(Preliminary Manual) **The Miller Word-Identification Assessment**

Edward Miller & Donald L. Potter, 1991, 2016

(Introduction by Charlie M. Richardson)

Introduction

The purpose of the *Miller Word-Identification Assessment* (MWIA) is to discover how a person "looks at" printed words, or the extent to which he/she is reading with the whole-word memorization or a phonetic decoding strategy.

The person is asked to read two lists (called "Holistic" and "Phonetic") of words which, though different, are all easy enough that a Phonetic-decoding reader will exhibit substantially equal fluency in both lists. However, for the whole-word trained reader one list (the Holistic list) will be significantly easier, it being composed of high-frequency words found in most basal-reader school texts and in children's books such as *The Cat in the Hat* and *Green Eggs and Ham*. The drop in fluency and accuracy as the person proceeds from the Holistic List to the Phonetic list indicates the degree to which he/she has become "dyslexic," that is, having dysfunctional reading, by having learned to view words as whole pictorial configurations rather than sound-decodable syllables where sequences of letters represent the order of sounds to be pronounced. The latter process is, of course, what has historically been called "sounding-out", or "decoding," by alphabetic principles often called "phonics."

CAUTION: Although this test may lead to a student's being judged "dyslexic," it is NOT an intelligence test, NOT a psychological test, NOT a medical test. It is an *educational* test yielding insight as to how a student has learned to "look at" words in print. Since the Holistic List II contains 24 multi-syllable words and many having irregularities and/or "silent" letters, and the Phonetic list contains only one-syllable alphabetically-regular words, differences in fluency/accuracy are NOT explainable via biological factors, and must therefore be learned behaviors.

By way of background, psychiatrist Hilda Mosse (*The Complete Handbook of Children's Reading Disorders*, Riggs Institute) identified a category of "sociogenic reading disorders ... caused by .. establishment and practice of wrong reflexes." She pointed out that a "conditioned reflex" emplaced in the brain by whatever is learned *first* as a reading strategy is highly resistant to change thereafter. Similarly, teacher-researcher Geraldine Rodgers (*The Case for the Prosecution, 1981*)¹ identifies two categories of readers, "subjective" and "objective," confirming Oskar Messmer's 1903 research, described by Edmund Burke Huey in his 1908 *The Psychology and Pedagogy of Reading*. The "subjective" readers are the holistic readers who guess unfamiliar words from context and/or parts of meaning-bearing words, and have difficulty with the new material. By contrast, "objective" readers are those who have learned syllable decoding to automaticity, leaving their intellects free to concentrate on the text meaning. Thus it has been known for many years that phonics skills learned AFTER a whole-word reflex has been acquired tend NOT to be used automatically. Rodgers found similar patterns of differences in students learning to read in four other languages other than English. I observed this effect in my own practice during the 1970's, but did not understand its nature.

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¹The Hidden Story, AuthorHouse.com, 1998

Test Description

The MWIA has two levels, each being a pair of lists: Holistic I & Phonetic I; Holistic II & Phonetic II, all contained on three pages (attached), identical for both student and teacher/examiner. A first page is an optional Summary Sheet for recording student data and all test scores and analyses. The second page contains the Level I Holistic and Phonetic lists; the fourth and fifth pages contain respectively the Holistic II and Phonetic II lists. A fifth page is an optional Summary Sheet for recording student data and all test scores and analyses. The sixth and seventh pages are two version of the "Vote" article. The Level I assessment is for young or beginner-level readers. The Holistic Level I list consists of the first 50 words from the Dolch Sight Word List. The Phonetic Level I list consists of 50 phonetically regular words of one syllable taken from the first 16 Exercises in Rudolf Flesch's 1955 Why Johnny Can't Read and what you can do about it. The Holistic Level II list contains all 220 words in the Dolch Sight Word List. The Phonetic Level II words are from the first 38 Exercises in Why Johnny Can't Read.

