Annotated Bibliography

This guide to further reading is organized around questions that readers are likely to have. If your questions are specific to events or resources in Hawai'i, please go directly to the HIDA website at <u>www.dyslexia-hawaii.org</u>.

Outline

- Websites for two of the most respected professional organizations dealing with dyslexia:
 a. The International Dyslexia Association
 - b. The National Center for Learning Disabilities
- 2. General overview of dyslexia in society:
 - a. Maryanne Wolf, *Proust and the Squid: The Story and Science of the Reading Brain* (N.Y.: Harper Collins, 2007).
 - b. *Children of the Code* <u>http://www.childrenofthecode.org/</u>
- 3. Affects of dyslexia on families:
 - a. "Read me differently," a film by Sarah Entine
 - b. Dana Buchman with Charlotte Farber, *A Special Education: One Family's Journey through the Maze of Learning Disabilities* (Cambridge, MA: Perseus Books, 2006).
- 4. Skills that help dyslexic learners succeed in the long run:
 - Roberta J. Goldberg, Eleanor L. Higgins, Marshall H. Raskind, and Kenneth L. Herman, "Predictors of Success in Individuals with Learning Disabilities: A Qualitative Analysis of a 20-Year Longitudinal Study," *Learning Disabilities Research and Practice* 18 (4) (2003): 222-236.
- 5. Accounts of their struggles by dyslexic learners themselves:
 - a. Tennessee Reed, Spell Albuquerque (Oakland, CA: AK Press, 2009).
- 6. Outcomes of multisensory language instruction:
 - a. Louisa Cook Moats and Karen E. Dakin, *Basic Facts about Dyslexia and Other Reading Problems* (Baltimore, MD: The International Dyslexia Association, 2008).
- 7. Relation of dyslexia to giftedness:
 - a. Jeffrey W. Gilger and George W. Hynd, "Neurodevelopmental Variation as a Framework for Thinking about the Twice Exceptional," *Roeper Review* 30 (2008): 214-228.

1. If you are looking for up-to-date, valid and reliable information on research and public policy relating to dyslexia as well as supportive information for parents and teachers on-line:

a. The International Dyslexia Association http://www.interdys.org/

This is the website of our parent organization. The organization conducts and evaluates research and keeps up with developments in the field.

There are two levels through which people can use this website. The general public can gain access to the following information:

- Notices of upcoming conferences and events, including a large annual national conference.
- Access to "Links of Interest," a useful compendium of organizations dealing with learning disabilities, including advocacy groups, teacher training organizations, private schools, and various kinds of therapists.
- "Matrix of Multisensory Language Programs," which summarizes the most important traits of successful teaching programs and gives an overview of numerous programs that have been thoroughly analyzed using appropriate scientific research methods and lengthy application in classrooms.
- IDA Fact Sheets, "*Just the Facts*" ... Information provided by the International Dyslexia Association.

"Just the Facts" is a series of 1 - 3 page bulletins providing accessible, clearly organized, and reliable information to the non-expert. The fact sheets are divided into those for general readers, parents, educators, and adults. They are available for free on the IDA website at <u>http://www.interdys.org/FactSheets.htm</u>.

Each fact sheet is dated so that the reader can tell how up-to-date the information is. Many have suggestions for further readings. The fact sheet topics are:

GENERAL

- Definition of Dyslexia
- Dyslexia Basics
- Is My Child Dyslexic?
- Multisensory Structured Language Teaching
- Social and Emotional Problems Related to Dyslexia
- Spelling
- Understanding Dysgraphia
- Testing and Evaluation
- Attention-Deficit/Hyperactivity Disorder (AD/HD) and Dyslexia

PARENTS

- At Risk Students and the Study of a Foreign Language in School
- Why Home School a Dyslexic Child?

