

HEART CENTERED MINDS

Learning Differences, Not Disorders

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HEART CENTERED MINDS

LEARNING DIFFERENCES, NOT DISORDERS

AN INTRODUCTION

Heart centered minds are those governed more by the right brain. It is the right brain that connects us empathically, spatially and inspirationally to our individual worlds and beyond, and thereby it is our heart connection as well. Those with this orientation are giftedly bright, and due to their heightened empathetic connection, they are deeply compelled to discover solutions, discern and follow a purpose, and make contributions to those around them or the world.

Instead of predominantly using the left brain, which organizes incoming information and stimuli in a filtered, sequential fashion, these individuals are aligned more with the right brain, which works like a satellite dish receiving wide and subtle degrees of information all at once.

While this right brain reception allows for connection, insight and great creativity, the sensitivity of this very subtle open perception can cause stimulation overload and overwhelm, since these individuals lack a left brain filter, and along with this orientation, have very sensitive nervous systems.

These minds have always been around, although they have been increasingly less recognized in the last 400 years when more and more focus and reliance has been put on the functions of the left brain.

However, even during this very long period of left-brain dominance, there has continued to be countless numbers still oriented to the right brain and its extraordinary gifts of insight and connection. Many famous individuals... Newton, Mozart, Lincoln, Grant, Edison, Churchill, Poe, Dickens,

Roosevelt, Dali and hundreds more...excelled beyond the norm, calling upon their right brain strengths to discover, create or serve in some way.

Individuals with heart centered minds are on the increase, and they are mistakenly being labeled with neural/learning disorders...autism, ADD, ADHD, Asperger's syndrome, dyslexia.... Heart centered individuals, even before, seemed a little different than the general population, but as the left brain control of our world has increased, the reactive and sensitive differences of right brain minds has intensified.

Being a mainstream classroom teacher working with many children over the years, I found the need to examine in depth the alarming increase in learning "disorders," which I have known are actually gifted differences. As a result of both what I knew from experience and what I have researched, I am writing this paper in an attempt to bring greater awareness to a situation that has only worsened as we continue to see it from a perspective that is inaccurate. It might be likened to telling all the reasons why helicopters are ill equipped to travel on land, until we realize they are meant for a different purpose.

What I have found is a basic paradigm-shifting answer hidden within the complexities of what we call "disorders."

I begin this paper with a general description of the major symptoms of learning "disorders," occurring now throughout the world, and propose this major paradigm switch attributing the symptoms not to disorders but to a right brain orientation.

After looking more closely at the attributes of right and left brain functioning, a discussion then follows of Jean Piaget's description of the right to left brain development of thinking in children. This development is normally relatively smooth, unless a child is more predominantly right brain oriented.

I relate that it was while teaching many, many of these children with "disorders" that I discovered they have extraordinary gifts, inexplicable to the scholars, and yet undeniable. These gifts I describe to you in the context of how they showed up each day in my classroom.

My desire to advocate for these kids, drove me to do research, which I share with you, where I found supportive evidence of these gifts in the textbooks and reference books written to address disorders. The authors of these books were compelled to also site the scores of great people throughout history who excelled despite being labeled learning-disabled as children.

I explain the shared and comprehensive qualities of the right brain that all these learning “disorders” embrace, describing also the basic differences between ADD, ADHD, dyslexia, non-verbal learning disorder, Asperger’s Syndrome, autism, and bipolar disorder, going into a few of these more in depth, in separate sections supported by specific research or “life” histories.

I close with...seeing things in relation to this right-brain perspective, how can we support these children in school and in life, and finally, I assert my contention that these children are here to bring about change.

THE SITUATION

“Learning problems” for children have been on the rise in our schools. In particular, the world’s attention has been drawn to the alarming increase in the number of children being diagnosed with autism, now said to be one in every 166 children (updated now in 1/2011 to 1 in 110). Some autistic children begin to speak much later than what is considered normal, and others, although having started to develop normal language skills, then stop speaking and withdraw from verbal and emotional interactions with others.

These behaviors can be accompanied by repetitive physical actions, such as spinning, and/or the flapping of arms and hands, marked impairment in social interactive skills, abnormal preoccupation with a restricted focus of interest, along with other autistic tendencies. These symptoms have and are creating difficult challenges for families, and great concern and search for answers in the medical and educational fields.

Most of the world is very aware of autism now. However, many other disabilities, as they are categorized, are also affecting children and their families. Among these are ADD, ADHD, dyslexia, Asperger’s syndrome (related to autism), nonverbal learning disorder, and bipolar disorder. Looking at these learning problems overall, one or more of the following general characteristics can be seen with each of these “disabilities,” in lesser

or greater degree: increased emotional and physical sensitivities, a lack of left-brain-linear filtering and processing skills, language and/or attention problems, inabilities in social interaction, and for some, disruptive or unusual physical movement.

These learning disabilities have become very prevalent not only in American schools, but in other countries as well. Some people question whether these disabilities are increasing or whether accurate diagnosing has increased.

As a teacher for fifteen years and the mother of grown children, I, and other teachers and families, have been exposed to the normal breadth of children out there in the world for quite some time...in our own youth knowing other students, next, our own children, and now our grandchildren, and for some, great grand children, as well as the school, general population, and adult population during these four or five generations.

Most of us have not see many *very* special needs children, as they would have been placed in special educational and social situations. But, in this “normal breadth” of the childhood population, there are definitely more children now showing intensified signs of difficulties socially and academically. However, regardless of the answer to this question of the increase in occurrence, we are still left with the same situation that we must address. How do we understand and remedy these learning problems?

Dealing with this question for years, and having done much research, I have come to this viewpoint that would profoundly change the dynamics of our approach. Perspective can be transformative.

This is the perceptual shift of which I have spoken: **that these children are having great difficulty, not because of some deficit, but because they are right brain oriented.** It is due to this different orientation that we find these children not able to cope, either easily or at all, with our left-brain-focused societal and educational systems.

It is my belief that these children do not have learning disabilities or disorders, but instead, learning differences. Not understanding this simple, alternate orientation is creating huge repercussions for these children, their families, our schools, and our society.

BASIC LEFT AND RIGHT BRAIN FUNCTIONS

The picture of a spinning female dancer graced the internet in a recent year¹ with the following question and information:

Do you see the dancer turning clockwise or counter clockwise?
If clockwise, then you use more of the right side of the brain and vice versa. Most of us would see the dancer turning counter clockwise (left brain) though you can try to focus and change the direction.

There was a listing also of basic right and left brain functions, which I will use, modified a bit for clearer understanding:

Left Brain Functions

uses logic
detail/linear oriented
fact-based
words as delineators
present and past
math/science-formulas
fact, detail comprehension
acknowledges
linear perception
object label oriented
outward knowing
in-the-box strategies
practical
safe
enjoys thought involvement

Right Brain Functions

uses feeling, empathic
“big picture”, visionary
feeling/imagination-based
words as symbols and images
present and future
philosophy/religion-principles
meaning-based comprehension
appreciates
spatial perception
object function oriented
inward knowing
out-of-the-box possibilities
impetuous
risk taking
enjoys hands-on

These brain functions are available to us all, and in the best situations, we would all have a balanced use of our left and right hemispheres. Most of us

¹ “The Right Brain Vs. Left Brain Test – Optical Illusion,” YouTube, 3 Jun. 2008
<http://www.youtube.com/watch?v=XxSmOOaXrHk&feature=related>.

do, however, have a predominant orientation toward either the right or the left brain.

We can easily think of those we have known who would probably be more right brain oriented: artists, musicians, park rangers, landscape gardeners, dancers, sports figures, poets....

Looking more generally at society, we can use the above characteristics to determine the orientation of individuals involved in other activities and professions, because in most activities there are both right and left brain skills involved.

Business: many visionary entrepreneurs are right brain oriented, but may be so enthused that the inspiration empowers them to tackle left brain linear functions, or they may depend on these skills in others.

Law/Government: fundamental philosophies can be based on large, big picture principles overall, but are delivered in a detail and fact-based format and process. Within this and all disciplines, both right and left brain functions can occur in single individuals or in the cooperative efforts among many.

Education: can be big picture, meaning-oriented if there is not an over focus on details and facts. Some educators are good at accessing both realms of the brain and creating lessons using both, or they may be more prone to one type of teaching or the other. (No Child Left Behind created a much greater, almost exclusive, focus on left brain learning, now continued and heightened in 2010-11 with Race to the Top.)

Money management, science, sales, health care, car repair... within all professions, one can fairly easily discern what types of activities in each would be more right or left brain oriented. Without both styles of brain functioning, occurring within ourselves or as balances for each other, our world would not be operational.

It is interesting to note that children start out using a majority of right brain functions. Learning must be experience-based in the early years. The young child must build on the foundation of an actual physical experience to be able to move on to an abstraction of it, such as with a word or a numeral. With formal schooling, children are introduced to more and more left brain

skills, this being the present focus on written/read words, numerals and concepts...thought-encoded information, processed in a sequential or linear fashion.

JEAN PIAGET AND THE STAGES OF LEARNING

The educational psychologist Jean Piaget studied the patterns of learning in children and came up with a description of the typical child's stages of the development of thinking. These stages basically map a child's learning progression from sensory interaction with the concrete world, to language symbols (words and thoughts) that stand for and show the attributes of concrete things, to finally a mental world of thoughts and abstractions, once based on concrete experience, that can now be lived in and manipulated independent of direct experience.

PIAGET'S FOUR STAGES: (Paraphrased from *Learning Disabilities and Related Disorders*)²:

Sensorimotor Stage: Birth to age 2.

Activity is with the senses and movement in relation to the physical environment to learn properties of space, time, location, permanence, and causality.

Preoperational Stage: Ages 2-7.

Intuitive judgments are made about relationships. Language symbols begin and increase in importance to represent the concrete world, as learning continues about properties and attributes of world. Thinking is dominated largely by the world of perception.

² Janet S. Lerner "with" Frank Kline, *Learning Disabilities and Related Disorders: Characteristics and Teaching Strategies* (Boston: Houghton Mifflin 2006) 165 -167.

Concrete Operations Stage: Ages 7-11.

Thinking now also used in relationships, understanding consequences, and grouping things logically. Thinking more systematized and organized. Thoughts still shaped by former experiences and are linked to the concrete objects that have been experienced through the senses.

Formal Operations Stage: Age 11

Major transition in thinking processes. Rather than observations directing thought, thought now directs observations. Capacity now to work with abstractions, theories, and logical relationships without having to refer to the concrete. Thought-based problem solving activity.

This is the accepted understanding of the usual pattern of development for most children, although we can all remember individuals (or experienced this ourselves) who had difficulty with the development of these thinking skills, perhaps with reading, spelling, math, science or the social sciences.

This learning is maturational, that is, based on a firm foundation of the former gained abilities and leading to new developments in thinking. Adequate concrete experience is crucial. Quoting from Lerner's text for teachers:

Attempts to teach abstract, logical concepts divorced from any real experiential understanding on the part of the students may lead to inadequate and insecure learning...(with) surface responses...³

Leaving now the general description of Piaget and the additional information from the text, **I see a major problem for the development of these thinking skills in many of our children.** This would be when **the individual is primarily right brain oriented.** In right brain oriented individuals, it is often extremely difficult to adopt the essentially linear

³ Lerner: 167.

patterns of thinking that are essential for written language and abstracted numeral operations removed from concrete experience.

