### DOCUMENT RESORE

ED 182 690

CS 005 241

AUTHOR

TITLE INSTITUTION Brown, Rexford: Bowditch, Deborah

Adult Readers: Will They Need Basics Too?

Education Commission of the States, Denver, Colo.

National Assessment of Educational Progress.

PUB DATE

NOTE

Oct 79

AVAILABLE PROB

National Assessment of Educational Progress,

Education Commission of the States, Suite 700, 1860

Lincoln St., Denver, CO 80295 (\$1.00)

EDRS PRICE

DESCRIPTORS

HP01/PC01 Plus Postage.

\*Adult Literacy: Adults: \*Educational Assessment: \*Functional filiteracy: Functional Reading: Multiple

Choice Tests: \*Reading Comprehension: Reading Difficulty: \*Reading Pesearch: Reading Skills:

Reading Tests: \*Trend Analysis

IDEN TIPIER S

\*National Assessment of Educational Progress

### ABSTRACT

Results of a 1977 assessment of the reading abilities cf approximately 1,250 adults (26 to 35 years old) are reported in this paper and are compared with results of a similar assessment made in 1971. After discussing a typical comprehension exercise used in the assessment, the paper presents the materials and multiple choice questions used in assessing respondents comprehension of four types of practical materials: a classified advertisement, an advertisement from a national magazine, a parking ticket, and a life insurance form. It then presents four exercises involving materials of a more difficult nature: two expository passages, a poem, and a graph. For each of the eight exercises, the paper indicates the percentage of adults responding to each answer and notes changes in those percentages from 1971. Among the major conclusions reported are that there was apparently little change in overall reading ability between 1971 and 1977, that a great many adults may still have difficulty reading passages that call for higher-level comprehension skills (for instance, key percentages of success on six questions with medium - to high-difficulty passages ranged from only 18% to 60%), and that amount of time spent watching television and amount of time spent reading appear to relate to reading performance. (GT)

Reproductions supplied by EDRS are the best that can be made

from the original document.

#### US DEPARTMENT OF HEALTH. EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRO-DUCED EXACTLY AS RECEIVED FROM THE PERSON OR GRGANIZATION ORIGIN-ATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRE-SENTO-FICIAL NATIONAL INSTITUTE OF EDUCAT ON POSITION ON POLICY

# ADULT READERS WILL THEY NEED BASICS TOO?

A paper by

Rexford Brown
Director, Dept. of Publications and

User Products, NAEP

Deborah Bowditch
Free-lance Writer, Denver

October 1979

National Assessment of Educational Progress
Administered by the
Education Commission of the States
Suite 700, 1860 Lincoln Street
Denver, Colorado 80295

# ADULT READERS: WILL THEY NEED BASICS TOO?

by Deborah Bouditch Rexford Brown

The catchphrase for education in this decade has been "back to the basics." An epidemic of reports on the decline of children's school achievements in the early and mid-1970s, compounded by a drop in college entrance exam scores, prompted a public cry for renewed emphasis on the three Rs, especially reading. The clamor came, naturally, from adults, whose concern was for the reading skills of elementary school students and teenagers.

But what about the adults themselves? Even more helpless than the student who cannot read his lesson is the functionally illiterate adult who cannot decipher the want ads or understand written instructions. The development of a child's reading skill is, after all, preparation for his needs as an adult. It is important, then, to periodically assess the reading skills of adults and determine to what extent changes in the skills of school-age youngsters have an impact, later on, upon them as adults.

The National Assessment of Educational Progress (NAEP) assessed adult readers (26-35 years old) in 1970-71 and found that, in most respects, their skills were on a par with 17-year-olds. In some cases, more teenagers than adults were able to answer questions correctly; but in most cases, the adults performed at or slightly above the teenagers' levels (Reading: Released Exercises, 1973). Both groups had greater success reading relatively easy, low-inference material than they did reading material that called for higher-level reading skills (Mellon, 1975).

Have adult readers improved their skills since that time? Or has the apparent erosion of school-age youngsters' skills had a domino effect that carried beyond the school walls, out into the marketplace? In order to find out, National Assessment again conducted a probe of adult reading skills in 1977. Unfortunately, this second effort was not nearly as comprehensive as the first. Nevertheless, the probe did employ items used in the first assess-



¹The 1977 probe consisted of 34 multiple-choice questions about 18 passages. Approximately 1,290 adults responded to each question. The 1971 assessment consisted of 97 questions about 53 passages. Approximately 1,250 adults responded to each of those questions.

ment and did involve a sufficient number of people for National Assessment to hazard some generalizations.