• Recommended Reading for Parents

EDUCATORS

- At-Risk Students and the Study of a Foreign Language in School
- The Alliance for Accreditation & Certification of Structured Language Education
- The Alliance Centers Teaching Level Courses By State
- The Alliance Centers -Therapy Level Courses By State
- Recommended Reading for Professionals

ADULTS

- Adults with Dyslexia and the Workplace
- At-Risk Students and the Study of a Foreign Language in School

Members receive access to more extensive resources:

- *Perspectives on Language and Literacy* is produced four times each year, and contains short, accessible articles on best educational practices, curriculum development, and other useful topics.
- *Annals of Dyslexia* –a peer reviewed scientific journal "dedicated to the scientific study of dyslexia and related language disabilities" (*Annals of Dyslexia* website).
- *Reading and Writing: an Interdisciplinary Journal* is an on-line peer reviewed scientific journal that connects all fields that deal with reading and writing, including "linguistics, information processing, neuropsychology, cognitive psychology, speech and hearing science and education" ("About this Journal" on their website).
- Automatic membership in your local IDA branch and access to its newsletter.
 - b. National Center for Learning Disabilities <http://www.ncld.org> is a respected not-for-profit organization addressing the needs of individuals with learning disabilities, the most common of which is dyslexia. Since dyslexia often co-occurs with other learning challenges, this is a valuable source of knowledge bringing together information on many kinds of learning differences. NCLD raises funds to generate public awareness and affect public policy about learning disabilities.

The mission of the National Center for Learning Disabilities (as stated on their website):

"The National Center for Learning Disabilities works to ensure that the nation's 15 million children, adolescents and adults with learning disabilities have every opportunity to succeed in school, work and life. NCLD provides essential information to parents, professionals and individuals with learning disabilities, promotes research and programs to foster effective learning and advocates for policies to protect and strengthen educational rights and opportunities."

This website has a comprehensive range of articles for parents, educators, and policy-makers. Their recent publication by Candace Cortiella, "The State of Learning Disabilities" (2009) summarizes available data on the status of children, teenagers, and adults with learning disabilities in the United States. There are numerous resources for parents, including:

- Parent and advocacy guides
- LD checklist of signs and symptoms
- Talks by scientists and educators

You can sign up for their free monthly email newsletters:

- "LD News," which provides links to current research and publications in scientifically valid sources as well as updates on governmental policies and debates concerning LD education. One issue, for example, directs readers to these research reports:
 - "Neuroscientists Map Intelligence in the Brain," in *Science Daily* www.sciencedaily.com
 - "Beginning in the Brain: Pioneering the Field of Educational Neuroscience," Harvard Graduate School of Education, Useable Knowledge
 www.uknow.gse.harvard.edu
- "RTI action network" offers updates on the educational practice called "response to intervention."
- "LD Essentials," their quarterly newsletter, offers practical information to parents, educators and others dealing with learning disabilities in their families or schools.
- "Parent News" provides timely suggestions for supporting your child's success.
- "Early Learning and Literacy" addresses early childhood educators.

• "Legislative Updates," offers regular updates on legislation affecting persons with LD. Archives for each newsletter make past issues available.

2. If you are looking for general information about the meaning and significance of dyslexia:

a. Maryanne Wolf, *Proust and the Squid: The Story and Science of the Reading Brain* (N.Y.: Harper Collins, 2007).

Professor of child development at Tufts University, Maryanne Wolf combines history, science, and pedagogy in her book on how we read. Have you ever asked yourself, when trying to understand someone's reading problems, is this "nature" or "nurture"? Environment or genetics? Wolf shows how that familiar question is the *wrong* question: our preprogrammed genetic inheritance is always interacting with our social circumstances to produce "the human brain's astonishing ability to rearrange itself" (pp. 4-5). In other words, we are born with the ability to change what we have inherited. While it is never too late to start, early intervention can save a dyslexic child from the traumatic consequences of failure in school.

Parts I and II of this book explain in layman's terms how our brains learn to read. Calling on the rapidly changing field of neuroscience, Wolf takes readers through the long process by which human beings invented writing systems, including hieroglyphics and alphabets. She inspires readers with the potentially infinite connections between reading, writing, and creativity: The act of reading fluently (not quickly, but smoothly and with understanding) gives the reader enough time to reflect on the passage, to draw inferences and predict outcomes (p. 131). The act of putting our thoughts into writing does more than merely record ideas that were already present: the act of writing stimulates and releases the thoughts themselves (p. 65).

