

## DOCUMENT RESUME

ED 079 704

CS 000 658

AUTHOR Hansen, Lee H.; Hesse, Karl D.  
 TITLE An Interim Report of Results of the Pilot Assessment of Reading Literacy.  
 INSTITUTION Madison Public Schools, Wis. Dept. of Curriculum Development.; Wisconsin Univ., Madison. Instructional Research Lab.  
 SPONS AGENCY Wisconsin State Dept. of Public Instruction, Madison.  
 PUB DATE Apr 72  
 NOTE 81p.  
 EDRS PRICE MF-\$0.65 HC-\$3.29  
 DESCRIPTORS \*Cloze Procedure; Content Reading; \*Criterion Referenced Tests; Grade 4; Grade 7; Grade 10; Grade 12; \*Reading Ability; Reading Achievement; Reading Level; Reading Research; \*Reading Tests; \*Test Construction

## ABSTRACT

A criterion-referenced assessment of reading literacy conducted in the fall of 1971 in grades 4, 7, 10, and 12 of the Madison Public Schools is described. The study was designed to answer the question: Can Wisconsin students read (gain information from) the written materials they encounter in daily living? The procedures for identifying the domains of content material, assigning the material to grade levels, developing the instruments, collecting and analyzing data, and sampling are briefly described. The test instruments were produced in a cloze format, and a description and justification of the cloze procedure are provided. According to cloze research, scores between 0 and 35% suggest that little or no information can be gained; between 35 and 50%, some information can be gained but the task is difficult and guided instruction is necessary; and greater than 50%, information can be gained independently with ease and comfort. Composite results for grade four indicate that 68% of the students scored less than 35% correct, 13% between 35 and 50%, and 19% above 50%. In grade seven, 56% scored below 35% correct, 16% between 35 and 50% and 28% above 50%. Breakdowns of scores by content type and attendance area are given. Sample test booklets for each grade are also included. (T0)

U S DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY.

ED 079704

AN INTERIM REPORT  
of Results  
OF THE PILOT ASSESSMENT  
OF READING LITERACY

Conducted by

The Office of Research and Testing  
in  
The Department of Curriculum Development  
Madison Public Schools

Lee H. Hansen  
*Coordinator of Research  
and Testing*

Karl D. Hesse  
*Coordinator of Language Arts  
and Reading*

In cooperation with  
The State Department of Public Instruction  
and  
The University of Wisconsin Instructional Research Laboratory

April, 1972

05 000 658

## TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION . . . . .	1
II. BACKGROUND . . . . .	3
III. DESIGN OF THE STUDY . . . . .	10
IV. RESULTS . . . . .	20
V. OBSERVATIONS AND IMPLICATIONS . . . . .	35

## P R E F A C E

What follows is an interim report to the Board of Education of the Madison Public Schools on the results to date of the reading literacy assessment conducted in the fall of 1971. The assessment was conducted at grades 4, 7, 10, and 12 using materials that students at those grade levels are expected to read. This report of the early results for grades 4 and 7 is but a beginning; it begins to answer some of the questions being asked about reading instruction and the suitability of written materials for students in elementary and middle school.

Hopefully, however, this interim report will also raise as many questions as it answers, questions which can be answered by additional analysis of the data. The data may also begin to suggest some future direction for the instructional program in reading and for the acquisition of written materials in the schools.

In an attempt to keep this report relatively brief, the description of the procedures will be confined to an overview of the design. A detailed description and documentation of the design will be included in the final and more comprehensive research report scheduled for August or September, 1972.

You will better understand this report if you first have read the document entitled: "A Description of an Assessment of Reading Literacy". The document is available from the Research Office of the Madison Public Schools.

P R E F A C E (cont'd)

Although ultimately a research report must become the responsibility of one or two people, a study of this magnitude does not occur without the help and support of countless interested people. It would be grossly inconsiderate of us not to acknowledge them. First and foremost are thanks to our reading and language arts colleagues, Kay Harty, Alice Benn, Aileen Nettleton, Elaine Hubbard, and Tom Swenson for working closely with us in the development and implementation of the study, for helping us to gather the data, and for sharing insights into its meaning.

Second, we must acknowledge the close teamwork of the staff of the Instructional Research Laboratory. Cy Svoboda, John Gottman, and most of all, Bob Clasen, provided constant help and support that made it all possible.

Our thanks, too, to the staff of the Wisconsin Department of Public Instruction, but particularly to Bill Kelly and Steve Daeshner, for their assistance in planning and data gathering.

Finally, our appreciation to Carmelo Sapone, Director of Curriculum, for his support, and to Jane Niebauer, our secretary and biggest helper.

Læe Hansen

Karl Hesse

## I N T R O D U C T I O N

About a year and a half ago, the Wisconsin Department of Public Instruction commissioned John Gottman of the University of Wisconsin, Instructional Research Laboratory to prepare a plan for a state-wide reading assessment. The plan<sup>1</sup> which Gottman presented in May of 1971 was radically different, in that it called for a criterion-referenced assessment of reading literacy rather than a normative-referenced assessment of reading achievement. More simply, the plan called for answering the following question:

*Can Wisconsin students read (gain information from) the written materials they encounter in daily living?*

This question differed considerably from the more usual question asked in normative assessment:

*How do Wisconsin students compare with a national sample of students and with each other in reading assessment?*

The plan was based on the extensive and substantial research of John Bormuth and his colleagues at the University of Chicago.

For the past seven years Bormuth has engaged in research with the financial support of the U.S. Office of Education to link the cloze testing procedure to literacy assessment.<sup>2</sup> (A description of the cloze test follows in the next section.)

Because little was known about the problems and issues generated by a large-scale assessment using the cloze test, the Department of Public Instruction approached Carmelo Sapone, Director of Curriculum for the Madison Public Schools, as to the

feasibility of conducting a pilot of the state plan in the Madison Public Schools. Dr. Sapone supported the request, with the understanding that the Instructional Research Laboratory and the Department of Public Instruction would provide financial support. The project<sup>3</sup> was accepted by the public schools in July of 1971. Since that time a team of researchers from the three cooperating agencies has been working on the project.

## B A C K G R O U N D

As background to a better understanding of the purposes of this project, four issues must be explored. The first concerns the nature of literacy; the second, the problem of assessing literacy; the third, the suitability of the cloze procedure as a test of literacy; and the fourth, the validity and reliability of the cloze procedure.

1. What does it mean to be literate? To be able to sound out words? To be able to read a string of words put together into sentences? To be able to read aloud a paragraph without mispronouncing any words? All of these behaviors probably contribute to the reading process; none of them defines literacy. To face that issue we must ask what the products of the reading act are. While we may not be able to name all of them, it would seem that one basic product of the reading act is gaining information from what has been read. This is the definition of literacy that Bormuth<sup>4</sup> is proposing; it is the definition that we accept. It is a definition based on the output or product of reading rather than on the behaviors and processes (e.g., sounding out words) that might be called the input or enabling behaviors of the reading process.

The definition has considerable utility for two reasons. First, literacy must be described in the context of specific materials. A reader can be literate with respect to one kind



of material and illiterate with respect to another; that is, his ability to gain information will be dependent upon the material he must read. Second, the definition allows us to skirt an important dilemma in reading instruction, i.e., the inability at the moment to identify all of the enabling behaviors that result in a successful reader, someone who can gain information from print.

2. How can we measure literacy? A good way is to orally ask the person what he has read. Many teachers conduct their own literacy assessment in just this way. However, such a procedure is expensive, for we must test children one at a time, and unreliable, for we have little assurance that the tester will ask each child in exactly the same way to recall what he has read.

Thus we must find some paper and pencil procedure. Some people would suggest the multiple choice test item that reading achievement tests contain. However, such items present serious limitations in an assessment of literacy. They allow considerable guessing (at least 20 to 25%); they can be made easier or harder by judicious selection of the incorrect responses; and they often introduce new words and phrases not found in the original written message.

A better type of test item to use is the completion item which requires the reader to recall and supply the information called for. Moreover, such items can be derived directly from the text. Thus, if a sentence in the material to be

read says: "The old man sat on the bank of the river.", a test item might be written which says: "Who sat on the bank of the river? \_\_\_\_\_." In this way only words from the text are used in framing the question. The test item is said to be replicable because two different people can produce the same item.

The problem with using the completion test item is that such items must be constructed for each reading passage that we wish to use in assessing literacy. The preparation of these items requires a lot of editing and trying out, an expensive and time-consuming process when we wish to check if children are literate with respect to hundreds of different written messages. Thus an easier way had to be found to assess literacy.

3. How can the cloze procedure measure literacy? Bormuth hit upon the idea of finding an inexpensive and replicable procedure that correlated highly with a reader's ability to gain information from the passage as measured by completion items. The cloze was such a procedure. In preparing a cloze test of a passage, one simply deletes every fifth word in the passage and substitutes a blank. The task of the student is to replace as many of the deleted words as he can, using the remaining text as a clue. An example of a cloze test is found in Exhibit 1 below.

Exhibit 1

RULES FOR BIKE DRIVERS:

- . Drive close to the right side of the \_\_\_\_\_, single file, and pass \_\_\_\_\_ cars with care.
- . Sit \_\_\_\_\_ the bicycle seat when \_\_\_\_\_, and never carry extra \_\_\_\_\_ --no "trick" riding.
- . Never \_\_\_\_\_ rides on other vehicles.
- . \_\_\_\_\_ carry loads which prevent \_\_\_\_\_ from keeping at least \_\_\_\_\_ hand on the handlebars \_\_\_\_\_ all times. (Or better, attach a basket to your bike for packages, so you always have both hands free for driving.)

1. road; 2. parked; 3. on; 4. riding; 5. passengers;  
6. hitch; 7. never; 8. you; 9. one; 10. at

The test is completely objective and replicable, since several different test producers equipped with the same decision rule for deleting words will come up with the same test.

The design which Bormuth has used to relate the cloze test to literacy is complex and cannot be described in total here (See Bormuth<sup>5</sup>, for a more thorough description). Simply put, however, if with some inaccuracy, Bormuth selected several appropriate messages, developed tests of information gain for these messages, using completion items, and developed a clozed version of each message. The design called for

having students 1) take the test of completion items before reading the passage (as a measure of the amount of knowledge which the student had before reading the written passage), 2) take the cloze test of the passage, 3) read the passage, and 4) take the test of completion items again. The difference between the performance on the test of completion items before reading the passage and after becomes a measure of information gain. Then Bormuth used statistical procedures (regression analysis) to relate students' performance on the test of information gain to their performance on the clozed version of the passage. (The actual design was somewhat more complex to control for certain interaction problems.)

This basic design has been replicated by Bormuth and colleagues in more than five major studies, each one designed to expand and extend the idea. Thus the design has been tried at various grade levels and in different schools. In addition, Bormuth has added to "information gain" such measures as interest in the material, reading rate, purpose for reading the material, and willingness to read the material.