I do explain later, however, there is not one model that fits every child, and where one can exhibit difficulty in adopting left brain skills, others can read or enjoy math, but may entirely stall with either of these things when done in drill fashion. Motivation, challenge and interest are key components to the success of right brain learners, their brain literally going on “screen saver” without these elements.

For many years, there have been right brain individuals in our schools... fewer before than today. Some, usually painfully, surrendered their normal right brain functioning and switched to left brain skills, perhaps excelling, just getting by, or maybe later in life, finally turning to new right brain professions or activities.

A great many with a right brain orientation have ended up dropping out of our schools, perhaps fortunate enough to find a job that did not require the same measure of left brain activity. And many other individuals with this orientation and difficulty in school have ended up on the street or in our penal system.

GENERAL GIFTS AND SYMPTOMS AND MY SEARCH FOR ANSWERS

Having briefly discussed, now, the basic left and right brain functions and Piaget’s stages as a background, let’s return and take a look at today’s children who are seen as having trouble.

In this section and the next couple, I will be describing some mild to moderate characteristics of a shared pool of symptoms occurring generally in a continuum of increasing components for ADD, ADHD, Asperger’s Syndrome. Dyslexics share these basic more mild symptoms that will be described (as also with nonverbal learning disorder later mentioned), but characteristically dyslexics can have more severe problems being able to read and/or spell, and sometimes are seemingly quieter in nature. The majority of the “disorders” I discuss are based on my experience in a mainstream classroom and on research regarding “mild to moderate”

learning disorders. However, I do report on in-depth accounts of autism and touch also on bipolar disorder...two on the end of the spectrum which can be more “moderate to severe.”

As I mentioned, I have been a teacher for fifteen years, mainly of third graders. In that time, many, many students with learning difficulties were guided into my third grade, regular education classroom. These individuals were placed there purposefully by administrators, parents, and teachers because it was known I could make a connection with these children. In addition to this teaching position in general education, I did also spend three months as an aide in an intermediate school special education classroom in order to see, first hand, in this situation whether my theories were upheld. They were.

My knowledge thus began with what I experienced in the classroom. I worked with these children, within, and along with, the population of my other students, five days a week, six hours a day. Each class had a variety of types of learning differences, and a very large part of my teaching effort was devoted to finding and responding to each child’s style of learning.

It is important to know at the outset that the learning qualities of each special student are varied and individual. For instance, **ADD (normally standing for Attention Deficit Disorder, which I call Attention Differently Directed)** is said to be an umbrella category that covers any number and combination of typical characteristics. A student may evidence a strong left brain skill in conjunction with many right brain characteristics, or not, but there is a “tipping point” when one evaluates that a student is primarily right brain oriented, with perhaps a special talent to bring that inspiration forth through a left brain expression.

As an example, I had a very talented boy in my class who read with skills far advanced beyond the third grade level. This young man read, immersed in what he read, digesting it from his own rich basis of knowledge and experience, facilitated by his broad storehouse of vocabulary, which continued to grow with each story he consumed.

These in themselves are outstanding qualities for any primary school age reader, but it was his ADD talents that enabled him to connect intuitively and empathically with the passion of the literature as it explored and

revealed the deep transformation of individual lives hidden within the events of the story. An informed adult could see these deep themes, but to most others in the class, they were unseen below the story's plot. Most others, that is, except also the ADHD kid, the dyslexics, the Asperger's student, and the autistic, who also understood the personal drama at this deep level, being able to feel the character's inner dilemmas and even his harmony or disharmony with the deep moral truths of life.

In addition to discerning and understanding the deep personal dimension in literature, this young man also reached out to every newcomer or underdog that came to our class. This was not just as an initial short-lived welcome, but as a total felt connection to that person, lasting through the year and, in some cases, on into the future whether in-person contact continued or not. Again, this wide-open expansive right-brain, heart connection, joined him to others needing support. It was his nature to empathically sense where support was needed and to feel joy and wellbeing in himself as he nurtured the wellbeing in others.

It is the depth of these intuitive, beyond-their-age knowings and empathy, that signals the right brain orientation, for it is in the right brain that we are joined in being and feeling with others, wanting a sense of wholeness and health for all. It is also seeing where these children feel uncomfortable socially or academically that one can determine that they are right brain oriented.

This same young man referred to above had noticeable difficulty staying on task as he sat in front of an assignment that required more of a linear approach: a practice page on multiplication problems, filling in missing words in questions about a paragraph above on space, working in the spelling book, listening to a subject presentation...while many others in the class would have no difficulty attending to these more linear or attention-requiring lessons.

We all function differently and a good deal of it depends on our basic right or left brain means of operation. The neighboring fifth grade teacher would occasionally wander into class and start an impromptu conversation with the students and myself. One day he asked my kids something about Thanksgiving (I can't quite remember his query). Everyone stumped and quiet, the young man of whom I have been speaking, considered and answered within just a moment, "The Mayflower." He had scanned the

information and realized the question asked was actually a riddle, for which he had discerned the answer. The visiting teacher, who had the “gifted” cluster of the 5th grade students in his class, retorted, “I want that kid in my class.” **Right brain oriented kids are very bright.**

A right brain orientation is indicated by any or all of...keen intelligence, a draw to nature, music, science, art, movement, intuitive and empathic understandings of people and “moral” action, and also by just how difficult it is for a student to use left brain skills such as: to adjust to a changing schedule, to organize, to listen and keep their attention on, finish and turn in routine assignments. Very often poor small and large motor skills also accompany a right brain orientation, often evidenced in trouble with handwriting and a lack of physical coordination.

As I have tried to point out with the example of this student above, the characteristics of children with a right brain tendency can be a mix, but it is possible to quickly realize their basic right brain mode of learning, and also to discern whether we are looking at ADD, ADHD, dyslexia, Asperger’s syndrome, autism, etc.

It was in the joy and often great challenge of teaching to the range of these children’s diversities that I first discovered what I thought was a different orientation underlying it all, not “disorders.” And it was on the basis of this discovery that I wanted to branch out in search of support for what seemed to be happening.

Another very important belief that drove me to seek answers was that, while medication is sometimes very helpful or necessary, **I do not believe most children are being born, meant to be medicated.** Here is a telling comment by Dr. Castellanos, head of the NYU Child Study Center, and one of the speakers for the Frontline program, *The Medicated Child*⁴ regarding one of the difficulties for parents and all involved in the search for answers:

“The idea that not all children are born perfect, is a very hard one to deal with.”

⁴ FRONTLINE, *The Medicated Child*, prod. Marcela Gaviria, 8 Jan. 2008.

Indeed it is an idea that either states and accepts that many, many children are imperfect, or it is the driving question that compels us to look deeper. Parents are having to face this apparent imperfection more and more, and it is this assumed “imperfection” and its frequency, that has made me feel we are missing what is truly happening.

SUPPORT FROM MY RESEARCH

Taking a year’s leave of absence to research and add to my own acquired knowledge about these children, what I found supported my theory. Attributing learning differences to a right brain orientation is definitely a different perspective about these children, but there are numerous observable, otherwise unexplained gifts in these individuals, and in the great minds of history, to which the references below will attest.

These gifts and learning differences appear to be consistent with functions attributed to the right brain: empathic, inspiration motivated, big picture oriented, out-of-the-box thinking, drawn to physical or sensory activities, and/or seeking meaningful solutions through philosophy, science, social leadership...as well as...trouble with the written word and the linear/repetitive aspects of math, organization, schedules, etc.

Referring again now to the textbook *Learning Disabilities and Related Disorders* written for teachers of students with “mild to moderate” learning disabilities, the first page of the preface states:

This new title reflects the shifts in the field of learning disabilities. These shifts occurred with the realization that many students with learning disabilities exhibit coexisting related disorders, such as attention deficit disorder, Asperger’s syndrome, nonverbal learning disabilities, and other related conditions...

Learning disabilities can impede learning to talk, listen, read, write, spell, reason, recall, organize information, or achieve in mathematics. Described as a weakness among a sea of strengths, the condition of learning disabilities is

especially perplexing because each individual has a unique combination of talents and characteristics, and of strengths and weaknesses. Students with learning disabilities are found in every classroom... (My bold highlighting)

And from a subsection titled “Gifted and Talented Children With Learning Disabilities”⁵ in this same textbook:

Some children with learning disabilities also may be gifted and talented. Characteristics of giftedness include spontaneity, inquisitiveness, imagination, boundless enthusiasm, and emotionality; and these same traits are often observed in children with learning disabilities. Often, children with learning disabilities, like gifted children, seem to require a great deal of activity...If their learning needs are not being met, they may respond by becoming fidgety, inattentive, and even disruptive.... (Again, my highlighting)

Also, within that subsection, this paragraph entitled: “Highly Successful Adults With Learning Disabilities”⁵:

Successful adults with learning disabilities find the world of work is quite different from the world of school. Studies show that many highly successful people have learning disabilities. In fact, about 30% to 40% of 300 individuals who had achieved a high level of financial success had learning difficulties in school (West 2003). A major business magazine, *Fortune* (Morris, 2002), did a cover story on chief executive officers (CEOs) of major corporations who have learning disabilities. Thus, there appears to be a strong, positive side to learning disabilities and dyslexia that requires further research (West, 2003).

⁵ Lerner: 14

Turning to another book:

In *Driven to Distraction* a book about ADD and ADHD, author Dr. Hallowell describes these gifted traits that also apply to many other “learning disorders.” I have joined quotes from a few pages into this summary:

You might describe many with ADD as having a “special something,” a hard-to-pin-down yet undeniable potential... In fact, there is a powerfully positive aspect to ADD, and learning disorders in general, a positive aspect that is as yet ill defined, something good... (These individuals) can be highly imaginative and empathic, closely attuned to the moods and thoughts of people around them... They also see new things or find new ways to see old things. They are not just the tuned-out of this world; they are also tuned in, often to the fresh and the new. They are often the inventors and the innovators, the movers and the doers. Good Do-Bees they may not always be, but we should be wise enough not to force them into a mold they’ll never fit... If that potential can be tapped, the results can be spectacular.⁶
(My highlighting)

RIGHT BRAIN CHARACTERISTICS OF INDIVIDUALS WITH ADD, ADHD, ASPERGER’S SYNDROME, (DYSLEXIA AND NONVERBAL LEARNING DISORDER)

The inclinations of these students with “disabilities,” across the board, seem to be toward the right brain, an operation of the brain which education and society have been leaving behind with greater and greater speed. In the following paragraphs I will describe more about the general pool of characteristics that can be exhibited by kids with ADD, ADHD, Asperger’s syndrome, dyslexia and nonverbal learning disorder.

⁶ Edward M. Hallowell, M.D. and John J. Ratey, M.D., *Driven to Distraction* (New York: Simon and Schuster 1994) 43, 36, 37, 43-44.

As I mentioned earlier, for years I have known that ADD should stand for Attention Differently Directed, and this redirection of perception and redefinition of labels is needed for other learning differences as well. I have seen unique and extraordinary qualities in the students who show a right brain orientation.

Uniformly, these children are gifted. Some say they do not finish things as consistently as children normally characterized as “gifted”, but I would like to add that this is being spoken of in regards to a routine classroom setting.

Gifted in what ways? They, more than even the “traditionally” gifted, understand the underlying theme of any subject... the intuitive, the whole, the empathic answers that speak of personal or societal connection, growth or limitation.

