

Introduction

NLD from the Inside Out started out as a 15-page final paper for a psychology class I took in 2004 at Clark University in Worcester, Massachusetts. When I later decided to expand the paper into my senior thesis, I realized that not only did it need a lot more research, but it also needed some real street cred. So I found and interviewed five students with NLD, aged 17–24. I asked them 12 questions about what it was really like to have NLD, such as:

- “What has been the most frustrating for you in terms of having NLD?”
- “When did you first get the impression that you might be different?”
- “If you could tell your previous teachers one thing they should know about NLD, what would that be?”

The results amazed me: these NLD students, who ordinarily had such a hard time communicating their feelings (a common trait of NLD), who generally felt that no one could understand them, completely opened up to me as we talked, because I was a fellow “NLDer.” Through talking with and observing them, I could tell that they really needed to be heard. And finally, someone was listening. They passionately expressed their wish to be acknowledged and to speak their minds about teachers and classes, and about how desperately they wanted their parents to understand them.

When I completed the thesis, and graduated with honors from Clark in May 2006, I realized that this research definitely was just the tip of the iceberg in getting the word out about what it was *really* like to live with NLD. I discussed this idea with my mother,

Gail Shapiro, who suggested that I expand the thesis into a book. The idea of writing a book was both daunting and exciting. I said I would do it if she would be the editor, because when one has NLD, project organization is a major challenge.

I wanted the book to be for teens with NLD, primarily because I wish I'd had a book like this while I was navigating adolescence, and I know my family and teachers could have used some guidance too. And who better to learn from than those who have made it past the horrors of high school and are now succeeding in college or in the workplace as young adults with NLD?

So I decided to find a way to reach people: both those with and without an official diagnosis of NLD, who were 18 to 30 years old at the time. I created a website,¹ and used SurveyMonkey™, an online survey instrument, to design and post a comprehensive survey with more than 80 questions about what it was like to have NLD.

At the same time, I joined four different online forums about NLD and other learning disabilities (LD). I posted my request for respondents on each of these boards, and the results were astounding! In addition to getting respondents, I got dozens of emails, most of them from desperate-sounding mothers of children with NLD, Asperger's Syndrome, or other learning disabilities. Many were confused and upset about their children, and thought I somehow had all the answers to their problems. Some even addressed me as "Professor Murphy," while others begged for referrals to psychologists, therapists, or schools where their children would be accepted and welcomed and would not be treated like freaks. In reading these emails, I felt overwhelmed and sad.

But it also made me realize that the work I was doing was important.

Amazingly, more than 100 people were both concerned and gracious enough to reply to the lengthy survey (if any of you are reading this—thanks again!), and I was able to use all the data from nearly 40 percent of these replies.

Although I thought I had run the gamut of topics to be covered, as soon as the first edition was published with BookLocker,² an independent print-on-demand publishing company, I again was flooded with emails from parents and NLDers seeking my advice on not just finding doctors and therapists, but also on dating and

finding learning disability-friendly colleges, and asking me if I could advise them as to whether their NLD child should be on a certain medication. (To this last point: No. I am not a doctor, and I have neither taken, nor, for the most part, even heard of these medications, so I am not qualified to answer this question.) At various points, I have been asked to help students write papers on what it means to have NLD, to help parents craft Individualized Education Plans (IEPs), to speak in remote locations, and to conduct webinars, and I even have been asked to serve as an expert witness in a custody hearing. And while you can't please all the people all of the time, the second edition seemed to please most of the people most of the time, to the tune of reaching readers in 37 countries.

Still, for all this, I knew there was more work to be done and more questions to be answered, so I went back to the beginning. I reread the comments for the survey, and found that there were certain questions like, "Do NLDers stir the bubbles out of their soda?" or, "Are Aspies left handed and NLDers right handed?" that originally made me laugh. But now I thought these might need to be reevaluated to find the questions behind the questions. Eventually, I decided that I needed to create a new survey, and start over.

So here are the changes you will find in this third edition.

