

TLC

The LITERACY COUNCIL

Charles M. Richardson, B.S., M.S. P.E., Founder & Chairman
1 Jefferson Ferry Dr, Ste. 5152, So. Setauket, NY 11720-4724
1631-650, FAX 2899, crichardson@ieee.org, www.TLC.LI

“Citizen Advocates for Quality Education”
a 501 © 3 non-profit organization

August 29, 2003

Dr. Sally E. Shaywitz
333 Cedar St., 3089 LMP
Yale University
New Haven, CT 06510

Dear Dr. Shaywitz:

Congratulations on your new finding on “environmental influences” a source of dyslexia! This is an important breakthrough in the understanding of literacy problems facing our nation and its children.

Some of my colleagues and I have been researching a new testing tool, the Miller Word Identification Assessment (MWIA), which quantifies a kind of disability which appears to be induced by non-phonetic teaching, particularly if applied before phonic decoding skills have been learned. It may be related to your work. The enclosed article describes the MWIA and some of our results.

The MWIA gives unique insight into a student’s reading strategy, which cannot be learned via the usual word and non-word lists. We think it might be useful in selecting subjects for fMRI having extremes or freedom from, the particular environmental disability under study.

Your study may also encounter a political minefield in their implications for the effects of “whole-language” teaching on a substantial cohort of our nation’s children. I pray you will “stick to your guns” as a nation needs all the scientific power it can muster to restore is vital human communications skills. Science is being applied to development of hardware and software, but not to the “liveware.”

Best regards. Please keep up your good works.

Very Truly Yours,



Charles M. Richardson, P.E.

cc. R. Sweet, D. S.Charney, E. Miller, G. Rodgers, D. Potter

[Mr. Richardson attached the first page of the following paper by Shaywitz, et. al.
<http://www.dyslexia.com/pub/Research/shaywitz2.pdf>] (No longer available 4/2/2020)

TLC

The LITERACY COUNCIL

Charles M. Richardson, B.S., M.S. P.E., Founder & Chairman
1 Jefferson Ferry Dr, Ste. 5152, So. Setauket, NY 11720-4724
1631-650, FAX 2899, crichardson@ieee.org, www.TLC.LI

“Citizen Advocates for Quality Education”
a 501 © 3 non-profit organization

August 28, 2003

The DYSLEXIA DEBATE: NATURE, NURTURE, or BOTH?

This is written in response to, and in support of, “Neural Systems for Compensation and Persistency: Young Adult Outcome of Childhood Reading Disability,” by Sally E. Shaywitz, et. al., in the Journal of BIOLOGICAL PSYCHIATRY, 2003: 54; 25-33.

INTRODUCTION

The Spring, 2003, issue of PERSPECTIVES (International Dyslexia Association) comes down squarely on the side of nature, that is the genetic neurologic etiology of whatever the educational profession chooses to call “dyslexia,” however described defined, or quantified, Period. While there is undeniable evidence that some humans have genetically traceable neurobiological anomalies which interfere with learning reading, mathematics, etc., this is to present evidence that there are other factors which lead to measurable conditions of reading disability which relate to students’ early exposure to the printed word, consistent with the Shaywitz team finding of “memory-based rather than analytic word identification strategies.” We find some person who appear to switch back and forth between two types of memory involved, and evidence of “environmental influences” with a negative effect on reading performance.

“We” are Edward Miller of North Carolina, creator of the Miller Word Identification Assessment (MWIA), a new testing tool; this writer who has used the MWIA for circa ten years in New York; Donald Potter of Texas who began using the MWIA in 2002 (Update: as of January 2012, Mr. Potter has given over 400 MWIAs).

We are profoundly indebted to Geraldine Rodgers of New Jersey whose incisive research has linked historical findings/events with evidence for there being “two types of readers” (Appendix II) above and beyond the much bemoaned innate dyslexic who requires individual multi-sensory tutoring to acquire a useful reading skill. Our concept of three types of readers is consistent with the findings of the Shaywitz team. Though we see evidence of mixed conditions in the young adults in the Shaywitz study, such do not taint the principal findings.

We acknowledge with thanks the long-time support of Sam Blumenfeld who publicized in one of his 1993 “Education Letters” Miller’s early findings, and accompanied us on a visit to Haskins Laboratory to discuss the same with Messrs Liberman, Shankweiler, and Xu.

BACKGROUND

As for “environmental influences,” on and off for 100 years the damage from early non-phonetic teaching has been fading in and out. Studies by Oskar Messer (Germany 1903), reported by E. B. Huey in *The Psychology and Pedagogy of Reading*, (U. S., 1908), and replicated by Myrtle Sholty (Chicago, 2011) showed that there are two different types of readers, the “objective” and the “subjective,” who read accurately from word parts, and the “subjective,” who read inaccurately from whole word and by conscious context guessing. Geraldine Rodgers’ 1977-1978 oral reading research demonstrated that the two types (or mixtures of same) result from differences in the way children were initially taught to read, by “sounds” or by “meaning” (sight words), or by mixtures of the two.

In the *Encyclopedia of Education* in 1913, Dr. Henry Suzallo introduced a triangle with its corners labeled “print,” “sound,” and “meaning” to facilitate debate as to whether a reader should (or does) navigate the triangle directly from “print” to “meaning,” or the other way, from “print” through “sound” to “meaning.” Suzzallo’s triangle makes it obvious that the two routes to decoding print – by “meaning” or by “sound” – are contradictory. Therefore they cannot be used simultaneously, but only by switching back and forth, in effect, switching from clockwise to counter-clockwise on the triangle. Such flickering behavior is obviously disabling, and may be related to the left-right blood-flow observations.

A scholarly and sensitive description of environmental effects was that of Dr. Samuel T. Orton in the *Journal of Educational Psychology*, February, 1929: “The ‘Sight Reading’ Method of Teaching Reading As a Source of Reading Disability.” He observed that pupils in a town where no children were given any reading training until he or she had learned ninety words by sight” exhibited twice the rate of disabilities as those in an otherwise similar town where phonics intervention occurred as soon as sight words were engendering difficulty. He further observed “effects of this unrecognized disability upon the personality and behavior of the child . . . conduct disorders and undesirable personality reactions which . . . appear to be entirely secondary to the reading defect and which improved markedly when special training was instituted to overcome the reading disability . . . even those who make a spontaneous adjustment without special training may never gain a facility . . . commensurate with their ability in other lines.”

The issue of instructional damage (“Iatrogenic Reading Disorders”) from non-alphabetic teaching rated a few paragraphs in Dr. Hilde Mosse’s *Complete Handbook of Children’s Reading Disorders* (1980), and a one-paragraph mention in a 1993 pamphlet by the National Institute of Health. More detail added by Rodgers in *The Hidden Story*, (Author House, 1996), describing her 1977-1978 research with children in five languages.

FUNCTIONAL IMAGING DATA QUESTIONS

The exact form of the subjects’ responses were not described. I am curious as to whether they were oral or something other such as a push-button; if oral, were they graded/judged personally in real time or recorded for later evaluation?

Were the responses to the line judgment (L) task were less than 100% accurate, it is possible that subtle visual tracking or refractory problems were involved; or Scotopic Sensitivity Syndrome (a.k.a. the Irlen Effect, Irlen Institute, Long Beach, CA)?