They play in the dirt at recess, sharing little critters they find with other kids, who might then step on them. An Asperger’s student can defy our understanding by deftly intercepting the inadvertent sharing of a peanut butter snack with the child in class who has the life-threatening peanut allergy. Asperger’s individuals are generally known to be less socially adept, and yet, a connective sense deep within can detect the problem and respond in a flash with the required, appropriate action. (Happened in my classroom.)

Often these children think in pictures and analogies. They also often need to move or do another task at the same time as being asked to learn what’s at hand. They cannot become bored, for if it is simply a routine task, their brain goes on “pause”.

Continuing...

Many individuals with ADD operate with a speed like they are walking in a body of water. This is because they are right brain connected, like a satellite dish that exposes them to life in a very broad, viscerally expanded fashion, which prohibits dashing “through that water.” Although, it is not commonly understood why these kids work more slowly, many of them are given a “504 program” in school, which allows them extra time to do their work. This time allows them to draw their information and inspirations from

the wide exposure base to which they are connected, and then to respond back.

(I'm sure an actual satellite dish is designed to take the mass of information coming in and make it accessible to scientists in a linear, and perhaps also, non-linear way.) These children do not have the linear filter.

Lacking this discerning, linear-receiving "filter," it is hard for these students to take in information coming in a linear fashion, and it is equally difficult, or at least takes more time, for them to give the information back in the usually required linear form. In addition, without this filter, these children also find it difficult to read the outward body language of people around them and are therefore interactively less skilled than others.

These individuals also live in a less organized fashion. Having a lot of things around and available to them is part of this broad experience on which they draw, and organizing, using the left-brain, is not how they are geared. They lack the speed and focus of the single pointed energy others more easily access to keep things in order.

Additionally, very subtle within all this, is also the feeling that keeping things in order is a waste of time when one could be moving on to the next idea or activity. And finally, because these individuals are motivated by challenge, there is more willingness to direct energy to their surroundings once there is a mess, so as to then experience the satisfaction that comes with the newly recreated order.

(At the other end of the spectrum to this, autistics and Asperger's syndrome individuals, with more pronounced sensitivities due to increased right brain subtle connection and nervous system sensitivities, characteristically depend on a more rigid order for a greater sense of control and stability.)

All this is not to say that these individuals cannot also act quickly.

Given a challenge they are drawn to, or their passion, they are unstoppable. In fact, this is how they are physically geared. They scan all information for the depth of knowledge and connection to be found there, and then follow their deepest response to what inspires them. They do this with great involvement and commitment (that can be misinterpreted as fixation), intelligence, and activity, resulting in completion and success, if they are given an encouraging and flexible environment in which to work.

I am going to jump ahead a bit here in regards to the category of different learner I am addressing, and give an example of the **inspired action** that would apply to *all* and any of the kids on the spectrum from ADD to autism. In this particular case it is a story involving autism individuals. Mine is a retelling of a CNN narrator/interviewer's amazing account, posted at the CNN website in honor of World Autism Awareness Day in 2009.⁷

Japan has many housing and activity centers for individuals with autism. One such center, also doubling as a school, is a site where young adult autistic individuals live to help in the production of wine. For years, Japan had been making wine, but overall being considered too sweet, the wines had never gained much national respect.

In view of this situation, Bruce Gutlove, a winemaker in California's Napa Valley, was invited to Japan to give advice and direction at the Japanese winery for three months. Having no special training to work with autistic individuals, Gutlove just kept his usual standard and expectations for the workers as he addressed the challenges of making a good wine.

Since the winery was located on steep terrain, all had to be done by hand. However, autistics do well with routine and repetition, and the students were happy in their work.

Creating a good Chardonnay in Japan's harsh climate was a great challenge. The interviewer commenting: "But Gutlove said the students did not let the setbacks stop them from meeting his expectations. Even when Gutlove would get discouraged, the students kept pushing forward." And Bruce, inspired by his workers: "Seeing their passion and their desire to create something of worth for other people is very, very impressive."

At the heart of this story, is another essential attitude that plays not a secondary but a primary part in creating successful outcomes with adults with "gifted differences." In the appreciative and enthused words of Machiko Ochi, the daughter of the creator of Coco Farm & Winery, "Bruce

⁷ Japan, "Autistic Winemakers Crafting Fine Vintages in Japan," updated 2 April 2009, 24 Jan. 2011
http://www.cnn.com/2009/WORLD/asiapcf/04/01/japan.autism/index/html?eref=ress_La

considers all of the residents colleagues. This is a big distinction. Treated as equals, the residents meet his expectations on the job."

Hiromitsu Watanabe, 28, is one of the students who arrived several years ago at the winery, not able to communicate with anyone. Today he is happy, committed to his work, and talking "non-stop." His favorite job is putting the labels on the red wine that he helps make.

Not only did the winery produce a Chardonnay that the Japanese critics acclaimed, but Bruce is still there after twenty years, and, he shared, it is not primarily for the wine.

After this wonderful story, we can return to the discussion of ADD, ADHD, Asperger's Syndrome, dyslexia and non-verbal learning disorder, and you will see the theme from the story of longing to make a difference or improving something in life runs across the full spectrum for these learning-different individuals.

Without acting from inspiration, these learners can be bored or seem unorganized, and undirected. It can be like pulling teeth to get them to do routine homework. Or, if they have worked with real interest or challenge on some interesting or exciting homework, they can then, and often do, neglect to turn it in. This is because after finishing the work, the rest is anticlimactic to their brain. To now turn in the homework becomes a routine aspect and their brain actually stalls. These brains *are not geared* to linear, routine tasks. Linking to a call from deep inspiration is the key to these children's success.

There is a hunter/farmer analogy that applies here. The hunters, who came before agrarian cultures, were highly motivated by the immediacy and need of the hunt, the strategy and cooperative aspects of the activity...all motivations leading to high focus and an adrenalin increase. Later, with the agrarian society, individuals adapted to doing a series of more linear tasks in a repetitive cycle... plowing, seeding, irrigating, harvesting, etc. Both natures have their place and can be cooperative within a society. Who is to say hunters need be farmers or vice versa. The students we are speaking of are born hunters.

All of these learning “disorders” have differences I will very generally site below, although it would take another paper to go into each learning type in more depth. The intent of this paper is to testify to an inherent right brain nature, as described above, within all of these learning-different children.

For all of these students sharing fundamental right brain gifted characteristics, here are some of the more “problematic” differences, as seen by our school systems. These characteristics appear to occur in somewhat of a continuum from less to more, although there are no firm boundaries that would conclusively describe any one individual.

One prominent characteristic common to all these individuals is that they are less socially “adept” by what some would consider our normal standards. However, judging by the deep commitment to serving others that all of these individuals have, I believe we now have to consider what is it that makes our experience of “normal” singularly preferred over what appears to be a new orientation for “good,” and what is it about human beings that creates almost a fierce defense against differences and change?

I would say every person falling somewhere on the ADD – autism/bipolar spectrum that I have known, or known of and speak of in this paper, has experienced some level of being shunned or rejected. Where is our acceptance?

I see all this as a new diversity that needs to be embraced, and so all characteristics, those appearing to be “positive” or “negative”, are just *differences* in the way some individuals function, generated by their innate inclination. It is on the basis of old perceptions that we would view any of these as other than just a new “normal” for some, and we would be still trying to have them fit former learning and life styles.

ADD (Attention Deficit Disorder) is primarily characterized by lack of attentiveness and organizational skills.

ADHD (Attention Deficit Hyperactivity Disorder). In addition to the ADD characteristics, includes more trouble sitting still and sometimes being physically hyper.

Dyslexia (discussed more later, as well as Nonverbal Learning Disorder) involves marked difficulty with reading and/or spelling, and in my experience the individual can be a bit more reserved.

Asperger's syndrome (considered related to autism) can include being much more vocal and physical about **likes**...strong desire to be who they are, not wanting to stop drawing, reading, enjoying music, or being very physically active in dance-like or karate type movements... and **dislikes**...having to conform socially and organizationally in schoolwork or schedules.

Autism, (and in some aspects, Asperger's syndrome), includes lesser or greater degrees of rigidity to ward off the outside world of challenging stimuli, this becoming the basis for the safety of habitual behaviors of routine, repetition, buffering, non-interaction and "over-focusing".

I will discuss autism in much more detail later, as well as how bipolar disorder also seems to be a right brain orientation.

Concluding this section, what I have described are some of the primary symptoms of individuals with ADD, ADHD, dyslexia and the more minor symptoms of Asperger's syndrome and other learning differences.

When these differences are not recognized and honored early on, secondary symptoms can arise...low self-esteem, frustration, anger, deceit, and efforts to gain self/other control, recognition, power or escape in other ways including substance abuse and even violence (such as at Columbine and Virginia Tech.) These are all attempts to fit in, control, retaliate for, or totally self-annihilate after many experiences of not fitting in or being accepted.

GREAT PEOPLE IN HISTORY

Many great people throughout history have shown the paradoxical characteristics of a gifted and talented right brain orientation. These individuals have been geared away from a left-brain focus, and often showed an early or life-long disinclination toward the written word. Our recent history has predominately used words in a linear left brain fashion... abstractions, rather than immediate expressions arising from inspiration.

Many, and perhaps most, of these famous people found it difficult to survive in a normal educational environment. A great number of them worked in an artistic world, separate from domains defined by a practical or more rigid use of words, while others powerfully employed words to directly express their arena of passion...their connection to inspiration, creativity and purpose from which they made great contributions.

In *Driven to Distraction*,⁸ Dr. Hallowell reports evaluations made about several individuals who achieved greatness after performing terribly in school due to undiagnosed “learning disabilities”: Mozart: distractible, impatient, innovative, creative; Einstein, Poe, Shaw, Dali...these, expelled from school; Edison: at the bottom of his class; Lincoln, and Henry Ford...both considered to have “no promise.”

The textbook quoted earlier, *Learning Disabilities and Related Disorders*, also cites many great people who have excelled despite apparent left-brain “learning disorders.” Among them were: Nelson Rockefeller: severe dyslexia; Charles Schwab: reading problems; Thomas Edison: “mentally defective”; Auguste Rodin: “uneducable”; Woodrow Wilson: didn’t read until age eleven; Albert Einstein: persistent language (reading, writing) problems throughout his life. Einstein stated that he “rarely thought in words; it was only after a thought came that he tried to express it in words at a later time.”⁹ It is more likely that, like Temple Grandin, he thought in pictures.

Instead of left-brain skills and approaches, these great men relied on their gifts of insight and found their own successful route to express and excel.

The minds of several of the great men listed above, resisted the adoption of written word usage, or waited until an older age, after lingering in an “experience” based realm for a longer period, finally, then, to adapt to reading and writing. Once accepting the world of words, they often used them to capture poetic eloquence or understandings of life that reached far beyond the norm.

The right brain is the domain of inspiration, out-of-the-box thinking, risk-taking, innovation, and a need to solve important unanswered philosophical,

⁸ Hallowell: 44.

⁹ Lerner: 3 - 4

scientific, mathematical, or societal questions and problems. All this was evidenced by the lives and contributions of those individuals that have just been mentioned.

The majority of the references above are to men. There seems to be a greater occurrence of these differences in males, but females also do exhibit the same symptoms. Women from the times of the men listed above may have been occupied more in the home, which involves more right brain skills, and many faced gender prejudice when it came to reaching for greatness.

Young females today in school can and do have characteristics of a right brain orientation, but often these can appear less obvious. Usually girls have a quieter nature than boys, and often they adapt to reading and writing skills more easily, or with quiet perseverance. However, trading away much of their right brain orientation can and does also occur for girls, in an effort to please and to not be noticed in a negative way.