What Bormuth found is that when performance on the cloze test fell below 35% correct (scoring only exact words correct), students were able to gain little or no information from the written material as measured by the test of information gain. Thus 35% correct on the cloze test becomes a threshold

of minimal literacy. Below that score the reader is all but illiterate with the material.

If the other variables of reading rate, interest in the material, purpose for reading the material, etc., are included in the analysis, a cloze performance of at least 50% correct is suggested.

Thus we are able to posit two criteria for this literacy assessment project. A score less than 35% will suggest that students can gain little or no information from the material; a score between 35% and 50% suggests that students may be able to gain some information from the material, but that the task will be frustrating and difficult. Students will find the material "hard". A score of 50% or more correct suggests that students can gain considerable information from the material with increasing comfort and ease.

4. How valid and reliable is the cloze procedure? Because the cloze procedure is for many people a new and different measuring procedure, it is natural to question its validity and reliability. Several researchers have devoted considerable attention to these issues. For example, cloze tests have been correlated with standardized reading achievement tests on several occasions with coefficients ranging between .73 and .84. When these figures have been corrected for the unreliability of both tests, the values have approached 1.00, a perfect correlation. Validity and reliability data

for the test instruments used in this study will not be included in this interim report. However, validity and reliability checks have been made for the tests. The data compare favorably with the results recorded by Bormuth<sup>6</sup> and others. A complete discussion of validity and reliability data will be included in the final report. (See the report entitled "A description of an Assessment of Reading Literacy" for additional discussion of the validity of the cloze procedure.)

## DESIGN OF THE STUDY

This section provides an overview of the design. Some attention will be given to procedures for 1) identifying the domains of content material, 2) assigning content material to grade levels, 3) developing the instruments, 4) collecting the data, 5) sampling procedures, and 6) analyzing the data. A detailed description and documentation of each will be included in the final report.

### THE DOMAINS OF CONTENT

Since this study was to assess whether students can read what they are expected to read, considerable thought was given to identifying the materials that students are expected to read. Considerable brainstorming by the project staff and 30 Madison teachers involved in a summer school inservice program produced over 200 discrete types of reading material that both students and adults might be expected to read. These were classified into categories and subsequently into domains of reading material. The domains and categories of material are listed in Table 1.1, 1.2, and 1.3.

### ASSIGNMENT TO GRADE LEVELS

A second task was determining which categories and domains of materials should be used at each grade level in preparing the test instruments. The determining criteria was to be societal expectation, not perceived readability of the material. In other words, the key question for including the material was not "Can students at the grade level read that kind of material?"; rather, the question was "Are students at that grade level reasonably

TABLE 1.1

DOMAINS AND CATEGORIES

<u>A. Recreational Literature:</u>	Grade Level Used
1. Magazines (3) <sup>+</sup>	<u>4-7-10-12</u>
2. Stories dealing with family relationships (3)	4-7-10-12
3. Animal stories (3)	4-7-10-12
4. Patriotic stories (3)	4-7-10-12
5. Biographies (3)	4-7-10-12
6. Adventure stories (3)	4-7-10-12
7. Student newspapers (3)	4-7-10-12
8. Mystery stories (3)	<u>4-7-10-12</u>
<u>B. School:</u>	
1. Student handbook (3)	<u>7-10-12</u>
2. Paperback list (15)	4-7-10-12
3. Standardized test instructions (5)	<u>4-7-10-12*</u>
<u>C. Automobile:</u>	
1. Promotional literature on new cars (3)	<u>10-12*</u>
2. Auto insurance promotion (3)	10-12*
3. Automotive license manual (3)	10-12*
4. Automotive driving tips (3)	10-12*
5. Operator's and owner's manual (3)	10-12*
6. Penalty point literature (3)	<u>10-12*</u>
<u>D. Citizenship:</u>	
1. Wisconsin Constitution (3)	<u>10-12*</u>
2. Voting directions (3)	12*
3. Newspapers (40)	7-10-12*
4. Referenda statements (27)	<u>12*</u>
<u>E. Leisure-time Activities:</u>	
1. Rule books (sports) (3)	<u>7-10-12*</u>
2. Directions for assembling toys (3)	7-10-12*

+ Number indicates the quantity of passages which will represent that category.

\* Indicates all grades involved received the same passages.



- 12 -  
TABLE 1.2

<u>E. Leisure-time Activities:</u> (Continued)	Grade Level Used
3. Recreation department bulletins (3)	4-7-10-12
4. Directions for games (3)	4-7-10-12*
5. T.V. Guide (3)	4-7-10-12*
6. Boy/Girl Scout Manual (3)	4-7-10-12*
7. Directions accompanying sewing patterns (3)	<u>4-7-10-12*</u>
<u>F. Occupational:</u>	
1. Vocational School annual ad (3)	<u>10-12*</u>
2. Instructions on job applications (3)	10-12*
3. Civil Service test applications (3)	12*
4. Armed Forces promotional literature (3)	10-12*
5. Prospective careers promotional literature (3)	10-12*
6. Instructions for filling out forms (3)	10-12*
7. School catalogs (3)	<u>10-12*</u>
<u>G. Reference Materials:</u>	
1. Road maps (3)	<u>7-10-12*</u>
2. Telephone directory (3)	4-7-10-12*
3. Encyclopedia (3)	4-7-10-12
4. Reference books (3)	<u>4-7-10-12</u>
<u>H. Safety:</u>	
1. Fire Department literature (3)	<u>4-7-10-12*</u>
2. Airplane emergency literature (3)	4-7-10-12*
3. Civil Defense instructions (3)	4-7-10-12*
4. Bicycle and pedestrian rules and fire evacuation (5)	4-7-10-12*
5. Warnings on commercial packaging (10)	4-7-10-12*
6. Heart, Cancer, and Red Cross literature (3)	7-10-12*
7. Directions for power tools (3)	<u>7-10-12*</u>
<u>I. Consumer Material:</u>	
1. Junk mail (3)	<u>7-10-12*</u>
2. Messages on packages (3)	4-7-10-12*
3. Recipes (3)	7-10-12*
4. Catalogs (3)	7-10-12*
5. Contractual agreements (3)	12*
6. Banking promotional literature (3)	10-12*
7. Financial planning literature (3)	10-12*

- 13 -  
TABLE 1.3

I. <u>Consumer Material:</u> (Continued)	Grade Level Used
8. Advertisements (3)	7-10-12*
9. Conservation/ecology literature (3)	7-10-12*
10. Consumer magazines (3)	<u>10-12*</u>
J. <u>Textbooks:</u>	
1. Language Arts and Reading (12)	<u>4-7-10-12</u>
2. Social Studies (12)	4-7-10-12
3. Science (12)	4-7-10-12
4. Mathematics (12)	<u>4-7-10-12</u>
TOTAL - 300 representative passages	

Numbers:

- A. 60 categories in 10 domains.
- B. 300 passages to represent these.
- C. 4th Grade: 18 different booklets of 9 tests each to cover 144 passages.
- D. 7th Grade: 36 different booklets of 7 tests each to cover 216 passages.
- E. 10th and 12th Grades: 30 different booklets of 11 tests each to cover 300 passages.

expected to be able to read that kind of material?". The issue was to determine if students at that grade level were an audience for each category of material. Is the material distributed to them? Are they likely to pick it up? Are they likely to be asked to read the material as part of some other activity or responsibility?

To determine this, a questionnaire was prepared and distributed to over 60 teachers and central office administrators. From that data, categories and domains of material were assigned to grade levels as shown in Tables 1.1, 1.2, and 1.3. In addition, it should be noted that while some categories are assigned to all grade levels, the materials selected for that category could differ with each grade level. Such would obviously be the case with textbooks, for example.

#### COLLECTING A CORPUS OF MATERIAL

The next task was to collect a corpus or bank of reading material by domain, category, and grade level from which passages could be selected for the test. To do this systematically, sets of decision rules were prepared for each category and domain. Exhibit 2 contains a sample of these decision rules for one domain.

Armed with the decision rules and a table of random numbers, a team of elementary and middle school teachers selected materials for each domain and category. In the development of the decision rules, attempts were made to select the easiest passages available. For example, passages were selected generally from those textbooks identified by professional personnel as the easiest currently being used. Within a book or magazine, passages were sampled

## EXHIBIT 2

### VII. Reference Materials

#### A. Categories

1. Road maps
2. Telephone directory
3. Encyclopedia
4. Reference books

#### B. Decision Rules

1. Road maps: Get a copy of the 1971 official Wisconsin highway map (State Motor Vehicle Department). In addition, list all major oil companies in Madison, identify two at random, and get any two maps from a service station of each oil company identified.
2. Telephone directory: Xerox pages 5, 11, and 12 in the white pages. (Madison directory)
3. Encyclopedia: Contact Mrs. Beckwith (IMC Coordinator). "If a school library could buy only one set of encyclopedias for Grade \_\_, what set should it buy?" (Grades 4, 7, 10, 12) Go to the set for each grade level and randomly identify three volumes. Go to each volume and randomly select three pages. If the page selected is the beginning of a topic, xerox it. Otherwise move to the closest page which contains the beginning of a topic and Xerox that page.
4. Reference books: Ask Mrs. Angie Beckwith (IMC Coordinator) to name five essential reference books (except dictionary or encyclopedia) which an elementary school, a middle school, and a high school each should have. Randomly select two from each set of five. Randomly select two pages from each identified book. Select the beginning of a topic closest to the page randomly identified and Xerox that page.

from the first three paragraphs of a chapter or article. (The corpus of reading material is currently stored in the research office.)

#### DEVELOPING THE TEST BOOKLET

After a corpus of materials had been collected, a random sampling procedure was employed to select 60-70 word passages within each category of material. These became the passages used for the cloze test. For some categories the same passages could be used at all grade levels; for others, a separate sampling procedure was used at each grade level for the materials suitable for that grade level, e.g., textbooks and recreational reading. The number in parentheses following each category in Tables 1.1, 1.2, and 1.3, identifies the number of passages selected for that category and domain.

A uniform decision rule was adopted for "clozing" each passage. The staff entered a table of random numbers until they came to a number between 6 and 10, counting into the passage that number of words, and deleted that word and every fifth word after that until a set of 10 blanks was secured for the passage. Thus, all passages had anywhere from five to nine words intact before the first blank occurred. Every fifth word was deleted because previous research had suggested that this was the optimum number from a measurement point of view.

The total number of passages selected varied by grade level, since not all categories or domains were included at each grade level. At grade four 144 passages were selected; at grade seven, 216 passages; and at grades ten and twelve, 300 passages. At each grade level these passages were randomly assigned to different

booklet forms. Table 2 identifies the number of passages, booklet forms, and passages per booklet. One common passage was selected to be included in every form at all four grade levels. Thus there is one "ten item" cloze passage that all students in the study were tested on.

