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# MDE + MRA = Reading Assessment Improvements

by Robert Smith

The attention of educators from around the country will be turned toward Michigan next fall with the dawning of an innovative assessment plan. The revised Michigan Educational Assessment Program (MEAP) Reading Tests are instruments that acknowledge -- in a way no other test has -- the complexity of reading. They admit rather than ignore, as past tests have done, that a person's prior knowledge is a major factor in determining how well the person comprehends a passage. Like the Michigan Department of Education (MDE) objectives they are founded upon, the tests view reading as a process that changes from one reader to the next, from one text to the next, and from one task to the next. Similarly, a student's knowledge of the reading process varies from one situation to the next, and students' attitudes and self perceptions vary. Because of the dynamic and interactive nature of reading, no test is in itself sufficient to measure a student's ability to read. Consequently, a teacher's assessment of each student's ability is essential. It is this belief that makes the MEAP uniquely supportive of the professional judgment of teachers.

In order to create a test founded on the work of the state's instructional leaders, MEAP has involved the Michigan Reading Association (MRA) in every step of test development and dissemination. The strong relationship of MRA and MDE was the envy of many out-of-state visitors at the National

Professional Development Leadership Conference in September; the work that had taken Michigan only five years to accomplish was estimated to require a much lengthier process elsewhere. Credit is also due to the many districts which released their personnel in order to accomplish the many tasks comprising a project of this magnitude.

MEAP's mission is to monitor the educational needs of Michigan youngsters. Since its establishment in the late 1960's, MEAP has traditionally involved MRA in test development and validation procedures. Many significant changes have occurred over the years, including the addition of high school testing and the conversion from norm-referenced to objective-referenced tests. However, perhaps no other revisions of the reading test have been as complex as the recent transformation.

## Curriculum Leads the Way

When Dr. Elaine Weber of the MDE Instructional Specialists Program (ISP) saw the discrepancy between **The Michigan Essential Performance Objectives** and current reading research in 1982, she was encouraged by a committee of MRA members -- including Dr. Karen Wixson of the University of Michigan, Dr. Charles Peters of Oakland Intermediate School District and then MRA President Mary Bigler -- to return to a question everyone had stopped asking: *What is reading?* Synthesis of the latest research led to the redefinition of reading,



which upon publication became MRA's most influential position paper:

*Reading is the process of constructing meaning through the dynamic interaction among the reader's existing knowledge, the information suggested by the written language and the context of the reading situation. (Wixson and Peters, 1984)*

The instructional objectives were developed next by a joint MDE/MRA committee. The objectives underwent field review followed by painstaking revision which resulted in State Board of Education approval in 1986. The objectives describe reading as a holistic process -- **not** a series of component skills. Three major categories organize the objectives: Constructing Meaning, Knowledge about Reading, and Attitudes and Self-Perceptions. The reasons for these categories were explained in the IRA's **Reading Teacher** as follows:

*First, good readers must be able to integrate their knowledge and skills as they construct meaning for different texts under a variety of reading conditions.*

*Second, good readers must have knowledge about the various purposes for reading, about how different reader, text and contextual factors can influence their reading, and about the skills and strategies they can use in their reading.*

*Third, good readers are those who have developed positive attitudes about reading and positive perceptions about themselves as readers.*

(Wixson, Peters, Weber, and Roeber, 1987)

In summary, mastering a series of isolated skills is not enough; students must be able to apply their reading skills flexibly and independently.

Weber formed the Curriculum Review Committee (CRC), with the cooperation of MRA, to carry out a nonstop campaign to disseminate ideas about the objectives and ways to revise local instructional plans. The CRC has nurtured a cadre of knowledgeable presenters and supplied them with a vast array of training modules. Numerous state

conferences have been conducted. Many of these presentations have been videotaped and are available through the intermediate school districts. The modules are careful to begin with a firm knowledge base before moving toward teaching and learning strategies. In September of 1988, all of the modules were revised and new ones created for a national leadership conference that hosted over 500 educators for four days. Contact the ISP for details about the many resources that CRC has created.