ASPERGER'S SYNDROME

Asperger's individuals, like all the rest we have discussed, **are highly intelligent and inspired individuals.**

I will tell three stories here to give a picture of gifted Asperger's individuals.

These students, particularly, resist being put in a box, and yet, because of heightened sensitivities, do need days that follow a routine, with little room for deviation from their familiar perception of things. However, hand in hand with *these* differences, comes empathic gifts and sometimes genius.

One such young man in my third grade classroom loved to read, understood the deep thematic material in all we studied, loved to move his body freely, spontaneously, and wanted to just be "himself," without having to fit any imposed social or learning norms.

Carefully working all year to help him assimilate the traditional essay style of writing, with opening thesis paragraph, supported by body paragraphs, conclusion, etc.,...on the final district write that was to evaluate his progress, he approached each paragraph with great disciplined compliance to the

structure and function of each sentence. And...sitting in the middle of this composition... was, “**Annie’s heart blossomed like a lotus flower in the spring.**” He was a third grader writing fairly short sentences in this format, and with Asperger’s, was still having troubles with the rules of spelling and capitalization, etc. However, here exploded this sentence. This spontaneous, heartfelt burst of eloquence is not seen in the third grade, or for many grades following thereafter, even from the higher achieving students.

And now two life descriptions of adults with Asperger’s...

A friend works for a biomedical company which is led by a gentleman with Asperger’s syndrome. This man has been called eccentric in that he is driven tirelessly forward with his creative genius to find remedies for illnesses, and does so with a high measure of success, the company of employees all involved in the subsequent follow through with relevant secondary research or whatever. However, when it comes to the monies of his company, or scheduling, or involvement of employees in meetings or business related social gatherings, this man has not much of a clue, or an interest. Therefore, others see that these things are taken care of, and this company does very well.

The second story...shortened here from a long and interesting telling (a little more in-depth in financial detail than I can easily keep up with)... read in Vanity Fair magazine¹⁰. Leaving the money details for you to read at the magazine or in the book, I quote just enough to reveal most of the story and to relate this to Asperger’s syndrome.

“Excerpted from The Big Short: Inside the Doomsday Machine, by Michael Lewis, to be published this month by W. W. Norton; © 2010 by the author:

Betting on the Blind Side

Michael Burry always saw the world differently—due, he believed, to the childhood loss of one eye. So when the 32-year-old investor spotted the huge bubble in the subprime-mortgage bond market, in 2004, then

¹⁰ Michael Lewis, Betting on the Blind Side, excerpt, Vanity Fair, April 2010, 24 Jan. 2011 <http://www.vanityfair.com/business/features/2010/04/wall-street--excerpt-201004>

created a way to bet against it, he wasn't surprised that no one understood what he was doing. In an excerpt from his new book, *The Big Short*, the author, Michael Lewis, charts Burry's oddball maneuvers, his almost comical dealings with Goldman Sachs and other banks as the market collapsed, and the true reason for his visionary obsession...

His glass eye, Michael Burry assumed, was the reason that face-to-face interaction with other people almost always ended badly for him. He found it maddeningly difficult to read people's nonverbal signals, ... The glass eye became his private explanation for why he hadn't really fit in with groups... It wasn't the sort of thing other kids ever allowed him to be unself-conscious about.

In his glass eye he found the explanation for other traits peculiar to himself. His obsession with fairness, for example. When he noticed that pro basketball stars were far less likely to be called for traveling than lesser players, he didn't just holler at the refs. He stopped watching basketball altogether; the injustice of it killed his interest in the sport... Even though he, himself, was a good athlete, he didn't care for team sports... He preferred swimming, as it required virtually no social interaction... 'My nature is not to have friends,' he said. 'I'm happy in my own head.'... His obsession with personal honesty is a cousin to his obsession with fairness.

Obsessiveness—... His mind had no temperate zone: he was either possessed by a subject or not interested in it at all. Even as a small child he had a fantastic ability to focus and learn, with or without teachers. When it synched with his interests, school came easy for him—so easy that, as an undergraduate at U.C.L.A., he could flip back and forth between English and economics and pick up enough pre-medical training on the side to get himself admitted to the best medical schools in the country.

He attributed his unusual powers of concentration to his lack of interest in human interaction, and his lack of interest in human interaction ... well, he was able to argue that basically everything that happened was caused, one way or the other, by his fake left eye...

He was genuinely interested in computers, not for their own sake but for their service to a lifelong obsession: the inner workings of the stock market.

Ever since grade school, when his father had shown him the stock tables at the back of the newspaper and told him that the stock market was a crooked place and never to be trusted, let alone invested in, the subject had fascinated him. Even as a kid he had wanted to impose logic on this world of numbers. He began to read about the market as a hobby...

Late one night in November 1996, while on a cardiology rotation at Saint Thomas Hospital, in Nashville, Tennessee, he logged on to a hospital computer and went to a message board called techstocks.com. There he created a thread called "value investing." ... Once he figured out he had nothing more to learn from the crowd on his thread, he quit it to create what later would be called a blog but at the time was just a weird form of communication. A few people grumbled about the very idea of a doctor having anything useful to say about investments, but over time he came to dominate the discussion, and signed off from his blog as Dr. Mike Burry....

There he posted his stock-market trades and his arguments for making the trades. He was working 16-hour shifts at the hospital, confining his blogging mainly to the hours between midnight and three in the morning. People found him. As a money manager at a big Philadelphia value fund said, 'The first thing I wondered was: When is he doing this? The guy was a medical intern... He's showing people his trades. He's up 50 percent.' ...

Burry's ability to work and to focus set him apart even from other medical students. In 1998, as a resident in neurology at Stanford Hospital, he mentioned to his superiors that, between 14-hour hospital shifts, he had stayed up two nights in a row taking apart and putting back together his personal computer in an attempt to make it run faster. His superiors sent him to a psychiatrist, who diagnosed Mike Burry as bipolar. He knew instantly he'd been misdiagnosed: how could you be bipolar if you were never depressed?...

The actual practice of medicine, on the other hand, either bored or disgusted him....The deeper he got into his medical career, the more Burry felt constrained by his problems with other people in the flesh. He had briefly tried to hide in pathology, where the people had the decency to be dead, but that didn't work. ('Dead people, dead parts. More dead people, more dead parts. I thought, I want something more cerebral.'))

He'd moved back to San Jose, buried his father, remarried (he had lost his first Vietnamese wife due to over focusing on his work), and been misdiagnosed as bipolar when he shut down his Web site and announced he was quitting neurology to become a money manager. With that, Dr. Michael Burry opened Scion Capital. (As a teen he'd loved the book *The Scions of Shannara*.)”

(Fast forwarding now through the years investing and investors....)

“In early 2004,...Burry immersed himself for the first time in the bond market...He wanted to know, especially, how subprime-mortgage bonds worked... By February 2007, subprime loans were defaulting in record numbers.

Not long before, his wife had dragged him to the office of a Stanford psychologist,. A pre-school teacher had noted certain worrying behaviors in their four-year-old son, Nicholas, and suggested he needed testing... Burry agreed to have their son tested. ‘It would just prove he’s a smart kid, an ‘absentminded genius.’

Instead, the tests administered by a child psychologist proved that their child had Asperger’s syndrome...

‘Marked impairment in the use of multiple non-verbal behaviors such as eye-to-eye gaze ...Failure to develop peer relationships ...A lack of spontaneous seeking to share enjoyment, interests, or achievements with other people ...Difficulty reading the social/emotional messages in someone’s eyes ...A faulty emotion regulation or control mechanism for expressing anger ...One of the reasons why computers are so appealing is not only that you do not have to talk or socialize with them, but that they are logical, consistent and not prone to moods. Thus they are an ideal interest for the person with Asperger’s Syndrome ...Many people have a hobby.... The difference between the normal range and the eccentricity observed in Asperger’s Syndrome is that these pursuits are often solitary, idiosyncratic and dominate the person’s time and conversation.’

After a few pages, Michael Burry realized that he was no longer reading about his son but about himself. His glass eye no longer explained anything....

The diagnosis explained an awful lot about his abilities and how he did it: his obsessive acquisition of hard facts, his insistence on logic, his ability to plow quickly through reams of tedious financial statements... ‘Only someone who has Asperger’s would read a subprime-mortgage-bond prospectus,’ he said.”

Late summer 2007. The Bloomberg News service ran an article about the few people who appeared to have seen the catastrophe coming....most conspicuously absent—one who had made \$100 million for himself and \$725 million for his investors—sat alone in his office, in Cupertino, California. By June 30, 2008, any investor who had stuck with Scion Capital from its beginning, on November 1, 2000, had a gain, after fees and expenses, of 489.34 percent. (The gross gain of the fund had been 726 percent.) Over the same period the S&P 500 returned just a bit more than 2 percent.” Burry had bet against the then current trends and practices in the market.

LOOKING AT AUTISM

I would now like to talk about autism, which we know is of great concern at this time. Many of autism’s characteristics fit the right brain orientation of which I am speaking, with more pronounced symptoms than with ADD, ADHD, Asperger’s syndrome and the rest.

I will describe how autism’s symptoms seem to be a reaction, sometimes an extreme reaction, to the stimuli coming from our left brain world. To help with our understanding, I will refer later to the life and writing of an adult autistic, Temple Grandin, (now better known in 2011, than when I wrote this paper, due to her many public appearances, her books, and the HBO movie about her life titled: *Temple Grandin: Different But not Less*).

All children with these learning differences have greater sensitivities to the world in one way or another. This sensitivity may be to sounds, smells, light, tastes, chemicals, touch, linear input...all related to the fact that their brain and nervous system’s responses to body sensations and stimuli are more acute, due to the lack of a left brain filter.

In the case of autism, these sensitivities appear to be very great. Autistics, like other children, long to be touched and interact, and yet, once autism is

present, they are extremely sensitive and can withdraw from touch and from the world of stimulation and communication.

The heightened sensitivity of an open, unfiltered right brain orientation to the world leaves these individuals subject to over-stimulation and information overload. This can happen with any of the “disorders” discussed above, in some slight or larger degree.

I will discuss an incident now that illustrates the impact of having no left brain filter. This is an extreme case likened to bipolar disorder (discussed later), but it is indicative of the overload that occurs on some level for all individuals with ADD through autism, and indeed for those with bipolar disorder.

Jill Bolte Taylor is a neuroanatomist who has shared with the world what she experienced as she witnessed her own left brain stroke from the inside out, an experience she now calls her “stroke of insight.”

Focusing in her research to understand schizophrenia and other brain disorders, Jill awoke one morning to experience her own left-brain functions progressively slipping away over a four hour period, (her speech, word recognition, understanding, recall ability, movement...). When her right arm would no longer respond to her request to move, Jill realized she was having a stroke. As the left brain shut down, Jill finally found herself in non-differentiated experiential immersion with all that surrounded her.

Feeling at many times great euphoria of fullness and connection, at other times her sensory system was totally bombarded by the stimuli present, due to the lack of her left brain filter.

She relates:

The stimulation coming in was pure pain, light burning my brain like wildfire, and sounds so loud and chaotic that I couldn't pick a voice out from the background. I wanted to escape.

Zeroing in here, on this particular experience of Ms. Bolte-Taylor, I want to relate this symptom of her stroke to the nature of many over-stimulating experiences for autistics. Ms. Bolte-Taylor's brain malfunction led her to many understandings, one of which was to know what it was like to be autistic or bipolar, overwhelmed by a world of sensory intrusion.