First, many sections have been expanded and reorganized. Each symptom of NLD is now more fully described, based on the latest discoveries in neuroscience. And I have responded to readers' most frequently asked questions, received since the first edition was published. In all, I hope you will find this edition of *NLD from the Inside Out* to be even more useful, more inspiring, and more informative than the first two.

Part I, "What Is NLD?" is devoted to explaining the nature of NLD. In Chapter One, you will read an overview of what a learning disability is and what NLD is. Chapter Two presents a short history of NLD, going back to the late 1960s when it was first named, as well as some theories about why it seems that today more kids than ever before may have NLD. Chapter Three gives a more in-depth discussion of the definition of NLD. Here you will learn about how to tell the difference between NLD and other learning disabilities, how NLD is diagnosed, and whether the diagnostic tests are really as fair and objective as they are designed to be. Finally, Chapter Three

gives a symptom-by-symptom overview of the findings from the surveys and interviews conducted for this book.

In Part II, “The NLD Brain,” Chapter Four presents an overview of what is actually going on inside your brain. In Chapters Five through Eight, the neurological basis of many of the most common NLD symptom areas are clarified and explained, namely: sensory sensitivities (Chapter Five), social cues and empathy (Chapter Six), executive functioning and decision-making (Chapter Seven), and specific learning disabilities (Chapter Eight). Because neuroscience is advancing so rapidly, some of this information may be out of date even by the time you read these chapters. Still, it offers you a new understanding of what can be gleaned about NLD from a scientific perspective.

Part III, “What We Want You to Know,” presents several examples of the everyday stress of living with NLD, tells how this stress can lead to learned helplessness, discusses the fact that you are likely to become more resilient as you get older, and offers a glimpse into what life is really like for those of us with NLD, plus what NLDers need you to know. Chapter Nine is written for therapists and guidance counselors, Chapter Ten for teachers and school administrators, and Chapter Eleven for parents.

In Part IV, “Preparing for a Successful Life,” dozens of young adults with NLD share advice about things that were frustrating and puzzling for us. We talk about how we addressed these problems, and tell you where we found some answers. In Chapter Twelve, you will read how to be more successful in high school. In Chapter Thirteen, you will learn how to succeed at dating and relationships. In Chapter Fourteen, you will learn tips for surviving and thriving in college, or whatever you choose to do right after high school. And in Chapter Fifteen, “It’s a Wonderful Life—Even with NLD,” you will hear what we consider to be the elements of a good life, plus what we wish we’d known earlier, and what we NLDers want you to know now—to give you a head start on making your life better.

Finally Part V, “The Big Questions,” discusses why NLD is still given short shrift as a learning disability, and often doesn’t count as a “real” diagnosis, and what you can do about it.

I hope that you will read this book and share it with your parents, your teachers, your therapist and doctors, your siblings, aunts,

uncles, and cousins, your friends, neighbors, and religious leaders, and anyone else who you think would benefit from an explanation of NLD. My goal is that every one of these people in your life—including you—will better understand what it is like to have NLD, and will learn how to help you grow to be the best person you can be.

Part I

What Is NLD?

Chapter One

What Is NLD?

I was always a curious child. When I was two, I cut open my sister's feather pillow to see how many feathers were in it. I wasn't trying to make trouble; I wanted to make sense of the world. I taught myself to read at age three, and especially liked to read about Curious George™. One day, when no one was paying much attention, I went to the laundry room, and got the big box of soap powder and dumped it in the middle of the living room floor. Then I went outside to get the hose, and turned it on, and was on my way back so I could make lots and lots of bubbles, just like Curious George™. I got caught, and I had to clean up the soap powder. And I was sent to my room.

Being sent to their rooms rarely, if ever, has the desired effect on NLD kids. For most of us, it's a treat, not a punishment. But back then, we didn't know that I had NLD. Here's what my parents and preschool teachers knew: I was smart and curious, could read and spell, and had an extensive vocabulary. I couldn't ride a tricycle until I was about five. I didn't learn to ride a two-wheeler until I was nine. I was kind of a klutz athletically, and even today, my fine and gross motor skills aren't as good as those of my peers.