TABLE 2

Grade	Passages	Booklets	Passages/Booklet		Common Passage
4	144	18	8	+	1
7	216	36	6	+	1
10	300	30	10	+	1
12	300	30	10	+	1

At grades 4 and 7 a single page of personal and demographic information was developed (e.g., sex, school, age, etc.); at grades 10 and 12 two pages of such information was requested. In addition, each booklet included directions for taking the test and a sample cloze test passage for students to practice with before taking the test. Answers were included for the sample passage so students could check their work.

#### POPULATION AND SAMPLE

Madison Public School students at grades 4, 7, 10, and 12 were tested. In grade four a 40% sample of students (N = 1066) was identified by randomly selecting 60 classrooms (selected proportionately within high school attendance area) and 18 students within each classroom. Thus one student in each classroom took one of the

18 booklets prepared for the fourth grade, and conversely, each booklet was responded to by a random sample of 60 students. Booklets, moreover, were randomly assigned to students in each class.

At grades 7, 10, and 12 all students were tested because of the increased number of booklet forms and passages. Again, however, booklets were randomly assigned to students.

#### DATA COLLECTION

A team of test administrators was gathered from the Department of Public Instruction, the University Instructional Research Laboratory and the Curriculum Department of the Madison Public Schools. After several training sessions, the team went into schools and classes and administered tests to students, thus relieving teachers of the burdens of testing using a procedure unknown to them. In addition to explaining the cloze test to students and helping them work through the sample passage, test administrators were available during the testing period to help students spell words they wished to use but could not spell. Fourth graders were tested in October; 7th graders in December; and 10th and 12th graders in January.

#### DATA SCORING AND ANALYSIS

Passages were hand scored using specially prepared templates. Only the exact word was scored correct,<sup>8</sup> although minor misspellings were ignored if the word could be recognized. A quality control procedure was maintained during the entire scoring and keypunching operation to control for scoring and punching errors. The error rate never exceeded .3 of 1% at any time.

Data were analyzed by computing the percentage of scores falling within each criterion category. (0-35%, operationally illiterate; 35-50%, minimally literate; and 50-100%, literate).

Appropriate measures of concurrent validity and reliability were computed for the Grade 4 Booklets; only reliability estimates are available for the Grade 7 data. These data were consistent with the findings of other investigators. (Reliability and validity data will be presented and discussed in detail in the final report.)



## R E S U L T S

In this section the preliminary results for grades 4 and 7 are presented and discussed. Results are presented in graphic format in Tables 3 through 13. Only percentages are reported. Total numbers of passage scores (that percentages are based on) are included in Table 12. Results will be discussed in four sections: Composite, Domains of Material, Attendance Area, and Grade Level.

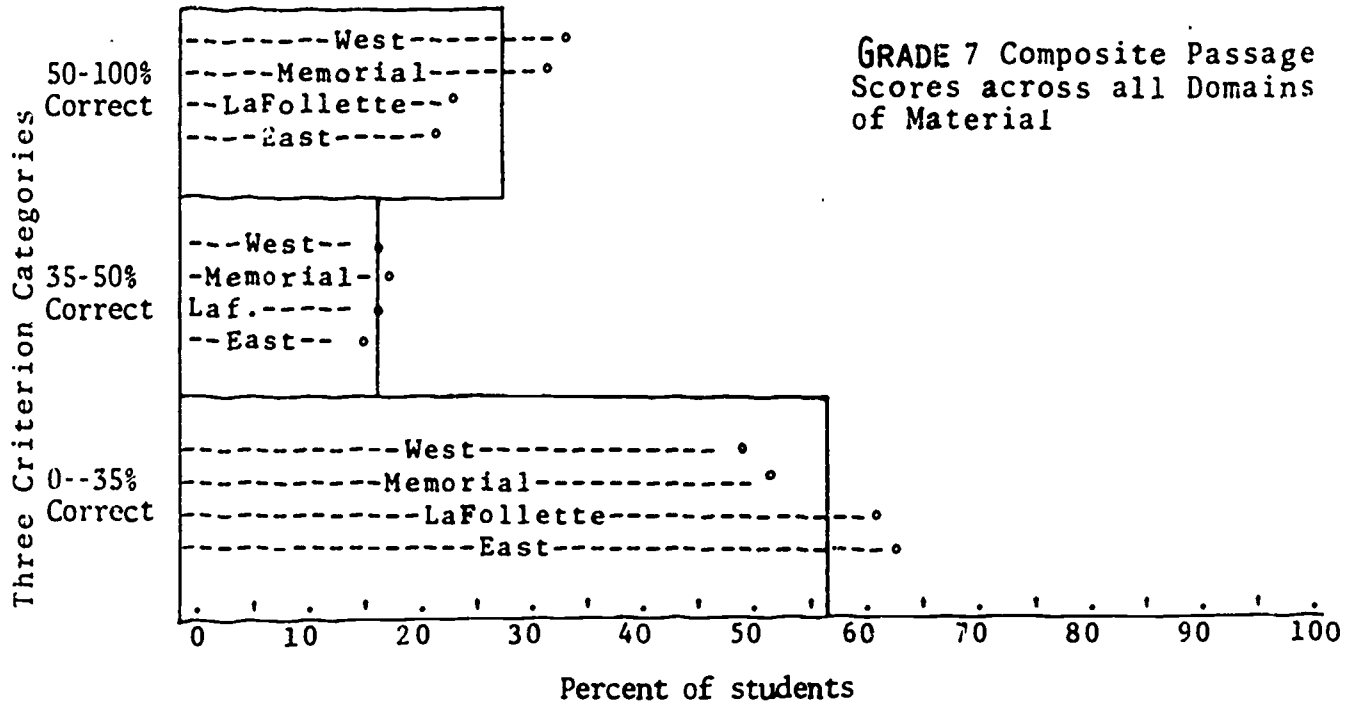
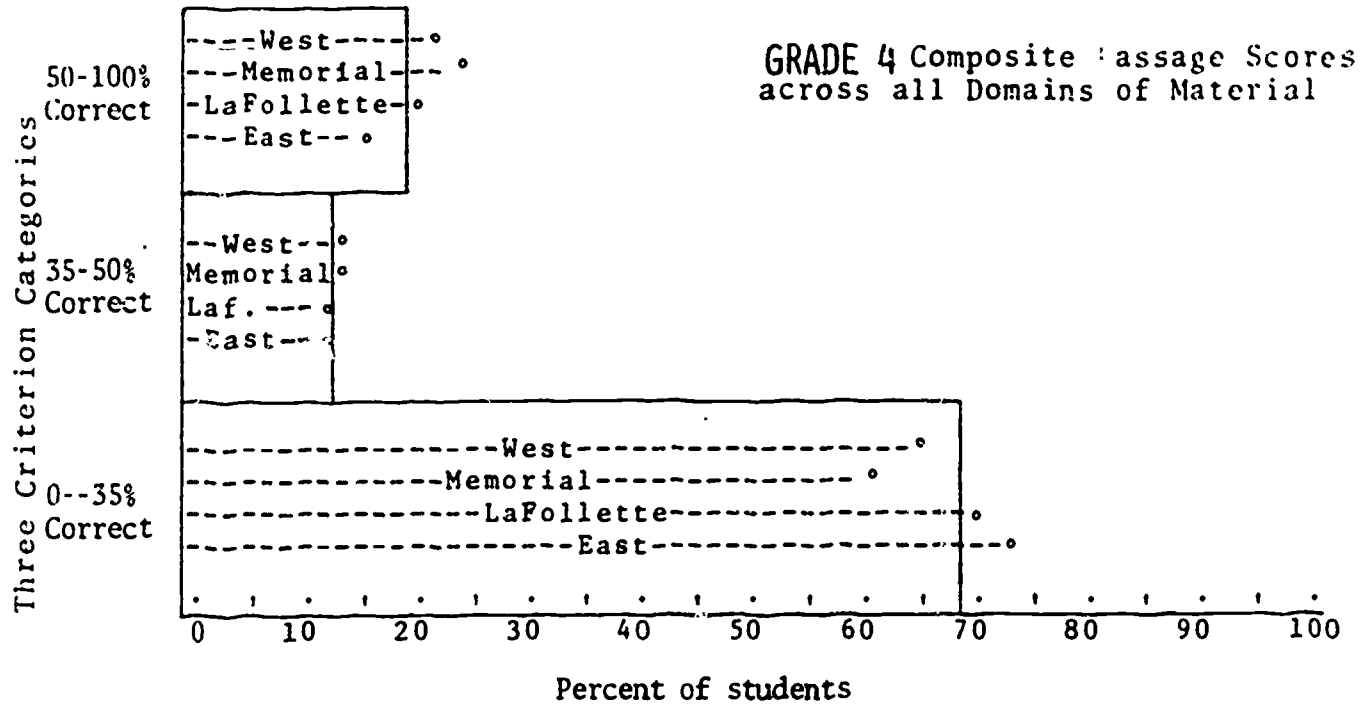
Before proceeding, however, it is necessary to review the scoring procedures. Each passage of 10 blanks is scored in terms of percentage of correct blanks. The graphs in this section depict the number of passage scores that fell within each criterion category. Scores between 0 and 35% suggest that those students can gain little or no information from the material from which the passages were obtained. They are operationally illiterate with that material. Scores between 35 and 50% suggest that students can gain some information from the material, but that the task will be difficult and guided instruction will be necessary. Finally, scores greater than 50% suggest that in general those students can independently gain considerable information from the material with ease and comfort.

### COMPOSITE RESULTS

Table 3 portrays composite results across the city for grades 4 and 7. In grade four 63% of the students had passage scores of less than 35% correct. Thirteen percent (13%) of the scores were between 35 and 50%, while 19% of the scores were above 50%.

TABLE 3

Percentages of students scoring within Criterion Categories for School District and High School Attendance Areas



Thus 68% of the students in the fourth grade sample are in general unable to gain information from the materials used in the study. Thirty-two percent (32%) can gain information, although for 13% of these youngsters the task will tend to be difficult and discouraging.

In the seventh grade 56% of the students had scores below 35% correct while 44% of the students were above the 35% criterion. Sixteen percent (16%), however, fall between 35 and 50%. Thus at the 7th grade level some 56% of the students were operationally illiterate with respect to the material identified for them. Twenty-eight percent (28%), however, would in general be able to read the material independently and comfortably.

Direct comparisons between fourth and seventh grade cannot be made safely, since the two grades were not tested on exactly the same material. One can conclude, however, that 7th graders are a little better prepared to read material expected of them by society than are 4th graders.