This book will help parents of dyslexic children to understand why reading to your kids, talking with them, teaching them to rhyme, and stimulating their minds with words and ideas is crucial to their development as readers and thinkers. It will help teachers understand the utter irrelevance of the old "whole language" vs. "phonics" debates, as Wolf marshals current research to show that there is no "one size fits all" method of instruction. Wolf explains the links among five crucial areas of development: phonological (sound units), orthographic (written symbols), semantic/pragmatic (meaning), syntactic (grammar), and morphological (prefixes/roots/suffixes). Policy-makers will gain insight into the enormous fiscal and social costs of allowing fully one third of our elementary age children to fall into "the netherworld of the semiliterate," as we currently do in the U.S. (p. 136).

Wolf ends her book with reflections on the impact of virtual communications on the human brain. She suggests that the benefits of being "virtual natives," skilled in surfing the rapid presentation of massive amounts of information available on computer screeens, must be accompanied by effective development of "our children's capacity to evaluate, analyze, prioritize, and prove what lies beneath any form of information" (p. 226). By becoming "bitextual," we can hold onto the creative and expansive possibilities of reading and writing while embracing the opportunities offered by the new media. This is an important message for parents and educators who are at war with kids over computer and video games: Wolf does not disdain young people's fascination with the screen but she does want to combine the new technologies and abilities with the old.

b. Children of the Code http://www.childrenofthecode.org/

Children of the Code is an educational project including interviews, videos, resources, and guides to events. It has five major components (as stated on their website):

- 1. "A television, DVD, and web documentary series;
- 2. A college, university, and professional development DVD series;
- 3. A cross-indexed database containing videos and transcripts of our interviews with the world's leading experts in reading, dyslexia, and related fields:
- 4. A variety of professional development opportunities for educators;
- 5. A series of presentations for parents, policy makers, and the general public."

The videos are free to educators and nonprofit organizations. Go to the home page and click on "videos" to find and download them. Available videos include the following:

- "We Have a Problem" gives an overview of the reading crisis in the U.S. and its social, economic, and emotional costs.
- "Causes and Contributing Factors" includes inherited disabilities; problems in families, schools, teacher education, and society in general.
- "Readiness" factors that help or hinder a child in becoming ready to learn to read.
- "Shame" the humiliation children and adults face when they cannot read.
- "A Brief History of the Code", parts 1 and 2 some high points in the history of writing, spelling, and literacy.

To access interviews with over 100 experts in dyslexia and related subjects, go to the home page and click on "interviews." Some interviews contain videos, others have written transcripts. The experts are divided into these subject areas:

- 1. Learning sciences and educational research
- 2. Language and orthography
- 3. Policy and teaching
- 4. Advocacy

Scroll down to find a more detailed guide to the interviews.

Materials on the website are further organized under these headings: events, topics (scroll down to "dyslexia" to find interviews that are most relevant to that topic), help (where you can find instructions on navigating the website) and search (where you can search the site).

3. If you are a parent or child trying to understand how dyslexia affects your family life:

a. "Read me differently"* is an insightful film made in 2009 by Sarah Entine, an adult child in a family with multiple generations of unrecognized learning difficulties. Sarah is dyslexic; her mother and grandmother have other learning challenges that appear to involve problems with attention and organization. Told from the point of view of the child struggling to fit in to an academically high-achieving family, "Read me differently" is a poignant window onto layers of conflict and misunderstanding, as well as a hopeful example of how, with courage, families can change.

Looking back at her childhood, Sarah recalls, "I had no idea that letters had sounds." "I'm always putting the middle before the beginning," she admits wryly, knowing that her inability to express herself in a straightforward, linear fashion is a source of great frustration to her family. She recounts the haunting, degrading perception that there was something wrong with her, that nothing she did was ever good enough. "Just try," her mother would insist, as though it had not occurred to Sarah to try, when in fact Sarah had been trying her best all along and was as befuddled as everyone else about why her efforts produced so few results. Ironically, school was a safer place for Sarah than home; at school she was fortunate to have a skilled tutor who helped her crack the language code, while at home, as her mother painfully recalled, "I was trying to make you better" and overlooked Sarah's need to be loved, as she was, without "fixing." Bedtime reading with mom was a painful, humiliating ritual in which Sarah was constantly tried and found wanting. Mom thought she was helping her daughter by pushing her, when she was actually taking away a needed opportunity for affection and the simple pleasure of enjoying stories.