I started out doing fine academically, but by about the time I got to the fourth grade, when papers were assigned, I couldn't keep up. I would get an assignment to write an essay, or even a paragraph, and I might get the first few words down, and then I would just stare at the paper. I could not write a paper until I got to college. Actually, it wasn't until I got to my third college that I really learned how to write a paper. (I attended four different colleges before earning my bachelor's degree.)

By this time, I had received a diagnosis of “Learning Disability—Not Otherwise Specified” (LD—NOS), but this wasn’t much better. So I decided to find out what it was.

The meaning of a learning disability

In order to understand Nonverbal Learning Disabilities (NLD), it’s helpful first to understand what a “learning disability” is. According to most clinical definitions, it’s a set of symptoms, each of which is based on a neurological impairment—either genetically inherited or trauma induced—so that the total effect of all symptoms has a negative effect on your ability to perform at least as well as your peers in some aspects: academically, socially, and/or physically.

A learning disability (LD) may hinder your ability to learn or to perform a skill: not understanding what the skill is, not understanding how to perform it, not being able to perform it, not understanding the logic behind the “rules” of the skill, or perhaps not understanding the reason for it at all.

Since the mid-1990s, there has been much controversy over what the “D” in “LD” stands for. Today, many people—professionals and laypeople alike—may refer to “learning differences,” “learning disorders,” or even “learning disease”!

Clearly, to say that you have a “learning disease” is both counterproductive and counterintuitive. To say that there is a disease from which you suffer is to say that you are sick (and that possibly you could get better or could somehow be contagious), which is not helpful at all and entirely misleading. Moreover, the nomenclature of the term “disease” might lead others to assume that you need medication or treatment.

But what is wrong with saying that “LD” stands for “learning differences?” That seems harmless enough. Every one of us learns differently from one another, just as each person has his or her own unique personality. Vocational rehabilitation counselor Joyanne Cobb, founder of the Professionals with Disabilities Resource Network, puts it this way: “If we only say that we are people who learn *differently*, then we are also saying that we are not *disabled*. In that case, legislation on accommodations for the disabled no longer apply to us.”³ And growing up with NLD, you need to know your rights—

both in school and college, and in the workplace. The Individuals with Disabilities Education Act (IDEA) ensures accommodations and an Individualized Education Plan (IEP) for students with disabilities, just as the Americans with Disabilities Act (ADA) protects people in the workforce who have a documented disability, but there is no legislation that protects you if you simply refer to yourself as “different.”

One thing I've wondered is: who gets to say what a disability is, anyway, and what is “normal?”

What of other “D words” that might serve as a substitute for “disability”? It would be nice if the “D” in “LD” stood not for “disabilities” or “differences,” but “difficulties.” Yet even then, who’s to say that dealing with your difficulties is any more pressing than dealing with anybody else’s difficulties? Perhaps the best term would be “learning disorders.” That way, all that is implied is that, yes, you have a disorder, so there’s something a little “disorderly” about your patterns of behavior vis-à-vis learning, but there’s no real expectation that you can’t learn (either now or ever), nor is there an expectation to think that whatever is disorderly cannot be made (more) orderly—something you will see in the latter chapters of this book. So why “learning disability” instead of “learning disorder”? Again, it comes back to the legal issue. In neither the ADA nor the IDEA does the “D” stand for “disorder.” You will learn more about this in Chapter Sixteen.

The term “learning disability” does not properly reflect the fact that if you have a learning disability, you simply learn differently from non-LD people. And while the term “disability” doesn’t necessarily imply that you can’t learn—in which case we would use the term “inability” instead—labeling it a “disability” sounds as though you once had the ability, but were rendered inoperative. It appears to put the blame on external factors, rather than dealing with the fact that here is a child who has trouble with writing, reading, social skills, etc., and who needs help.

In this book, the term “Nonverbal Learning Disabilities” (without hyphenating “Nonverbal,” or saying “Disability” in the singular or “Disorder,” and not including the “V” as in “NVLD”) will be used, simply because it is the most widely recognized and

accepted nomenclature. You also will see the word “neurotypical,” a term originating in the autism community to mean “not autistic,” and which, for the purpose of this book, loosely means both, “not having gone through Special Education,” as well as, “not exhibiting most of the symptoms of NLD.”