Procedure

A. Decide whether you will start at Level I or Level II, based upon your judgment of the student. Young or low-level students might be able to do only Level I; secondary or adult students usually start at Level II. Prepare a teacher's copy of the test by writing the student's name in the spaces of the sheet you will be using. The student will be timed as he reads each list, so you will need a stopwatch or equivalent timing device. The student works from an unmarked copy of the test; it may be useful to set aside copies in (non-glare) plastic page protectors. Arrange the student comfortably seated at a desk or table with a copy of the test face down or with the first row covered. Arrange yourself where the student cannot see if, how, or when you are marking your copy. (If you are recording the test, arrange a microphone in as non-threatening a position as possible, preferably a small clip-on lavaliere microphone clipped to the front of the student's clothing.) To help the student keep his place, provide a short ruler or file card as a line guide if he seems to need it; or let him use his finger or place a light pencil mark at the beginning of each row as he starts it.

B. Say to the student: "We are going to ask you to read words from two lists. You probably know some of them already. Read all the words across in each row, then the next, and so on. Say each word carefully as you can; accuracy is the most important thing, so do not hurry even though I will be timing you. This is NOT a speed test; we just need to see how long it takes you to read the words." If he has questions, answer them as best you can; then say, "Please turn over the paper and begin." [Point wherever you are starting.]

C. Point as needed to where the student should begin. Help him align his line guide if necessary. Start your timer as the student says the first word. Listen carefully (if not taping), and <u>underline</u> on the teacher's copy each word that the student mis-calls or double-calls. (Notice if his "double-calls" are first holistic, or the reverse.) Stop your timer when he says the last word in the Holistic section. Enter the timer reading in minutes and second by the word "TIME." Reset your timer. (Writing the student's responses over the misread words can reveal valuable insights into the student's word processing strategies – suggested by Donald Potter of Odessa, TX.)

- D. Repeat C for the Phonetic List. After doing the Phonetic list, in the phonetic section only, revisiting the words (at least 5-10 if not all) that were missed/underlined, point to each in turn, and ask the student to:
 - 1. Spell the word aloud while looking at it, and then,
 - 2. Say the word again.

If he now calls the word correctly, draw a circle around it in your copy. If he still mispronounces the word, put /slashes/.

- E. If the student took more than 100 seconds on both level I lists, go no further. If he had read either list in less than 100 seconds, proceed with level II, using the same procedures as above.
- F. After giving the Phonetic II section, have the student spell and retry missed words as in D, above. Note: For a young student or one who struggled with Level II lists, it may be too much to re-try all the missed words. Revisit only enough to support the computing of a sensible correction basis, say 5 10. Record the number revisited in the second blank space after "Spell-corrected." Make the "Phonic Efficiency" computation as the number corrected divided by the number revisited, converted to a percentage.
- G. If the student read the Phonetic II list well, have him read the "Vote" article. Underline the mis-called or skipped words, and if possible indicate any substitutions or additions. Record time and errors where indicated.
- H. Tell the student he did great things even if he only followed directions!

Scoring

Count the underlined words (including circled) words in each section; write the count on the line "Err." Convert the "times" from minutes & seconds to total seconds. Convert total seconds to word-per-minute (WPM), calculating per the formula below:

For Level I (50-word) test, compute WPM by dividing total seconds into 3000: WPM = (50 X 60)/(TIME in SECONDS) = 3000/TIME; e.g., for a time of 150 seconds, the speed would be 3000 divided by 150 or 20 WPM. (Round to the nearest whole number.)

For Level II (210 word) sections, WPM is 12,600 divided by total seconds: WPM = (220 X 60)/(TIME in seconds) = 13200/TIME; e.g., for a time of 200 seconds, the speed would be 13,200 divided by 200 or $\underline{66}$ WPM.

For the "VOTE" articles, WPM is 9000 divided by Total Seconds.

For the Phonetic Sections, count the words that are *circled* and enter the count in the space after "Spell-Corrected." Divide this count by number of words underlined, revisited per the NOTE in Part F, above. Express the results as a percentage, i.e., multiply by 100. This is the "Phonetic Efficiency" indicator, the student's ability to decode words phonetically once his attention has been directed to the spelling.