First, there has apparently been little change in overall reading ability between 1970 and 1977. Of the 34 exercises assessed, 25 showed no significant change in percentages of people who answered questions correctly. Of the remaining 9, 6 showed significant declines and 3 showed significant improvements.<sup>2</sup>

Second, it appears that a great many adults may still have difficulty reading passages that call for higher-level comprehension skills. For instance, key percentages of success on six questions with medium-to-high difficulty passages ranged from only 18% to 60%. In addition, five of the six key percentages had declined since 1971. Although only one of them was statistically significant (-11%), the overall trend may be cause for worry.

Third, income, amount of time spent watching television and amount of time spent reading appear to relate to reading performance. Because questions about income, television watching and reading frequency were not asked in the 1971 survey, National Assessment cannot report any changes; however, the 1977 survey revealed that, as a group, people with annual incomes below \$8,000 per year consistently performed below the national level, while those with incomes of \$15,000 or more performed above it.

In order to flesh out these more general results, this paper will present some representative exercises by first discussing a typical comprehension exercise, then some practical or "functional" reading tasks, and finally some of the more difficult materials.

# Performance on a Relatively Simple Passage

One comprehension exercise required respondents to read a 1,000-word Reader's Digest article on prevention of mosquito bites and then answer five multiple-choice questions. The amount of time required to read the article was recorded for additional information. (Sixty percent of the respondents read the passage in six minutes or less; 42% read it in five minutes or less; 19% read it in four minutes or less.)

Although percentages of correct answers were relatively high on each of the five questions, the overall percentage of people who answered all five questions correctly was only 34% and had not changed appreciably since 1971. Two-thirds of the readers, however, correctly answered four of the five questions.



2

<sup>&</sup>lt;sup>2</sup>Significant means statistically significant at the .05 level. In other words. National Assessment is confident that the differences would not arise by chance alone in at least 95% of all the possible samples one could draw to test these populations.

Reader's Digest articles are aimed at the widest possible audience and are typically edited to be readable for anyone with a grammar school education. National Assessment results suggest that a majority of 26-35-year-old adults read such articles at about 165-170 words per minute and most are able to answer significant questions about the passage. A considerable number, however -- perhaps as much as a third of the population -- may have difficulty reading such articles. Only a third of the population seems capable of answering all the questions asked -- not very encouraging when one considers that the questions were quite simple.

## Performance on Practical Reading Tasks

Performance on practical tasks varied. For instance, on the following item almost nine-tenths of the adults answered all three questions correctly.

Read the classified advertisement below and answer the questions on the next page. You may look back to this page if you wish.

# Be a

# Flight Hostess

Now TAA is Hiring 100 Hostesses Weekly!

AND - TAA OFFERS YOU IMMEDIATE HIR-INGI SEE YOUR TAA FLIGHT HOSTESS REPRESENTATIVE AT THE PLACES AND TIMES LISTED BELOW.

You will enjoy:

Free schooling-with training salary of \$61 weekly.
Salary after 6 weeks schooling up to \$525 monthly.
Flights within U.S.A. or to Europe.
Training in major European languages: free.
Travel pass privileges for parents after 6 months.
A wide range of fringe benefits.

### **Primary Qualifications**

Minimum age 19½. High School Graduate; Excellent health; Unblemished complexion. Height 5'2"—5'9" with proportionate weight by TAA standard. Glasses permitted.

### **APPLY IN PERSON**

Mrs. Molly Wabash Smith Hotel - San Francisco Tuesday and Saturday April 9th and 13th 9:00 - 1:00 p.m.

### TRANS ATLANTIC AIRLINES

An Equal Opportunity Employer



Percent Responding	From 1971
1 97 1 1 Ct	0 0 0 0 -1*
1 91 2 4 2 0	-1 4* 0 -2 1 -1*
er"	
95 1	1* 0 -0 -2 1
	Responding  1 97 1 1 1 1 1 2 4 2 0 er" 2 1 1 1 95

\*Statistically significant.
†Figures do not total 100% because of rounding.