#### RESULTS BY TYPES OF MATERIAL

Tables 4 through 7 describe results of content domain of material for the 4th grade. In grade 4 the following domains of material were sampled: Leisure-time Reading, School-related, Leisure-time Activities, Reference, Safety, Consumer (recipes), and Textbooks. Results suggest that 4th grade students had least trouble with School-related materials (particularly paperbacks) (Table 4). In that domain 52% of the students had scores above 35% correct and 37% of the students had scores above 50% correct. Fourth grade students had the most difficulty with materials relating to Safety (Table 6) and Leisure-time Activities (Table 5)

TABLE 4

Percentages of students scoring within Criterion Categories for School District and High School Attendance Areas

(GRADE 4)

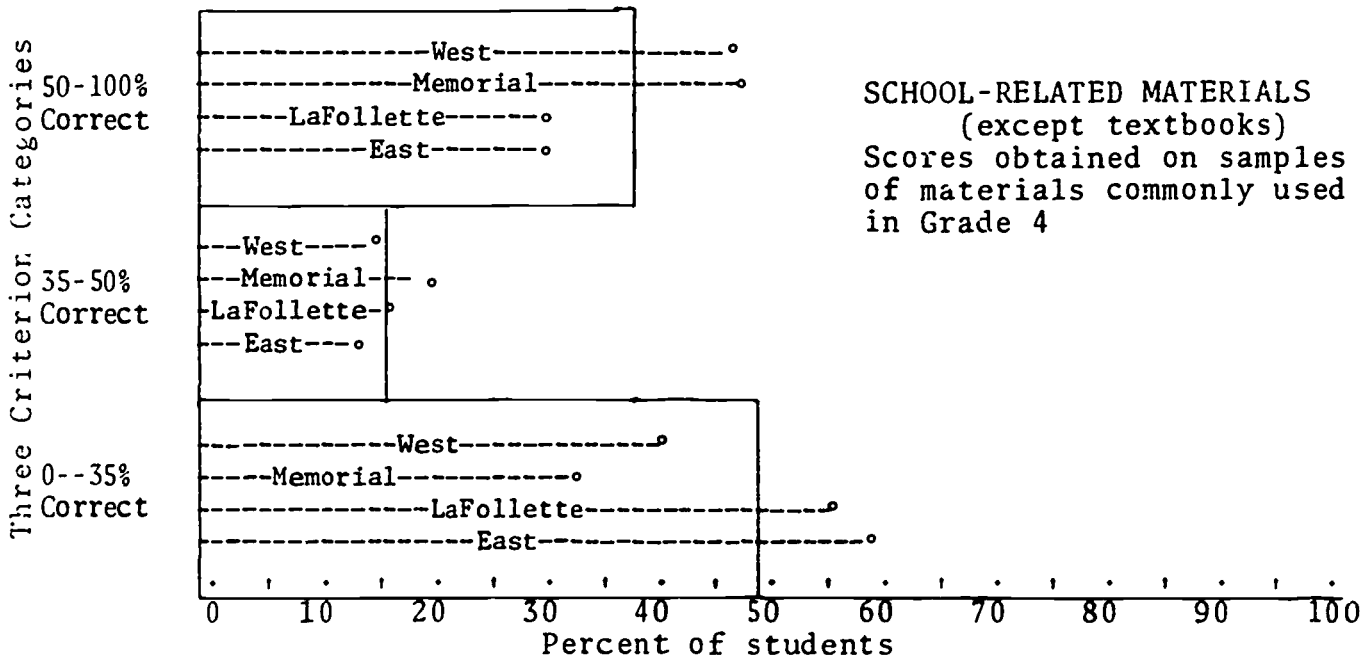
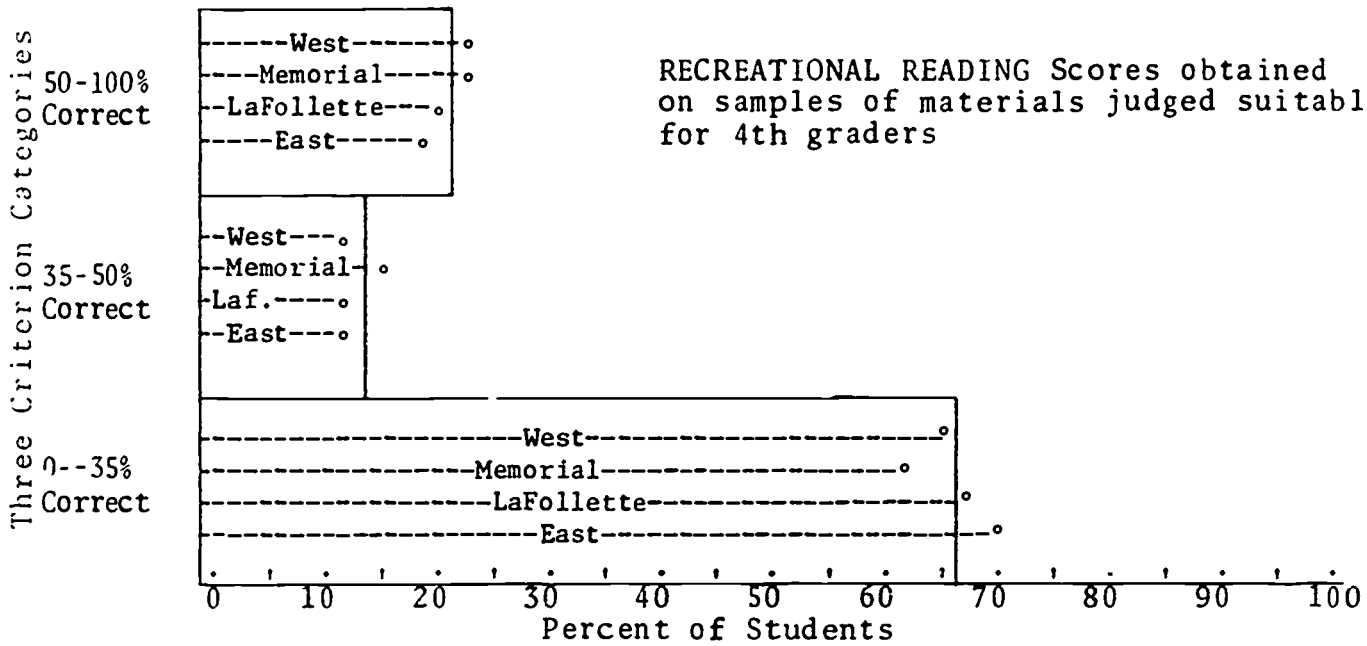


TABLE 5

Percentages of students scoring within Criterion Categories for School District and High School Attendance Areas (GRADE 4)

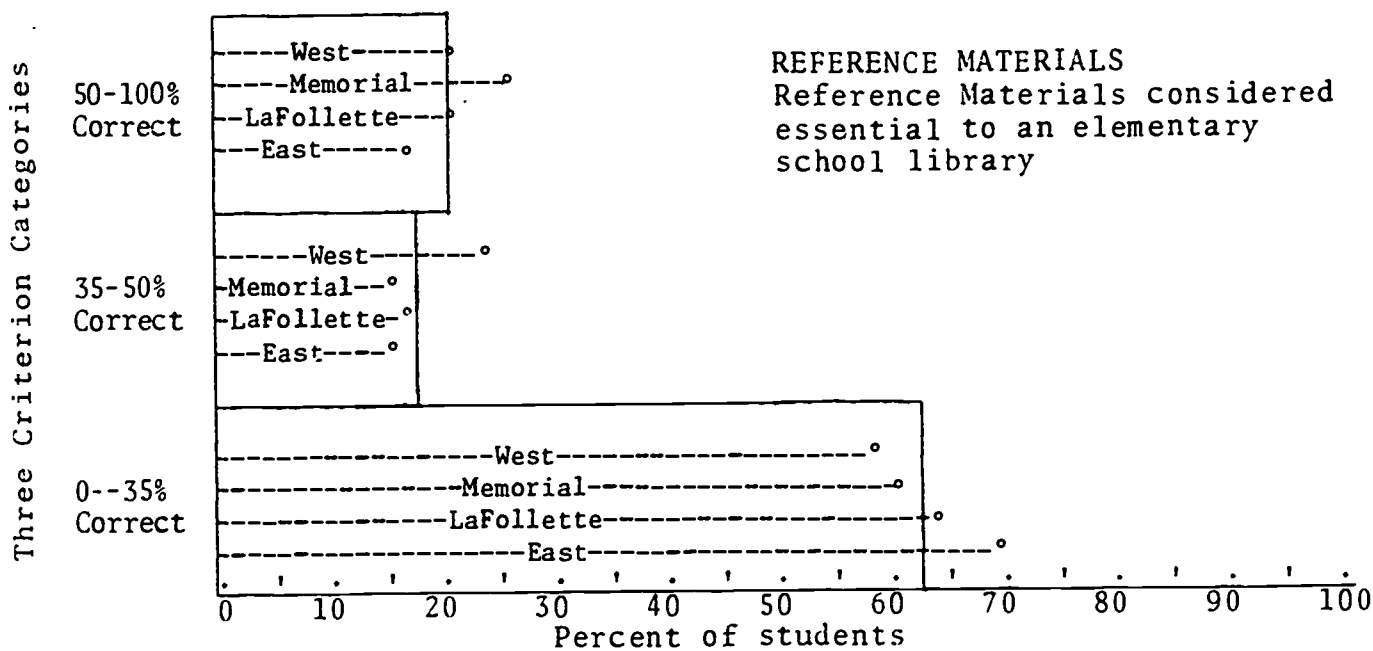
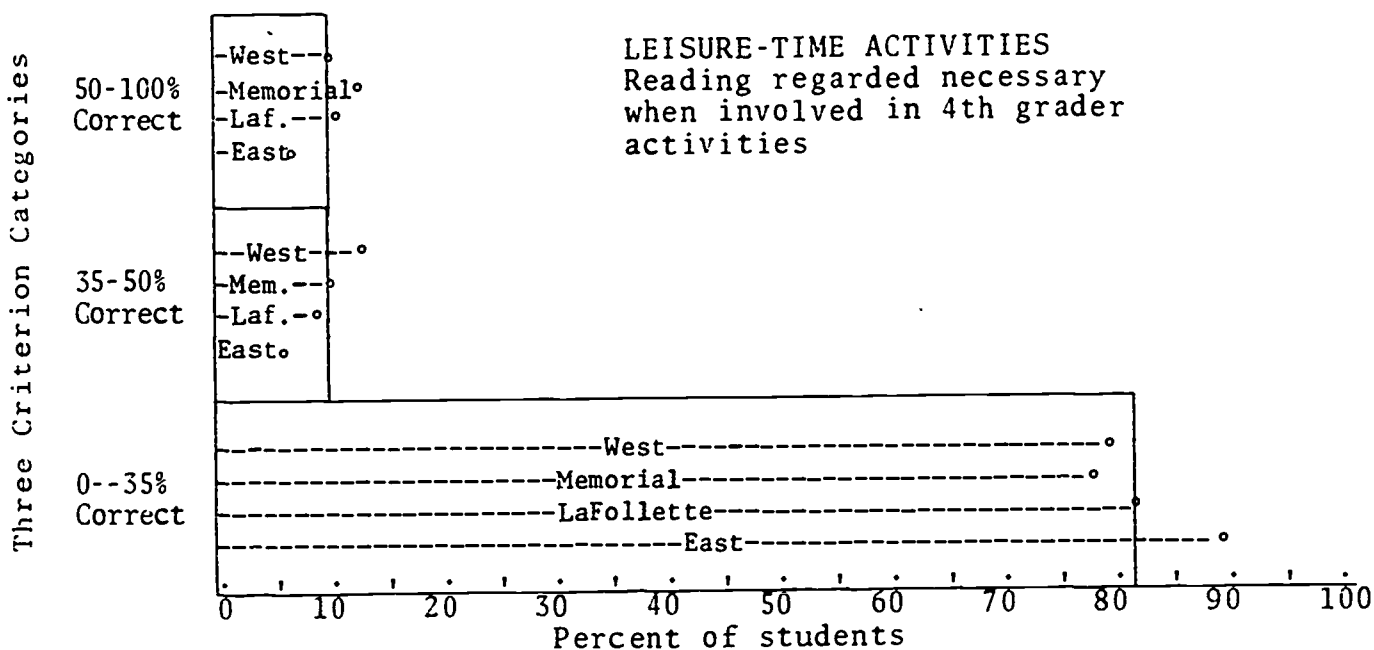


