brain must actively manage body movement, and even manage balance. A child should be mature enough to free the brain from managing body movement, before starting school. Immature sensory development can affect the ability to listen, concentrate, and act in the classroom. It can also affect the ability to sit quietly, copy things from the board, pay attention, or write.

Occupational or movement therapy can help the sensory system to mature.

My Notes:

What's Inside of a Sensory Processing Disorder Diagnosis?



Associated Weaknesses

- Overly sensitive to clothing, sounds, touch, vision, or food
- Vestibular (e.g. trouble standing on one foot)
- Proprioceptive (e.g. trouble learning while sitting still)
- Fine and/or gross motor skills
- Handedness - hasn't selected dominant hand
- Coordination (sports, handwriting, utensils, dressing)
- Postural Control (slumps, leans on things)
- Clumsy: bumps into things, drops and fumbles, sloppy
- Problems regulating: loudness, physicality, emotions
- Visual fine motor skills: tracking, focusing
- Short attention span: distractible
- Problems listening to and following directions
- Difficulty with ordinary activities

May Include:

- Social Skills

Statistics about Learning Differences

- 70% of children with learning differences exhibit problems with social skills.¹⁵⁹
- 50% of children diagnosed with ADHD also demonstrate problems with auditory processing disorder.¹⁶⁰
- 50% of dyslexic children also have ADHD. 35% of children diagnosed with ADHD have dyslexia.¹⁶¹
- 50% of dyslexics show difficulties with bilateral integration (like tying shoes), and with motor functions, like handwriting (dysgraphia).¹⁶²
- 25% of dyslexic children have dyscalculia (mathematics). Many children with dyscalculia, however do not have dyslexia.¹⁶³
- 60% of dyslexic children have difficulty with numbers (and 11% excel in numbers)¹⁶⁴
- It's common for children with dysgraphia to also have dyslexia.
- 75% of children with learning differences have retained infant reflexes. (Described in Chapter 7 in “Foundational Skills and Movements” section.)

Glossary of Terms Used in This Appendix

Auditory memory—A form of short-term memory in which information is heard, processed, stored, and then remembered and used.

Auditory organizational and sequencing skills—The ability to understand and remember the order of words, for example in a sentence.

Automaticity—The ability to do an action as an automatic response, without having to actively think through the steps involved in it.

Bilateral integration—A developmental stage, where a child learns to use both sides of the body together in a coordinated fashion. Used when tying shoes or buttoning.

Comorbidity—A medical term, meaning that a patient has two conditions at the same time.

Convergence—A vision disorder in which the eyes don't work together. Sometimes called "eye teaming." Shows up when looking at items close to the face, when the eyes need to converge on a subject.

Expressive language—The ability to communicate clearly with language. Includes labeling, describing events, forming sentences, using grammar, answering questions, and re-telling stories.

Fine motor skills—The ability to coordinate the eyes and the hands. Includes writing, cutting, tying shoes.

Gross motor skills—The ability to perform large movements of the body, such as running, jumping, and crawling.

Grouping—Trouble understanding that a number (for example, three), applies to any group of three. Problems recognizing groups of three.

Impulse control—The ability to consciously inhibit actions. Also called self-control. Every toddler lacks impulse control. Impulse control grows with maturity, and exercises and therapy can help to develop it.

Integrate—Simple skills are said to develop separately and independently, but are later integrated, or combined into, more complex skills. Integrate is also the process by which the brain collects different types of inputs and combines them.

Internal idea of time—The internal "feeling" for how long five minutes is, and the difference between how long five minutes and a half hour feel, for example.

Language processing—How the brain understands what you hear, and assembles what you want to say.

Neuroplasticity—The brain's ability to change and adapt by forming new neural connections and changing throughout life. Neuroplasticity is involved when a brain compensates for injury, or learns new actions in response to new situations.

Number sense—Ability to see immediate difference in amounts. For example, which is bigger: a group of three, or a group of five?