Where our test data (to be described) record speed of word reading instead of reaction time, I found it interesting to covert the Shaywitz fMRI reaction-time to “speed of response” by taking the reaction-time reciprocals and shifting the values one decimal so that all could be plotted on the same scale with the proportion correct (accuracy) data (See Time Δ Speed conversions at the bottom of PLATE ONE, and cluster A.) All subjects are seen to be slower and less accurate on the NWR task where real decoding was involved, vis-à-vis the CAT task which used short, familiar words. Even the “non impaired” NI subjects suffered 14% in speed and 10% in accuracy vs. 11% and 15% respectively for AIR subjects and 9% and 21% for PPR subjects.

Also Figure 1 shows blood-flow activity in the inferior occipital gyrus on both sides of the brain in all subjects, suggesting all have some mix of right and left-brain activity. The article does not include information on the early reading histories of the 43 subjects. It would be interesting to know which (if any) were given systematic phonic instruction in K-1 so that their left-brain linguistic word-recognition strategies would have developed early as a basis for all reading tasks. The National Reading Panel Report (December, 2000, to be discussed) underscores the differences in ultimate reading ability depending upon the sequence of phonetic vs. non-phonetic instruction in early years of schooling.

WORD PRONUNCIATION TASKS

The (out-of-magnet) Word Pronunciation Task was described as pronunciation of high and low frequency words, with accuracy and reaction time being recorded. The data on page 29 gives accuracies but no reaction times. Even with high-frequency words, the highest accuracy recorded was 96%, which I as a tutor would deem less than satisfactory for functional 18 to 20 year olds! Four percent errors in reading scientific material would lead to frustrations. And the NI subjects dropped to 94% (six percent error) on the low-frequency words (PLATE 1, Clusters B and C). The PPR subjects seemed in real trouble, dropping 10% in relative accuracy and doubling the percentage of error from 8% o high to 17% on low frequency words.

Are the reaction time data available? Are the high- and low-frequency word lists available? These kids of data resemble what we have been measuring with the MWIA since circa 1993.

The oral reading accuracy scores are surprisingly low on “individual reading inventories” of connected oral reading, a score of 98% accuracy is normally considered to indicate the “independent” level, and 95% is considered to indicate the “instructional” level, and below 90% accuracy is considered to be at the “frustrational” level or failing. Granted that these accuracy scores were on isolated word lists than running context, where one list as of high frequency words and NI group were considered to be “successful” readers, a score of at least 98% should have been anticipated.

The details of the yearly reading performance assessments of the test cohort from the Connecticut Longitudinal Study should be carefully reviewed, since their educational history began (1983) when “whole-language” was being promoted aggressively, and 1970-1990 decades saw a lot of sagging SAT scores. Data obtained from the College Board Research Section revealed a startling comparison of 1977 vs. 1991 SAT verbal scores: Though the number of testees was about the same (one million) in both years, the number of students scoring 750 or above **DESCREASED** from 2817 in 1971 to 1226 in 1991. That’s a drop of more than 50% among our best and brightest! Whatever depressed their verbal scores is likely to have affected language skills all down the line.

THE NATIONAL READING PANEL (NRP) REPORT

Environmental influences on reading accuracy can be discovered in the NRP released in December 2000: In the final pages of the Phonics Subgroup Report, pages 2-133 through 2-138, one finds provocative data that didn’t make the Executive Summary. Question 4 (p. 2-1330) asks: “Is phonics instruction more effective ... when introduced to students not yet reading, in kindergarten or 1st grade, then when introduced above 1st after students **HAVE ALREADY BEGUN TO READ?**” [Emphasis added.] Its answer, based on large-scale test data, is that “phonics instruction proved much more effective ... [i.e.] produces the biggest impact on grown in reading when [begun] in kindergarten or 1st grade before children **HAVE LEARNED TO READ INDEPENDENTLY.**” [Emphasis added.]

The rest of the section posed the question four different ways, but all answers had a common thread: delaying the teaching of phonics until after a year or two of other [not specified] instruction **ALWAYS** degraded the long-term results! On the last page (2-138) we find: “When systematic phonics instruction is introduced to children who have already acquired a reading skill as a result of another program that does not emphasize phonics, one wonders about the impact of trying to teach ... new strategies when old tricks have already been learned. It asks if there are “sources of conflict.”

Finding of the Panel indicated that the impact of systematic phonics instruction was **MUCH REDUCED** among children who were introduced to it presumably for the first time in 2nd grade and above. The assumption that “other” instruction was usually whole-language is supported by the section’s very last sentence: “It may be that children do better when a year of systematic phonics instruction precedes a year of whole language instruction than when the reverse is the case.” That sentence leaps off the page as a grudging admission that **WL** has been a factor in thousand of depressed reading performances alluded to above. We submit that the above patterns qualify as “environmental influence.”

ENTER: THE MILLER WORD IDENTIFICATION ASSESSMENT (MWIA)

The MWIA quantifies the damage from early non-phonetic teaching. It appears that whatever is learned **FIRST** for a habit, or “reflex,” that interferes with learning the other, much as learning to drive on the right-hand side of the road embraces reflexes that interfere with trying to drive on the left.

A child coached to sound out words looks to the INNER structure of a word for pronounceable syllables (left-brain). He can practice his decoding skill to automaticity, freeing his attention to focus on comprehension. By contrast, a child taught something other than phonics strategies must depend on OUTER (holistic, right-brain) shape of a word plus whatever clue he has memorized. He frequently guesses and must constantly divide his attention between comprehension of the text and verifying each word judgment against subsequent context.

Furthermore, the evidence strongly suggests that, even when he is using the left-brain, his “sound” memories are solely of sounds of whole words and parts of whole words, and never of the sounds represented by letters or printed syllables. BECOMING A NATION OF READERS (NIE Commission on Reading, 1985) reported that most readers today do not work out unknown words by letters sounds, but by analogies of parts of one known word to parts of other known words. That research-based finding strongly supports the presumption that, when the left brain of sight-word taught children is finally utilized, it is forced to deal only with sight words and parts of sight words, and has been made incapable of dealing automatically with isolated letter and syllable sounds.

HOW THE MWIA WORKS

The MWIA measures the degree to which a person is a sound-syllable (left-brain) reader or an outline-configuration (right-brain) reader. It consists of two lists of words, the first (holistic) being essentially the 220 high-frequency words children are given as “basic sight vocabulary” (not sounded out), originally chosen through 1920’s research as words that occur most frequently in English text. The second list consists of one-syllable, phonetically regular words with no silent letters nor unusual/irregular pronunciations, but less familiar – requiring the student to decode. Comparing speed and errors of the two lists reveals how the student’s brain has been conditioned to process print – his “reflex.”

A phonetic reader handles both lists equally, sometimes reading the second list faster because the words are inherently easier. A holistic reader, however, may fly through the first list, but slows down and makes more errors on the second. Moreover, the differences can be major: Slow-downs above 50 percent and errors counts 10 times higher.

An additional testing step re-visits some of the mis-called phonetic words, asks the student to spell them aloud, and then re-try. Most times, he will say them correctly (!). Many students blurt out the correct word immediately, as soon as the examiner points to it. It must be asked, “If he has the skills to say them right, why did he mis-call them the first time when he was running on automatic? There is no biological rationale, as the sight-word list contains over two dozen that are either multi-syllabic (another, anything) or irregular (could would). The frequency difference appears to be the effect of a LEARNED behavior – the “reflex” from initial whole-word learning that undermines a person’s automatic utilization of phonics skills taught AFTER the basic sight vocabulary has been acquired. (Errors are usually “look-alikes.”)

“CONNECTING THE DOTS”

With MWIA data, we can now explain the NRP’s quandary as to why phonics delayed is less effective than when taught in K-1: The whole-language-whole-word acquired reflex is a disabling “source of conflict.” sabotaging phonetic reading. In the light of the Shaywitz Team’s research, we speculate that the non-phonetic reading engram thus established manifests as right-brain memory activity, which competes with the left-brain language analytic function.