How can you recognize NLD?

Does this sound like you?

- You began to read on your own at a very early age.
- You astonished your parents and elementary school teachers with your advanced vocabulary.
- You didn’t learn to ride a bike until you were eight or nine, and you may have been clumsy in both gross and fine motor skills.
- You’ve had a parent or teacher refuse to acknowledge that anything is the matter other than your own laziness, lack of trying, ineptitude, or bad attitude.
- You’ve had a parent or sibling who “babied” you.
- You’ve had teachers who threw up their hands in frustration, telling your parents, “I just can’t get through to him/her.”
- You’ve been labeled as a “discipline problem” in school—maybe not for serious stuff, but for the stuff that gets attention.
- You’ve had teachers ask, “You are so bright—why aren’t you working up to your potential?”
- You’ve sat and stared at a writing assignment for English class, unable to get past writing the first sentence or two.
- You may have no or only a couple of friends; other kids see you as nerdy or uncool.
- You get along much better with adults than with your peers.

- If you are a young adult, you may be unemployed or underemployed, because you have been unable to find a work environment that matches your skills and strengths.
- You suffer from depression, low self-esteem, or loneliness, but are developing coping skills as you grow up.

Or does the above list sound like your child? If so, maybe the following points apply.

- You have wondered why he/she is so bright, yet so immature.
- You often worry about your child's safety and well-being, with each age bringing a new set of concerns.
- You have spent hours in teacher conferences, discussing IEPs and other strategies for classroom success.
- You have (or would like to be able to) quit your job, in order to devote more time to your child, *or*:
 - you (or your spouse) are in complete denial about your child's disabilities, and think that he or she should just try harder and "buckle down."
- You have argued with your spouse about the "right" way to discipline this nonconforming child.
- You feel you are neglecting your other children and your spouse, because this child takes so much of your time and energy.
- You live with a constant high level of stress and anxiety, which may translate into physical and/or emotional health issues.
- You often feel like a failure. You wonder what you might have done to cause the disability and you lie awake at night, wondering how you can be a better parent.

If you can identify with either of these lists, or if you teach or work with families who can, read on.

The NLD “syndrome”

A classic example of how NLD manifests, familiar to many children, is Amelia Bedelia, a lovable character created in 1963 by the late children’s author Peggy Parish. Literal to the point of silliness, Amelia Bedelia, a housekeeper who works for Mr. and Mrs. Rogers, tries to be helpful, as she follows her employers’ instructions exactly. For example, when told to “dust the furniture,” she sprinkles the furniture with dust. When asked to “draw the drapes,” she gets out her pencil and paper and starts sketching. Every little kid with NLD can relate to this, and so can most parents.

But what exactly is NLD?

Nonverbal Learning Disabilities gets its name from the fact that our major language functions, such as reading and verbal output, are not usually affected, in contrast to most other language-based learning disabilities. Those of us with NLD often are characterized as “excellent” in certain academic areas such as spelling and grammar rules, history, geography, physical sciences, some standardized tests, and in most areas that require logic and memorization. However, we may do poorly when it comes to English and social science courses, where written papers are required, as many of us tend to be deficient in executive functioning skills. This means that we may have trouble with prioritization, impulse control, attention, retention, and organization. The lack of ability to plan, to organize work, and to foresee consequences are common symptoms of NLD.

I’m not really sure what my problems are, but my bag’s so messy, and my handwriting’s horrible, and...they’re a little tough to deal with.

I’m never exactly sure what to do in a new situation. It seems like everyone else does, but I don’t see how they figure it out without asking.

A very hard question for us NLDers to answer is, “Why is this particular action the correct thing to do in this situation?” We often have an excellent, extensive vocabulary, and good rote memory skills, pay great attention to detail, and are early readers. However, other language-based tasks often are a challenge. For some with NLD, especially females, math is the biggest challenge.