### **A First-of-Its-Kind Test**

With a statewide reading test which was no longer compatible with the revised objectives, MEAP Supervisor Dr. Edward Roeber initiated a complex test development process. MEAP staff members Dr. Caroline Kirby and Peggy Dutcher, director of the Reading Test Development Project, were also instrumental in planning and developing what was to be a first-of-its-kind test. They felt it was essential that the new instruments be useful for instructional planning.

A test development committee was established to create ways of measuring the dynamic and interactive process of reading. The old view that each reading skill could be measured in isolation to allow inferences about comprehension was no longer being validated by research. Given the interactive view that reading is a holistic process, there could no longer be a one-to-one correspondence between objective and test items. Instead, items were grouped to correspond to the three major categories of the objectives. Then MDE contracted with MRA to produce the initial test blueprint (coauthored by Wixson and Peters) containing prototypic passages and items.

Approximately 30 classroom teachers, reading specialists, and administrators (most of them MRA members) spent over three years creating items. Quality short stories and portions of textbook chapters (social studies and science) representative of the materials children use in school were selected and hierarchically mapped. Based upon the maps, thousands of items were generated with the intention of replacing passages yearly. It was determined that each test



would contain one full-length story and one intact informational passage.

### Assessing Prior Knowledge

Item writers learned to focus on underlying concepts from the passages -- concepts that students would definitely need to know to build meaning from the text. These "superordinate" concepts became the basis for "Topic Familiarity" items which are designed to determine which students have prior knowledge that will prove useful in reading the selection. Students will take the Topic Familiarity items **before** reading the passages. The items assess how well students understand characteristics and examples of each concept and how the concepts are related to other important concepts. An individual's report will state whether the student had high, moderate, or low familiarity with the superordinate concepts in each selection, thus offering teachers new information to use in considering why students performed as they did.

For example, positive inferences could be drawn about a student who had low prior knowledge of a social studies topic coupled with a high score on the comprehension ("Constructing Meaning") portion of the test. Such a pattern would suggest that the student can construct meaning for a social studies chapter even when the subject is unfamiliar. A note of caution: Topic Familiarity scores have meaning only in relation to a student's performance with the test's selections, and therefore are intended solely for the classroom teacher's interpretation of individual results.

### Since Reading is Constructing Meaning

The Constructing Meaning items are the heart of the revised reading test. Whether students pass or fail will depend entirely on their capacities to generate meaning from the test selections. Results from the other parts are intended to help explain the students' performances on the Constructing Meaning items and are not to be used in isolation. The Constructing Meaning objectives incorporate and extend the comprehension objectives from the previous set of objectives (literal, inferential, and critical reading skills).

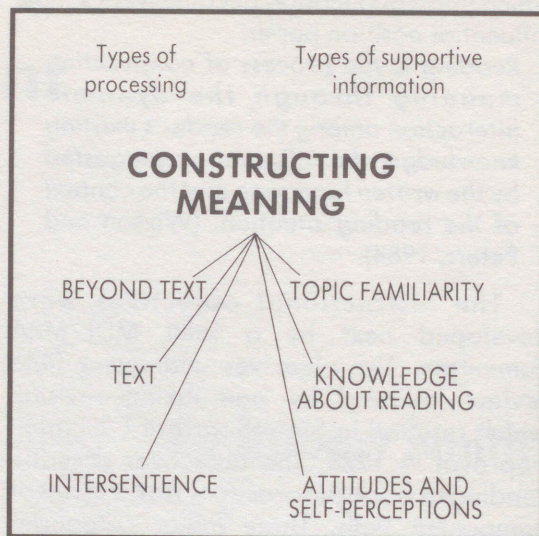


Figure 1

Constructing story maps (also known as story grammar) helped item writers focus on the themes, problems, resolutions, settings, and important character traits and functions. From the maps, these story elements were then translated into Constructing Meaning items. To a lesser degree, item writers also concerned themselves with vocabulary, story events, and adjunct aids (e.g., drawings) when they were significantly related to the themes or other key elements of the narratives.