MWIA DATA

For lack of a better term, we call the condition of affected students “Whole-Word Dyslexia” (WWD), as it seems to describe the condition accurately. Miller has tested over 1000 students in North Carolina and Florida. My data covers nearly 250 persons including adults in drug rehabilitation programs and teenagers in a literacy program for youth involved with the criminal-justice system. [As of 1/14/12, Don Potter has tested well over 400 students with the both levels of the MWIA.]

Because of low frustration thresholds in these populations, I elected to use MWIA’s “Level I” having only 50 words per list, and taking a mere 5 minutes to give. Despite its disarming simplicity (See Appendix I), it produces startling results, comparable to those of the “Level II” 21-word version. [I have always been puzzled as to why Mr. Richardson gave older youth and adults the Level I test. I give the Level II to third-grade students and up, unless they score very poorly on my 1987 Riverside Informal Reading Inventor. I believe I get richer results from the Level II test. Mr. Richardson’s students on Long Island must have been incredibly poor readers. Don Potter, 1/14/12].

GRAPHS

An overall perspective of the results will be found in the accompanying graphs, histograms drawn to permit comparison of both the mean values and the range of responses in the two sets of data. “Holistic” – interpret as “high-frequency words;” “Phonetic” – interpret as “low-frequency words.” Some of the distributions are quite skewed. Figure 1 shows that most readers slowed down on the Phonetic list, though a few sped up slightly; others gave up and could not finish. Figure 2 shows nearly all made more errors on the Phonetic list. Figure 3 shows that comprehension is negatively affected by decoding errors. Every student is administered the Passage Comprehension Subtest of the Woodcock Reading Mastery Test, Form B at the same session.

LONG-TERM EFFECTS

As a separate project, in 1993 I tested (with MWIA Level II) a major fraction of the seniors in an upper-middle-class Long Island high school, and compared the errors’ count to their verbal SAT scores. The correlation coefficient was a minus 0.61, higher error counts related to lower SAT scores. From the district’s (retired) reading coordinator, I learned that their reading program had been Macmillan-R, a whole-language series.

The test candidates were divided into two groups: Group A were students whose verbal scores were higher than their (math score-100) (N=13; Group B were students whose verbal scores below the (math-100) point (N=25).

On average Group B made slightly more than 3 times as many errors as Group A on both lists, and their speeds were about 20% lower overall. But Group B were no dummies: Their average SAT math scores were 611 compared with 548 for Group A!

Comparing the above with Shaywitz Team data, Group B appears as PPR, but their math scores suggest that their IQ's were likely average or above, rather than below. That work was done ten years ago, and the patterns of speed and accuracy need to be reviewed in the light of the Shaywitz Team findings.

REMEDIES

MWIA findings lead to remedies: Prevention of course is the best remedy. But once a student has acquired any amount of WWD, the next best is some way to temporarily remove those ubiquitous 220 sight words from his reading environment, as repeated exposure keeps reinforcing the wrong behaviors. Ed Miller devised a "Sight-Word Eliminator" (SWE) by modifying a popular American novel, blacking out those 220 wherever they occurred. A sample page is enclosed. After a word-guessing student has been tutored in decoding skills, he gets to practice with the SWE where he has to decode every word – simple behavior modification. Miller has remediated nearly 110 elementary students, some in groups, some individually, most being substantially cured in a few weeks of regular practice. Specific results are being documents. [Here is a link to Mr. Miller's 2004 report: <http://donpotter.net/pdf/miller-rtc-update.pdf>

OTHER, UNEXPECTED FINDINGS

MWIA data also helps explain questions arising from studies on inner-city populations of academic gains related to voucher-transfers from public to non-public school, questions those research teams cannot yet answer. Unexpected, but very consistent, are findings that slow-downs and error counts for African-Americans with WWD are roughly twice as severe as those for Caucasians. The phenomenon was discovered by Miller in North Carolina, and persists in my NY test data: My data shows mean phonetic errors for Caucasians were 8.2, vs. 16.1 for African-Americans; mean percentage slow-downs for Caucasians were 17.5% vs. 36.3% for African-Americans.

The team of Howell, Wolf, Peterson, and Campbell is at a loss to explain why African-American children who obtained voucher transfers made significantly higher gains than other ethnicities. Their initial report (September 2000) was described in EDUCATION WEEK, 2/7/01, "In Defenses of Our Voucher Research," re-visited in The WASHINGTON TIMES WEEKLY, 5/13/02, as "Voucher programs raise scores of inner-city blacks."

MWIA data have only highlighted what anyone might have decoded from careful examination of schools where African-Americans children do well as compared with those where they do less well: Private schools tend to have stronger phonics programs than do public schools. Though reasons are not yet well understood, MWIA data suggest that phonics-first teaching is more crucial for African-Americans children than for other ethnic groups.

RESEARCH NEEDED

Brain blood-flow research is needed to examine differences between behaviorally induced WWD and other kind of disabilities, which are deemed organically neurological. The MWIA can be used to identify students who are pure phonics readers: Those whose performances are equal on both lists, or slightly faster on the phonetic list, theoretically should show as pure left-brain readers.

It would be exciting to see if circulation patterns change, as a student is being SWE rehabilitated from WWD to consistent phonetic reading.

Further research might well question the benefit of reverting to whole-language after a year of phonics, to see if another piece of Miller's research is replicable: In a whole-language school, he tested 46 children twice, two years apart. Readers who were very poor on the first test improved; but many others regressed, with the students who were initially the best deteriorating the most.

ACKNOWLEDGEMENT

I thank my colleague Conrad Hasl whose superb information skills performed the data analysis and facilitated the creation of the unique histograms for reporting MWIA data.

DIRECTIONS for the *MILLER WORD IDENTIFICATION ASSESSMENT I* (MWIA I)

INTRODUCTION

The MWIA Level I is a quick way to see how a person analyzes words: By decoding (sounding-out), by sight memorization, or a mix of the two. The MWIA consists of a "Holistic" and a "Phonetic" list. You need a pen/pencil, stopwatch or equivalent, a clipboard or folder to hold your copy out of sight of the student, and a copy of the test for the student. (Use a separate copy to record each student's responses.) If the student is apprehensive about being timed, tell him this is part of some research (which it is) and that we need to see if he reads one list slower or faster than the other. Explain that he should read aloud across each line (point), and stop at the end of the first list.

TESTING

When you and your watch are ready, tell him to begin, and start your watch. Underline each word he mis-calls, but give no hint or signal; if he self-corrects, just circle the word. If possible, mark some indication of his error for later analysis. When he completes the Holistic list, stop your watch. Ask him to wait while you record the time, and reset your watch.

Repeat as above for the next list. Stop your watch; record the time.

On the PHONETIC LIST ONLY, re-visit 6 - 10 of the words he mis-called, point to each and say, "Spell this out loud while you're looking at it, then say it again." If he says it right, complete the underline into a full circle around the word. If he still says it wrong, bracket the word /thus/ to indicate that it was attempted but not successful. If he "blurts out" the correct word without spelling it, just circle the word. Enter the # of words spell-corrected and total # re-tried for the Phonetic list.

SCORING

Convert the recorded times to speeds in WPM (words-per-minute) by the formula (3000 divided by seconds). Record WPM's. The percent slow-down (SD) from the Holistic speed (HS) to the Phonetic speed (PS) is $100(PS/HS)$ subtracted from 100: $100 - 100(PS/HS) = \%SD$

% Phonic Efficiency is words corrected divided by words re-tried, expressed as a percent.