TABLE 6

Percentages of students scoring within Criterion Categories for School District and High School Attendance Areas

(GRADE 4)

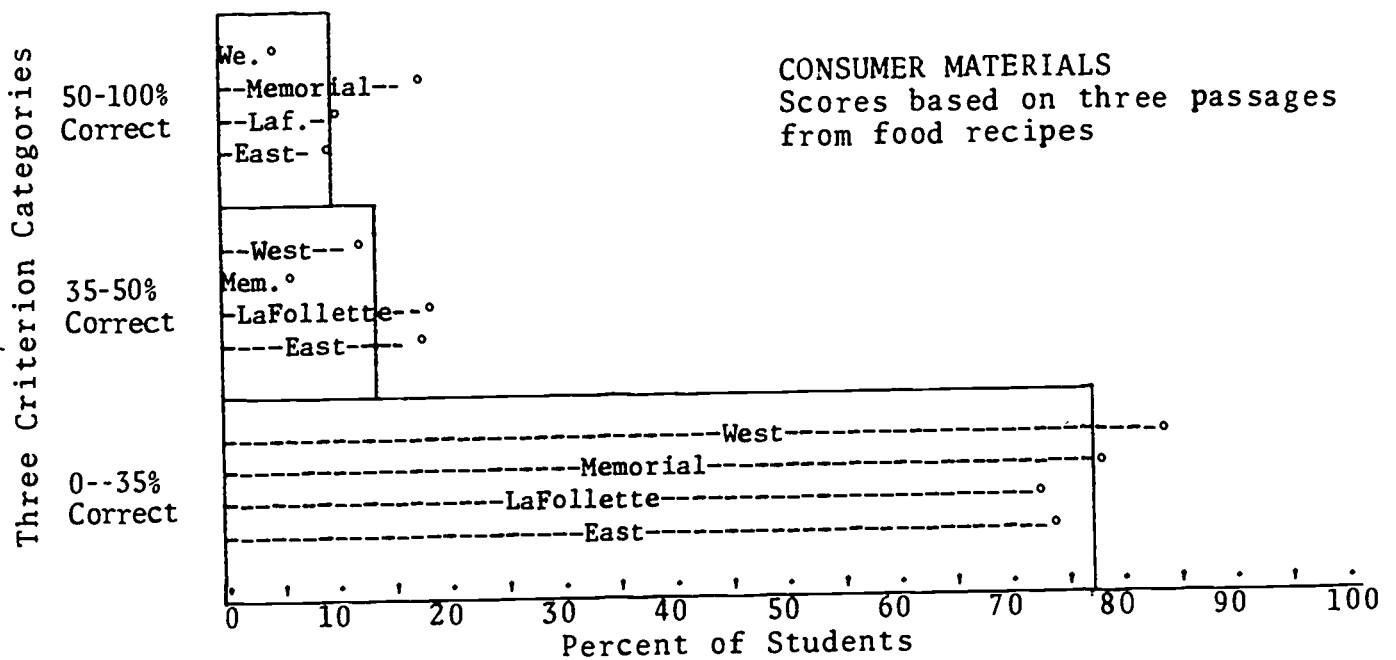
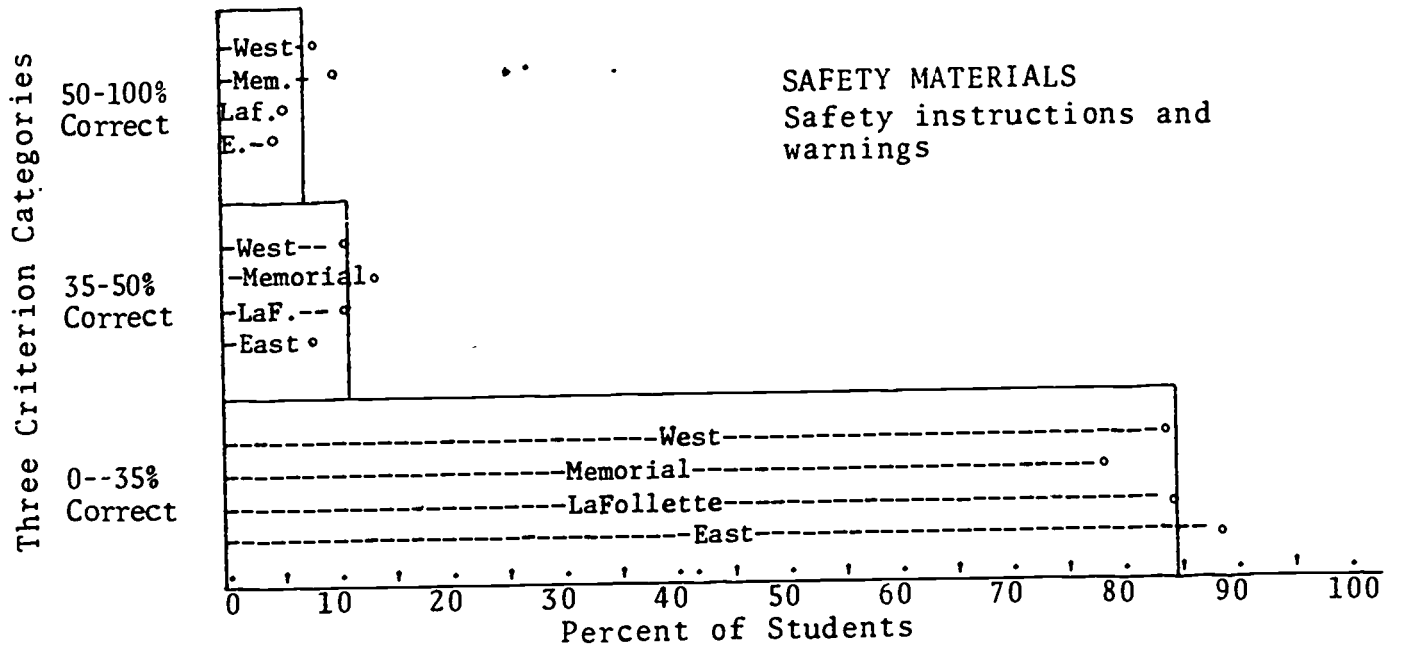
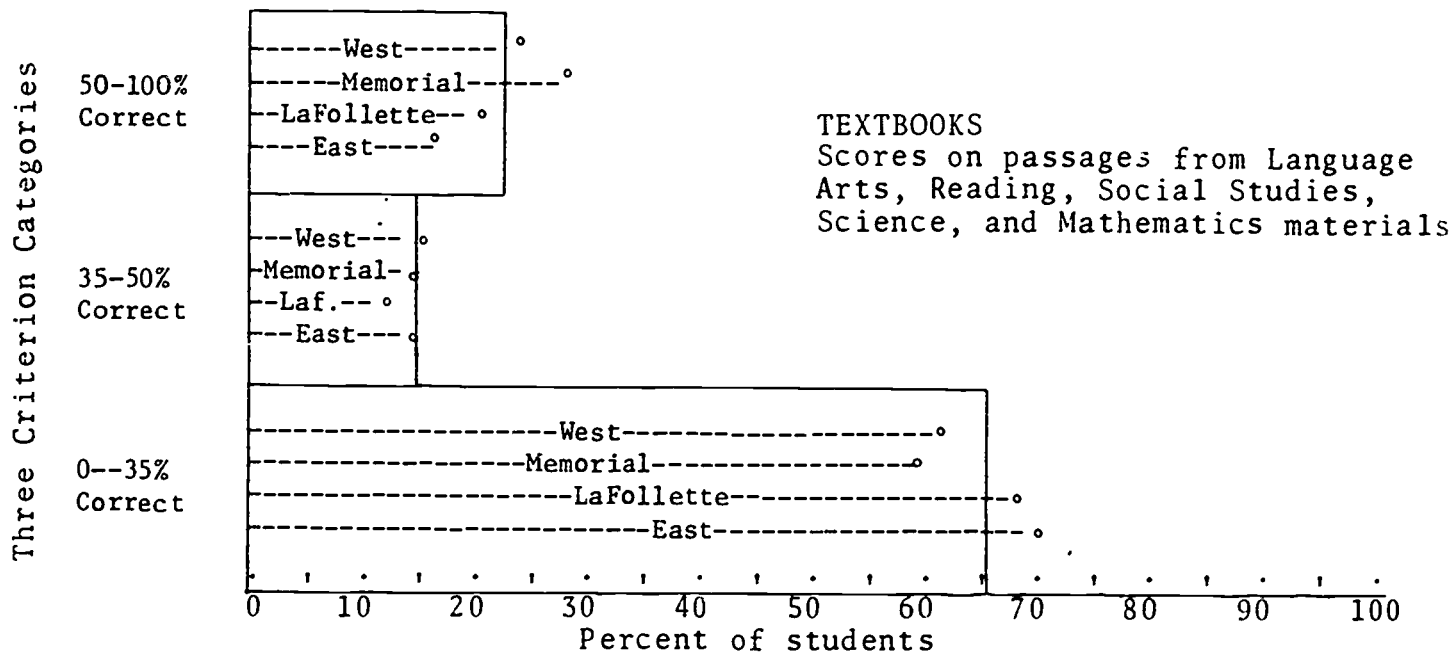


TABLE 7

Percentages of students scoring within Criterion Categories for School District and High School Attendance Areas

(GRADE 4)



where 84% and 83% of the students respectively had scores below 35% correct. Only 6% of the students were above 50% correct on Safety materials, while 9% were above 50% correct on Leisure-time Activity materials.