Compute "percent of slow-downs" as: 100 X (Holistic WPM – Phonetic WPM)/Holistic WPM, and record in the space indicated. In Level II, it is convenient to transcribe the Holistic scores on to the Phonetic page where indicated, so as to have all data on one page.

Interpretation/Discussion

If the student reads at 30 WPM or more (50 words in 100 seconds or less; or 210 words in 420 seconds or less), he is using an "automatic" system, whatever it is.

Observe the percent slow-down between the corresponding Holistic and Phonetic lists. If the student has first learned a non-phonetic word identification system as a principal strategy, he may be "running on automatic" in the Holistic list, but unable to do so, and significantly (15% or more) slower in the Phonetic list. (Students have been found who slow down more than 50%.)

Compare the numbers of errors between corresponding Holistic and Phonetic lists. If the student is a whole-word reader, his accuracy will suffer on the Phonetic lists. Students whose strategy is holistic have been known to make over 10 times as many errors on the Phonetic as on the Holistic list. Look at the pattern of "double-called" words. The student with the non-phonetic or holistic strategy calls the word non-phonetically *first*, never the other way around.

The spell-and-re-try steps, note that where the student correctly calls certain words *only after his attention is directed to their spelling*, this indicates the existence of TWO knowledge systems relevant to identification of words. The two knowledge systems are mutually exclusive, and the student cannot deny either one by conscious effort. This is a condition known to psychologist as "cognitive dissonances," which has been known to lead to emotional disturbance and trauma.

The holistic, or shape-recognition, a way of perceiving visual stimuli relies mainly on the RIGHT brain hemisphere for processing as simultaneous or "parallel" data. Conversely, the phonetic way of decoding letters and syllables is in *serial* order uses mainly the LEFT brain hemisphere, which is a "serial processor," and which has been found generally to be more involved in language activities – appropriately, as language is inherently serial data.

Also, since the two eyes map mirror-symmetrical images in the two brain hemispheres, an instructional emphasis on "right-brain reading" may account for the increased tendency for reversals and transpositions among non-phonetically-taught students.

If the student's total accuracy is 96% (a *total* of less than 10 errors) in the combined Phonetic sections, his automatic system is phonetically based and will guard him against becoming educationally dyslexic. Such a student will read both kinds of word lists at substantially the same speed, and the newspaper articles in two minutes or less with no substantive errors.

A student who reads ONLY the Holistic list well is a "disabled" or "dyslexic" reader, and will need intensive re-training to re-condition his automatic reflex. Success is uncertain unless the student is highly motivated. Obviously, the earlier the intervention, the more favorable the prognosis.

The acquired-dyslexic condition has been found to be language-specific; that is, an English-dyslexic reader can acquire a phonetic-based reflex in a second (or additional language) as long as efforts are made to get the student to look at the words analytically instead of holistically.

Perhaps the most important results of this test is that we may better understand the problems associated with learning to read, and begin to examine reading programs in terms of the reading reflexes they produce in their students.

Educational Engineering, Charles M. Richardson, September 27. 1995. Retyped on 4/19/03 by Donald L. Potter for publication on the Education Page of the www.donpotter.net website. Thanks to Miss Geraldine Rodgers for sending corrections on 9/2/03. Published on the WWW on 7/22/04. Switched to 100% Dolch Holistic Sight Word List on 2/14/2016.

The Miller Word-Identification Assessment (MWIA)

SUMMARY SHEET

Edward Miller & Donald L. Potter, 1991, 2016

Name	M ()/F () Age Grade Test Date
School	City/State
Level I	
Holistic WPM	Phonetic WPM Difference
Difference/Holi	stic WPM x 100 =% of Slow-down
Holistic Errors	Phonetic Errors Difference
Ratio of Phonic Errors	
Phonetic Corrected	out of attempted =% Phonic Efficiency
Level II	
Holistic WPM	Phonetic WPM Difference
Difference/Holi	stic WPM x 100 =% of Slow-down
Holistic Errors	Phonetic Errors Difference
Ratio of Phonic Errors	
Phonetic Corrected	out of attempted =% Phonic Efficiency
	Tested by
	Scored by
"Vote I" Article: WPM "Vote II" Article WPM	f Errors f Errors
K – 1 School	City/State/District
Method/Program	
Publisher	
Comments:	