INTERPRETATION

Severity of "Whole -Word-Dyslexia" (WWD) is proportional to %SD and the rise in errors on the Phonetic list. Up to 5% SD is mild, 10-20% is moderate, >20% is severe. Up to 3 Phonetic errors is mild, 4-8 is moderate, >10 is severe. Combinations are left to the judgment of the examiner. Examine the errors: if the substituted word is a "look-alike," he's using memory instead of decoding. If he switches a vowel it's a phonetic error. If he mistakes look-alike consonants, e.g., "n" or "b" for an "h," it could signal a visual difficulty. The above are not absolutes!

This test was first published on 9/27/03 on the www.donpotter.net web site, from a copy Mr. Richardson send Donald Potter. Rudolf Flesch's 1955 phonics primer, *Why Johnny Can't Read and what you can do about it*, is readily available in an inexpensive paperback and highly effective for helping students with WWD. Hazel Loring's highly effective *Reading Made Easy for First Grade with Blend Phonics* is available for free on Donald L. Potter's website www.blendphonics.org Mr. Richardson passed away in 2008 and his TLC organization was disbanded. There is also a MWIA II, which consists of two lists of words of 210 words each to use with older students. Writing the students response over the misread word will quickly reveal that the students are reading the words by shape. Articles by Samuel L. Blumenfeld, Miss Geraldine Rodgers, Raymond Laurita, Helen Lowe, Charles Walcutt, Dr. Patrick Groff and many other experts can be read for free on Mr. Potter's website.

The Miller Word-Identification Assessment I (MWIA I)

SUMMARY SHEET

Edward Miller, 1991

Name _____ M ()/F () Age ____ Grade ____ Test Date _____

School _____ City/State _____

Level I

Holistic WPM ____ Phonetic WPM ____ Difference ____

Difference ____ / Holistic WPM ____ x 100 = ____ % of Slow-down

Holistic Errors ____ Phonetic Errors ____ Difference ____

Ratio of Phonic Errors ____ / Holistic errors ____ = ____

Phonetic Corrected ____ out of ____ attempted = ____ % Phonic Efficiency

Tested by _____
Scored by _____

K - 1 School _____ City/State/District _____

Method/Program _____

Publisher _____

Comments:

Name _____ M ()/F () Age _____ Grade _____ Test Date _____

Holistic – I Time _____ : _____ ” = (_____ Sec)\3000 = _____ WPM Err _____

Sam am and anywhere a are box be
boat could car do dark eggs eat fox
green goat good ham here house I in
if like let mouse me may not on
or rain say see so that them there
they tree train the try thank would will
with you

Phonetic – I Time _____ ’ _____ ” = (_____ Sec)\3000 = _____ WPM

Err _____ Spell-Cor _____ / _____ Phon Eff _____ % Slow-Down _____ %

Ben nip map tag job met sip mix
pad lock wig pass hot rack jet kid
pack Tom luck neck pick cut deck kick
duck fuzz mud hack sick men hunt rash
pest land tank rush mash rest tent food
bulk dust desk wax ask gulps ponds hump
lamp belt

Copyright 1991

E-MAIL SAGA OF THE DISCOVERY OF “TWO TYPES OF READERS”

By Geraldine Rodgers
March 1, 2003

Dear Don:

You had asked for information on when the two types of readers had first appeared in the literature. That will take some time to answer. Hence the following lengthy response!

About April, 1978, I typed up the final table on my 1977-1978 sabbatical research comparing American fall phonics programs to sight word programs (Mostly Code 10 to Code 2 and 3), European October and November phonics programs to sight word programs (Mostly Code 10 to Code 2 and 3), then put in greater than and less than arrows next to the scores. What I got, as you said earlier about something else, “hit me in the face.” I had an almost absolutely consistent pattern of scores. Sight words were more inaccurate, slower, had more reversals ANDHAD HIGHER READING COMPREHENSION SCORES. Naturally, I flipped about the last, but also knew I had turned up something fundamental, a clear-cut difference in types. I even got the same pattern of scores when I compared Code 3 (Houghton Mifflin) to Code 2 (Scott Foresman).

Then I honed in on those reading comprehension scores. When I looked at individual classes (instead of the total of all cases), I found that the reading comprehension scores for phonics went all over the scale – from terrible to marvelous. But the reading comprehension scores for sight words fell into a very narrow range, much higher than the worst phonics classes, but lower than the best. It was obvious that the “meaning” method was controlling reading comprehension scores, but the phonics method had absolutely no effect on them – either positive or negative.

The answer obviously was that the sight-word classes were decoding BY the meaning of the text, not by the sound of the letters. Since they were reading words by guessing them from the meaning of the text, it was impossible for their attention to wander when reading. If their attention did wander, they would simply have to stop reading. But the phonics classes did not need the context to read the words, but could read them automatically. Their attention was totally free, to pay attention to the meaning, if they wanted to, and they could have all their attention free to focus on it. But they could also read mindlessly – and then could score horribly on “reading comprehension.”

Two Open Court second grades, which I tested, were made up mixtures of two Open Court first grades, which had been shuffled, in a school in which the first-grade teachers had left in mid-year. “Experts” would expect terrible “reading comprehension” from both classes. Yet the scores were very revealing. One scored beautifully on “reading comprehension” I believe that second grade teacher was probably handing out lots of ditto exercises on “reading comprehension” so the children had been encouraged to “pay attention” when they read so that they did not get bad marks on the papers. The other second grade “bombed” the reading comprehension on my test. Yet both classes could read automatically, which the sight-word classes could not. Both phonics classes had all their attention potentially free to concentrate on “meaning”, but sight-word trained classless had their attention split – part to decoding, and only what was left over for ultimate meaning. That is why none of the sight word classes on my sabbatical research scored as high as the best phonics classless on reading comprehension.

I finished my first book, *Why Jaques, Johann and Jan CAN Read*, in August, 1979, and sent it to Harper & Row, who rejected it, even though I had an “entrée” from a retired Harper & Row executive to the same editor who had worked on Flesch’s book. My 1979 book was terrible, although it included my research results. I then wrote a summary of my research, some five pages or so, and sent to about 100 people. The only answers I got (except a nice thank-you from a European teacher) were from Rudolf Flesch, Charles Walcutt, and Siegfried Englemann.

Charles Walcutt was the first to answer, about the end of November 1979. He told me that I had turned up something “of the highest importance.” He said he would share it with his editors at Lippincott, and asked me to write the Council for Basic Education in Washington. I don’t remember clearly what that correspondence was, except that I eventually wrote them a letter (which they published!) suggesting that all sight-word books be carried by plane to the mid-Pacific and dumped. That would have been environmental pollution, though, wouldn’t it?

Rudolf Flesch was most supportive (though I am not at all sure he agreed with me about the “two types”), but he got me a hearing for the book at Prentice Hall, about January 1980, by speaking to the president – but again, no luck, and I don’t blame Prentice Hall. The book was terrible.

Siegfried Englemann had a different response. He told me that my conclusions were wrong, and in a letter, he wrote me, in January 1980. So I called him by phone. The conversation got somewhat heated, because he told me if I sent him my research data on the existence of two types of readers, that he would “shred” it.

I submitted my short paper to the *Reading Informer* of the Reading Reform Foundation, then in Scottsdale, Arizona, and it was published in the *Reading Informer* in March 1980. I did not receive even one letter as a result.