Simply put, NLD is unlike many of the better-publicized learning disabilities such as dyslexia and attention deficit

hyperactivity disorder (ADHD), as NLD has no one identifiable specific problem focus, such as difficulty with reading, distractibility, and/or hyperactivity. Instead, the neuropsychological methods of diagnosing NLD employ examining what amounts to a laundry list of symptoms.

Individuals with NLD are not stubborn, spoiled, lazy slackers—as many of those who interact with us might believe. NLD is caused by deficiencies or damage to the brain, as you will learn in Chapters Four through Eight.

Lynda Katz, former president of Landmark College in Putney, Vermont, a two-year school for students with learning disabilities, and her co-authors state that the definition of NLD usually reflects “the perspective of the professionals involved”⁴—that is, teachers, doctors, school administrators, therapists, and others each define NLD through their particular lens.

As it stands, there is no general consensus as to one specific, definitive way to identify, diagnose, or treat NLD. Because this is the case, it is vitally important to *listen to the voices of NLDers themselves*, so we can come to a much better understanding of what NLD is and how it operates.

So, how was NLD “discovered”? How many people have NLD? How did “Nonverbal Learning Disabilities” become an official diagnosis, and how did its relevant terminology develop? Read on.

Chapter Two

A Short History of NLD

In 1967, Northwestern University researchers Doris Johnson and Helmer Mykelbust coined the term “nonverbal disorders of learning,” which quickly evolved into “nonverbal learning disabilities” to refer to students who did not have a “verbal learning disability,” but who were not performing up to par in school, and therefore should be viewed as having a “disorder of social imperception.”⁵ To Johnson and Mykelbust, “nonverbal” learning disorders could be divided into two categories: “Nonsocial–Nonverbal” and “Social–Nonverbal.”⁶ At the time, other researchers were also looking into specific learning disabilities from a psychological perspective, and still others from a neurological perspective, but it was Johnson and Mykelbust (especially Mykelbust) who saw the need for these two fields to inform each other.⁷

Though the concept of a “nonverbal learning disability” was widely rejected by educators and psychologists throughout the 1970s and early to mid-1980s, some were doing research to find out the root of the impairments to the brain that would comprise this “disorder of social imperception.” By comparing the overall combination of these symptoms to those found in other neuropsychological disorders due to brain lesions and trauma, the general consensus by the mid-1980s was that what Johnson and Mykelbust described amounted to a disorder specific to the right hemisphere of the brain.

The late Canadian researcher Byron P. Rourke is considered to be the first psychologist to identify what we know today as NLD. His research and books became the veritable bible of NLD information, and until as recently as a few years ago, many of the books about NLD by both parents and psychologists simply cited his research.

In his 1989 book *Nonverbal Learning Disabilities: The Syndrome and the Model*,⁸ Rourke described the history of the concept of a learning disability, which he said was first discovered in the 1970s, when he and his colleagues began to notice children who were not as “normal” as others. These children were given the Wechsler Intelligence Scale for Children® (WISC)⁹ and divided into subgroups according to the gap between their Verbal IQ (intelligence quotient) and Performance IQ scores (these will be explained later).

Those whose Performance score was more than ten points higher than their Verbal score were labeled “Group RS” to indicate poor performance in Reading and Spelling as the most prominent discrepancy. Those whose IQ differential was ten points or fewer in either direction were labeled “Group RSA,” as they were shown to have equal deficits in the areas of Reading, Spelling, and Arithmetic. Those whose Verbal IQ scores were more than ten points higher than their Performance IQ scores were labeled “Group A,” to indicate poor performance in Arithmetic as the most prominent, but not the only, discrepancy.¹⁰

Rourke also posited that all those right-hemisphere neurological impairments that contributed to the problems in socio-emotional reasoning in the child with a “disorder of social imperception” were identical to those neurological impairments that contributed to the problems in mathematical reasoning. In other words, according to Rourke, in terms of forming the definition of “Nonverbal Learning Disabilities,” difficulties in socio-emotional reasoning and difficulties in mathematical reasoning were inseparable. This was why all the “Group A” children had NLD, even though Johnson and Mykelbust contended that although most to all of their students with mathematical disorders had difficulties with socio-emotional reasoning, the converse was not necessarily true.

