

So? If a school system wants its graduates to be truly literate, the first thing they must do is to ensure that their students learn to decode words automatically. If they want to very scientifically make their own decoding *tests*, they can have their computer whizzes set up a program that lists all the onsets and rimes. It can randomly produce non-words such as clig, cligging, cliggle, clickle, climple, clestonable, clision, clission, unclissionably, and preclique. This way, if a student can correctly read *clision* to rhyme with *vision*, you can be reasonably sure that he responds automatically to the -ision rime. But if the student reads *preclique* as “preck luh cue” rather than rhyming it with *pree cleek* you can be reasonably sure that he wouldn’t be able to read Angelique has a unique boutique in Mozambique.

At the moment there is no listing of all the “rimes” in any of the reference tools used by the major publishers. Why? Well, I guess I have to take the blame for that. I haven’t taken the time to pound on their doors and scream in their ears that I have such a tool, that they need such a tool, that they should buy that tool, and that they should allow me to teach them how to use that tool. *Mea culpa, mea culpa, mea maxima culpa.*

If a school system wants to really set its literacy goals by using criteria that can be measured, the AVKO Educational Research Foundation, is willing to help them do it. We can tell you exactly what has to be learned. The school system can determine when each component is to be taught, how it is to be taught, and if it’s being learned.

Chapter 24

What is dyslexia? Official definitions defined.

If it looks like a duck, walks like a duck,
it’s probably a duck.

The wrong road that the most current and expensive research on dyslexia is headed.

A Few Definitions of Dyslexia:

<p>DYSLEXIA IS: “a disorder manifested by difficulty in learning to read despite conventional instruction, adequate intelligence and sociocultural opportunity.” —World Federation of Neurology</p>	<p>Translation: <i>If a student isn’t dumb and he isn’t surrounded by people who hate schools and he goes to school and gets the “conventional instruction” (Look-see or whole language or even phonics), and he has problems reading, it must be that he is dyslexic.</i></p>
<p>Developmental dyslexia is a specific learning disability characterized by difficulty in learning to read. Some dyslexics also may have difficulty learning to write, to spell, and, sometimes, to speak or to work with numbers. We do not know for sure what causes dyslexia, but we do know that it affects children who are physically and emotionally healthy, academically capable, and</p>	<p>Translation: <i>We don’t know for sure what causes dyslexia, but the difficulty in learning to read, spell, speak, or do math (dyslexia) can affect healthy, intelligent people who attend excellent schools (nice buildings, well paid teachers, and look-see or whole language curriculum) and have a good family environment.</i></p>

<p>who come from good home environments. In fact, many dyslexics have the advantages of excellent schools, high mental ability, and parents who are well-educated and value learning.</p> <p>—U.S. Department of Health and Human Services</p>	
<p>Dyslexia is a neurologically-based, often familial, disorder which interferes with the acquisition and processing of language. Varying in degrees of severity, it is manifested by difficulties in receptive and expressive language, including phonological processing, in reading, writing, spelling, handwriting, and sometimes in arithmetic. Dyslexia is not a result of lack of motivation, sensory impairment, inadequate instructional or environmental opportunities, or other limiting conditions, but may occur together with these conditions. Although dyslexia is life-long, individuals with dyslexia frequently respond successfully to timely and</p>	<p>Translation: <i>This means dyslexia is related to the structure of the brain itself that may either be inherited or caused by brain damage.¹ The bell curve applies to dyslexics as well as all other segments of society in regards to the individual difficulties in understanding language (written, oral, and body) and in using language in speaking or writing. Dyslexia is not the result of a child not trying or not having sufficient motivation. Dyslexia is not the result of something wrong with the eyes or the ears. Dyslexia is not the result of poor teaching or poor environments. Dyslexia cannot be cured. But some dyslexics can be</i></p>

¹My dyslexia could be the result of brain damage. I suffered birth trauma, but since my son and one of my grandsons is dyslexic, it could also be genetic, or perhaps even both.