I truly thought my discovery of two types of readers was original (as Walcutt obviously thought, and as Englemann thought by telling me I was completely wrong).

But in December 1980 at the Library of Congress, while researching all the papers of W. S. Gray (the Dick and Jane Gray) had put in the bibliography to his 1917 thesis, turned up Myrtle Sholty’s 1912 paper recounting the fact that she confirmed Messmer’s finding that there are two different types of readers, and I was floored. Oskar Messmer in Germany had already found the types that I had found and had reported the in 1903 (though neither he nor Sholty said they resulted from differences in initial teaching, or that the types can be mixtures. Then probably in the spring of 1981 in the New York Public Library, I found Henry Suzzallo’s “triangle” in his 1913 *Cyclopedia of Education* article on reading, clearly showing the existence of two distinct but opposite types (clockwise vs. counterclockwise on the triangle).

In my opinion that my rediscovery of the types in 1979, and my reporting in the November 1979 paper I sent to about 100 people, was the first reference in the public literature since Sholty’s 1912 article and Suzzallo’s 1913 triangle. Gray had completely obscured the nature of Sholty’s research in his short account of it in his annotated 1917 bibliography, and it was even more obscured in Gray’s 1925 summary of all reading research to that date. As you know from my book, I think the “obscuring” was done deliberately.

Sam Blumenfeld's wonderful book, *The New Illiterates*, (published in 1973) clearly places the origin of the Scott Foresman 1930 readers in Gallaudet's 1835 or so *The Mother Primer*, establishing that what was used in the Dick and Jane readers was the same deaf-mute method. But I do not believe that Sam concluded that there are two distinct types as a result of using that method – but just that there are poor readers versus good readers as a result of it. I do not believe either Walcutt or Englemann would have made the comments that they did to me in November 1979 and January 1980 if the fact that there are two different and opposite kinds of readers (or mixtures of those kinds) had been publically known at the time, in the current literature. Therefore, I believe that I was the first to publish the fact openly in 1979, since Sholty in 1912, although Gray, Gates, et al, clearly knew it “privately.”

Gray obliquely admitted as much in his spoken comments in a Bloomfield method classroom about 1940, quoted in Mitford Mathews' *Teaching to Read, Historically Considered*, though Mathews' apparently did not pick up on what Gray was obliquely admitting, that there were distinct and opposite types.

This was a hard question to answer – when did “two types” first appear in the literature – so I am sorry if I made this answer too long!

Footnote from Charlie Richardson:

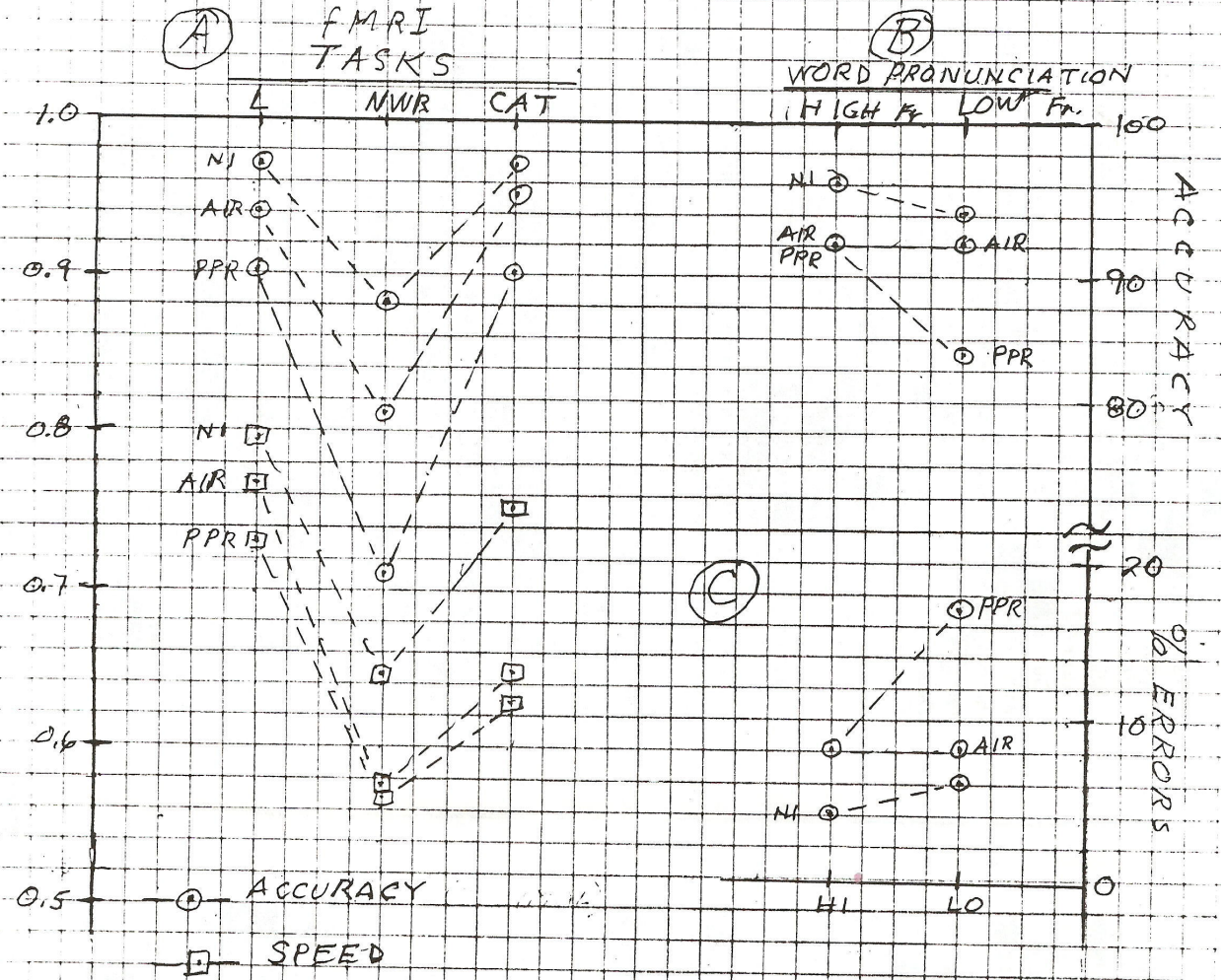
Gerry's “code” rating of reading instructional programs reflects her analysis along a scale of 1 to 10, where 1 equals pure meaning and 10 equals pure phonics.

The names “Gray and Gates” have historical significances, as William S. Gray and Arthur I. Gates (graduate students of E. L. Thorndike at Columbia) not only authored tests that still bear their names, but each was a principal author of open of the first “Dick and Jane” genre of sight-word (“meaning-emphasis”) readers launched in 1930, Gray's being published by Scott-Foresman, Gates' by Macmillan.

The confluence of evidence “privately” known to be significant by leaders of the reading profession in the early third of the last century, plus Orton's “Sight Method as a Source of Disability” article published in 1929, followed shortly by the “Dick and Jane” series in 1930, suggests questions like those raised during the Congressional hearings on the “Iran-Contra” scandal: “What did they know?” and “When did they know it?” To those questions, should be here added a third: “What did they DO with what they knew?”