Here is an ad from a national magazine. Read it and complete the sentence on the opposite page.



<sup>\*</sup> Percentages were almost as high on the exercise following, although the percentage dropped about 3 points from 1971:

As we all know, the mentally retarded can only make baskets and other simple objects like...



Computer subassemblies.
Printed circuits for electronic test sets.
Electric meters.
Automobile instrument panels.
Aircraft components.
Hospital supplies.
You already know that the retarded worker is generally more conscientious, loyal and punctual than the average employee.
Perhaps you have a few "simple" jobs he might do in your business.

For information about employing the retarded, write The President's Committee on Mental Retardation, Washington, D.C. 20201.

	1977 Percent Responding	Change From 1971
The purpose of this advertisement is to		
encourage industry to employ mentally		
retarded people.	83	3
show how mental retardation can be		
reduced in the population.	2	0
indicate that mentally retarded workers		
are superior to other workers.	3	-2
show the general public that mentally		
retarded people can make simple things.	9	3* 2 -1
O I don't know.	3	2
No response	0	-1
*Statistically significant.		

The number of adults with incomes less than \$8,000 who picked the correct response was almost 11 points below the national level; those with incomes of \$15,000 or more were 10 points above; more than three hours of television watching, 11 below; no reading for pleasure, 31 points below.

The parking ticket exercise following apparently caused problems for a third of the adults. It, too, revealed a decline in the percentage of people able to answer questions correctly.

	•	Percent Responding	Erom 1971
Α.	Must a person appear at the Traffic Violation Bureau to plead "Not Guilty" to a traffic offense?		
	Yes	79	-4*
	O No	20	5*
	O I don't know.	1	0
	No response	n	-1*



1977 Change Percent From Responding 1971

B. If a person received this ticket for parking two hours in a one-hour zone, his fine would be

<b>&gt;</b> \$ 1.30.	5	3*
<b>\$</b> 3.00.	80	-4
<b>&gt;</b> \$ 6.00.	8	-1
<b>&gt;</b> \$10.00.	2	0
O I don't know.	4	3*
No response	. 0+	-1*

\*Statistically significant.
†Figures do not total 100% because of rounding.

Sixty-six percent of the respondents answered both questions correctly, a significant drop of 6 percentage points. The percentage of adults who responded correctly to both questions and whose annual income was \$15,000 or more was 7 points above the national level; those who watch three or more hours of television a day were 8 points below; those who do no reading for pleasure, 18 points below.

Finally, a majority of the adults failed to answer correct! two questions about the life insurance form below.

FIMDS	A INNINA	B PROPERTY DAMAGE LIABILITY	C MEDICAL PAYMENTS	15' beginner 11120.22	E COLLISION		CHISTS	COMMENTE
THOUSANG EACH PERSON	THUUSAND EACH OCCURRENCE	THOUSAND EACH CCCURRENCE	EACH PERSON	IEI ACTUAL CASH VALUE	ACTUAL CASH VALUE		PROCESSAND EACH ACCIDENT	CHARTE OF
	;				4.	-	† <b> </b>	TOTAL PROPERTY.
\$25	\$50	\$10	\$1000		\$100 DEDUCTIBLE	\$10	\$20	

٦		1977 Percent Responding	Change From 1971
<b>A.</b>	What is the maximum amount for which this policy covers medical bills?	•	≈ <i>l</i>
٠	\$ 1,000 \$ 5,000 \$ \$10,000 \$ \$25,000 I don't know. No response	86 1 3 4 6 0	-4* 0 1 2* 2
B.	What is the maximum amount this policy would pay in case you injured another person in an auto obile accident?	·	
	\$ 25 \$ 3,000 \$ 5,000 \$ \$25,000 I don't know. No response	14 27 3 46 8 0+	-6* -2 1 6* 2

<sup>\*</sup>Statistically significant.

There was a significant drop from 1971 to 1977 in the number who correctly identified the maximum medical bill amount and a significant increase in the correct response to the question about the maximum amount allowed for another person's injury. Overall, only 40% answered both questions correctly in 1977. Among women, that percentage was 34%. Although this is below the national level, it nevertheless represents a significant increase of 6 points.

Although results on these practical tasks are mixed, they may be nonetheless discouraging when one considers how central insurance policies and similar documents are in many people's lives.

