(Preliminary Manual)
The Miller Word-Identification Assessment

Edward Miller, 1991

(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 contains 15 multi-syllable words and 18 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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[1]*The 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 four pages (attached), identical for both student and teacher/examiner. The first page contains the Level I Holistic and Phonetic lists; the second page a 150-word article titled "Vote;" the third and fourth 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 level I is for young or relatively beginner-level readers. The **Holistic Level I** list has 50 words from Dr. Seuss' *Greek Eggs and Ham,* a book composed of sight-words supplied by an educational publisher. **The Phonetic Level I** list is 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.* **Holistic Level II** list contains the 210 words in Dr. Seuss' *The Cat in the Hat.* **The Phonetic Level II** list 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 underline 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 mis-pronounces 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 12600 divided by total seconds: WPM = (210 X 60)/(TIME in seconds) = 12600/TIME; e.g., for a time of 200 seconds, the speed would be 12600 divided by 200 or 63 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,

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SUMMARY SHEET

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

School _____ City/State _____

<u>Level I</u>

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

<u>Level II</u>

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 _____

61TesSum.1, September 27, 1995

"<u>Vote I</u>" <u>Article</u>: WPM _____ Errors _____
"<u>Vote II</u>" <u>Article</u> WPM_____ Errors _____

K – 1 School _____ City/State/District _____

Method/Program _____

Publisher _____

Comments:

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

<u>Holistic – I</u>   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						

<u>Phonetic – I</u>   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						

about	a	after	all	always	and	another	are	as
at	away	back	bad	ball	be	bent	bet	big
bit	books	book	bow	box	bump	but	cat	cake
came	can	call	come	cold	could	cup	day	dear
deep	did	dish	do	down	dots	fall	fan	fast
fear	fell	find	fish	fox	for	fun	funny	fly
from	game	get	go	good	got	gown	hat	hall
hands	had	have	he	head	hear	her	here	hit
high	him	hold	hook	hop	house	how	I	if
in	is	it	jump	kick	kind	kite	kites	know
last	like	lit	little	lots	looked	let	look	made
make	man	mat	me	mess	milk	mind	mother	my
near	net	new	no	not	now	nothing	of	oh
one	out	on	our	pat	pack	pink	pick	plop
play	pot	put	rake	ran	red	rid	said	Sally
sat	say	saw	sad	see	shake	shame	she	sank
sit	should	show	ship	shook	shut	shine	so	some
step	sunny	sun	stop	string	stand	take	tall	tame
tail	think	tell	things	this	those	the	that	there
then	these	they	thump	them	their	tip	top	today
toy	too	to	two	tricks	us	up	wall	want
way	was	we	wet	went	wish	with	what	when
why	will	wood	would	yellow	yet	yes	you	yours
open	something	playthings						

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7

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

Phonetic – II   Time _____'_____"   = (_____ Sec\12,600) = _____ 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	mug	pad	fig	dog	Ted	den
nod	bed	set	web	hug	lid	rib	nap	muff
fog	mill	sell	sob	pup	well	Gus	ten	tap
moss	dad	sop	Dan	map	pet	hen	sip	jazz
bit	hum	fib	doll	Ed	bib	jet	hip	kept
ring	notch	crack	thrash	test	chink	glad	pond	slot
tax	stub	fins	whisk	melt	clap	prompt	thrill	step
chunk	mush	trip	clip	ask	brat	bangs	masks	frog
drink	block	punch	strap	mend	monk	bugs	ash	grunt
camp	sand	gang	ink	spit	cuffs	much	mink	sled
dress	wept	scat	switch	chick	wax	sing	hunt	chop
branch	hills	facts	lend	hops	mist	shrub	gulps	drift
snag	quench	sketch	patch	moth	slip	grip	hints	damp
flint	lifts	dash	strip	crib	nest	long	brink	lumps
cloud	storm	reap	moist	broil	curl	thaw	charm	peach
found	lord	bound	stir	foil	leaf	birch	squeal	or
fort	chart	proud	lark	jar	ground	veal	roof	brawl
Ma	launch	Roy	girl	beast	drawn	torn	down	our
hound	talk	soot	spout	ouch	how	street	draw	farm
cork	bar	fir	Paul	coo	pout	spook	sheep	wheat
cool	boost	sweet	beam	loin	paw	chirp	shark	crook
clamp	flap	hand						

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.

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.

(150 words, 12 sentences, 12.5 words per sentence, 4.6 characters per word, Flesch-Kincaid Reading Level 8.3.)