Concept maps of the informational passages were also constructed to keep item writers true to the central purpose and main ideas of the informational passages. Vocabulary, adjunct aids (pictures, subheadings, summaries, etc.) and supporting ideas were addressed; but again, the superordinate levels of the text were focused on much more closely than in past tests.

The longer passages allowed the item writers to write synthesis and application items mirroring questions teachers ask in the classroom. Such questions have been uncommon in past tests because of short reading selections. In writing the Constructing Meaning items, writers were careful to include questions that require readers to use three types of mental processing: 1) the



intersentence type of processing, when literal answers can be located within two to three sentences; 2) the text type of processing, when integration and synthesis of chunks of meaning are required; and 3) the beyond text type of processing, wherein application and extension of the text's meaning depends upon the reader's use of prior knowledge. Because teachers will receive individual reports on students' performances with each type of processing and for both fiction and nonfiction, teachers will be able to make instructional decisions not possible with the current MEAP test.

### **Asking Directly About the Reading Process**

The MEAP's Knowledge About Reading items measure many aspects of students' strategic behaviors and other processes involved with skilled reading:

- Knowledge about Reader Factors
- Knowledge about Text: text type, text location and text structure
- Knowledge about Text Features: adjunct aids, literary devices, linguistic devices
- Knowledge about Strategy Usage: application for a specified purpose

In other words, are students aware of how reader, text and contextual factors influence reading? In keeping with the redefinition of reading, the MRA committee decided these items should not be generic; rather, they must determine whether students can adapt their strategies for each specific purpose or reading selection. Therefore, the Knowledge about Reading items spring uniquely from each text in a manner similar to classroom instruction. This part of the test, like the Topic Familiarity part, has little meaning in isolation, but used in relation to the Constructing Meaning score, it offers new insights into student abilities.

### **Measuring the Affective Domain**

A reader's attitudes and self-perceptions affect how well he or she reads. Finding out specifically how a student reacted to a passage and its accompanying items offers teachers another way to critique a student's performance. The three main components of the MEAP Attitudes and Self-Perceptions

items are 1) interest, 2) ability, and 3) effort. Twelve standard items are used on each selection for this purpose, but they are not intended to reflect general attitudes or perceptions about reading so much as ones specific to the test's selections. For instance, a student who was interested in the test's story, felt good about her ability to read the story, and believed she had tried hard to read it and answer the related questions would qualify for the "high" band. The same student may feel somewhat differently about the informational selection on the test and may place in the "moderate" or "low" bands on that selection based upon her responses to the Attitudes and Self-Perceptions items. Passage-specific reporting will enable new interpretations of performances. Again, this part of the test is NOT intended to have meaning except in relation to an individual's constructing meaning score.

A November 1988 revised blueprint of the test containing prototypic items is available from MEAP with sample items at grade levels 4, 7 and 10.

### **The MRA Contract Team**

Even before item writing was completed, MEAP began to seek review of the items and passages. Again, MRA was a support system for MEAP. A special contract was drawn up to establish a team of MRA members. This ten-member team, which has met monthly for over three years, has involved several MRA presidents and vice-presidents. Regional content reviews were organized after both of the test tryouts and after both of the pilots. With the final round of reviews approaching, nearly 1,000 educators have commented item-by-item on the revised MEAP tests. Many changes have resulted in part from their recommendations including the elimination of several passages. Other reviews -- for example, a bias review panel and content specialists' reviews -- brought the tests to the attention of members of other professional organizations. Further, MDE contracted with a testing company, several reading specialists, and two universities for item editing and analyses to ensure that the tests were reliable and valid measures.



The MRA Contract Team has also assisted MEAP with other important test development and dissemination projects. A collaborative project, for instance, has been established between MEAP and 61 of the districts that piloted the reading tests. There is a dual purpose for this project: 1) MEAP staff members learn from the districts about their experiences with the test and its administration, and 2) the 61 districts are preparing themselves to disseminate information to other districts.