# Performance on More Difficult Passages

The following passage illustrates reading material that is apparently difficult for American adults.

<sup>†</sup>Figures do not total 100% because of rounding.

Read the passage and answer the questions which follow it.

In the years between 1940 and 1960, literature, the arts, and culture in general became increasingly oriented to the many. In an economy of high productivity, deluging millions of people daily with movies; magazines, books, and television programs. American culture achieved a degree of homogeneity never dreamed of before. However, if such cultural homogeneity spelled loss of individuality-which it undoubtedly did- and if mass culture was often produced primarily for profit and only secondarily for esthetic reasons, nevertheless mass production of "art" made available to millions of people what in previous times had been the privilege only of the aristocratic few. Good radio and phonograph music was available where there had been no music before; there were more symphony orchestras and chamber music groups than ever; and in recent years more Americans purchased tickets to classical concerts than to baseball games. Paintings and items of scuipture were being turned out en masse in moderately good reproductions. The world's literature was being distributed in inexpensive paperback editions in every bookshop, drugstore, and transportation terminal. On balance it seemed that mass production, while it might not raise mass culture, would not destroy the growth of genuine taste either.

		,	1977 Percent Responding	Change From 1971
Α.		passage implies that before 1940, arts were		·
	00	homogeneous. generally enjoyed. oriented to an elite. oriented to the average man. oriented to the level of mass culture. I don't know. No response	10 8 51 10 14 7	0 2 -1 -0 0 -0 -1*
В.		was "the privilege only of the aristocr as described in the passage?	atic	•
		High profits Great works of art Good radio and phonograph music Inexpensive reproductions of art works I don't know. No response	6 61 14 11 7 0+	0 -0 -2 2 1 -1*

		1977 Percent Responding	Change From 1971
<b>C.</b>	What does the author seem to think of the mass production of art?		
	■ It does not harm genuine art.	. 44	0
	It is destructive to genuine art.	7	' Î
	It lowers the level of mass culture	e. 6	ī
	It raises the level of mass culture		-2
	It is produced primarily for esthet		
	reasons.	. 7	-1
	O I don't know.	10	1
	. No response	<b>/</b> 1†	-1
	· •.		
	catistically significant.		
†Fi	gures do not total 100% because of round	ing.	

Fewer t. an one in four (24%) were able to answer all three questions correctly. Only 15% of those who watched more than three hours of television per day could do so.

Only half the adults chose the correct answer to the question that follows this poem.

My body a rounded stone with a pattern of smooth seams, My head a short snake, retractive, protective.

My legs come out of their sleeves of shrink within, and so does my chin.

My eyelids are quick clamps.

My back is my roof.

I am always at home.

I travel where my house walks.

It is a smooth stone.

It floats within the lake,
or rests in the dust.

My flesh lives tenderly
ipside its home.

		1977 Percent Responding	Change From 1971
	ne method the poet uses to attract r's interest?	·	
An u Scie The The I do	dramatic outcome nusual point of view ntific detail about nature use of regular rhymes and rhythms relationship between the characters n't know. esponse	3 52 16 8 14 7 0	-0 -0 -0 -0 1 1

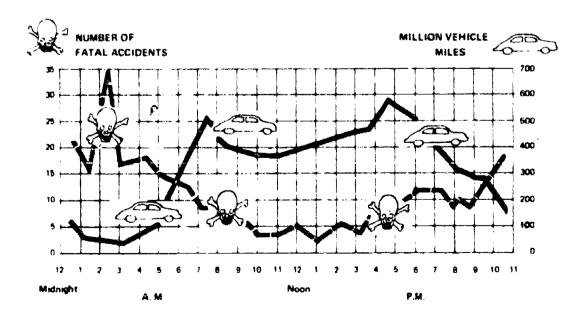
<sup>\*</sup>Statistically significant.

The fact that so many people did not know the answer, thought there were two characters in the poem or thought the poem is scientific might indicate that many people are alienated from complex statements like poems.

The following chart that shows the number of fatal accidents in California and the time of day during which most occurred also seemed difficult for the adults.

Read the passage and look at the chart, then answer the question below it.

This chart shows the number of fatal accidents (broken line) and the number of vehicle miles (solid line) in California, arranged according to the hour of the day.