If you are interested in seeing Ms. Bolte-Taylor's moving account of this event, you can find it through this link.¹¹ You will see that, as a result of her stroke of insight, she also has much to say about how the right and left hemispheres of our brains function, and about peace, connection and empathy in our world, referring again to the euphoria of fullness and connection she attested to in my earlier mention:

She closes with:

I believe the more time we spend choosing to run the deep, inner peace circuitry of our right hemispheres, the more peace we will project into the world, and the more peaceful our planet will be. What do you choose?

The left brain is that which filters stimuli, and accesses and processes verbal communication. Lacking this filtering system, and being so sensitive, autistics find their own ways to filter out the world of over-stimulation. This is often done by spinning their body and flapping their arms or by the repetition of a verbal or musical phrase. These actions insulate the individual from the outside world, and he or she finds some semblance of peace within. Autistics are then in the quiet of the right brain, the place not only of peace but also inspiration, insight and a protected space in which to learn.

In this place of inner quiet and calm, young autistics can learn to use words and improve communication. It is here also that autistic individuals can respond to their connection to music, nature, principles governing math or science, etc. There have been programs on 20/20 and any number on UTube videos showing the creative right brain talents of autistic individuals, be it musical or otherwise.

Occasionally, autistics have extraordinary brain functions of calculation or replication, for their minds can function outside the realm of normal left

¹¹ "Jill Bolte Taylor: Neuroanatomist," TED, Mar 2008, 24 Jan. 2011
<http://www.ted.com/index.php/speakers/view/id/203>

brain limitations (Rain Man) or act like a blank film, capturing and duplicating what is seen or heard, etc. Videos on UTube recently have shown individuals viewing a place, such as flying over Rome for an hour, and then drawing from memory, within the next several days, every city structure, with complete details such as every window and door.

Since I have just mentioned Rain Man and the amazing skills of autistic individuals, more and more of which are testified to in videos traveling the internet, I would like to tell more of Rain Man's story here.

About four months before his death in December 2009, four UTube videos had gone around about his life. Parts of the video series were described in a NY Times article after his death, an account which also covered more about his life. I am generally drawing information here from both the article and the video.¹²

Kim Peek (Rain Man's real name) was raised after he was about thirty, solely by his father. The father dedicated his life to his son, being a total support and advocate, helping his son dress each day, and taking him wherever life called them. Prior to the movie made about his life, Kim did not look people in the eye. However, once he had recognition, acceptance and an honored identity as Rain Man, Kim loved meeting people, greeting them on cable cars, in medical office buildings, grocery stores.... To each person he engaged with, it was a similar, if not repetitive greeting, such as, "Nice to meet you, and you are such a lovely person."

Kim clearly reveled in offering this greeting to all he met. Following the greeting was his unusual next question, "What was the date of your birth?", and after receiving the answer, Kim would tell what day of the week it had been and added if it had been a holiday such as Easter in that year...all from his memory.

Kim's parents had been advised when he was 6 years old that he should have a lobotomy, but by that time he had already memorized the first eight volumes of the family encyclopedia. Referred to by one of his doctors as a Mount Everest of memory, Kim had memorized so many Shakespearean

¹² Bruce Weber, "Kim Peek, Inspiration for 'Rain Man,' Dies at 58," The New York Times (New York) 27 Dec. 2009.

plays and musical compositions, that he and his father had to stop attending performances, since Kim would stand up and correct the performers.

When invited to speak to a full house at Oxford University, and after answering a broad range of questions, each with precise detail as to when and/or where, a young female student asked, “Kim, are you happy?” His response was, “I’m happy just to look at you,” said with the full charm as was in all of his greetings.

When Kim’s father was 80, he decided he needed to take his son to Standford Medical Center to finally determine, if possible, what was different about him. It was found that Kim did not have a corpus callosum, the nerve tissue that connects the left and right hemispheres of the brain. Kim’s father was told that this was why his son could not, and never would think rationally.

At the end of the video clips, Kim was asked what he thought about his father, this man who had dedicated his life to helping him in every way possible.

Kim responded by saying, “My father and I share the same shadow.”

Here are his father’s closing remarks in the video, paraphrased, “My son may not be able to think rationally, but there is something extraordinary in Kim’s perceptive statement about our relationship.”

To “share the same shadow” is not a rational description...it is profound, such as one finds in the inspired words of poetry...a use of words based in inspiration, not in a left brain analysis.

TEMPLE GRANDIN’S STORY OF BEING AUTISTIC

The account by Temple Grandin of her life as an autistic individual was particularly pivotal for me in my study of autism and learning differences in general. It was from reading this autobiographical book, *Emergence*, that I began to hypothesize that these symptoms, that are seen as other than normal, are natural occurrences, as these individuals interact with life in a nontraditional manner, due predominantly to a right brain orientation.

Temple was among those first few diagnosed with autism in the 50's. She, like most autistic children, longed for contact but could not stand to be touched. Also like autistic kids, she spun around and flapped her arms. Her story tells of her progress through all of her challenges to success and great contribution in the world.

Temple's book relates how she amazingly and bravely found her way to graduate high school, and then college, next to earn a PhD, and later to write of her story in *Emergence*, with other books following. In these writings she describes what it is to be autistic. Temple has also gained acclaim as "a gifted animal scientist, writer, and presenter, who has designed one third of all the livestock-handling facilities in the U.S.... She is regarded as one of the highest functioning individuals with autism in the world",¹³ as written on the back of this inspiring book.

Through Temple's draw to animals and her intuitive connection to their feelings, along with her design abilities, heightened by her natural "thinking" in pictures, these livestock facilities were modernized and humanized by Temple's re-design. These facilities were changed from old systems that operated purely for convenience, into operations built upon the natural desire of the herd to follow in circles, in single file, with no fearful confrontations along the way to their end...this all showing great respect and care for these animals raised for our needs.

One of Temple's newer, instructive books for care givers and parents is titled, *The Way I See It*...an invaluable resource for all involved. From this new book, *Emergence*, and Temple's others works, there is much to learn.

According to Temple, autistic kids flap and spin because by so doing, they focus on a self-imposed physical sensation so that they can shut out over-stimulation from the outside world. Within this spinning and flapping, they find inner quiet.

(Similarly, movement for the ADHD individual could be enhancing their ability to attune to their inspiration, or the learning at hand, and to "shake off" the stress caused by a left-brain oriented curriculum, or over-stimulation

¹³ Temple Grandin, PhD and Margaret M. Scariano,, Emergence: Labeled Autistic (New York: Warner Books, 1986).

in general. Many ADD and ADHD individuals are known to work better doing two things at once...the second, self-directing activity allowing them to focus more on the first. Examples would be needing background noise, such as music or TV, in order to focus on homework, and knitting in class in order to pay better attention to lectures. Moving could also be an anti-boredom measure, stimulating the brain with movement at times when linear input could cause it to go on “pause”.)

Temple, as a child, dreamed obsessively of inventing a device that would help her with her extreme sensitivities and her inability to relate emotionally, or easily in communication with others. (Children and adults within the span of these learning differences are, to a greater or lesser degrees, visionary, and in search of needed solutions and innovations.) Temple envisioned a “squeeze machine,” a type of which she eventually saw at her aunt’s cattle farm. The farm used a cattle chute to hold and still animals for inoculations and brandings. Temple saw that the cattle chute did not just hold the squirming animals – it calmed them.

With heightened fear and reluctance due to her autism, Temple trusted her aunt to apply pressure to her in the cattle chute. Temple found herself calmed as she had seen with the cattle. Temple then built four increasingly advanced “squeeze machines,” allowing her to self-treat with externally applied pressure, subduing her heightened sensitivities to the world. Mothers have known for eons the soothing effects of swaddling newborns, who are sensitive to all the stimuli of the new world they have entered. This swaddling allows their sensory systems to calm as they begin to adjust to their new environment.

Temple used this external pressure to find increasing stillness within. It was in this quiet that she was able to learn to relate and communicate with others and to understand her mother’s love, love being felt by us all through the connective orientation of our right brain. Further, it was from her right brain orientation that Temple found an enhanced connection to life at a level where she was highly empathic to the feelings and needs of others, including animals, thus leading to her later expertise and contributions to their treatment.

WHAT IS PARTICULARLY SPECIAL ABOUT THE RIGHT BRAIN?

The right brain offers an extraordinary dimension to our functioning, if we are available to it. For most of us, our attention is tuned mostly to our left brain skills, trained to go there by the traditions of our societal and educational approaches. The left brain delineates, objectifies, labels and then manipulates objects and concepts, dealing with the world in separate pieces, joining those pieces together as we choose or are accustomed to doing so. Socially, as we act from the left brain, it is more common to feel separation and competition with others, feeling a lack of connection to them and often a sense of fear.

In contrast to this, what have we spoken of so far as seen in these children?...empathy, a sense of connection and understanding of the needs of others, a deep wanting to know and inform others, or to make things better in some way...and creatively from the right brain...wanting to express through music, art, movement, innovation....

As we have discussed, these individuals often appear and feel awkward in their interactions with others, but it is their deep level of empathy that motivates their desires and actions to find ways to make a meaningful contribution.

These connective feelings and the desire to create...these arise from a right brain intelligence that has its own gifts for our lives. As we understand what the evidence reveals, it is these and other talents that put scholars in the position of not quite understanding how these individuals can seem not to fit our world, but are undeniably somehow “gifted”, in many cases beyond the general population.

What “informs” these individuals from the right brain?... deep insights, and integration not reliant on thinking but on picturing, sensing, feeling...what we might briefly experience as “ahha’s” and epiphanies. It’s written that Einstein envisioned riding on a light beam to help in his understanding which became $E=MC^2$. A famous Einstein quote is “Imagination is more important than knowledge.” I have read that after Einstein envisioned the reality of this important understanding, he went to his brother, who was

more versed in linear mathematics, who then helped Albert to express this in the famous formula.

In a reading textbook used in recent years in elementary schools, there was an expository piece that explained to the children that Edison and many other inventors found their inspirations in dreams, a realm which accesses right brain integration and insight...this text book being used as No Child Left Behind focused more and more exclusively on left brain skills.

A book by Daniel Pink titled: *A Whole New Mind...Why Right-Brainers Will Rule the Future*,¹⁴ was recently a NY Times and Business Week bestseller. From the back of this book:

Gone is the age of “left-brain” dominance. The future belongs to a different kind of person with a different kind of mind: thinkers whose abilities mark the fault line between who now gets ahead and who doesn’t.

This is important to understand because there is much in our life that we can learn and understand in ways that do not focus on left brain skills.

The right brain is open to a broad expanse of information coming in, communicating to us in ways that do not involve thinking. Not being an artist, I was amazed at a recent gathering where an artist was painting impressions of the day. Her images were dynamic...some strong and forceful, others beautiful and serene. When I asked her how she decided upon these images, she said they came forth quickly and from a place without her will directing it, a place that spoke through her brush as she rapidly painted what emerged.

So now, after exploring many things that come from a right brain connection, I can return to Temple Grandin and share with you this dimension of a gifted, perhaps enigmatic intelligence as Temple experienced it. Temple explains that she knew since childhood that she would find “answers in realms unexplored by others.” She was referring to the realms of the right brain that had given her, for instance, her childhood vision and compulsion to create a squeeze machine for herself.

¹⁴ Daniel Pink, *A Whole New Mind: Why Right – Brainers Will Rule the Future* (New York: Riverhead Books, 2005).