C.M.R

PLATE I



REACTION TIME \rightarrow SPEED = $\frac{1}{\text{TIME}} \times 10$

	L		NWR		CAT	
	TIM	SPD	TIM	SPD	TIM	SPD
NI	.1261	.793	.1553	.644	.1333	.750
AIR	.1309	.764	.1730	.578	.1548	.646
PPR	.1369	.730	.1750	.571	.1597	.626

FROM SHAYWITZ et al

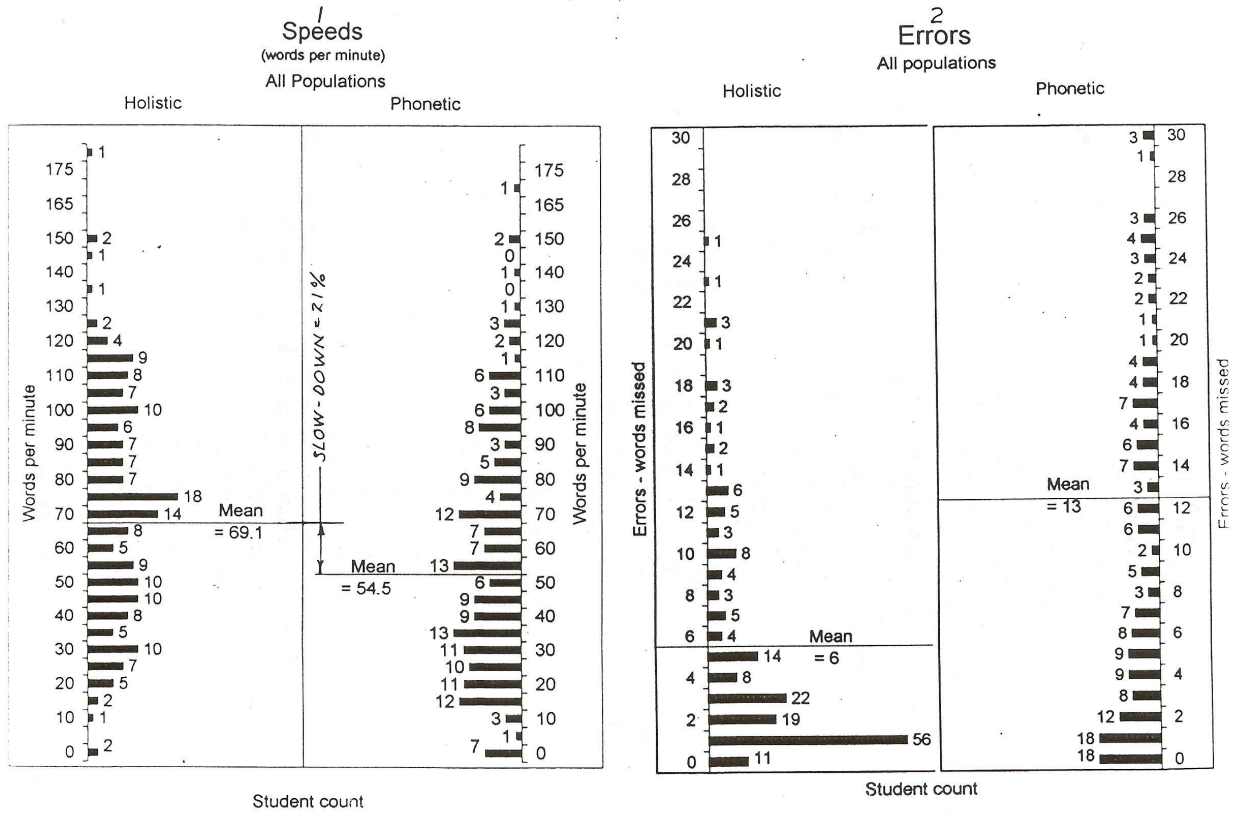
BIOL. PSYCHIATRY 2003; 54; 25-33

C. M. Richardson 8-15-2003

small ships remain anchored storm just
 home. Trapped those raging seas, Chaplain
 expected recover. Still, nothing
 give journey. Like Hakluyt, Hunt
 determined carry great commission. last could
 stand against winter storm, walked among seasick, fright-
 ened, lonely settlers, reminding calling restoring
 vision pursued.
 finally sail Virginia, winter gales headwinds
 continued cause "much dissension discontent." Many wished
 never set journey. Hunt encouraged set-
 tlers stormy Atlantic crossing. prayers words
 wisdom, convinced continue. determination endure
 hardship served example countrymen, praised
 ministry among
 landing Cape Henry, sailing James River, estab-
 lishing rough log fortress Jamestown, settlers faced
 round trials: bad weather, short supplies, unfriendly Indians, inad-
 quate rotting foodstuffs. settler's words, next months
 filled "endless cruel discomfort."
 locked behind log walls fortress, terrified natives,
 rationed "half wheat half pint wormy barley boiled
 water per day," sickness struck.
 "Scarc amongst could either goe stand; such ex-
 treame weaknes sickness oppressed settler wrote obvious
 despair. Finally, food almost gone, Captain Newport sailed
 back England, leaving 104 build permanent
 settlement Virginia keep dream alive. September 10,
 half settlers dead.
 amidst suffering settlers experienced during first
 winter Jamestown, January 1608, wooden church many
 homes settlers burned, including home Chaplain
 Hunt. Captain John Smith, reporting later fire during
 year America, wrote, "Good Master Hunt, preacher, lost
 library, given clothes back) yet none ever
 saw him repine loss."
 According early records, Hunt settlers daily wor-
 ship, preaching teaching commission Christ
 Himself given Captain Smith described worship

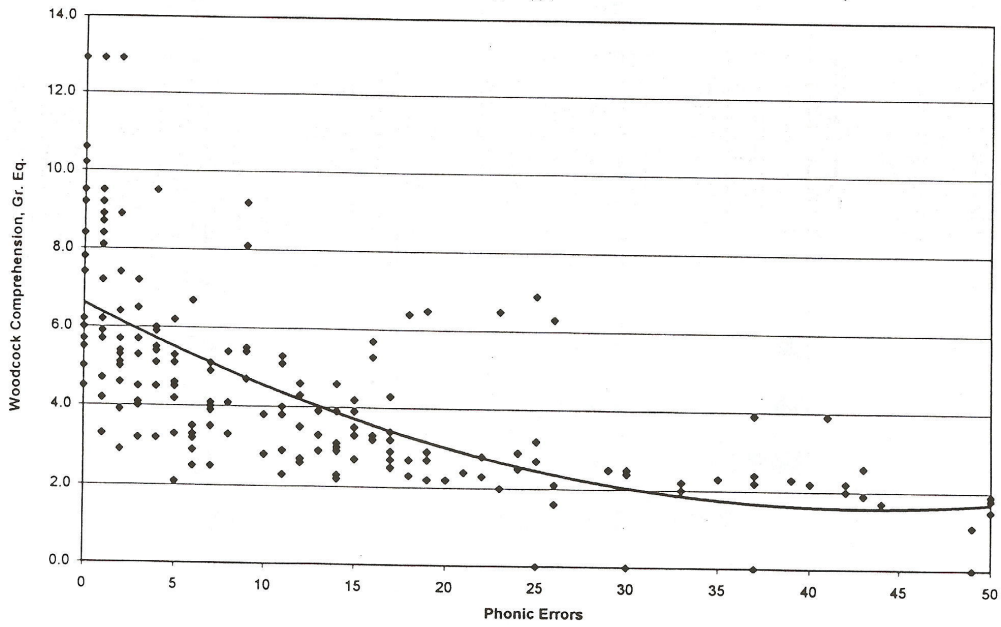
This is a page from the SIGHT-WORD ELIMINATOR devised by Ed Miller. All of the 220 high-frequency sight words have been blacked out. The student can practice the habit of DECODING EVERY word.