<p>appropriate intervention.</p> <p>—Definition proposed by Committee of Members Orton Dyslexia Society , Nov., 1994. Currently known as the International Dyslexia Association.</p>	<p><i>taught to read and write if they receive “proper” teaching early enough.</i></p>
<p>Dyslexia is one of several distinct learning disabilities. It is a specific language-based disorder of constitutional origin characterized by difficulties in single word decoding, usually reflecting insufficient phonological processing abilities. These difficulties in single word decoding are often unexpected in relation to age and other cognitive and academic abilities; they are not the result of generalized developmental disability or sensory impairment. Dyslexia is manifested by variable difficulty with different forms of language, often including, in addition to problems reading, a conspicuous problem with acquiring proficiency in writing and spelling.</p> <p>—Orton Dyslexia Society (Now known as the International Dyslexia Association [IDA]) Research</p>	<p><i>Translation: Much the same as the other translations.</i></p>

Committee, Nov. 1994	
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What is *my* definition of *dyslexia*? I don't bother defining dyslexia. To me, the word *dyslexia* is a word much like the word *love*. We all know what *love* is. But the more we try to define exactly what *love* is and what *love* is not, the more confused we get.

Besides, who cares what the best definition is? All I care about is that everybody should receive proper instruction in reading and writing. As far as I am concerned, *everybody* can be taught to read and write at least as well as they can speak.

But if I am pressed to give a definition of dyslexia, rather than invent one of my own, I think I would choose the one the Orton Dyslexia Society used in its brochure *dyslexia DEFINING THE PROBLEM*. The following passage is quoted directly from this pamphlet. The only exception is the clearly marked notation concerning my personal traits that are associated with dyslexia.

<p>The word dyslexia is derived from Greek: <i>dys</i> (poor or inadequate); and <i>lexis</i> (words). The English meaning is poor or inadequate language. Dyslexia is characterized by problems in expressive or receptive, oral or written language. Problems may emerge in reading, spelling, writing, speaking, or listening. Dyslexia is not a disease; it has no cure. Dyslexia describes a different kind of mind—often gifted and productive—that learns differently. Intelligence is not the problem. Dyslexics may have average to superior intelligence. An unexpected gap exists between their learning aptitude and their achievement in school. The problem is not behavioral. It is not psychological. It is not social. It is not a problem of vision; dyslexics do not “see backward.” Dyslexia results from differences in the structure and the function of the brain. Dyslexics are unique. Each has individual strengths and weaknesses. Many dyslexics are creative and have unusual talent in areas such as art, athletics, architecture, graphics, electronics, mechanics, drama, music, or engineering. Dyslexics often</p>
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<p>show special talent in areas that require visual, spatial, and motor integration. Their problems in language processing distinguish them as a group. This means that the dyslexic has problems translating language to thought (as in listening or reading) or in translating thought to language (as in writing or speaking).</p>

Characteristics That May accompany Dyslexia	Characteristics that I possess
Lack of awareness of sounds in words—sound order, rhymes, or sequence of syllables	<i>When I take tests that use nonsense words run together in normal speech patterns, I fail miserably.</i>
Difficulty decoding words—single word identification.	<i>I have no problem. My sister was a good teacher.</i>
Difficulty encoding words—spelling	<i>Again, no problem. Same reason.</i>
Poor sequencing of numbers or letters in words, when read or written, e.g.:b-d; p-q, sing-sign; left-felt; soiled-solid; 12-21.	<i>In tests using nonsense words without normal patterns such as nsoeensn, I do miserably. Transposing numbers has often created problems for me, especially dialing telephone numbers.</i>
Problems with reading comprehension	<i>No real problem. Same reason.</i>
Difficulty in expressing thoughts orally.	<i>Yes. I never know when something I know (word, fact, or name) suddenly cannot be retrieved. But I have developed many compensating verbal skills.</i>
Delayed spoken language	<i>I was the slowest in my family to talk. I had speech</i>

	<i>therapy from 1st Grade through the 4th.</i>
Imprecise or incomplete interpretation of language that is heard.	<i>I heard “mustard” for Buster and “for all intensive purposes” instead of intents and purposes. I find it difficult to hear words when sun or when I can’t see the person who is speaking.</i>
Confusion about directions in space or time (right and left, up and down, early and late, yesterday and tomorrow, months and days).	<i>In buildings or in cities where hallways or streets do not follow nice neat patterns, I’m lost. Without a watch, I have no sense of time.</i>
Confusion about right or left handedness.	<i>I bat and throw with both hands and can even write with both hands or play table tennis equally badly with both hands.</i>
Similar problems among relatives.	<i>My son and grandson exhibit many of the same symptoms. I had to teach both of them to read when the schools couldn’t.</i>
Difficulty with handwriting	<i>The only grade below an A that I received in grade school was in handwriting. Although most people consider my handwriting to be excellent, I have never achieved what would have been good enough for my Cook School teacher to</i>

	<i>be worth a grade of B.</i>
Difficulty in mathematics—often related to sequencing of steps or directionality or to the language of mathematics.	<i>As long as I had good teachers, I have had no problem. However, learning the symbols and formulas in statistics was a nightmare for me.</i>

Few dyslexics exhibit all the signs of the disorder. Their problems in language processing distinguish them as a group.