These realms continued to inspire and guide Temple to her many successes...intuiting and acting upon answers received in ways that are not accessed by the left brain. This is something that we have all tasted in a much smaller way as we have felt a gut hunch, whether or not we have had the confidence to act on it, and it is enigmatic because it cannot be understood or accessed by the thinking of the left brain.

It is with thanks and appreciation to Temple Grandin that I have shared what I have understood of her experiences. Now, I would briefly like to turn to the story of Jenny McCarthy and her son's bout with autism.

LOUDER THAN WORDS – JENNY MCCARTHY

*Louder Than Words*¹⁵ is the book written by Jenny McCarthy that describes the events in her life with her young son as autism took both of their lives by storm. Reflecting later, Jenny realized there were autistic traits inherent in Evan since birth. Kids appear to be geared toward autism at birth and/or are kicked into it full-fledged by something occurring as they grow and develop.

One of Evan's early autistic characteristics was not responding with outward signs of warmth and joy to Jenny's loving physical and verbal communications or to those of others. Another was a habit of flapping his hands in apparent excitement. Others symptoms later arose like tiptoe walking and spinning, as well as his fascination with hinges, geometric shapes, turning wheels...and more, as he grew month by month approaching two years old.

But it was on one particular morning that Jenny woke up sensing something wrong registering within her own body. Checking on two and a half year old Evan, sleeping forty-five minutes later than normal, she found him struggling to breathe, soon followed by a seizure and convulsions.

With few answers from medical personnel, and several of those inaccurate, Jenny found herself alone that day and in days to come in a desperate attempt to find out what was happening. The situation intensifying, Evan

¹⁵ Jenny McCarthy, Louder Than Words: A Mother's Journey in Healing Autism (New York: Dutton, 2007).

had seizures along with cardiac arrest six times on one particularly terrible day. Inaccurate diagnoses were accompanied by hugely problematic medications.

Before the seizures, Evan had already learned several words and was able to recite full verses from some songs (an autistic inclination). However, one of Evan's subsequent medications took his speech away entirely. This, along with other effects from tried medicines, plunged Evan into withdrawal and deep isolation from the world.

Reading Jenny's book will give the full picture of her frantic, resolute and successful efforts to pull Evan out of autism through a "window" of time of possible recovery. She had learned of this window from other moms, from whom she also learned about dairy, wheat and sugar free diets, finding a DAN (Defeat Autism Now) doctor, ABA therapy, B12 shots, and more. In a "What to Do Pamphlet" at the back of Jenny's book, she lists the many approaches to try in any parent's attempt to help their child.

In Evan's case, Jenny feels that full-fledged autism seemed to have taken hold as the months proceeded after Evan received some of the childhood vaccinations. She believes that Evan and many other children are born with inherently weaker immune systems that cannot take the injection of these live viruses and the mercury when it accompanied them. She feels that it might be best to wait until a child is 18 months old to give them these injections.

I believe that, along with all these other sensitive children I have spoken of, autistics are reacting even more strongly to a world where those of us, far less sensitive than autistics, know that sound and chemical pollution, as well as the stress caused by the increasing pace and demands of life, are taking their toll on us all. Introduce autistics to this scene, and you see individuals in reaction and withdrawal.

Speaking of one other specific example regarding Evan's autism, there was a time, after being medicated with numerous antibiotics, when his little body was so full of the yeast overgrowth called candida, that once given an antifungal medication, his body began releasing yeast like it was exploding from his system.

Within two weeks of taking this anti-fungal medication, and adding to his already increased communication due to diet changes and therapy, Jenny heard him giggle at a joke on TV. Even more than his recent and sudden six-word sentence, this meant he understood “subtext and emotion... language in a more complex way,” which makes it appear that his language understanding had been growing all along, but was inhibited by the incited autistic condition.

It seems a real possibility that, in some cases, vaccines or medicines can initiate or complicate body reactions in all these sensitive kids in general...kids whose sensitive nervous systems are connected to a right brain orientation, with its extremely subtle receptive and connective qualities.

The heightened attunement and sensitivity of these children puts us in the position of needing to find what works for them for health, life style and communication. For some, diet, therapy, and other corrective measures can bring these individuals back into an understanding of our world of interaction. For others...our words, world of stimuli, and linearity are ineffectual and too often totally abrasive, leaving it *to us* to understand, accept, and discover ways that allow and celebrate new means for autistics to participate, and contribute what they have to offer this world.

NEW MEDIUMS OF COMMUNICATION

Many seeking answers *are* exploring others means of communication that serve autistics. *Autism, The Musical*,¹⁶ produced by HBO, shows one creative woman’s wonderful approach to “giving voice” to highly expressive and creative autistic children.

This is a documentary about some twenty-five families that enrolled their autistic child in an interactive therapy and child-affirming program that culminated in a musical. While showing the classes and sessions as they progressed toward the final musical, we also see story segments about the lives of many of these gifted autistic children.

¹⁶ *Autism the Musical*, dir. Tricia Regan, DVD, HBO, 2007.

The children were all very bright, and highly sensitive...to sound, light, too much activity, and some even to the requests to participate.... Gloriously, they were all respected and loved for being a person who functions differently, but in a way that is to be honored and appreciated. Autism, in the program, was still said to be a brain disability, but it was also recognized essentially as just a “different way of functioning.”

Some children who spoke well, showed us their gift of intelligence and insight. Wyatt, around 9 years old, while swinging on a swing, was struggling, soul searching with the paradox of why autistic kids withdraw into themselves...

They are not going to find a friend in their own little world, and this frustrates me about them as I try to be their friend...but, but, then why do *I* do the same thing, when the most *special* thing in the world would be to have a friend, a kind friend, not a bully...

Adam, about eight, whose behavior can be very erratic (he’s lucky enough to have a one-on-one aide in his classroom) also clearly showed his gifted brightness. We saw this in his classroom, at home, and in the “musical” as he used his cello playing (loves to play Bolero) as a means of expression.

Moving to another expressive approach for autistics and others, Joey Travolta, John Travolta’s brother, serves the “developmentally disabled” with his program “Inclusion Films.”¹⁷ Two-week Film Camps (ages 9-18) are designed to develop self-esteem, confidence, and creativity through acting and digital filmmaking, teaching essential skills for a career in film in a non-competitive environment.

Travolta’s Practical Film Workshop for Adults (18+) is designed to provide entry and intermediate level skills necessary to work in the film production field. This program helps enable developmentally disabled individuals to fully participate in all aspects of community living and the work force.

¹⁷ Inclusion Films, Joey Travolta, <<http://www.inclusionfilms.com>>

Many, many helpful programs, such as Brain Gym, and other sound and movement therapies, are serving to decrease the sensitivities of those who are autistic, thereby softening the blows of the world upon them.

Now to move on to a sometimes even more volatile world, that of bipolar disorder.

BIPOLAR DISORDER

My research of learning “disorders” affirmed that all of these children are extremely sensitive. They are driven away from the world, either through lack of challenge or inattentiveness to the world around them, or by more physical or extreme emotional reactions to invasive stimuli. They do not adjust easily or at all to left-brain governed linear structures and systems.

All these “learning-differences” children, in general, are oriented to the right brain, and feel and think in ways other than the usual, while also sometimes reacting with very anti-social or anti-world behaviors.

The lives of individuals with bipolar disorder, and also the lives of their family members, can be like a nightmare. These children can be extremely reactive to life in so many ways, with huge mood swings... needing love and closeness one minute to yelling and screaming at those who just hugged them...holding it together some days at school and then releasing a rampage when Mom arrives for pick up after school...so many difficult highs and lows....

I am not a doctor and do not presume to have answers that can be better than what has been already tried, **but I see a connection to what I have discussed before...amazing gifts and great sensitivity** to our world. Along with the inspiration and creativity, which has been noted also in bipolar individuals throughout history, it is almost as if bipolar individuals join other disorders in an increasing reactive responses and overwhelm to our world, and in the case of bipolar individuals, it is an extreme reaction.

On a small, related scale, I wanted to share a personal experience. After my second daughter was born, I starting experiencing extreme symptoms of PMS, premenstrual syndrome. During this time each month, small problems became enormous, creating great anxiousness and reactivity in me, and

misery for my family. This was so much so that my husband went *with* me to the doctor to find an answer! Being put on a diuretic, my heart nearly pounded out of my chest. Then I read to eliminate salt and caffeine from my diet, and in so doing, my PMS ended entirely.

Typically a calm person, it was uncharacteristic of me to feel so highly irritable and angry. This small comparison makes me wonder just how much outside stimuli, noise, chemicals, and diet are setting off physical/emotional reactions in children who are somehow geared to great sensitivity...as my sensitivities, hormonally increased, were incited by salt and caffeine.

I know that in the desperate situation with bipolar disorder, families have given their hearts entirely to trying to find answers, as in the case of Jenny McCarthy and so many others. Along with nutritional, environmental and behavioral approaches, and not knowing what else to do to help these kids, doctors have prescribed many new drugs, sometimes more than one at a time, and most untested in humans...in an attempt to see improvement and to offset new side effects.

After watching the Frontline program, *The Medicated Child*, about bipolar disorder, I googled Childhood Bipolar Disorder,¹⁸ and at the very first site found, from the Child and Adolescent Bipolar Foundation:

The family trees of many children who develop early-onset bipolar disorder include individuals who suffered from substance abuse and/or mood disorders, often undiagnosed. Also among their relatives are found highly accomplished, creative, and extremely successful individuals in business, politics, and the arts.

The creativity evokes, again, the consideration of right brain connection. Also again, the mood swings could be no left-brain filtering of experience, and heightened sensitivities to stimuli and chemicals, resulting in confusion, disorientation and reactivity. **Substance abuse, with any of these disorders, can be a type of self-medication, which can calm a person down, afford them escape, and sometimes increase focus.**

¹⁸ Child and Adolescent Bipolar Foundation, <http://www.bplids.org/>

From this same internet writing, there is reference, as with the other “disorders,” to the great creative ability in bipolar people throughout history:

Historical Perspective:

Bipolar disorder has left its mark on history. Many famous and accomplished people had symptoms of the illness, including: Abraham Lincoln, Winston Churchill, Theodore Roosevelt, Goethe, Balzac, Handel, Schumann, Berlioz, Tolstoy, Virginia Woolf, Hemmingway, Robert Lowell, and Anne Sexton.

The biographies of Beethoven, Newton, and Dickens, in particular, reveal severe and debilitating recurrent mood swings beginning in childhood.

Again, I draw no conclusions but am just noting these similarities in sensitivities and gifted qualities that characterize the learning and life differences I have previously discussed for all these individuals.

The program about bipolar children mentioned above, *The Medicated Child* followed several children from the onset of the problem and over several years with behavioral and medication approaches. Many of the children had been on 7 to 10 different new drugs throughout their treatment histories. At the end of the program, it was shown that Jacob, a boy they started following at age 2, was turning to meditation and yoga at about the age of 16 in an attempt by him and his parents to find solutions other than the many medications, sometimes multiple at a time, that had been prescribed for him.

Seeing the more severe reactions of autistic and bipolar individuals, we'll now look at the concurring information regarding nonverbal learning disorder and dyslexia, which, once again, exhibit symptoms at the milder end of the learning differences spectrum. I bring these up now because the description of nonverbal learning disorder generally summarizes again the *broad* span of learning-different characteristics I have described, and the discussion about dyslexia leads us forward to the question of what is to be done.