### **Informal Assessment**

Another far-reaching project that the MRA Contract Team is involved with is the development of informal assessment techniques. As previously stated, Roeber and his staff believe that formal testing, such as MEAP tests, is only one part of a comprehensive assessment plan; the evaluations that teachers make within the instructional environment is another crucial component. Daily observation of students' performances and collection of evidence of their progress is helpful in instructional decision making and in reporting to parents and administrators. In a multi-year effort, the committee is collecting and trying out procedures to help teachers systemize their methods. A preliminary report of this project will be presented at the annual MRA Conference in March. MEAP expects to disseminate its informal assessment tools through MRA in an effort to balance informal and formal assessment more favorably.

### **Reaching the Public**

Public relations is another aspect of the test revision process that MRA will impact via its contract with MDE. The Michigan School Public Relations Association (MSPRA) has likewise volunteered its expertise and will collaborate with MRA to advise MEAP about how local districts can best publicize the reasons for assessment changes and ways to interpret the new types of scores. A vital part of the message is that longitudinal comparisons between the previous test and the revised one are inappropriate.

### **Reporting the Reports**

The reporting formats for future MEAP scores are still in the draft stage. The results of the test pilot, however, will be reported at the individual, classroom and district level by the forms shown in Figures 2, 3 and 4. These same types of forms, plus others which are still under consideration such as a parent pamphlet and some type of test item analysis report, are likely to be used in the future.

The first report shows how an individual student performed on Constructing Meaning, Knowledge about Reading, Attitudes and Self-Perception, and Topic Familiarity. It also displays a student's performance in each type of processing: intersentence, text, and beyond text. The second report summarizes a classroom's performance. It shows whether students passed the test; makes a qualitative statement about the performance on the Knowledge about Reading, Attitudes and Self-Perceptions, and Topic Familiarity subtests; and assigns a Category of Achievement (1-4) to each person. The final report is the School Summary and District Summary format. Like the other reports, it summarizes information for each part of the test. It also gives percentages of students passing each selection (story and informational).

When the first results are reported to schools, there will be accompanying written material to explain how the reports should be read and interpreted. Additional information is expected to be published in this journal.

### **A National Gathering**

MEAP's plan to hold a national assessment conference has been greatly supported by MRA. In fact, President Jerri Hansen has done much of the initial organizing of the conference. Scheduled for July 24-26, 1989, the site will be Boyne Mountain and the cost, approximately \$75. Members of the MRA Contract Team will be doing some presenting; the keynoters will be announced later. To register, contact MEAP (517/373-8393).

For those who can not attend the national assessment conference, MEAP's annual coordinator briefings will address the administration of the revised tests and other



related issues. The fall dates for these briefings will be announced in 1989. Each school district will choose between administering the tests in two sessions or three sessions. Either way, the reading portion of the MEAP tests will take approximately two and one-half hours.

### Conclusion

Clearly, MRA's leadership is well woven into the effort to revise the MEAP Reading Test. Since both the new curriculum ideas and the new assessment ideas have been aired at the MRA state conferences and even more so in the MRA publications, MRA members are some of the most knowledgeable educators in the state regarding the redefinition of reading. But as curriculums continue to advance and as MEAP's revised assessment instrument is first administered state-wide in 1989, MRA's commitment and leadership will be even more important than in the past, for it will be needed in every school building throughout the state. Now, MRA members who have been following the conceptual changes in reading are in a position to make exciting changes where they really matter.

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# MICHIGAN EDUCATIONAL ASSESSMENT PROGRAM

## INDIVIDUAL STUDENT REPORT GRADE 4 READING PILOT TEST

Student: SMITH  
Teacher: JONES  
District: M  
School: H

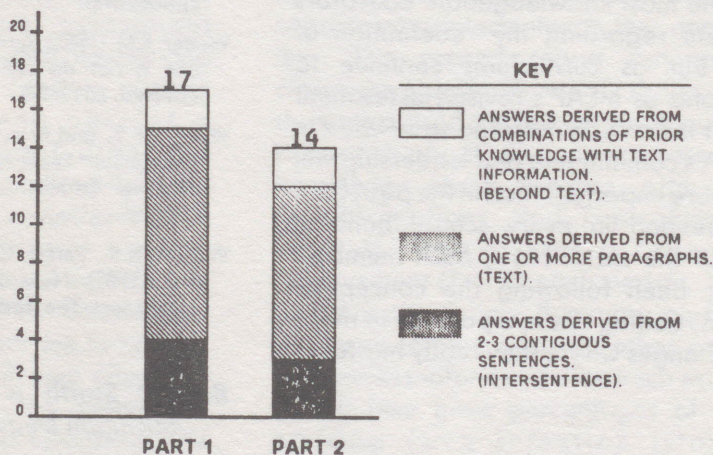
BETTY  
MELINDA  
PUBLIC SCHOOLS  
HIGH SCHOOL