End of Quotation. *Column of italics is mine.*

Would I add any characteristics to Orton’s list? Yes. Having a logical mind and wanting to know *why* is a characteristic I have found most dyslexics to share. Most dyslexics by the time they reach high school will be able to read and spell *cat, fish, peck, and helpful*. Yet a word like *special* is liable to absolutely throw them for a loop. Why? Logic. Major premise. Words with the letter c have either a /k/ sound or a /s/ sound. “Spek-eye-al” is not a word. “Spee-sigh-AL” is not a word. All combinations of sounds and accents lead to nothing. The word *special* can’t be sounded out using what I have been **taught**. BEEP BEEP BEEP goes the logical computer. It does not compute.

Non-dyslexics generally have no problem learning this word. Logic and rules don’t interfere. Someone told them that the letters s-p-e-c-i-a-l spell special. So they learned. Maybe not the first time, but it didn’t take many repetitions for them to learn.

And I do think the problem lies in the underlying, unstated, and definitely not-admitted-to-by-our-educational-leaders assumption that schools need only ensure that students learn the names of the letters of the alphabet, write the letters somewhat legibly, surround the students with words and pretty pictures, and expose them to literature, and they’ll learn to read. That this is all that is necessary for **some** to learn to read is undoubtedly true. And it is some of

these “some” who run our schools. Their unspoken logic is: What was good enough for them to learn should be good enough for everybody else. WRONG!

What should dyslexia researchers NOT be researching?

1. Who we should blame for dyslexia? Our parents’ genes? Our schools? Our language?
2. What should we blame for dyslexia? The brain itself?

The wrong road that the most current and expensive research on dyslexia is headed is just where you might suspect it would be: Number 1 finding the blame. Among the more expensive and stupid research that is being done is being done with cadavers of known dyslexics. Researchers are carefully pickling their brains and slicing them deli-thin and comparing the dyslexic slices with brains from normal cadavers. They hope to demonstrate that there is a difference. I have no doubt they will. Big hairy deal. If the same scientists were to pickle and slice paper thin the leg muscles of paraplegics, and then compare them with paper thin slices of pickled normal human leg muscles, there will be a difference. I wonder why. Might it be that things that are used by the mind or body might differ from those that aren’t?

And if after spending millions or billions of dollars, they can determine that the fault is in the brain, so what? How does that knowledge help a single dyslexic? It doesn’t.

The same goes for the genetic research that is going on. I listened to the experts put on their dog and pony show at the 94 National Orton Dyslexia Society Conference. They think they have located the genetic marker. Wonderful. After a few more millions spent, they might be able to have a DNA test that could be used to determine if a child is predisposed to being dyslexic. Maybe even in the womb! Big

deal. Big hairy deal. Just how is that knowledge going to help a single dyslexic? Again, it isn’t.

What should dyslexia researchers be researching?

1. How and when and if we should identify dyslexics?
2. When, how, and with what materials and techniques should we use to teach dyslexics?

Treatment of dyslexia is what is important, not determining who or what is to blame. And identification and labeling of dyslexics? What is important is not stamping a scarlet D for Dumb on a student but rather helping that student. Today, millions are still being spent trying to find ways of early identification. Almost nothing is being spent on finding effective ways of treating kids who can’t read and just as importantly, getting these methods and materials into our schools. In fact, the largest and best of all organizations devoted to helping dyslexics, The International Dyslexia Association (formerly the Orton Dyslexia Society [IDA]) has as part of its credo—its disclaimer that it will NOT recommend any specific program, school, or materials.

Unless the IDA and its larger brethren, the International Reading Association, relax their seemingly logical neutral stance of not recommending anything that might work, the giants in the publishing industry have nothing to worry about. They love the status quo. They’re making money at it.