Recreational Reading (Table 4), Textbooks (Table 7), Consumer materials (recipes) (Table 6), and Reference materials (Table 5), while not as difficult as Safety and Leisure-time Activity materials, presented more difficulty than School-related materials for 4th graders. Sixty-six percent (66%) of the students had scores below 35% on recreational reading materials; however, 21% of the 34% of the students above the 35% criterion were also above the 50% criterion. Similar percentages are evident for Textbook materials and Reference materials. Recipes presented somewhat more difficulty, with 77% scoring below the 35% criterion of literacy.

In grade 7 the following domains of material were included: Recreational Reading, School-related, Citizenship, Leisure-time Activities, Reference, Safety, Consumer, and Textbooks. The results for these domains are presented in Tables 8 through 11. Results suggest that 7th grade students had least trouble with School-related (Table 8), Safety (Table 10), and Textbook (Table 11) materials. In these domains anywhere from 52 to 56% of the students had scores above the 35% criterion. Moreover, the percentage of students had scores above the 35% criterion. Moreover, the percentage of students above the 50% criterion for the three domains varied between 31 and 38%.

In other content domains 7th graders did not do as well. Sixty-two percent (62%) of the students had scores below 35% correct on passages sampled from Recreational Reading (Table 8). These were books which city librarians perceived as suitable for and



popular with seventh graders. Only 20% had scores above the 50% criterion. A similar pattern is observed for Reference (Table 10) and Consumer-related (Table 11) materials, although slightly more of the scores are above the 50% criterion (25% and 24% respectively). Leisure-time Activity (Table 9) materials presented somewhat less trouble for seventh graders, since 46% of the students had scores above the 35% criterion. Finally, passages from newspapers (Table 9) presented 7th graders with the most difficulty. Seventy-three percent (73%) of the students had scores below 35% and only 14% of the students had scores above 50% correct.

#### ATTENDANCE AREA DIFFERENCES

In Tables 3 through 11 the results for each high school attendance area are superimposed as line graphs on each bar graph. In Tables 4 through 7 these differences are noted for grade 4; in Tables 8 through 11 they are observed for grade 7. Table 3 displays attendance area differences for both grades 4 and 7 on the composite.

At the 4th grade level the differences in literacy among attendance areas parallel the results of the 4th grade STEP Reading Test released earlier. In all of the domains except Reference materials the East Attendance Area has the largest percentage of students who scored below 35% correct followed in turn by LaFollette, West, and then Memorial. For Reference materials the pattern is similar, except that 60% of the Memorial students scored below 35% correct as against 58% for West Attendance Area students (a minor difference at best). However, for all of the domains except School-related materials the difference between the two most extreme attendance areas seldom exceeds 11% at any of the three criterion

TABLE 8

Percentages of students scoring within Criterion Categories for School District and High School Attendance Areas

(GRADE 7)

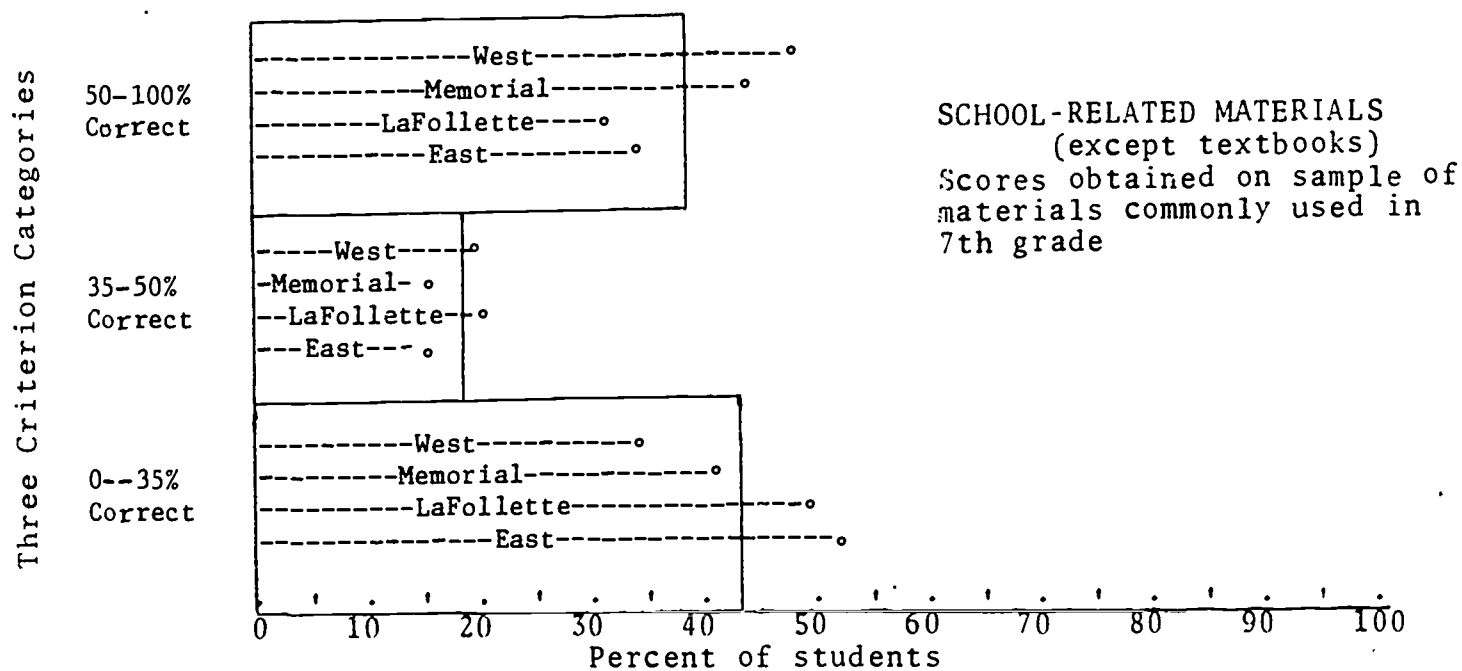
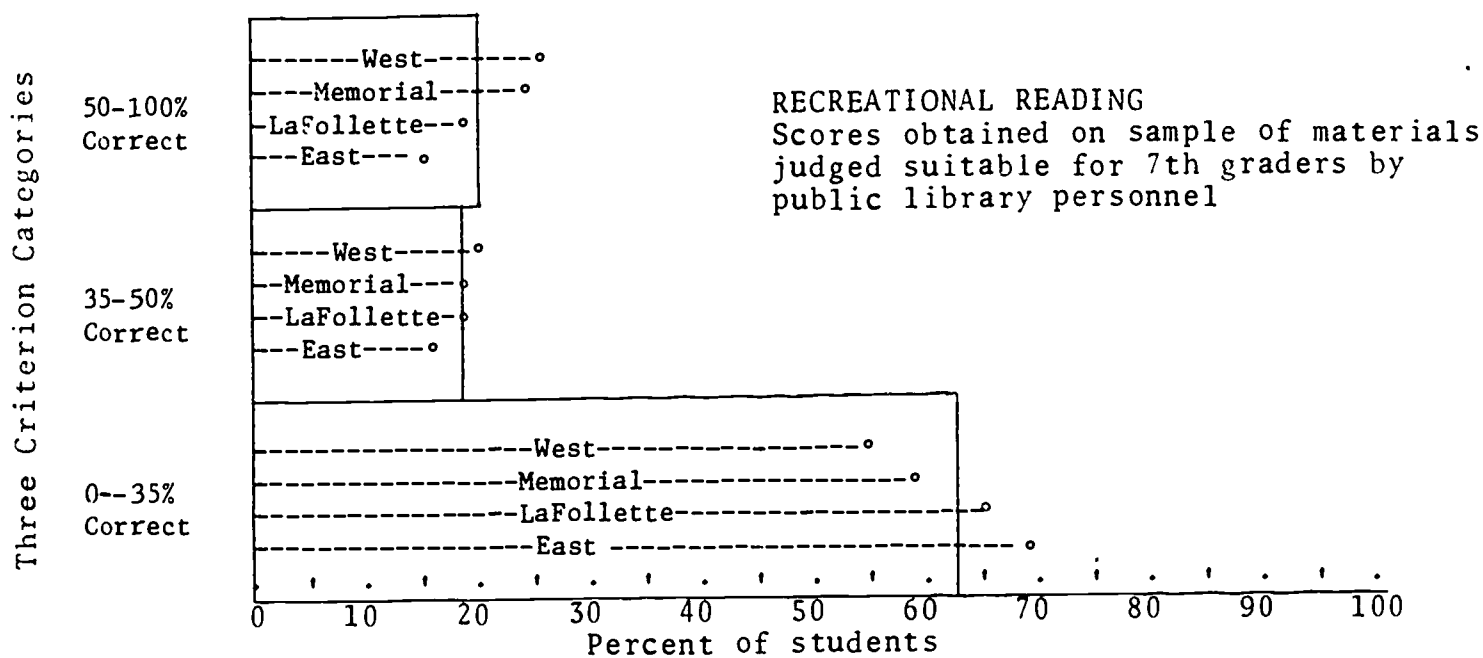


TABLE 9

Percentages of students scoring within Criterion Categories for School District and High School Attendance Areas

(GRADE 7)