Sarah recalls a deafening silence in her family on the subject of learning disabilities: "I don't remember my family ever talking about it." While her parents worried about their daughter being labeled in a negative way, Sarah found the word "dyslexia" liberating: "I'm *liking* finding out those labels," she insisted. When there was no information

available for Sarah to understand her situation, then the child was left to her own devices to make sense of things, and she filled the void with her worst fears.

Some classic family dynamics are revealed in ways that many viewers will recognize. The type-A older sister, confident and successful, has to slow down to make sense of her younger sister's less fluent speech; when Sarah expresses her dissatisfactions, they come across to the sister as unjustified complaining; "just get on with it," the sister thinks, as she lets her irritation get in the way of comprehending Sarah's world. The rest of the family harbors ongoing suspicions that Sarah just isn't trying hard enough, that she could "buck up" and get things done if she just put her mind to it. Sarah's high-achieving parents have trouble recognizing themselves in their struggling daughter, leading the parents to feel guilty while the child feels resentful and alone.

The strongest segment of this film is the funny and exasperating scene in which Sarah, her mother, and her grandmother try to assemble a garment rack from a pile of parts and a cryptic instruction booklet. Earlier discussions of their difficulties in communicating seemed a bit vague, hard for the viewer to understand; in contrast, watching the three women fumble, get in each other's way, undo each other's efforts, and grow exasperated with one another, made the problems painfully clear. Yet, in the end, the garment rack stood assembled and ready for use, and perhaps that is the morale of the story: with perseverance, patience and effort, forgiveness can be achieved and wounds can heal.

*One cautionary note about this film is needed: the special education teacher states that scientists have conclusively identified a "dyslexia chromosome" that accounts for dyslexia. Many neuroscientists are doubtful that there is a single gene causing specific brain developments, but rather there are interrelationships between genetic materials, areas of the brain, and the environment that produce different combinations of outcomes. For more information, see the article by Gilger and Hynd in this annotated bibliography.

b. Dana Buchman with Charlotte Farber, A Special Education: One Family's Journey through the Maze of Learning Disabilities (Cambridge, MA: Perseus Books, 2006).

This book is the perfect companion to the film "Read me differently" (see above). While "Read me differently" is largely from the child's point of view, *A Special Education* is told primarily from the parent's perspective. It is an honest, brave, and useful book. Buchman explores her relation with her work, her partner, her daughters and her own unexamined self as she recounts their family's struggle to recognize the gifts that came with her daughter's learning differences (LD) while addressing the sometimes overwhelming problems.

The great strength of this account is the author's frank discussions of the big issues as well as the small details of life in a family in which the older daughter struggled in school while the younger one sailed through. In some ways this is not a typical family – both parents are successful professionals, living in a city with bountiful resources for LD learners, and possessing adequate funds to pay for the best private education and therapy. Yet, even with these advantages, getting an appropriate education for the LD child while maintaining a balanced family life was an

enormous challenge, and other parents will recognize their own doubts and needs in this mother's story: How do you interpret the barrage of test data? What do you do when the experts don't agree? What does it all mean? Buchman recounts the resistance she and her husband had to admitting that their beloved daughter had a serious learning problem, and the final triumph of realizing that learning differences were only one small aspect of their daughter, that she could not and should not be reduced to LD.

The parents' emotional roller coaster is exhausting: shame that their perfect-looking child was flawed by invisible problems, then guilt for feeling ashamed, followed by even greater guilt that somehow they are at fault for the LD in the first place. Overwhelming impatience that basic life tasks, from getting dressed to finding homework to cutting with scissors, take so long and are so poorly done. Confusion that one's beloved child could be so unlike oneself. A constant backdrop of anxiety, punctuated by periodic waves of pure terror, for the child's future.

The devil indeed is in the details: How do you balance a family's conversations when three of them are lightening quick with their words, while the fourth fumbles to express herself? How do you organize family activities when one child can't keep up, resentment builds all around, and it is so much easier to just give up? How do parents treat their children equally, when the younger child does so easily what the older child cannot accomplish? How can they give much deserved praise to the high-achieving child without undermining the struggling learner?