NONVERBAL LEARNING DISORDER

Children with nonverbal learning disorder evidence the common nonverbal tendencies of which I have spoken in the beginning of this paper, and the paragraph below summarizes the wide spectrum of the milder to near autistic symptoms discussed throughout this work. From the article, *Non-Verbal Learning Disabilities: A Distinct Group Within Our Population*,¹⁹ by Tom Humphries:

Widespread academic difficulties in the language arts, including problems in reading, spelling, and written composition, are commonly associated with this profile because the individual lacks the verbal strengths to succeed in these areas... Their inability to integrate and interpret information both socially and academically can result in poor organization and make it difficult for them to remain attentive when trying to do tasks that they do not fully understand. They can be misidentified as a primary behavior problem, or, due to their tendency to cling to the familiar and routine as a way of coping with becoming overloaded with information, they may erroneously be seen as slower in their overall functioning.

DYSLEXIA

An interview with Stephen J. Cannell,²⁰ famous TV screenwriter and author states:

Despite my obvious weaknesses, I view dyslexia as a gift, not a curse. Most dyslexics are good at right brain, abstract thought and that's what writing is. You're starting with nothing and coming up with something all on your own that didn't exist before. That's my strong suit.

¹⁹ Tom Humphries, PhD, "Non-Verbal Learning Disabilities: A Distinct Group Within Our Population, CPsych, Autumn 1993, 24 Jan. 2011

<http://www.nldontheweb.org/nldentrylevelreading/nldadistinctgroup.html>

²⁰"Interview with Stephen J. Cannell," Dyslexia E-Newsletter for Bright Solutions for Dyslexia, Fall 2007 <http://www.brightsolutions.us>

The real fear that I have for dyslexic people is not that they have to struggle with jumbled input or that they can't spell, but that they will quit on themselves before they get out of school. Parents have to create victories wherever they can, whether it's music, sports or art. You want your dyslexic child to be able to say: "Yeah, reading's hard. But I have these other things that I can do."

In an interview on the site, Cannell explains that Einstein was so dyslexic that he had his front door painted red so that he could find his home as he drove up and down the streets.

Cannell also relates that he himself flunked three different grades early on, but finally graduated with a 2.0 from the University of Oregon. He feels that he made it through school because of his good people skills, being a high school football champ, which boosted his self esteem, and because of the tremendous support from a creative writing teacher in college who saw Cannell's incredible writing talent despite his phonetic spelling. Cannell also found several coping skills, one of which was to sign up for 20 units of classes each college semester, ask the teachers how important spelling was in their class, and then to keep only the classes where his phonetic spelling was not a problem.

So now this reference to Cannell's fear that dyslexics will give up on themselves leads us right into the topic "How DO we support all these children?"

HOW DO WE GIVE SUPPORT IN GENERAL

We are seeing a huge increase in the number of sensitive individuals with a right brain orientation. Just as it didn't work when society tried to change left-handed kids to right, I do not believe that we are meant to "flip" these children to a left brained outlook. They need to be recognized for the gifts inherent in their orientation and supported in the acquisition of any appropriate left brain skills to bring their talents into this world. Again, the qualities inherent to the right brain that I am seeing are: empathy, connection, and inspiration from a non-linear realm.

We are being invited by nature to solve this mystery of an incredibly sensitive generation of kids, geared away mentally or physically from the world (some reacting to it), and attuned more to the right brain. They find there, and express, deep empathy and connection to people, and understandings not typical of their age. Their sensitivities also lead me to mention again their increasing allergic reactions to nuts, wheat, and milk, as well as their possible genetic pre-dispositions opposed to metals, chemical additives, etc., in the environment.

SUPPORTIVE MEASURES WE CAN TAKE

- 1) Awareness of the non-linear orientation of these children in our schools can help bring forth experience-based and open-ended type lessons, where discovery and insight are part of the learning environment. The Waldorf schools and many others have philosophies that honor the development of the whole individual. They encourage open-ended questioning, investigation, inspiration, even movement and outdoor experiences, with the results then shaped and formed by the artful application of left-brain skills. This is a return to balance in our lives, of how we use both our left and right brain abilities.

This balance referred to in “Unplugged Schools,”²¹ by Lowell Monke:

From the seventeenth century through the first half of the twentieth, schools were places children went to gain entry into the world of symbols. The abstract character of the texts and numbers found in schools complemented the intensely physical character of life outside. Rarely, however, was it allowed to supersede it. Those children who spent an inordinate amount of time in the world of abstractions were typically chastised for being “bookworms” and pushed outside to get some fresh air.

We need to return this balance to our public schools, which, in recent years, have been forced to increase the left-brain focus due to the performance demands of No Child Left Behind (and now, in 2010 and 11, Race to the

²¹ Lowell Monke, “Unplugged Schools,” Orion Magazine, Sept./Oct. 2007

Top). Left brain skills for forming and shaping knowledge are important, and can be taught with patience, along with positive re-enforcement for the gifts of these children. When lessons allow children to draw from their inspirations, talents and ability to find answers and create, excitement fuels a momentum and desire to learn left-brain skills that help to shape creations into products which others can appreciate.

2) Until this emergent right-brained orientation is seen more clearly by the educational system, we need to help these kids do their best to succeed or just get through until they can find a freer arena in which to create. As I have seen, and as Stephen Cannell further attested in helping his own children succeed, this may mean lots of tutors, tons of parent/teacher support, any helpful therapy, such as the ABA therapy with autism, and a de-emphasis on the “all-important” grades and test scores. It happens all too often, in fact most of the time, that these children are entirely overlooked as to who they really are, in the attempt to have them fit the norm.

Let me say again here, that many right brain oriented individuals can and do adapt or flip and become good or even very good students, often energized by their innate passion that comes from their inspiration. This can happen with an effective teacher, and/or by the support of two or three concerned people in the individual’s life. On the other hand, this can also happen for stronger and more detrimental “survival” reasons, such as driving oneself, or competing with others to get much needed acceptance and attention.

It often happens, however, that many of these individuals, changed to the left brain orientation, end up continuing our world’s emphasis on a left-brain perspective and modes of interaction and action, alienated from their own right brain talents. Further, although some kids can and do flip, many others are unable to make the switch even after great encouragement or prodding, and throughout their lives consider this a great failure and character flaw.

3) To support right-brain oriented kids, we need to allow them to explore their realms of interest, or in autism, their seeming “fixation.” A student was “mainstreamed” into my class from a Special Ed. classroom during the afternoons, three days a week. Right off we learned of his love for animals, and he boldly stated he could communicate with them. This young man

focused on and knew everything about animals, and was hugely inspired, bringing a contagious enthusiasm for life to every child in the room each day he was with us.

Many psychologists say that kids should be diverted from their fixations. Temple Grandin sees that these fixations focus children into the genius of their gifts. She could not be dissuaded from her drive to build a squeeze machine, and thereby discovered her connection to people, and her calling, where her contributions have led to a more compassionate treatment of animals and offers us a greater understanding of gifted individuals.

4) In and outside of school, these children need the *unconditional* support and love of at least one or two significant people in their lives. Of course, the more people the better. In every case of success which I have experienced while teaching, or read about, this was a huge part of a successful outcome.

5) These children's diets need to be chosen carefully, selecting wholesome, unadulterated foods as much as possible, along with considering special non-dairy or non-wheat diets if these or other approaches might help with troublesome symptoms.

6) Serotonin may play an important role in the picture as well. Temple Grandin wrote that being on a mild dose of an anti-depressant seemed to help her get through. Many individuals I know with these syndromes, ADD, ADHD, Asperger's, are on an anti-depressant. Some anti-depressants act to increase or regulate levels of serotonin. There are additional methods of increasing serotonin, which could be tried in place of or in addition to perhaps smaller doses of medication.

Serotonin is a wellbeing chemical, and right brain activities, such as being in nature, feeling loved and being accepted, having a sense of connection and community, having pets, enjoying art and music, being physically active, and doing meditation and yoga, all promote the production of serotonin.

7) Expose these children to large amounts of unstructured time, returning to them the opportunity to discover basic wonders, beauties and principles on their own, with their own eyes, ears, body and mind.

Richard Louv, the author of *Last Child in the Woods*, states that being connected to nature, much of the time, helped calm and support his daughter with dyslexia. His book is filled with chapters related to the benefits that nature offers: “Why the Young (And the Rest of Us) Need Nature,” and “The Genius of Childhood: How Nature Nurtures Creativity.” He discusses ADHD, Natural School Reform, and “Re-Enchanting the City.”

8) Limit/modify these kids’ exposure to poor television and mind/heart damaging video games or internet activities, finding instead those programs/activities that are supportive of health, stability, and social and heart-felt learning for these children. (One 22-year-old with Asperger’s syndrome still watched Mr. Roger’s because, “The world would be crazier without him...he trusts us and the fact that we are different”).

9) Carefully consider medical procedures, and monitor effects of these and any medication that may be used in addition to alternative, more natural ways to manage difficult symptoms.

10) Parents should free themselves and their child by realizing that their child is meant to be different. Accept behaviors that may be different or out-of-the-box, if they are also health-supportive. This does not mean set no boundaries for the child, because boundaries give shape to their positive identity, ensure physical safety, and create a sense of stability.

11) Be in harmony with, or “go with the flow” of your child, as much as possible, for I have a deep conviction that by valuing and accepting these children for who they are, with their sensitivities and great gifts, we will be transformed ourselves into being less left-brain driven and more heart connected.

Lexi is a wonderful teenage girl with autism, seen in the HBO program *Autism, the Musical*. Lexi would respond in copy style when in an oral conversation, but could compose her *own* original answers with a word board, and could sing beautifully with no language hesitations.

Lexi’s mom, at first stressed, confused and depressed by the huge challenges of Lexi’s autism, became a highly accepting and supportive parent, joyous and grateful for Lexi’s wonderful nature. Speaking I’m sure for so many of the desperate parents who have devoted their lives to helping their special needs child, she says:

Autism is considered a disease...and nothing will happen that is positive, until these humans are valued by others for the beautiful people they are and the gifts they have. I cannot make them respect Lexi and love her. *Living with Lexi has had a strong effect on who I have become.*

Listening recently to a panel of three adult males from a San Francisco Bay Area organization called AASCEND (Autism, Asperger's Coalition for Education, Networking and Development), with two of the men having autism, and one Asperger's syndrome, I was once again struck by an important familiar comment, made at the end by one of these participants.

Greg Yates is a man with autism, perhaps in his 40's, a graduate of MIT...who, despite his high intelligence, struggled through his childhood as a head banger and toe walker, with other autistic characteristics. These things incited bullying by others, and therefore, a self-chosen isolation for Greg. Miseries accompanied Greg into his twenties, when, at times, he wanted to commit suicide.

It was at this time that Greg found and chose ways to cope: always traveling with ear plugs; using Irlen lenses for help with reading and focusing; joining socially structured programs such as Al-Anon, and starting to do Zen meditation which: enabled him to be a "witness" to his head banging and gave him a choice not to do this, he could use as a calming, centering activity each day...but also before and as a break...during highly social engagements such as parties and meetings, and which he could enjoy as a group activity...sitting in silence with others meditating.

In addition to these, Greg goes to Zydeco dancing, a "special dance for special people," and when he found himself feeling extremely socially isolated and unhappy in a job commensurate with his MIT training, he quit and found being a handyman now makes him feel most comfortable, by working with his hands and being in peripheral communication with those who need some help with various tasks.