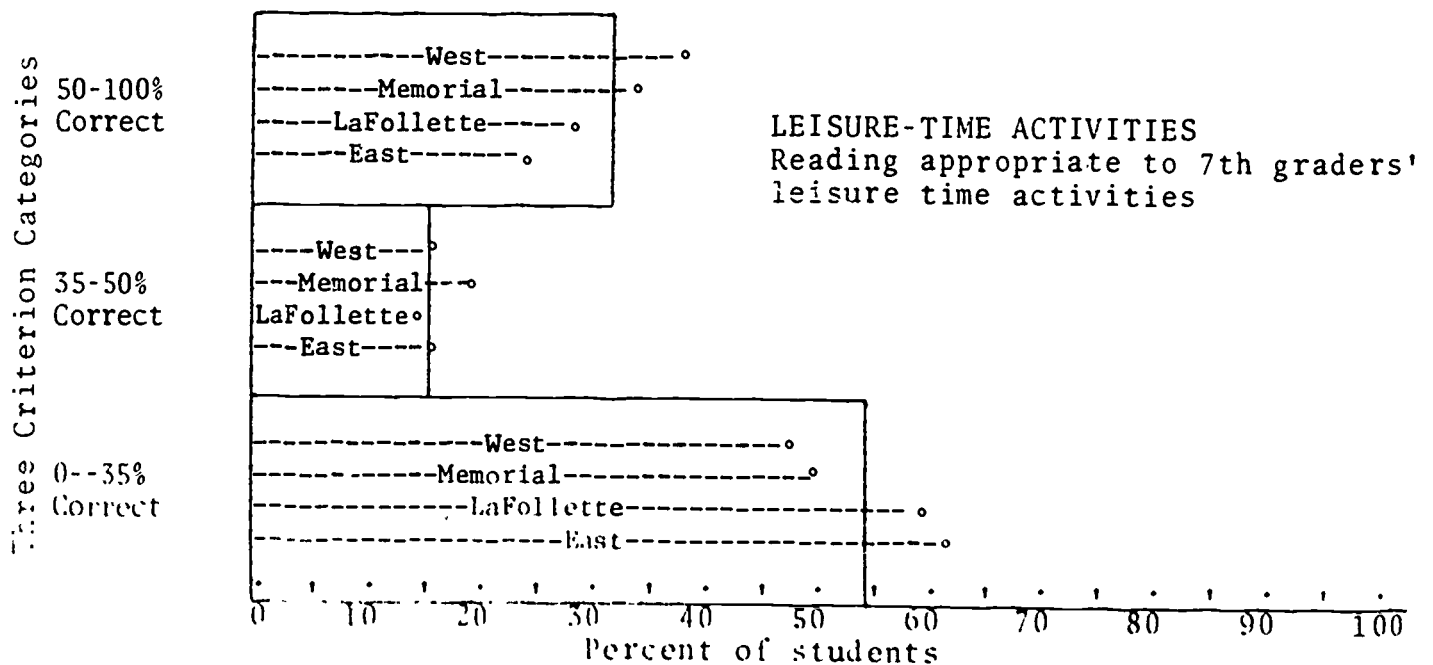
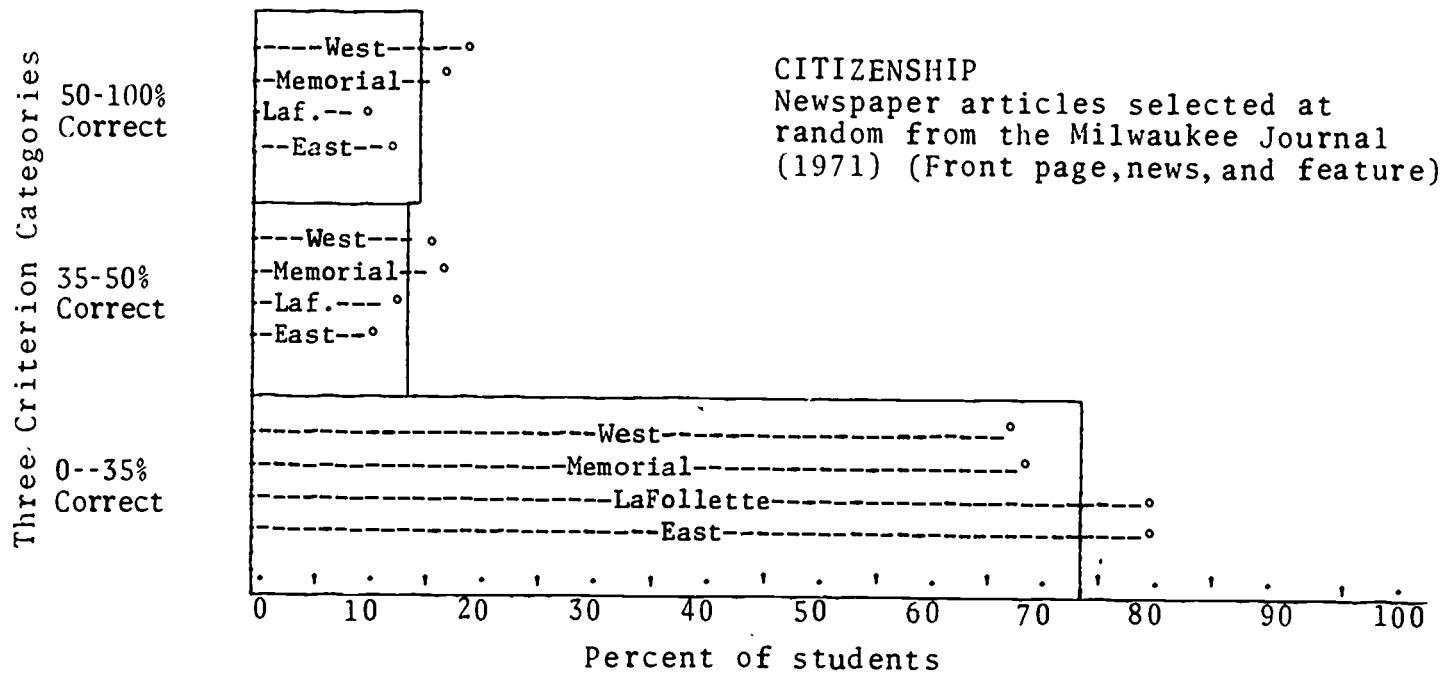


TABLE 10

Percentages of students scoring within Criterion Categories for School District and High School Attendance Areas

(GRADE 7)