Organization of written language—The ability to organize information in memory and retrieve it, the ability to think in a structured fashion, and the ability to create outlines, and output, whether through handwriting or typing.

Phonological awareness and skills—The ability to hear sounds that make up words. Includes perceiving rhymes, identifying words that start with the same sound, pointing out smaller pieces of words, and being able to add a letter to create another word.

Phonological sounds—A phonological sound is also called a phoneme. It's a distinct unit of sound in speech. Phonemes string together to make words.

Pragmatic language—The social language that we use to interact with people around us, including both verbal and nonverbal rules. Includes things like how to phrase things, how to position the body, understanding body language and tone. Also called social skills, these skills can be taught. Many LD children need help with social skills.

Processing—The ability of the brain to take in information, reach some judgment on what to do about the information, and then take action. Processing can apply to any type of input.

Proprioception—This sense tells the brain information about where the body is in space. It is involved when we move our limbs without looking at them. An immature proprioceptive sense can result in problems sitting still. Many LD children have problems with proprioception, which can be developed by doing exercises and working with an occupational therapist.

Self-organization—The ability to know where schoolwork is and to retrieve it when necessary. Also used to describe the ability to structure different types of information or pieces of schoolwork, as part of knowing where to start working.

Self-regulation—One of the core strengths of healthy emotional development, the ability to deal with challenging situations in an age-appropriate fashion. Includes tolerating a bit of discomfort or frustration, self-soothing, dealing with transitions, and appropriately controlling emotions and activity levels.

Sequencing—The process of putting events, ideas, and objects in a logical order. Sequencing is a necessary skill for learning counting or the alphabet, being able to prioritize, and being able to follow directions. In math, this might be associated with problems remembering facts and formulas.

Sensory system—The sensory system is responsible for receiving and processing sensory information from the world around you. It includes sensory receptors for vision, hearing, touch, taste, smell, balance, and more. Includes neural pathways, and sensory perception parts of the brain.

Social skills—See “Pragmatic Language,” above.

Sorting—The ability to organize items by size, shape, or other characteristics.

Sound localization—The ability to identify where a sound comes from.

Symbol recognition—Ability to identify and remember symbols, to tell the difference between different symbols, and to tell if a symbol is backwards.

Task switching—The ability to switch between different tasks smoothly, without forgetting what you are doing.

Time awareness and management—Common challenge for many LD children. The ability to identify and estimate how long a task will take, and then accomplish the task within the allotted amount of time. Time management skills can be taught.

Tracking—The ability to follow something with the eyes, such as a finger drawing in the air, or a sentence. This is one of the visual fine motor skills that can be improved by working with a developmental optometrist, as described in Appendix C, “The Whole-Child Diagnostic Approach.”

Verbal self-instruction—Dr. Russell Barkley, ADHD specialist, talks about the importance of internal language, also called “the mind’s voice,” and ADHD. He maintains that children with ADHD are delayed in developing the ability to talk themselves through situations. Verbal self-instruction skills can be taught.

Vestibular—The vestibular system determines body balance and movement. The vestibular sense organs are located in the inner ear, and include three semicircular canals, which detect gravity and linear movement. It can be difficult to stand upright or to sit still if the vestibular sense is underdeveloped. Occupational therapy can help to develop this sense.

Visual fine motor—Another term for visual problems that can interfere with reading and education. Includes lazy eye, convergence problems, tracking problems, and so forth. See Appendix C for more information on vision therapy.

Visual-spatial—The ability to see things and relate them to their location, or to distinguish between objects. Can affect motor skills and classroom performance. Occupational therapy can help develop this skill.

Working memory—Also called short-term memory. Stores information that you’re currently using. For example, you hold a question in your mind as you turn the page looking for an answer. There are several types of working memory: auditory, visual-spatial, and motor. Working memory increases naturally up until age 12, and can be exercised. *The Mislabeled Child*, by Brock Eide, M.D., M.A., and Fernette Eide, M.D., is the best reference book to inform you about working memory structure.