In addition, Rourke contributed the ideas that the Verbal IQ must be at least ten points higher than the Performance IQ in order for there to be a diagnosis of NLD, and that the brain-based cause of NLD was due to a deficit of white matter (which will be explained in Chapter Four).¹¹ This was the precedent set back in 1989.

Beginning in the late 1990s, as NLD became more recognizable, many books were written by teachers and parents of children with NLD: that is, NLD as previously defined by Rourke. Pioneers such as

Pamela Tanguay,¹² Sue Thompson,¹³ Katherine Stewart,¹⁴ and others began to redefine what NLD really was, based on the behavior of their children and students.

In so doing, suddenly the floodgates burst open, introducing parents of NLDers, as well as lay readers, to a whole new set of terms such as “executive functioning,” “metacognition,” “hard/soft signs,” and others, as well as many comparisons of NLD to other learning disabilities. Parents, teachers, and school administrators began to take NLD seriously, and to create IEPs for NLD students.

New clinical information and theories of NLD have been put forth more recently.

In his 2006 book, *Nonverbal Learning Disabilities: A Clinical Perspective*,¹⁵ clinical social worker Joseph Palombo radically revamped the definition of NLD with his “Theory of NLD Subtypes.” According to Palombo, there exists a core of Nonlinguistic Perceptual Deficits—a set of symptoms of NLD common to everyone who has it. This set of deficits, he says, constitutes “NLD Subtype I.” If, in addition to meeting the criteria for NLD Subtype I, you also have difficulties in attention, impulse control, and executive functioning, you fall into the category of “NLD Subtype II.” Or if, in addition to meeting the requirements for NLD Subtype I, you have difficulties in “reciprocal social interactions” (e.g. being argumentative, being disrespectful, having few or no close friends, and/or being teased and rejected by peers), “social communication difficulties” (e.g. not knowing what and what not to say, and when and when not to say it), and “emotional functioning difficulties” (e.g. poor self-esteem, anxiety, and poor self-regulation), to the exclusion of having problems with attention, impulse control, and executive functioning, then you have “NLD Subtype III.” If, however, you meet *all* the criteria, then you have “NLD Subtype IV.”¹⁶

Psychologist Maggie Mamen divides NLD into four distinct areas: Perceptual NLD, Social NLD, Written Expressive NLD, and Attentional NLD in her 2007 book, *Understanding Nonverbal Learning Disabilities: A Common-Sense Guide for Parents and Professionals*. And in their 2011 book, *Nonverbal Learning Disabilities in Children: Bridging the Gap Between Science and Practice*, written primarily for school-based professionals, psychologist and professor John M. Davis and

psychoanalyst Jessica Broitman discuss the nuances and history of defining NLD, subtypes, and neurology.

There are many books about NLD, written either by doctors or psychologists, or parents of kids with NLD. Most of these writers examine NLD through the lens of their own child, their own clients, or their own patients, but they don't get it, at least not completely. You need to live with NLD to really get it. No matter how tough life may be for you right now, you are not likely to feel that way forever. We learned to deal with our NLD, and so will you.

Are there more people with NLD today than there used to be?

When the NLD syndrome was first identified by Rourke in 1989, he estimated that, although 8 percent of U.S. schoolchildren were enrolled in SPED classes for a learning disability, only 10 percent of all children with learning disabilities had NLD, up from 5 percent in 1968. Or to put it another way, about one of every 100 students had NLD; further, he said this number was equally distributed between males and females, up from five boys for every girl.¹⁷ However, it is not sufficiently clear that this estimated ratio is or ever was correct. For example, the interviews and two surveys for this book show a ratio of 69 percent female to 31 percent male.

Most of the current literature about NLD—much of which still cites Rourke—states that the prevalence of NLD is about 1 percent of the general population (the given range is from 0.5% to 1.5%), or about 10 percent of those identified as having a learning disability, both as defined by Rourke, and as defined by more current measures.