Jamestown words: " daily Common Prayer morning
 evening, Sunday sermons, months
 holy Communion, till minister died." Of Hunt's life among
 concluded, "Till speak never ceased utmost
 animate constantly persist."
 During winter death, Robert Hunt buried Jamestown
 with dozens men pastored long Atlantic journey
 during year America. search " gold, adven-
 ture natural resources," placard placed Cape Henry
 Department Interior puts have been sufficient motivation
 Robert Hunt through those terrible trials? don't believe
 settlers remembered reading Bible hours every
 morning walking alone woods pray. Robert Hunt,
 varying degrees sailed Cape Henry commission
 God, landing Cape Henry reminded once
 again seriously dedication determination company
 remember leave wives families build
 men volunteered "God's plantation New World."
 Hakluyt called commitment stand alone beach Cape
 Henry kneeling long voyage ended Ches-
 hastily erected cross shortly after
 handfull Cape Henry
 permanent roots soil given solemn counsel
 king began journey. James I ended charter
 prosper Virginia Company prophetic warning: " yourselves mind
 achieve good success country serve fear God
 good country every plantation Heavenly
 Giver goodness, every plantation
 Father hath planted, rooted."
 ing, rewrite history almost forgotten King James's words warn-
 wooden cross planted Cape Henry caused kneel.
 Just twenty-six years ago, Christian television station
 few miles Cape Henry. God has blessed first station
 transformed giant network. Christian Broadcasting Net-
 work same goals brought forefathers
 obey Great Commission life teachings Jesus

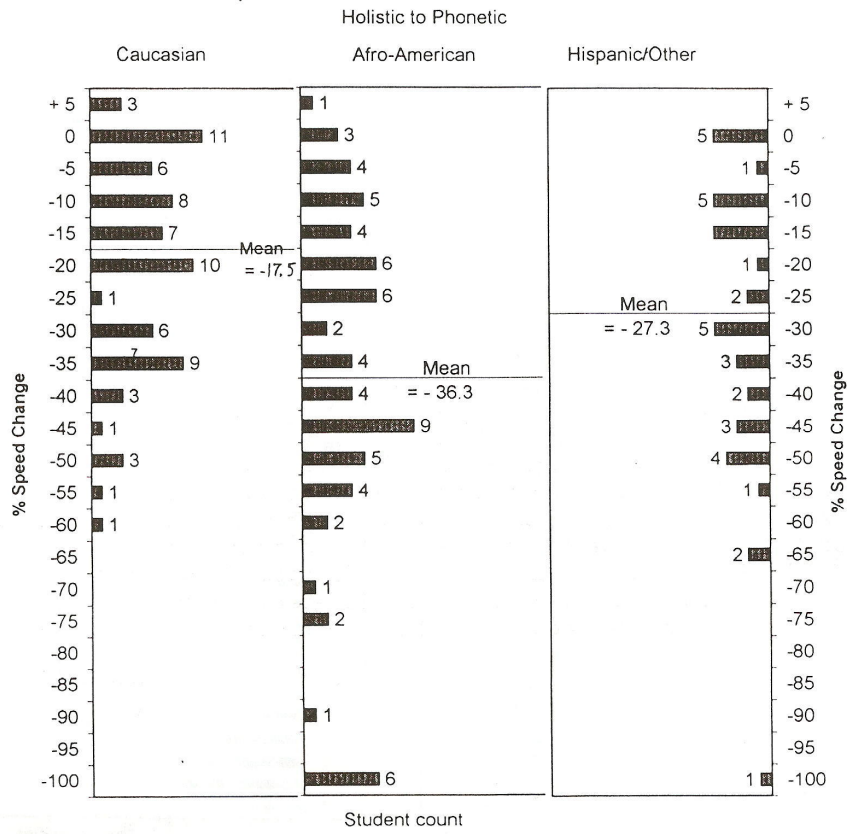


3.5 Comprehension vs. Phonic Errors

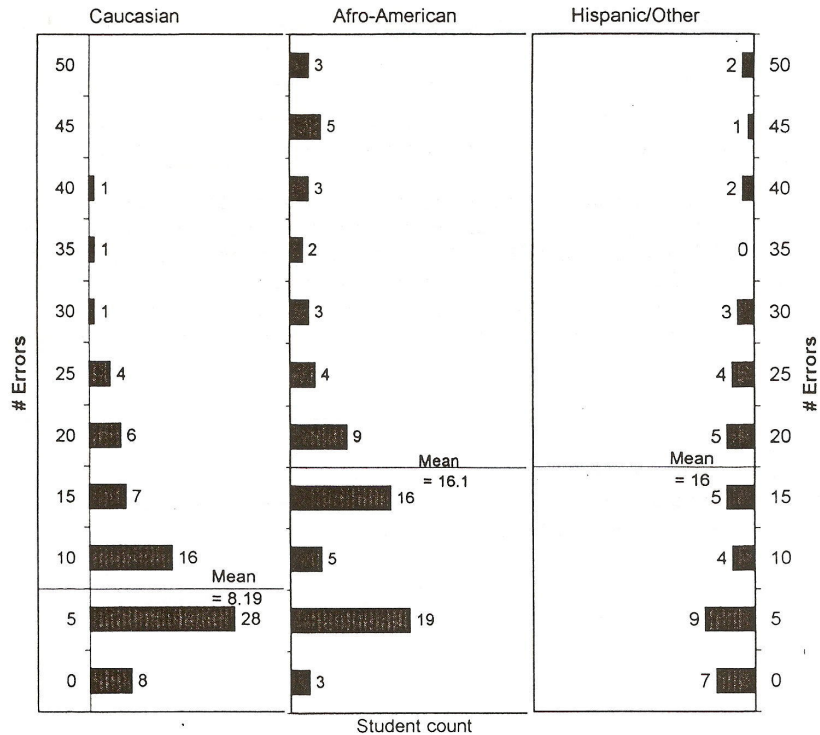
Students age 13 & over
R ~-.64



4 % Speed Change



5 Phonetic Errors



Two Types of Brain Problems Are Found to Cause Dyslexia

By BONNIE ROTHMAN MORRIS
SCIENCE TIMES, July 08, 2003, p. 5

Dyslexia appears to be caused by two distinct types of brain problems, a new study has found.

The researchers, from Yale, used scanning devices to examine the brains of 43 young adults with known reading disabilities while they performed reading tasks. Another group of 27 good readers were also studied.

All the subjects had been tracked for reading ability since elementary school. One group appeared to have what the researchers called a “predominantly genetic type” of dyslexia.

These students had gaps in the neural circuitry that the normal readers used for the basic processing of sound and language, but had learned to enlist other parts of the brain to compensate for the difficulty. They still read slowly but can comprehend what they read.

The second group had what the researchers called a “more environmentally influenced” type of dyslexia. Their brains' system for processing sound and language was intact, but they seemed to rely more on memory than on the linguistic centers of the brain for understanding what they were reading. These students had remained persistently poor readers, scoring poorly on speed as well as comprehension.

The two groups of poor readers were from similar socioeconomic backgrounds and had comparable reading skills when they began school, according to the study, which was published this month in the journal *Biological Psychiatry*.

But there were two differences: the students who compensated for their problems tended to have higher overall levels of learning abilities, and the students whose problems persisted were twice as likely to attend what the researchers called disadvantaged schools.

The study's lead author, Dr. Sally E. Shaywitz, said the discovery that the neural systems for reading are intact in the students with the most serious reading problems came as a surprise. It also implies that their problems are more correctable than may have been thought, she said.

“The persistently poor readers have a rudimentary system in place, but it's not connected well,” Dr. Shaywitz said. “They weren't able to develop and connect it right because they haven't had that early stimulation.”