Buchman faces all these questions head-on. Her need to tell her story honestly wins over her understandable desire to put a happy face on things. She does not spare herself: she explores her own reliance on alcohol and immersion in work to compensate for the problems at home; her desire for the teachers to "fix" her daughter and send her home "cured"; her horror when a new life situation thrusts the family back into the same difficulties they thought they had already conquered; her many tactics of denial. In the end, this family grows with their daughter, everyone gaining painful but useful insights about themselves.

If there is one overwhelming lesson in this story, as in "Read me differently," it is that denial does not work. Pretending nothing is wrong is a bad strategy for everyone. Better to face the situation, find words to address it, get help to deal with it. In her afterward to her mother's book, Charlotte offers the reader this advice:

"Don't walk alone with LD. Get tested – it is so worthwhile. Everyone deserves a fair chance. Don't be afraid or embarrassed. It's the only way for a child with LD to get the education she or he needs. And, parents, remember to tell your LD kids that you love them. See the other parts of them, including the things they do well, and point them out. The deserve that." (p. 194)

Charlotte could come to this wise conclusion because her whole family did the needed work to get her there, to get all of them there. It is not an easy story to read, but in the end it is a hopeful one.

4. If you are a parent, wondering how to help your child be successful in life over the long run:

Roberta J. Goldberg, Eleanor L. Higgins, Marshall H. Raskind, and Kenneth L. Herman, "Predictors of Success in Individuals with Learning Disabilities: A Qualitative Analysis of a 20-Year Longitudinal Study," *Learning Disabilities Research and Practice* 18 (4) (2003): 222-236.

This study is very useful and encouraging for parents who already know some of the things you should be doing *now*: you read to your children, you talk with them, you listen to them, you engage them in an expansive world of thinking and doing. But what about the long run? What can you do to help them be successful, independent, resilient adults? This article was published in a professional journal, and is accordingly complex and detailed; yet it is relatively accessible for a persistent non-professional reader.

The authors from the Frostig Center in Pasadena, California, use a qualitative methodology called an ethnographic interview to gain the point of view of dyslexic adults on their lives, their successes, and their challenges. The study includes both successful and unsuccessful individuals, so we can see some of the differences between the two groups. It uses a generous definition of success, including education, employment, health, crime/substance abuse, independence, family and social relations, and overall satisfaction with life. The authors conducted extensive interviews with 41 individuals who were identified as learning disabled in childhood and attended the Frostig Center between 1968 and 1975. Twenty years later, the authors find subtle but crucial differences between those who were successful, independent adults and those who had not yet met that goal.

- All of the people interviewed were aware of their learning disabilities, but the successful ones had learned to think of their difficulties as only one aspect of themselves, not as the whole of them.
- Successful individuals were involved in their communities, taking leadership roles and reciprocating with those who had supported or mentored them. They were flexible in creating and maintain relationships, while the less successful people tended to try the same approach over and over, even if it wasn't working.
- All of the people interviewed understood themselves to persevere in the face of adversity; but the less successful ones were more rigid about their strategies while the more success ones were willing to experiment with a variety of approaches.
- All of the participants set goals for themselves, but the more successful ones set realistic goals for which they developed workable plans, while the less successful tended to be vague or grandiose.
- Everyone recognized their need for the support of family, friends, and mentors, but the less successful people became dependent on that support while the more successful sought it readily when needed, built upon it, and learned to reciprocate it. It is worth quoting at length from the study:

"A key distinction between the successful and the unsuccessful groups was that successful participants had significant others who held clear and realistic expectations of them, and who were consistent and steadfast in their function as sounding boards for reality testing. While never harsh or critical, they guided successful participants in identifying and achieving realistic goals, or changing directions if necessary. A successful adult described this process well when he reported that a mentor in the workplace helped him "switch gears" into a job that was better suited to his skills:

I guess you could say he rescued me. I was working at this place and going nowhere. Probably getting canned and I only had a couple of more months of work and he was able to take me out of the division I was in and put me back working on minicomputers. That made me very happy. He taught me a new programming language to work in and really helped me out. He's one of the reasons I own this place." (p. 229)

• Both groups experienced considerable stress from their learning disabilities. The differences appeared in how they dealt with the stress. Again, the study is worth quoting:

"The significant difference between the two groups appeared to be that the successfuls developed effective means of reducing and coping with stress, frustration, and emotional problems. To deal with LD stress, they recognized what situations triggered stress and developed effective strategies to cope with stress... including getting others to do unmanageable tasks on the job, holding in their emotions so adverse consequences would not result, changing activities periodically so stress did not build up, utilizing peer support and encouragement, planning ahead for difficult situations, keeping away from negative or critical persons, obtaining medication, working out differences with friends and family, sharing with sympathetic family members, and so on. Recognizing triggers and developing effective strategies for dealing with them aided successful participants. In contrast, unsuccessfuls reported being "blindsided" by emotional states, which then overwhelmed them. When overly stressed or emotionally wrought, they had great difficulty thinking of potential resources, both internally and externally, to help them reduce stress and regain stability."

In addition to the differences reported above, the study finds some consistent themes in the lives of most or all of the individuals studied:

- They all recognized that they would not "outgrow" their learning disability, and would continue to need services, including counseling, assistive technology, and support groups. Yet they were virtually unanimous in recalling childhood and specifically school as their most traumatic time.
- Most recognized the extraordinary support they had received from family members and were grateful for it.
- Most of the respondents reported social difficulties, including learning to trust others, meeting people, developing reciprocal relations with romantic partners, and asserting themselves with co-workers. The differences emerged in the ways that the respondents dealt with the problems. The authors conclude, "maintaining good peer relationships and keeping socially active were two effective coping mechanisms that most clearly differentiated the successful from the unsuccessful group.... One successful informant reflected about the importance of friends:

"Well they're companionship. They're somebody I can share my frustrations with. Like if I'm ever insecure about something you can use them as a sounding board... get some validation or some, you know, constructive criticism. Which is always nice. Friends are so important. It just would be nice to have more."

"In contrast, this unsuccessful informant reported a very different picture of friendships:

"I had no social life in high school or college. Lisa was my first girlfriend. I've had women I've known but not any kind of girlfriend... There were 3 or 4 guys I hung out with, but no permanency." (p. 230)

Parents and teachers who are helping young people into adulthood can find in this essay many practical insights into the needed long-term strategies dyslexic learners require.

5. If you are a teacher needing to understand your dyslexic learners:

Tennessee Reed, Spell Albuquerque (Oakland, CA: AK Press, 2009).

This book is difficult to read, but it is worth it. It is difficult for two reasons: first, because of the daunting struggle this young woman has faced to acquire an education, and second, because the prose itself makes unfamiliar demands on the reader. At the end of the book, non-dyslexic readers will have gained a personal look at the trials as well as the victories that learning disabilities have brought to the life of a talented and determined young woman. Dyslexic readers will have an inspiring example of the payoffs that perseverance and fortitude can bring.

Reed was diagnosed early in life with a speech and language disorder. She has been diagnosed with dyslexia, aphasia, dyscalculia, and Attention Deficit Hyperactivity Disorder (ADHD). She has trouble taking tests, processing information, and writing in accepted essay form. She has overcome much of her difficulty with reading comprehension, although she still prefers audio books to visual ones. She has trouble with three dimensional perception, which interferes with understanding math. She was plagued by ear infections as a child, and now copes with chronic pain from a back injury. Her fine motor skills were slow to develop, so her ability to use scissors was compromised, to the chagrin of teachers. She sometimes has problems with socially inappropriate behavior, and may talk too much, misread social cues, or laugh when others find it misplaced.

She is also a talented artist and poet who has published five books of poetry. Her education, which includes a BA from the University of California at Berkeley and an MA from Mills College, is a meditation on poorly prepared teachers, unsupportive schools, and the occasional, refreshing, even life-saving educator who sees what needs to be done and does it. Teachers would routinely disparage her, yell at her, humiliate her in front of other students, and refuse to grant the accommodations to which she is entitled by law.