But back to identification of dyslexic. Is early identification desirable? Everybody seems to think so. But ask Dr. Eldo Bergman from Houston, Texas just how

important it was to identify his son as dyslexic when he was in kindergarten. He'll tell you that from the day he knew for sure that his second son was dyslexic, he fought to get the best schooling possible for his son. He did all the right things. He even sent his boy to a private school with class sizes limited to six. He had tutors for his son. And until his son had phonics drilled into him, he was making no gains at all. And even the phonics with the best of Orton Gillingham didn't do the trick.

Early identification of dyslexia is worthless unless effective remediation takes place.

And how much money is being spent on effective remediation? Well, just try to get grant money in this area. It's really impossible. Grants for gimmicks, yes. Grants for studies of existing programs that don't work, yes. Grants for creating new programs, no. Grants for developing materials, no. If you think I'm wrong, please, please prove it to me. Help the AVKO Foundation get some grant money! We're not proud. We'll accept federal, state, local, corporate, or foundation grants. But please don't just say we should have tried harder. If you know how to do it, do it for us. Better yet, do it for a whole nation filled with kids at risk.

One of the things we tried to do many years ago was to get all the major education organizations to jointly apply for funding. As I envisioned it, there would have been two or three competitive research and development programs going on at various major university centers, such as the Center for the Study of Reading at the University of Illinois, the Center for the Study of Teaching at Michigan State University, and the Center for Family Literacy at Indiana University. The major educational publishers would be involved. They would have everything to gain and nothing really to lose by joining in. The government and philanthropic foundations would be footing the bill. The

object, of course, would be to find the most efficient and effective ways of ensuring that all students graduate with the ability to read and write—not just the non-dyslexics. Were any organizations interested? Not one answered. Were any of the universities interested? Not one answered. But since the challenge was sent also out to thousands of other educators, I did get some replies. Most of the said about the same thing. “Good luck. You'll need it. But I don't think you can overcome the battles over turf.” They were right.

Which comes to the great Catch-22 of reading research. If it is true that “in fact, many dyslexics have the advantages of excellent schools, high mental ability, and parents who are well-educated and value learning” what's the point in trying to develop material for them? They can't learn to read.

Hogwash!

Dyslexia is as much the result of bad teaching techniques and even worse teaching materials and insane curriculum design as it is the results of various neurological dysfunctions that may be either inherited or results of trauma.

Strong words? Yes. Heresy? Yes. No self-respecting member of the International Dyslexia Association's Research Committee would agree to that. But damn it all, it's true. We can pour millions of dollars into building beautiful schools and millions more staffing them with teachers who have Ph.D.'s in Education, and security guards trained in all the martial arts, and we still won't solve the problem.

Do you remember the piece *60 Minutes* did on the Kansas City Schools? Great TV journalism. But saddening. They were spending money on all the wrong things.

Other than Cook School, the best school I ever attended had the least in terms of things physical. Flint Technical had

no gym, no library, no auditorium, no cafeteria. Yet it was by far the best high school in the city of Flint as long as it existed. In case you skipped the first part of the book, that story occurs in Chapter 4.

What did Flint Tech have?

- Good teachers,
- a good principal,
- a good curriculum,
- good students and
- good student discipline.

The order is not important. Every element has to be there. Lose one and you might end up losing all the rest.

Common Misconceptions about Dyslexia

Dyslexics see letters backwards. They see b's when they should be seeing d's. Wrong! The image on a dyslexic's retina is the same as that of anybody else's. True, it is upside down. That's normal. Every human is born seeing everything upside down. But it doesn't take long for our computer brains to take its visual sensory input and make it agree with its inner sense of reality by reversing it. You can purchase a special type of goggles that will make you see everything upside down. However, if you wear them long enough, the computer brain once again forces its data into making sense, and even with the reversing vision glasses on, you see rightside up. Of course, the moment you take these glasses off, now you're seeing upside down. But not to worry, the correct vision is fairly quickly restored.

How did this misconception come about? It came about because people working with dyslexics noticed that their students would often read *was* for *saw* and *saw* for *was*. They would write *d*'s for *b*'s and *p*'s for *g*'s or *q*'s. The misconception came about because so many people jumped to the wrong conclusion. The misreading or miswriting came about not because the visual images the dyslexics had in their mind were somehow twisted around, but because of the way the computer brain is pre-programmed to operate.

For example, let's look at four different pictures in which the positioning of the same object makes no difference as to what the object is. But the word being used to illustrate the sound of the letter and the letter itself? Hmmm.