A large body of research has shown that intensive tutoring can correct this kind of reading problem, especially if begun while the children's brains are still developing.

“If you can provide these children early on with effective reading instruction, these children can really learn to read,” Dr. Shaywitz said.

Note from Internet Publisher: Donald L. Potter

January 12, 2012

I received this article by Mr. Charlie Richardson in September 2003. I had been corresponding with Mr. Richardson for a year at that time. He introduced me to Geraldine Rodger's whose research and correspondences has proven very helpful to my efforts to teach children, teens, and adults to read well. Mr. Richardson had sent me a copy of Mr. Miller's Word Identification Assessment. I think it was the 2001 – 2002 school year.

At the time, I was assigned to teach fourth through sixth-grade students who had failed the TAKS reading test. I noticed that the kids would seem to make up the text as they read. They would quite often insert a word in the text that fit the context but was not the word in the text. This was back when sight-words were the rage and Whole-Language was King. I was flabbergasted to discover that all my students were "subjective" readers guessing from the meaning of the words rather than decoding from the "sounds represented by the letters."

Since the theory behind the Miller assessment was that prior sight-word instruction interfered with later phonics instruction thereby causing reading problems, I decided to look at reading instruction the kindergarten classes. Since I was not trained in early childhood, I did not have a clear idea how reading was taught in kindergarten. To my dismay, I discovered that the main thrust of the instruction was based on sight-words and Guided-Reading (a form of reading instruction in league with whole-language). This is not the place to recount the story; but when one class switched to phonics-first instruction, there was enormous improvement in student performance in reading. I corresponded daily with Mr. Richardson and Mrs. Rodgers in those days concerning the student's improvement.

Mr. Richardson mentions 220 sight-words. I assume he is referring to the Dolch Sight Vocabulary List of Service Words. Mr. Miller did not choose those words. He could have, and it might have made an even stronger test, but he did not. Instead he chose to use the words from two books that are notoriously rich in sight-words and located in virtually every children's library in America. He chose for the MWIA Level 1, the words from Dr. Seuss' *Green Eggs and Ham*. There are 50 words in that list. His boss at Random House, Bennett Serf, bet Dr. Seuss that that he could not write a book with just 50 sight-words. Dr. Seuss won the bet by writing *Green Eggs and Ham*. To create his Holistic List (sight-words), Mr. Miller simply put the 50 words in *Green Eggs and Ham* in alphabetical order and typed them in rows on his test for the children to read. Then he chose a list of 50 corresponding regular one-syllable phonics words from Rudolf Flesch's first 32 Exercises (vowel digraphs, but no VCE words, polysyllables, or words with silent letters). The MWIA Level 2 Holistic List consists of the 210 words in Dr. Seuss' *The Cat in the Hat*, which is largely composed of sight-words, but not entirely. Mr. Miller's test shows that kids read Dr. Seuss words better than less frequent phonetically regular words. Since most of the Dr. Seuss words are sight-words, the test functions as Mr. Miller intended.

I would think that a similar test constructed with 220 Dolch List words, rather than the Dr. Seuss words, would yield even more incriminating scores for artificially induced whole-word dyslexia. It is ironic that many people think that Dr. Seuss books are good for teaching children to read; when in fact, they are exactly the opposite.

One of the most important observations that Mr. Richardson made was, “...**comprehension is negatively affected by decoding errors.**” The teachers of my tutoring students all tell me that the students have comprehension problems. I find this rarely to be the case. The real problem underlying the low comprehension scores is poor decoding skills. As decoding improves through intensive phonics instruction, comprehension inevitably improves, also. The common opinion that children are suffering from comprehension problems leads to false diagnosis of the problem and to “solutions” that compound the problem. The more we ask kids to read and answer questions, the deeper their guessing habits become, creating a vicious cycle. Although it may sound counterintuitive to today’s teachers, removing students from their whole world guessing environment and teaching intensive phonics until they break the guessing habit is the shortest route to improving comprehension.

Concerning SWE and remediation: I called Mr. Edward Miller on March 10, 2003 to discuss his test and remediation procedures. He said very little about the SWE, but he did explain to me how he used Rudolf Flesch’s 72 Exercises in *Why Johnny Can’t Read and what you can do about it*. He said that he usually worked with two students at a time. He would have one student on his right and the other on his left. The one on the left would read the first two columns in the exercises, Mr. Miller would read the middle column, and the student on the right would read the last two columns. It was then that I reread Flesch’s book and carefully analyzed his phonics, its linguistic basis and pedagogical organization and sequence. My work is available on my Flesch Audio Page. I then used Flesch’s method to remediate several students just to see if his method really worked. It worked just as Flesch and Miller said it would. I have also used it to teach kindergarten students to read. It is a truly amazing program that I can unhesitatingly recommend to anyone teaching reading to students of any age with or without reading problems.

Here is an article Mr. Richardson wrote for EDUCATION NEWS:

<http://www.educationnews.org/articles/whole-language-causes-dyslexia.html>

Mrs. Rodger’s comment on *Open Court* refer to the program when it was still available in the strong *Association Method* formation, of Margaret McGinnis, Priscilla McQueen, and Ann Hughes. The current Open Court program published by SRA/McGraw-Hill is a very different program.

I have published the paper by 1912 Myrtle Sholty that Mrs. Rodgers mentions as well as the 1913 Cyclopedia of Education article on reading by Henry Suzzallo on my website. I also have extensive quotes from Samuel Blumenfeld’s 1973 *The New Illiterates* that make easily accessible the high points of Mr. Blumenfeld’s penetrating insights.

I did not copy the *National Reading Panel Report* pages that Mr. Richardson attached as a stapled attachment. He pretty well quotes word for word from the report, so there seems to be no need to included it since extra scanned pages make the document download much slower. Nor did I copy the material Charlie included on Voucher programs. The point of those papers was that at-risk students at schools with strong phonics programs do much better than schools with weak phonics programs. He used as examples the Barclay voucher school in Baltimore that uses the Calvert program.

Here is the URL to a compilation of articles by Mr. Richardson that I gathered after he passed away. I still have the e-mail he sent me saying that he was passing the “torch” to me.

http://donpotter.net/pdf/reading_charlie_richardson.pdf

In Memory of Charlie Richardson

by Robert W. Sweet,
President National Right to Read Foundation

March 13, 2008

The passing of another giant in the cause of providing reading instruction grounded in the findings of scientific research has left a huge hole in our ranks and prompts us to continue, with renewed vigor, our efforts on behalf of effective reading instruction for all children. Literacy crusader, educator, retired engineer, and founder of The Literacy Council (TLC) on Long Island, Charlie worked tirelessly for the benefit of children's literacy and for the efficiency of tax dollars spent to educate them.

Charlie had co-developed an approach designed to cut down the time it was taking to teach reading and also pick up eye and auditory problems in the process, thereby saving millions in potential Special Education costs for children who, consequently, would never know the pain and failure of trying to learn to read with unproven methods. Even just weeks before he died he was still active and very enthusiastic about the progress he was making in gaining the cooperation of the local business community on Long Island, NY, in addressing the reading needs of its students.

His work has made a monumental difference in the lives of countless children who will never know him. We are privileged to be among those who did know him, and we send our heartfelt sympathy to his two sons and their families.

Corrections:

Mr. Potter made significant corrections to this document on April 17, 2016. He has given perhaps 1,000 MWIA's over the years. There is a revised MWIA Level 1 with all Dolch List words. It appears that either the original or new form of the test will serve equally well. Mr. Potter continues to use the original form for most of his testing.