Over and over Reed comments, her teachers "did not know how to deal with students like me." (p. 55)

Reed's own matter-of-fact account:

"Because I have disabilities, people make a lot of negative assumptions about me, whether they are teachers, bosses, classmates, co-workers, family, and even friends. The most common assumptions are that I am lazy, that I'm not bright, that I am trying to get something, that I'm not interested in a subject, or that I am selfish. I have gotten used to these assumptions. I used to think these assumptions were personal to me. At age thirtyone I know they were not personal to me. Assumptions are based on ignorance." (p. 3)

The first reason this book is a difficult read should be apparent: it tells a dismaying, infuriating story of school and teacher failure. The second reason, the challenging prose style, is also relevant to Reed's learning disabilities, but in a different way. Her prose is sometimes heavy. She recognizes her own tendency to summarize rather than analyze, a challenge many students share. Sometimes her ADHD is evident, as she is distracted from her story by a side theme that she pursues with equal determination. A story about medication leads her to mention her time in AmeriCorps, and without missing a beat she detours into a lengthy description of the program. A story about learning to swim results in a laborious list of every pool she has ever visited. Arguments with other children issue in painfully prolonged recitations of the details of hurt feelings.

Then, the reader turns a page, and there lies an exquisite poem, the language twirling and sailing across the page. Clearly, poetry is her strength. Reentering the labored prose, it occurred to me that the whole book should be a poem: the lists might be lyrical rather than intrusive; the detours, illuminating rather than distracting; the relentless details might provide welcome context rather than feel like a forced march.

One painful but useful insight this story offers to parents and teachers is the recurrent theme of anger. Reed is frequently angry at emotionally abusive teachers. She most often expresses her anger by withdrawing. Teachers and parents both may find insight in Reed's portrait of herself: "I unleashed my anger toward him [an impatient teacher] by not doing the work in class and by not answering his questions." (p. 57, 58) She understands her own withdrawal as an active assertion of her dignity, not a passive retreat. Reed also describes frequent conflict with other children, sometimes threatening to erupt in physical confrontations, often disrupting friendships and activities. Reed's reflections on her anger could help parents and educators to see anger as a form of communication, one that requires interpretation, rather than simply as inappropriate behavior on the part of the child.

Similarly, Reed is often the recipient of the anger of others, which she has wisely learned to interpret: "I learned that anger is a mask of other feelings like frustration, fear, hurt and jealousy." (p. 21). In her retelling of painful confrontations with inept teachers, one hears their frustration: one told her to "shut up" or she would "scream." (p. 74) The anger of teachers is often an index of their own inability to teach challenging students effectively, which in turn indicates the inadequacy of their training. Reed knows all this, but she is nonetheless exacting in her judgments of teachers who have let her down.

Reed is most successful in classes in which sympathetic and knowledgeable teachers provide clear written instructions, create assignments that have clear design and purpose, and provide useful and timely feedback. She excelled in classes where teachers willingly made the legally approved accommodations so she could tape lectures and show her knowledge in oral rather than written exams. She flourished with teachers who appreciated her unique artistic talents. One might think this would not be so much to ask of our educational system, but Reed's story suggests that these classrooms were the exceptions rather than the rule. In Reed's own poignant words:

"There seemed to be a cognitive firewall separating me from some of my fellow students and teachers. It was as though I was on an island shouting to people on the mainland, but my pleas were inaudible." (p. 176)

As a biracial child from a sophisticated intellectual family, Reed has many insights into racism in her education and its intertwining with learning disabilities. Her impressive but unsuccessful run for the Oakland Board of Education was motivated by her desire to be an advocate for minority students of all kinds. She would be good at it.

6. If you want to know what to expect from multisensory language instruction:

Louisa Cook Moats and Karen E. Dakin, *Basic Facts about Dyslexia and Other Reading Problems* (Baltimore, MD: The International Dyslexia Association, 2008).

This concise book does exactly what it promises to do in its title: it covers the basic facts about dyslexia, presenting current scientific information in readable form. The authors define dyslexia, explain how dyslexia manifests itself and how it is identified, briefly summarize its genetic components, and present the key elements of successful multisensory instruction.

The unique contribution of this little book is its presentation of the problems, needs, and learning processes of specific individuals of different ages, with different severities of dyslexia. Chapter two illustrates the discussion of dyslexia across the life cycle by showing how particular children, teenagers and adults have met reading challenges. Chapter seven follows two individuals with severe dyslexia, Emily and John, through their educational process. The authors show us what worked for Emily and John and what their parents could expect. Chapter eight explores the emotional consequences of dyslexia by looking at how several individuals faced and responded to the difficult challenges of their learning disabilities.