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

Holistic-Dolch I Time ___: __ "= (____ Sec)\3000 = ___ WPM Err ____

the I to and a it in you said for look is little up go we down big can not one see my me red where jump blue here help come away play yellow two find funny make three run that she they but he was on at with all

Phonet	<u>ic-Flesch</u>	-I Time	·		Sec)\3000 =	=	WPM
Err	Spell-C	Cor/_	Pho:	n Eff	% Slov	w-Down	%
bib	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	fond
bulk	dust	desk	wax	ask	gulps	ponds	hump
lamp	belt						

Name: M()/F() Age Grade Test Date Holistic-Dolch II Time _____, = (_____ Sec\13,200 = _____ WPM Phonic Spelling Errors % Errors: the and I you it in said to a for little look is down up go we can me big blue red see not one my come here help yellow where jump away make two play run find three funny he was that she on with they but all there be have at out do did what this will am SO get like ride into good yes went are now no came want too pretty four saw well ran brown eat who new must black white soon our ate say his under of had him please her some as then could when where them ask just an over from any how know put take every old by after think let going walk again fly may stop round give has live thank would very once open its don't right sleep around their call your green five been off cold wash or before tell work first always made does goes write gave us buy those pull both sit which why use fast read found because best upon these sing wish many if myself long about got six seven eight today never much drink better keep try start ten bring only hold full done light pick hurt cut kind warm fall carry small show hot far draw clean own grow together shall laugh Copyright 2016

Name: M()/F() Age Grade Test Date Phonetic- Flesch II Time ' " = (Sec\13,200) = WPM Errors _____ Spell-Corrected ____/_ Phonics Efficiency ____% Slow-Down ____% dig pass men mass fuss fill Jill Ned beg jam Ann Nat win gas yell wig mud rob Tim pan rip pad fig dog Ted den mug nod bed web hug lid rib muff set nap fog mill sell sob pup well Gus tap ten dad Dan hen sip jazz moss sop map pet fib bit hum doll Ed bib jet hip kept chink ring notch crack thrash test glad pond slot stub fins whisk melt clap prompt thrill step tax trip mask chunk mush clip brat bangs masks frog drink block punch strap mend monk bugs ash grunt sand ink spit cuffs mink sled camp gang much dress wept scat switch chick wax sing hunt chop branch hills facts lend hops mist shrub gulps drift quench sketch patch moth slip grip hints damp snag flint lifts dash strip crib nest long brink lumps cloud storm reap moist broil curl thaw charm peach lord bound foil leaf birch sound stir squeal corn fort chart proud ground veal roof brawl lark jar Ma launch Roy girl beast down drawn torn float hound talk soot spout ouch slow street draw farm cork bar fir Paul sheep wheat coo pout spook loin chirp cool boost sweet beam shark crook paw clamp flap hand grip shrug print trap tramp press drill grill flash Copyright 2016

Name:			Grade:			Boy or Girl	
Age	Date	Time		···	(Sec)/9000 =	WPM
						Errors	

Vote I

One last time: vote

Please vote for the people who are going to run the school. Go and vote.

If today is Tuesday and you have not voted, please go vote now.

This vote is important. It is not important because the people running for office send you lots of material to get your vote. It is not important because there are a lot of people running for office. It is not important because they are spending a lot of money to get the job. It is important because you need to make sure that the best people get elected. You want good people over the schools. Your job as a voter is to vote.

It is bad when people do not vote. It is your job to make sure that good people run the schools. We do not want bad people running the schools. Please help us now. Please!

⁽¹⁵⁰ words, 14 sentences, 10.4 words per sentence, 3.9 characters per word, Flesch-Kincaid Grade Level 4.2) Written by Donald L. Potter 5/12/03.

Name:			Grade:			Boy or Girl		
Age	Date	Time	· ·	,, 	(Sec)/9000 =	WPM	
						Errors		

Vote II

One last time: vote.