According to the United States Census Bureau, as of December 2015, there were 87,979,043 children, aged 0 to 19. A 2014 study by the National Center for Learning Disabilities¹⁸ states that 2.4 million American public school students (approximately 5% of the total public school enrollment) are identified with learning disabilities, and that an additional 15 percent or more of students “struggle due to unidentified and unaddressed learning and attention issues.” Another 10 percent of children, or about 240,000, attend private schools or are homeschooled.

So the real implication of these data is this: it is likely that between 879,790 (1% of the general population) and 960,000 (10% of those with both diagnosed and undiagnosed learning disabilities) U.S. children ages 19 and younger have NLD, and that the total number of children and adults is close to 3 million.

Whatever the incidence or prevalence may actually be, it is increasingly important for more people to understand NLD. As one interviewee explains:

Even though 99 percent of the population does not have NLD, they will at some point meet, befriend, study with, teach, marry, give birth to, advise, work next to, supervise, or otherwise interact with an NLD individual.

Why does NLD seem to be so much more prevalent today than it was in our parents' or grandparents' generations, when no one had ever heard of it? Why are there still so many new cases of NLD diagnosed each year? Of the many different theories and ideas about the causes of NLD, perhaps the best can be attributed to Rondalyn Whitney, founder of the Lighthouse Project.¹⁹

Whitney presented three main reasons: one of which may be an actual cause; another one, a reason for the increase in the prevalence of NLD; and the third, a reason why we are noticing more people with NLD than ever before.

The first is genetic. The DNA of an NLD individual contains an accumulation of at least some of the visual–spatial, social relationship, mathematical, and other deficiencies characteristic of each parent. One partial disability concurrent with another results in a greater chance of NLD in the offspring of two such individuals.

Whitney's second theory was that NLD is the result of environmental toxins, such as overuse of computers, effects of late-life pregnancies, and high-stress lifestyles. But the third—the lack of opportunities to develop motor and social skills as part of everyday play—was the theory to which Whitney gave the most credibility. Writing in 2002, she explained that “30 years ago,” most children “ran and rode bikes from morning till sundown. They explored in the woods and climbed trees for hours...” They had many more opportunities to develop their social skills, as well as “visual, proprioceptive, vestibular and tactile experience[s].”²⁰

Back in around 1970, the period to which Whitney refers, there was no system of SPED classes. Those who had NLD symptoms may have struggled, but they were expected to keep up with the class. All students learned handwriting using the Palmer Method, in which cursive writing was taught using rhythmic motions. In English classes, there was no “creative” writing (“creative” meaning “just express your feelings and don’t worry about punctuation, spelling, or grammar”). Spelling was taught by rote and students learned to diagram sentences. These highly structured teaching techniques were very, very helpful to students with NLD. And their use may have helped greatly to ameliorate some students’ NLD symptoms.

So it seems that the recent increase in NLD diagnoses may be the result of lifestyle changes and teaching techniques that do not give children sufficient opportunity to develop fully their fine and gross motor skills, planning skills, or social skills.

Still, it is important to note that the 1 percent figure was first put forth in 1989, and no one has proven or disproven it since—nor, it seems, even questioned it. This also is true with the statistic commonly cited that of all those with learning disabilities, 10 percent have NLD. But even that’s an estimate; no one actually has real data.

Part of the problem in determining this number is that, because the United States Census Bureau’s definitions of the different types of disabilities do not include NLD, there can be no statistics on it. Another problem is the ever shifting and renaming of disorders according to the APA’s Diagnostic and Statistical Manual of Mental Disorders (DSM), about which you will learn more in Chapter Sixteen.

And if the reported rates of both ADHD and Autism Spectrum Disorders (ASD) are on the rise, it is possible that NLD is getting squeezed out—and being replaced by those more common, and medically defined, disorders. So maybe the only real way to report how many NLDers there are is to count the number of people who self-identify as having it.

How do you know whether you have NLD, if you have not yet been tested, or if your test results were inconclusive? The next chapter may give you some answers.