Moats and Dakin use these stories to show readers that much can be done to minimize the negative impact of dyslexia and allow students' talents to blossom. They remind us that children who learn how to solve problems and navigate around their learning difficulties, and who find a strength that provides them with opportunities to succeed, are far more resilient that those who do not. Further, the successful, well adjusted child has "a strong, constant, supportive relationship with at least one adult who believes in the child's worth and capabilities." (p. 78) For every parent, grandparent, and teacher who is laboring to be that person in some child's life, this book is a reminder that the struggle is worth it.

7. If you want to know about the relationship between giftedness and dyslexia:

Jeffrey W. Gilger and George W. Hynd, "Neurodevelopmental Variation as a Framework for Thinking about the Twice Exceptional," *Roeper Review* 30 (2008): 214-228.

This article by two neuroscientists is written for their professional colleagues, but a careful lay reader can understand the main points without a background in genetics. This article is useful for both teachers and family members of dyslexic learners because it connects brain research with practical approaches to teaching and learning.

Many learners who are dyslexic are also gifted, yet understanding the "twice exceptional" learner poses challenges to conventional neuroscience models. Comparing studies of learning disabilities (LD) to the famous blind men encountering different parts of an elephant, each taking his section of the pachyderm's anatomy to be the whole animal, Hilger and Hynd urge neuroscientists to view the brain as "an integrated and multifaceted organ that is more than a simple reflection of its separate parts or domain-specific symptoms." (p. 214) While other scientists have called for and proposed such models, progress has been limited by several factors, including the continued priority of a medical model of learning disabilities. If learning differences are taken to be "disorders" of the brain, rather than different kinds of orders, then the logical conclusion is to try to "fix" them rather than to see their value.

In laypersons terms, this means that, generally, dyslexia is considered bad while giftedness is considered good, so it has been difficult for us to think of them as part of one larger whole. For example, educators often speak of children as "at risk" for reading problems, but would be unlikely to say that a child is "at risk" for artistic talent, even though they are looking at the same child with the same brain. This common separation of the "good" from the "bad" has specific consequences for the twice-exceptional learner: parents and teachers who see the child's abilities - for example, remarkable spoken vocabulary, intuitive insight into human relations, artistic gifts, advanced spatial imagination, leadership skills - quickly become impatient with the child's problems. "S/he seems so smart!" they say to each other and to the child. "Why doesn't s/he try harder?"

Gilger and Hynd turn to the concept of "atypical brain development" (ABD) to get past the kind of thinking illustrated by the blind men and the elephant. "Atypical" is a less loaded term than "disorder" or "disability" because it does not suggest these brains are abnormal or undesirable, only that they are less common. The word "development" in term ABD reminds us that our brains are always works-in-progress, not static entities. ABD offers a way of thinking about people with "multiple cognitive weaknesses and strengths." (p. 223)

Gilger and Hynd do not claim that the ABD model applies to all persons with learning problems, but they do insist that we should broaden our view in order to comprehend those for whom "the learning problem shares etiology [cause] with the learning gift." (p. 218) They advocate a "whole brain" approach to studying the mix of traits that researchers and educators often separate into abilities and disabilities. They also suggest that, given the complexity and variation within the population with atypical brain development, it is less important to settle on a specific diagnosis

than to identify and address each learner's needs.

This is good news for teachers who are using the new "response to intervention" model for helping students learn to read, because that model, unless it is compromised by untrained educators or inadequate funding, assesses each student's needs, intervenes with a teaching strategy designed to address those needs, assesses the student's response, and modifies the teaching strategy as needed. It is based on comprehending and responding to the student's evolving needs, rather than settling on a name for that student's kind of learning. Gilger and Hynd conclude that this step-by-step focus on what a student has trouble with and how the student can be helped, "fits in well with the ABD model, where diagnosis is less important and the focus on symptoms is key." (p. 224) While the word "symptoms" still has an unfortunate medical connotation, Gilger and Hynd's work develops the idea of atypical brain development as a "thinking tool" to let researchers, teachers and parents understand the whole brain as it changes through time.