The board of education election and the party primary election is tomorrow. Make sure you vote.

For some readers of this newspaper, it may already be Tuesday when you find time to read this far. If any registered voter reading this hasn't voted, drop everything and go to the polls.

This election is an important one. Not because of the volume of promotional material, or the number of candidates, or the amount of money spent, but because of the solemn responsibility voters bear to select the best people available to carry out serious duties of government.

It is perhaps the most vital component of our national heritage, the democratic challenge to elect our government. What a shame it is when governing bodies are chosen by a minority of the voters! Make sure this election is a valid reflection of public will. Do your part. Go vote.

Note from Internet Publisher: Donald L. Potter

February 14, 2016

The purpose of this revision of the late Edward Miller' Miller Word Identification Assessment is to strengthen the test by conforming it to the popular Dolch Sight Word List. Mr. Miller stated that it might be beneficial to use the specific sight words that the students were memorizing at their schools in place of the Holistic List he created by putting the 210 words in Dr. Seuss's The Cat in the Hat in alphabetical order. This revision simply substitutes the Dolch List words for the Dr. Seuss List words. I increased the Level 2 lists to 220 words in order to include all the Dolch List words.

Origin of Dr. Seuss Books: Dr. Seuss' books were specially designed sight-word readers, composed almost entirely of sight words in a list developed by Phyllis Cerf for the Random House children's early readers. Mr. Miller surmised that students who learned to read with Seuss' books might develop what he called a "holistic reflex" to identify words by shapes rather than the syllabic sound structure (phonics). He further surmised that once a holistic reflex was developed it might interfere with later attempts to teach children to read accurately and fast (automatically) with phonics.

Blumenfeld's Discovery: Mr. Samuel Blumnfeld had demonstrated in his 1973 *The New Illiterates* that students who were taught with the look-and-say (Dick and Jane) readers were very likely to develop a habit of guessing words in stories from a memorized context base of sight words. He came to this logical conclusion after doing a detailed investigation of the Dick and Jane Teacher's Manuals.

Miller's Question: Mr. Miller was confronted with the question of why some children seemed to have a holistic reflex before going to school and receiving look-and-say instruction. As he investigated the matter, he discovered that the popular Dr. Seuss books were actually look-and-say readers. Phyllis Cerf of Random House provided Dr. Seuss with a list of sight words from which to develop his readers. In essence, the children were receiving look-and-say instruction on their parents' laps as they listened to the stories and viewed the pictures and words.

Miller's MWIA Level 1: Mr. Miller created an assessment comparing how students read the 50 words in Dr. Seuss' *Green Eggs and Ham* with how they read 50 one-syllable regular phonics words from the first 16 phonics exercises in Rudolf Flesch's 1955 *Why Johnny Can't Read*. He called this the Miller Word Identification Assessment Level 1. I have published two revisions: One for Dolch and one for Fry.

Miller's MWIA Level 2: This test is similar to the Level 1 assessment but it is longer, and I believe more informative. For this test he compared how students read the 210 words in *The Cat in the Hat* with their performance on 210 once-syllable phonetically regular words from the first 38 Exercises in Flesch's book. By contrasting the students' abilities to read these lists of words, he developed a profile of the students' preferred word identification strategies.

What Miller Discovered: Miller's test thorough substantiated his hypothesis that children taught sightwords first would develop a holistic word identification strategy, identifying words inaccurately from the outward shape of the word coupled with context guessing rather than reading accurately from the syllabic sound structure of the spoken word. This holistic reflex (right brain) conflicted with the development of a phonic reflex (left brain). Miller made early use of Sperry's split-brain research.

Our Confirmation: I have given well close to 1000 of Miller's assessments over a period of thirteen years. I have mountains of scores that thoroughly vindicates Mr. Miller's theory. I have both before and after intervention assessments coupled with my 1987 *Riverside Informal Reading Inventory*. I am a teacher and tutor, not a trained scientist of statistician. Nothing would please me more than to have Mr. Miller's test put to the most thorough and rigorous evaluation possible. We would be delighted for some young graduate student to do a PhD level investigation and evaluation of the test.