When asked at the end of the presentation and discussion, "What was the most help for you, Greg?", he replied, "Opened-hearted people who dealt and looked at me with an open heart."

DO THESE CHILDREN BRING CHANGE?

Truly honoring these individuals for who they are will indeed bring change. It is no longer working in our schools and our society to try to orient people solely according to our left brain approaches and expectations. Many of these younger people who have had a different orientation are now young adults, not yet having found a place in the workforce, or perhaps just beginning to do so.

Families of these sensitive, empathic, gifted individuals are seeing that their children's contributions are going to be made in a different way, and we need to allow our societies to evolve to benefit from the expression of their talents, here to balance our world.

We need to ask ourselves what new accommodations, acceptances and understandings will allow for our embrace of these giftedly-different individuals and what they can bring to our world?

Parents of many autistic, Asperger's and bipolar individuals worry how their child will make it in our society, once grown and in their 20's, 30's...or once the parents are gone. Many of these individuals may not be able to be fully independent in life on their own, but they can be supported and their talents shared if we create environments for them with coaching that keeps them scheduled and directed, if necessary and appropriate.

Group living situations in the case of Asperger's young adults, for instance, can help greatly, for they love the company of similar individuals, and resident coaches can help keep them guided. (Many of these opportunities are now surfacing in 2010, 11). This also underscores the value of a program like Joey Travolta's, training this very intelligent and sensitive generation with skills that enable them to have an expressive and self-supporting place in the world.

And, we also have to ask ourselves:

Why is this all happening? Our attention and hearts (ask those involved) are being strongly drawn in a new direction. This message is loud and clear because it is coming to us from the lives of thousands of our children and

young adults. They cannot be ignored, mistreated, or continued to be misunderstood, for seeing them from our current perspectives, is a form of abuse.

And they are also here for us. They bring talents of inspiration and giftedness for new solutions, and hearts that are tuned toward the well being of all. Our outward faced, hectic paced, goal driven and disconnected societies are being forced to turn around and look right beside each of us, to care for extraordinary children who are unable to fit the world in the old ways. And, in the process of caring and providing for the needs of these sensitive individuals, we ourselves will be changed, finding our own heart-centered qualities of connection, sensitivity and service.

How long and how fast has the change been coming?

Evidence of these symptoms of learning differences reaches back into former generations, as well as occurs, not just in the current immediate families, but also in the extended families. Increased change toward sensitive, heart/right-mindedness has been coming for quite a while and is exploding on the world scene right now.

From the Child and Adolescent Bipolar Foundation:

In every generation since World War II, there is a higher incidence and an earlier age of onset of bipolar disorder and depression. On average, children with bipolar disorder experience their first episode of illness 10 years earlier than their parents' generation did. The reason for this is unknown.

In the PBS written interview accompanying the program, *The Medicated Child*, Dr. Castellanos speaks about the role of dopamine in the brain of individuals with ADHD:

And most of the evidence converges and suggest that regions that are rich in dopamine are involved....It used to be said that

dopamine was the reward chemical—that if something was rewarding, then you would release dopamine. It turns out to be more complicated than that. It's not just whether something's going to feel good, or be rewarded; it's more if there's a possibility that something would feel good.

If ADHD kids have increased dopamine levels in the areas of the brain where these “erratic” symptoms are evidenced, it is probable that these behaviors are being encouraged with the chance that there might be success acting in these ways.

Teaching a program, designed by Jerome Bruner and others, years ago called: *Man, A Course of Study*, it was described how the juvenile baboons, who were foolhardy enough to tease a sleeping lion, were also the ones who found new places to live, new foods to eat, and whatever else that led to the survival of the species.

So, based on my own experiential knowledge about these children, as well as on my research, I believe these individuals are being guided towards their right brain in a left brain focused society. The linearity, structures and hierarchies of our left-brained predominant emphasis over the last 400 years, while bringing many advances, has also led to division, inequality and a huge sense of unease and imbalance.

It seems clear these children have an inbuilt orientation away from adapting to things as they are. Our present skewed perceptions and mindsets are not working: just take a look at the world. It is a lack of the experience of ourselves as whole and balanced that leads to the seeking of exaggerated amounts of information, food, money, and dominance, in search of something that we inherently feel that we are lacking. We ARE lacking... connection to our whole selves, and connection to others and this earth.

Many, many right brain oriented individuals, young and old also feel that *they* are lacking, for they are treated as though they are out of step or disabled in this world. We have known that they are different, but have not considered that perhaps their important differences are meant to return balance to what could be cooperative interactions, efforts, goals and visions for our lives and the world.

So, our attention is strongly being called to our children. How better could change call to us? And what might we understand? It is paradoxical to consider that a child's oversensitivity or resistance to being able to behave in "a normal way" in this world (his/her "disorder"), could be the very thing that will allow that sensitivity and orientation to lead us to a new connection to others. However, seeming paradoxical, I believe this is instead a call for a paradigm switch.

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IMPORTANT ADDENDUMS

A BEAUTIFUL NEW MOVIE ABOUT LEARNING DIFFERENCES

A great, beautiful movie dealing with learning differences came out in 2008, and was SO well done. It is an amazingly positive and supportive film, excellently made in India called "Taare Zameen Par", (*Like Stars on Earth*). It is the compelling story of a misunderstood ADD and dyslexic boy, saved by a teacher who saw his giftedness, the problem, and what was needed to support him. It applies, across the board, to what's needed for every child with a special need or a special learning difference, as well as showing symptoms that are common to so many different learning styles.

The little boy in this movie is totally immersed in the present moment, with the involvements of his mind and body caught perfectly on film. The movie does mistakenly, in my opinion, consider these children as having a disability, of course, but, most importantly, it brings out how to beautifully honor and support them. Once knowing that these children are just other-oriented, one sees in the movie, that by "reading" and responding with love to these children, it is we also who have so much to learn. What we learn about and from these children, can bring about our own transformation, liberation, and return to joy.

Available for purchase and on Netflix.

TWO QUICK REFERENCES TO THE CREATIVITY OF THE RIGHT BRAIN

Daniel Pink's bestseller: *A Whole New Mind: Why Right Brainers Will Rule the Future*, and his DVD *Living on the Right Side of the Brain*.

www.ted.com find "speakers" and then Sir Ken Robinson speaking on "Education is Killing Creativity", also his book *The Element: How Finding Your Passion Changes Everything*.

Other movies available on Netflix about heart-centered, differently oriented individuals:

Temple Grandin: Different but not Less

Like Stars on Earth excellent

The Whole Wide World (Bipolar indiv. with characteristic lack of social skills, but extremely talented and empathic. Lived, because totally supported by one indiv.)

Enchanted April one woman brings them all to love

Praying with Lior down syndrome

Regarding Henry

Dominick and Eugene

I am Sam

Jack the Bear

The Other Sister

Her Name is Sabine autistic

The Horse Boy autistic

My name is Khan Aspergers

Autism, the Musical (by HBO)

A GENERAL LISTING OF “LEARNING-DIFFERENCES”
CHARACTERISTICS...MILD TO MORE SEVERE

An Addendum follows of general characteristics of learning differences, from mild to more severe, listed as a flow in terms of the point of view of this paper.

A. Here in section A is an accounting of the characteristics that are nearly universal to all right-brain oriented individuals, and which are the major qualities of *the more mild individual learning differences: ADD, ADHD, dyslexia, nonverbal learning disorder, and mild Asperger’s syndrome*

- 1) Very **bright** individuals, with **heightened to extreme sensitivity**, evidencing as both being **highly empathic** and/or significantly **vulnerable** in regards to people, accompanied by mild to acute **sensory sensitivity** to the world around them
- 2) Very often have **no differentiating filter** to physically shut out over-stimulation, or **to take in or give back in linear form**; although very empathic to the inner state of people, lack of a filter makes it very **difficult for them to read body language** and social cues; also for most, this makes **school very difficult** due to the enormous focus on left-brain, linear approaches to learning, causing potentially both overwhelm on the one hand and boredom on the other
- 3) Also, nearly universally: **drawn to** (often passionately) or calmed by right-brain exposures or activities: **nature, music, art, literature, principles or workings of math, inherent congruities and details within a certain realm of science, drama, play, cooking, sewing, gardening (hands-on things)**
- 4) Often **poor large and small motor skills**, therefore less physically coordinated, and often poor initial handwriting (or never improved)
- 5) Often **lacking in organizational skills** (bedrooms, school desks, offices) because the orientation is rather for creating, ex.: may be **inspired to do the homework, if it is inspiring, but then forgetting to turn in the work...**the creativity of the job being done, turning it in drops out of the mind like anything routine, interpreted by the brain as boring
- 6) Nearly all being **passionate “creators”**, and, when free to be inspired, are

filled with **great drive and excitement, like,** and including, **great entrepreneurs,** whose office managers often deal with necessary, linear details

7) Connected to experience coming in as if to a satellite dish, so **information is taken in, in a whole and not a piecemeal fashion.** Understandings then come from, and are fit into, a **large picture of things.** Therefore exhibit **profound understanding** and embrace of the **deep values in life...** intuiting these themes, beyond the norm, in school studies, movies, and making **advocates** of these individuals **on the playground,** in **careers serving others,** and leading to a strong sense and **drive for social justice**

8) **Reading (and writing) may or may not be difficult for these individuals,** again, each developing differently; certainly for **dyslexics** (with phonetic and spelling differences), this presents a large challenge within educational systems, where rigid standards for form can supersede content, and for those with non-verbal learning disorder, where unfiltered information-overload and a non-linear orientation for experiencing and learning, makes reading and writing very difficult

9) **Impulsive behavior,** from more mild forms to more dramatic, can be seen nearly across the board in all these individuals, as well as **varying degrees of depression,** (? due to our societies' lifestyles producing a shortage of serotonin in the brain, which can be increased with right-brain connective experiences, like those mentioned above, or, as a friend recently commented, if one is perceptive to all that is around, how could one not be depressed?).

B. Here in section B, we move on to *more particular qualities* not so universally exhibited, but *often accompanying a form of autism, Asperger's syndrome, or bipolar "disorder"*.

10) **A more rigid need for things to stay the same,** in a particular state of understanding or physical placement, **schedules and patterns...** an unbending definition of a certain concept or relationship, the rigid need for **same placement of objects** on some table or in a drawer (this showing the **need for stability** and **some control** over what can seem a chaotic world)

11) **Resistance to getting put "in the box" of a defined, limited self,** having to abide by socially prescribed rules, preferring to be free in choice,

experience of self, expression, movement, joy, musicality... (Asperger's, bipolar?)

12) **Over-stimulation** of these extremely sensitive individuals can lead to **repetitive physical and verbal behaviors: spinning**, arm-flapping, head banging, hitting others...both the physical and the verbal repeated acts are self-induced (or environment-incited) to shut out over-stimulation and/or again create some stability and peace (autism, some Asperger's and bipolar disorder) ; frequent **verbal repetitions** of easily acquired or key phrases and songs, due to an "unexposed, film-like", replicating ability of the brain (autism, some Asperger's)

13) Sometimes **irritability, moodiness, and mild to very strong tantrums**

14) Some exhibiting **strong technical inclinations, relating more easily to systems or some body of knowledge than to people** (autism, Asperger's)

15) **Frequent TV viewing to calm** themselves in their world of familiar programs, to **integrate** some of the "**rules**" of relating, **practice reading body language**, and **be inspired by the personal growth** of individuals in the programs (Asperger's)