Student No: 1234567890  
Section:  
Age: 11-04  
School Year: 88

89969

### TEST SCORES FOR EACH READING SELECTION

#### I. CONSTRUCTING MEANING



BEYOND TEXT	2/5	2/4
TEXT	11/11	9/12
INTERSENTENCE	4/4	3/4
TOTAL	17/20	14/20

DRAFT

FORM : T11

II. KNOWLEDGE ABOUT READING	13/14	9/14
III. ATTITUDES AND SELF-PERCEPTIONS	7/12	11/12
IV. TOPIC FAMILIARITY	11/12	10/12

### Summary of Student Performance

I. CONSTRUCTING MEANING	**	**
II. KNOWLEDGE ABOUT READING	HIGH	MOD
III. ATT. & SELF-PERCEPTIONS	MOD	HIGH
IV. TOPIC FAMILIARITY	HIGH	MOD

PASSED TEST:

CATEGORY OF ACHIEVEMENT:

\*\* INTENTIONALLY LEFT BLANK; DATA ELEMENT(S) HAVE NOT BEEN DEFINED. \*\* \* NOT TESTED

Figure 2



1988-1989

DISTRICT: M PUBLIC SCHOOLS

SCHOOL: H HIGH SCHOOL

TEACHER: MILLER JANE SECTION:

CODES: DISTRICT- 89-969 SCHOOL- 0001

# meap

## CLASSROOM LISTING REPORT

### GRADE 4 READING PILOT TEST

STUDENT NAME		TEST FORM	TEST SUMMARY		PART 1										PART 2									
			PASSED TEST?	CATEGORY	CONSTRUCTING MEANING				KNOWLEDGE ABOUT READING	ATTITUDES AND SELF-PERCEPTIONS	TOPIC FAMILIARITY	CONSTRUCTING MEANING				KNOWLEDGE ABOUT READING	ATTITUDES AND SELF-PERCEPTIONS	TOPIC FAMILIARITY						
					I	T	B	TOTL				PASSED?	I	T	B				TOTL	PASSED?				
BATEMAN FRANKLIN HUGHES	JOAN	T11	**	**	5	11	4	20	**	**	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH							
	TAD	T12	**	**	3	10	3	18	**	**	HIGH	MOD	HIGH	HIGH	HIGH	HIGH								
	PAV	T12	**	**	3	2	0	5	**	**	LOW	MOD	LOW	LOW	LOW	LOW								
	TOM	T14	**	**	5	11	2	18	**	**	MOD	MOD	HIGH	MOD	HIGH	HIGH								
	RICK	T13	**	**	4	10	3	17	**	**	HIGH	MOD	HIGH	HIGH	HIGH	HIGH								
	RALPH	T12	**	**	4	3	2	9	**	**	MOD	MOD	LOW	LOW	MOD	LOW								
SMITH TUCKER MELCH	BETTY	T11	**	**	2	11	4	17	**	**	HIGH	HIGH	HIGH	HIGH	HIGH	MOD								
	MARY	T14	**	**	4	11	4	19	**	**	HIGH	MOD	LOW	MOD	HIGH	MOD								
	CATHY	T13	**	**	5	5	1	11	**	**	MOD	MOD	LOW	MOD	MOD	LOW								
DRAFT																								
NUMBER OF STUDENTS			**																					
PERCENT OF STUDENTS			**																					

\* NOT TESTED.  
 \*\* INTENTIONALLY LEFT BLANK; DATA ELEMENT(S) HAVE NOT BEEN DEFINED.