Miller's Intervention: Mr. Miller not only developed an assessment for what he aptly called "artificially induced whole word dyslexia," but he also developed an intervention that has proven highly effective. It was on March 11, 2003 that I contacted Mr. Miller by phone to him about his assessment. That is a historical date for me because it was a turning point in my work with children with reading problems. Mr. Miller explained to me that he used Rudolf Flesch's 72 Exercises in the back of Rudolf Flesch's 1955 *Why Johnny Can't Read and what you can do about it.*

Miller's Procedures: Mr. Miller told me he worked with two students at a time, one on his right hand and the other on his left. He had one student read two columns from Flesch, then Miller read the middle column, and the other student would read the two remaining columns.

My Flesch Research: After taking with Mr. Miller, I did a thorough analysis of Flesch's method of teaching reading with phonics. The results are on my Flesch Audio Page. I immediately began using Flesch's Exercises to help students overcome their whole-word guessing habit. The success of the method has been confirmed by the changes in reading behaviors on the MWIA, my reading inventories, and students overall success with reading assignments in school.

Lessons Learned: The most important lesson learned is that how a student is first taught to read determines, in large part, how they will read the rest of their lives. The alphabet and phonics needs to be taught first if we expect students to identify words automatically and accurately from the syllabic sound structure of words (objective readers) rather than inaccurately from the outward shape of the words and unreliable context clues (subjective readers).

Blend Phonics Timed Fluency Drills: In June of 2016, I refined Miller's method of curing artificially induced whole-word dyslexia by creating drills similar to Rudolf Flesch's phonics exercises, that Mr. Miller used. I added the Precision Teaching timed fluency development technique to make the instruction more scientific. Encouragement to develop my own materials came from Kathy Alfke who had extensive experience with Gus Enderlin's Victory Drill Book high-speed phonics.

Two Phases of Beginning Reading Instruction:

- 1. <u>The Letter Name Phase</u> is best taught with my *Alphabet Tapping Exercise* and *Alphabet Flashcards*, available for free from my website. The students should also learn to write the letters with my *Shortcut to Manuscript* or *Shortcut to Cursive*.
- 2. The Letter Sound Phase can be taught with a number of good phonics-first programs such as *Blumenfeld's Alpha-Phonics* by the late Samuel L. Blumenfeld or Flesch's 72 Exercises in his *Johnny*. I highly recommend my paperback edition of Hazel Loring's 1980 *Reading Made Easy with Blend Phonics for first grade*, which was designed with whole class instruction in mind. *The Phonovisual Charts* are a handy aid, of which I make constant use.

Invitation to Research: Nothing would please me more than for some intrepid researcher to put Mr. Miller's theory of artificially induced dyslexia, his MWIA, and intervention procedures to the severest test possible. In the meantime, teachers, tutors, and parents are welcome to make use of the test and draw their own conclusions.

Last edited on 6/10/16. www.donpotter.net and www.blendphonics.org

The following Addendum is a version of the MWIA Level I for testing students who have been taught the Fry 1000 Instant Words with whole word memorization.

Name M (__)/F(__) Age _____ Grade _____ Test Date _____ <u>Holistic-Fry I</u> Time ___:__" = (____Sec)\3000 = ____ WPM Err ____ the of and a to in is you that it he was for are on as with his they I at be this have from had by words or one but not were we when what all our can said

each which she

do

how

an

there

their

use

if

 $\underline{Phonetic\text{-}Flesch-I} \qquad \text{Time} \underline{\hspace{1cm}} \text{"} = (\underline{\hspace{1cm}} Sec) \setminus 3000 = \underline{\hspace{1cm}} \text{WPM}$ Err _____ Spell-Cor ____/__ Phon Eff _____ % Slow-Down ____ % bib nip map tag job met sip mix jet pad lock wig pass hot rack kid neck pick pack Tom luck deck kick cut duck fuzz mud hack sick men hunt rash land mash tank fond pest rush rest tent bulk dust desk ask gulps ponds hump wax lamp belt