	Percent Responding	From 1971
All but one of the following factual conclusions can be reached from the data presented. Which statement goes beyond the data given in the chart?		
Fewer fatal accidents occur during the		
day than at night.	8	2
Driving at a time when most people	_	_
would be sleepy is dangerous.	7	-2
Eating a good lunch tends to keep		_
drivers alert to driving hazards.	44	1
Traffic becomes heavier at the end of the working day than at the beginning.	7	0
Just because there are few vehicles on	·	•
the road is no reason to relax one's		
safety precautions.	26	-5*
O I don't know.	8	4*
No response	0	-1*
*Statistically significant.		

1977

Change

There was a 4-point increase in the number who said "I don't know." The overall level of correct responses remained at about 44%.

The passage on budgetism below includes two accompanying questions calling for inference on the part of the reader; correct responses to both questions were down.

Suburbanites are not irresponsible. Indeed, what is striking about the young couples' march along the abyss is the earnestness and precision with which they go about it. They are extremely budget-conscious. They can rattle off most of their monthly payments down to the last penny; one might say that even their impulse buying is deliberately planned. They are conscientious in meeting obligations, and rarely do they fall definquent in their accounts.

They are exponents of what could be called <u>budgetism</u>. This does not mean that they actually keep formal budgets—quite the contrary. The beauty of budgetism is that one doesn't have to keep a budget at all. It's done automatically. In the new middle-class rhythm of life, obligations are homogenized, for the overriding aim is to have oneself precommitted to regular, unvarying monthly payments on all the major items.



Americans used to be divided into three sizable groups: those who thought of money obligations in terms of the week, of the month, and of the year. Many people remain at both ends of the scale, but with the widening of the middle class, the mortgage payments are firmly geared to a thirty-day cycle, and any dissonant peaks and valleys are anathema. Just as young couples are now paying winter fuel bills in equal monthly fractions through the year, so they seek to spread out all the other heavy seasonal obligations they can anticipate. If vendors will not oblige by accepting equal monthly installments, the purchasers will smooth out the load themselves by floating loans.

It is, suburbanites cheerfully explain, a matter of psychology. They don't trust themselves. In self-entrapment is security. They try to budget so tightly that there are no unappropriated funds, for they know these would burn a hole in their pocket. Not merely out of greed for goods, then, do they commit themselves; it is protection they want, too. And though it would be extreme so say that they go into debt to be secure, carefully charted debt does give them a certain peace of mind—and in suburbia this is more coveted than luxury itself.

			1977 Percent Responding	Change From 1971
Α.		h of the following BEST explains the of human behavior described?		
	000000	"Not merely greed for goods." "In self-entrapment is security" " obligations are homogenized" "Suburbanites are not irresponsible." "They are extremely budget-conscious." I don't know. No response	3 29 8 16 37 6	1 -2 -1 -1 2 2 -0
В.	How	could "budgetism" BEST be defined?		
	0	Buying everything on the installment plan	8	2
	0	Keeping careful records of income and outgo	18	-1
	0	Deciding in advance how much will be spent each year	8	2
	0	Setting aside a certain amount each month for regular expenses	24	2
		Committing almost the entire monthly income to regular payments	37	-6
	0	I don't know.	4	1
		No response	1	-0



Twenty-nine percent correctly answered the first question and 37% correctly answered the second. The drop of 6 points on part B is close to statistically significant. Overall, only 18% answered both questions correctly.

In this paper, a handful of results from an adult reading probe have been presented; the probe is not, in itself, a comprehensive test of abilities. National Assessment cannot make very broad generalizations from this information alone. However, the reader can infer from it that today's adult readers have not improved noticeably over the adults who participated in the more comprehensive 1971 assessment. A third to a half of them continue to have difficulty comprehending reading materials that call for higher-level reading skills.

More adult assessments are needed to substantiate this claim and to pinpoint the most troublesome areas. For the meantime, however, it is safe to conclude that if America's school children need more work in the "basics," her adults do, too.



## **BIBLIOGRAPHY**

Mellon, John C. National Assessment and the Teaching of English. Urbana, Ill.: National Council of Teachers of English, 1975. Educational Resources Information Center (ERIC) no. ED 112 427.

Reading: Released Exercises, Report 02-R-20, 1970-71 Assessment. Denver, Colo.: National Assessment of Educational Progress, Education Commission of the States, 1973. ERIC no. ED 079 684.