TOTAL NUMBER OF STUDENTS IN THIS REPORT: 9

0806A3

Figure 3



**meap**

GRADE 4

1988 - 1989  
SCHOOL SUMMARY  
READING PILOT TEST  
FORM T11**DRAFT**

DISTRICT: M.

PUBLIC SCHOOLS

SCHOOL:

MIDDLE SCHOOL

CODES: DISTRICT - 89-9690 SCHOOL - 0009

\* NOT TESTED  
\*\* INTENTIONALLY LEFT BLANK; DATA ELEMENT(S) HAVE NOT BEEN DEFINED.**I. Distribution of Constructing Meaning Scores**

PART 1				PART 2			
RAW SCORE	PERCENT OF STUDENTS	RAW SCORE	PERCENT OF STUDENTS	RAW SCORE	PERCENT OF STUDENTS	RAW SCORE	PERCENT OF STUDENTS
20	7.0	10	0.0	20	4.0	10	4.0
19	8.0	09	3.0	19	7.0	09	3.0
18	12.0	08	0.0	18	11.0	08	3.0
17	9.0	07	0.0	17	16.0	07	3.0
16	15.0	06	3.0	16	13.0	06	5.0
15	17.0	05	2.0	15	8.0	05	1.0
14	9.0	04	1.0	14	4.0	04	1.0
13	5.0	03	1.0	13	6.0	03	4.0
12	3.0	02	1.0	12	2.0	02	2.0
11	2.0	01	0.0	11	2.0	01	0.0
		0				0	
PERCENT OF STUDENTS PASSED = **				PERCENT OF STUDENTS PASSED = **			
NUMBER OF STUDENTS TESTED = 107				NUMBER OF STUDENTS TESTED = 106			

**II. Relationship Between Constructing Meaning Scores and Other Test Components**

A. KNOWLEDGE ABOUT READING				B. ATTITUDES AND SELF-PERCEPTIONS			
PART 1		PART 2		PART 1		PART 2	
HIGH	MOD	LOW	HIGH	HIGH	MOD	LOW	LOW
**	**	**	**	**	**	**	**
NUMBER OF STUDENTS INCLUDED = **				NUMBER OF STUDENTS INCLUDED = **			
C. TOPIC FAMILIARITY							
PART 1		PART 2		PART 1		PART 2	
HIGH	MOD	LOW	HIGH	HIGH	MOD	LOW	LOW
**	**	**	**	**	**	**	**
NUMBER OF STUDENTS INCLUDED = **				NUMBER OF STUDENTS INCLUDED = **			
CONSTRUCTING MEANING				CONSTRUCTING MEANING			
NOT PASS				NOT PASS			
PASS				PASS			
NUMBER OF STUDENTS INCLUDED = **				NUMBER OF STUDENTS INCLUDED = **			
NOT PASS				NOT PASS			
PASS				PASS			
NUMBER OF STUDENTS INCLUDED = **				NUMBER OF STUDENTS INCLUDED = **			

**III. Percent of Students by Category of Achievement**

Category	1988		
ACHIEVEMENT 1	**		
ACHIEVEMENT 2	**		
ACHIEVEMENT 3	**		
ACHIEVEMENT 4	**		
ACHIEVEMENT 5	**		
ACHIEVEMENT 6	**		
ACHIEVEMENT 7	**		
ACHIEVEMENT 8	**		
ACHIEVEMENT 9	**		
ACHIEVEMENT 10	**		
ACHIEVEMENT 11	**		
ACHIEVEMENT 12	**		
ACHIEVEMENT 13	**		
ACHIEVEMENT 14	**		
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ACHIEVEMENT 95	**		
ACHIEVEMENT 96	**		
ACHIEVEMENT 97	**		
ACHIEVEMENT 98	**		
ACHIEVEMENT 99	**		
ACHIEVEMENT 100	**		

STATUS/CHANGE CATEGORY

Status: \*\*

Change: \*\*

1988 RESULTS \*\*

Total Number of  
Answer Sheets Processed: 109

NOTE: In 1989, the MEAP tests will be revised. Longitudinal comparisons should not be made with previous Reading tests.

0007/3

Figure 4