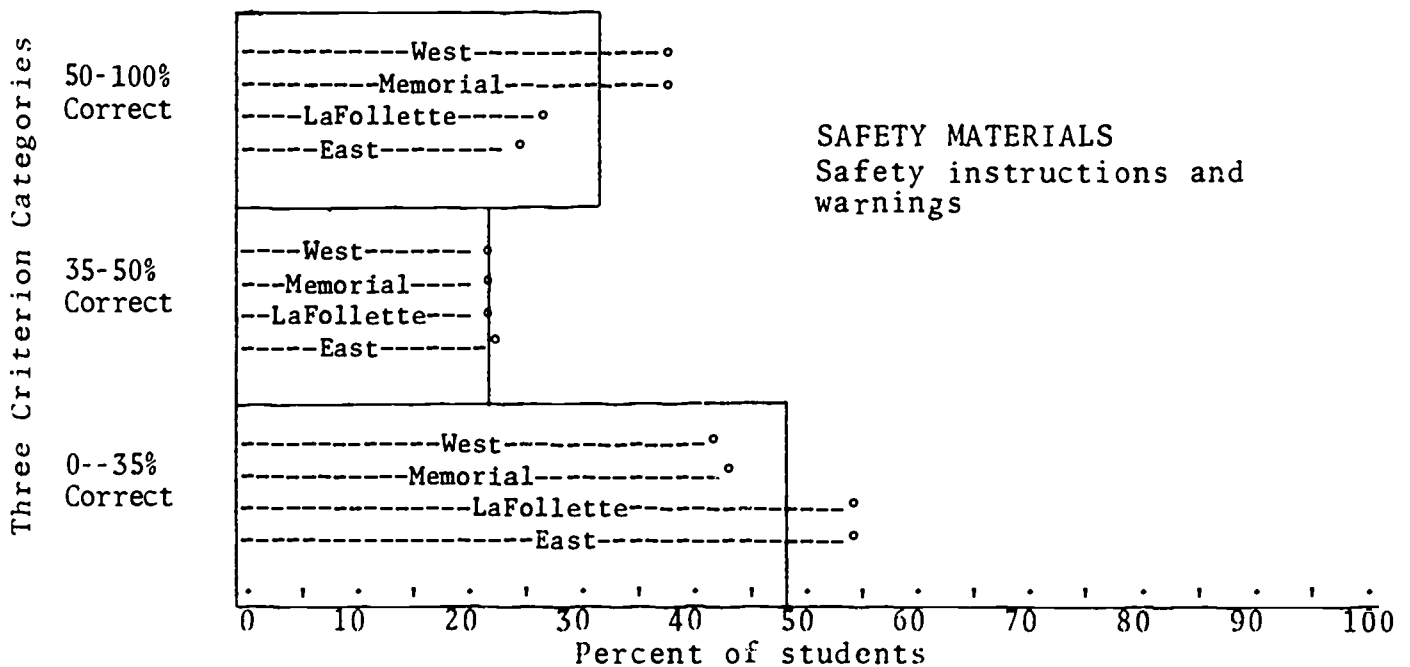
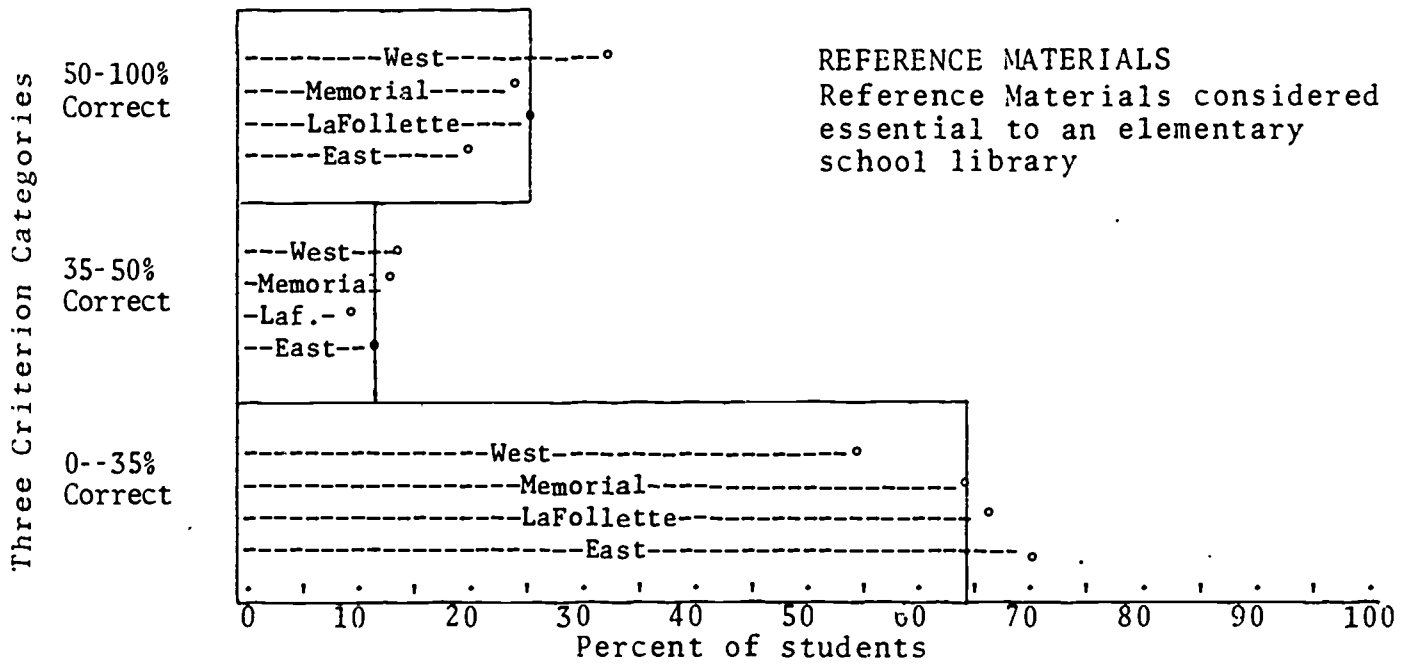
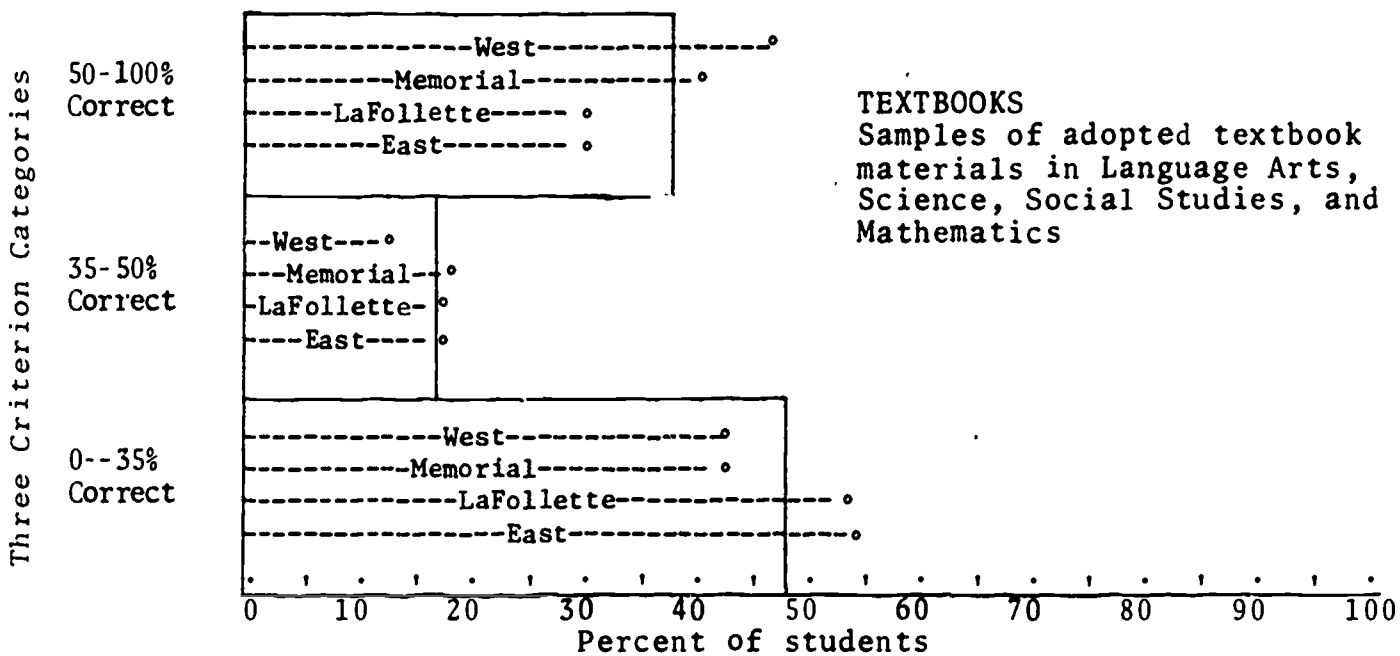
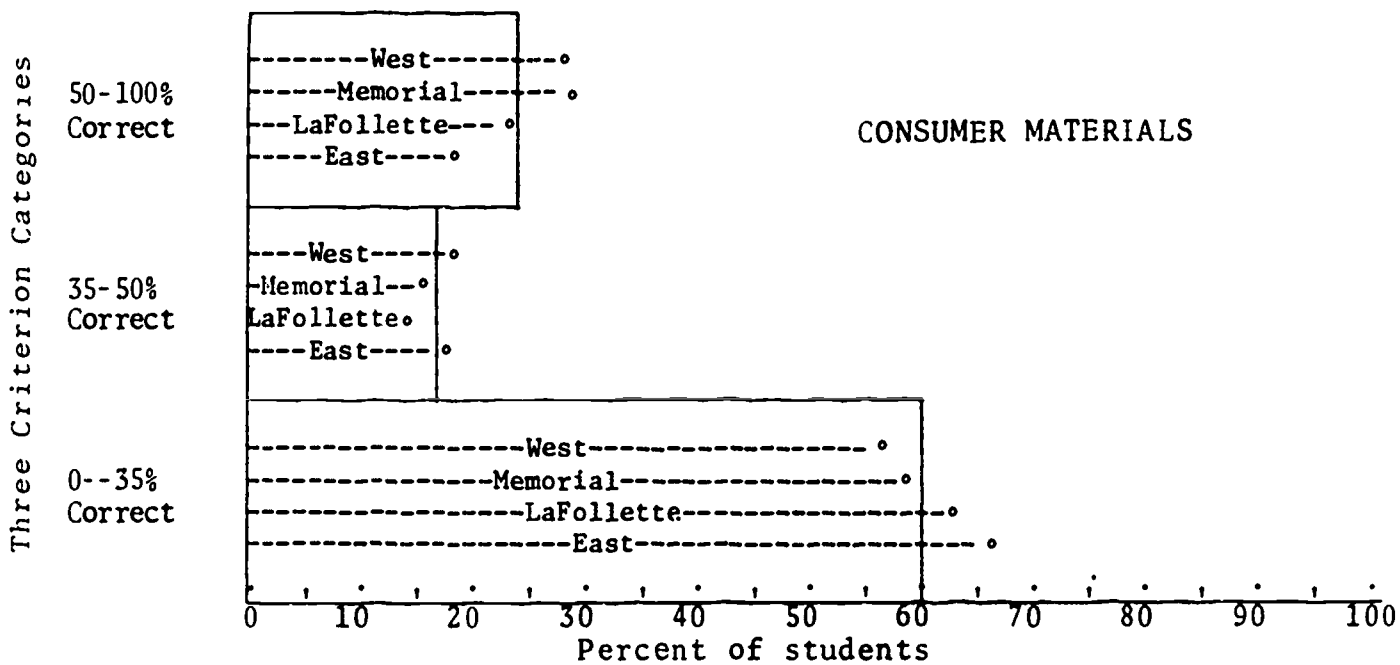


TABLE 11

Percentage of students scoring within Criterion Categories for School District and High School Attendance Areas

(GRADE 7)



levels. For School-related materials, however, the differences in percentage of students are more extreme: 33% for Memorial as against 58% for East in that category below 35% correct. Above 50% correct the difference is just as extreme but reversed.

In seventh grade there are again differences among attendance areas with respect to the percentage of students who are operationally literate. At this level, however, a somewhat larger percentage of the West Attendance Area students are operationally literate than is true for the Memorial Attendance Area. In grade 4 the pattern was reversed. Finally, results for most of the content domains show slightly larger differences among the attendance areas for scores below 35% and above 50% correct than was true at the 4th grade level.

#### GRADE LEVEL DIFFERENCES

Because of the differences in material used, it is exceedingly difficult to draw direct comparisons between Grades 4 and 7. In general, however, fewer 7th graders had scores below 35% correct than did 4th graders. Moreover, more 7th graders had scores above 50% than was true of 4th graders. This is particularly true for the domains of Leisure-time Activities, Safety, and Textbook materials. Later analysis is planned just on those passages used for both the 4th and 7th grade tests. However, it seems appropriate to conclude that 7th graders have somewhat more reading power than do 4th graders.

TABLE 12

Number of passages per domain, number of students tested per passage, and total number of passage scores (students per passage x passages) for each domain

GRADE 4

	<u>Domain</u>	<u># Passages</u>	<u>Average # Students Per Passage</u>	<u>Total # Passage Scores</u>
(A)	Leisure Reading	24	60	1,432
(B)	School	21	60	1,252
(E)	Leisure Activity	15	60	894
(G)	Reference	9	59	531
(H)	Safety	24	59	1,424
(I)	Consumer	3	60	179
(J)	Textbook	48	59	2,848
		<u>144</u>		<u>8,560</u>

GRADE 7

	<u>Domain</u>	<u># Passages</u>	<u>Average # Students Per Passage</u>	<u>Total # Passage Scores</u>
(A)	Leisure Reading	24	66	1,595
(B)	School	23	66	1,510
(D)	Citizenship	40	66	2,635
(E)	Leisure Activity	21	67	1,399
(G)	Reference	12	66	793
(H)	Safety	30	66	1,966
(I)	Consumer	18	66	1,188
(J)	Textbooks	48	66	3,170
		<u>216</u>		<u>14,256</u>

## OBSERVATIONS AND IMPLICATIONS

It is expected that a research report will draw conclusions and suggest implications. While we will devote some attention to these expectations, we are cautioned that it is better to draw a few conclusions from a lot of data than too many conclusions from a little data.

All of the results are not yet in. Data for grades 10 and 12 have yet to be analyzed. Moreover, data from parents and the schools for grades 4 and 7 have not been collected and analyzed. Thus conclusions must be limited and implications tentative. With that caution as background, we will attempt to discuss the results drawn in the previous section.

A close scrutiny of the results leads to the inevitable conclusion that considerable numbers of students appear to be unable to gain information from material they are expected to read (68% in grade 4 and 56% in grade 7). The percentages may seem extreme to us, however, only because we have an incomplete definition of reading. Many people equate reading with "sounding out words". Considerable emphasis often is placed on phonics and work attack skills in reading, perhaps because these are the skills of reading that we best understand. However, this ignores what many teachers already know from experience, i.e., that considerable numbers of youngsters who appear to be sounding out words well are gaining little or no information from what they are reading. Thus we need to better identify those behaviors or skills which enable a student to read. Research has only begun to address the problem.



This observation suggesting that many of Madison's students have a reading problem is probably not unique to Madison. Results from our standardized reading tests this year suggest that Madison students perform at least equal to and in most respects better than the national samples of students used to norm the tests. If these national samples are at all representative of children across the country, then it would seem possible with some caution to suggest that other communities will get similar literacy results. Bormuth<sup>9</sup> in a study limited to textbooks did indeed get similar results. These results but dramatize the severity of a national reading problem that many citizens are only beginning to become aware of. Certainly the recently enacted "Right to Read" program is but one manifestation of that growing recognition.

A closer look at the various content domains leads one to make a second observation. Beginning fourth graders have relatively little reading power regardless of the material they are to read. Even for school-related material (except textbooks) 48% of the students scored below 35% correct while 64% scored below 50% correct. For every other domain of material the percentages of students below each criterion were higher.

This would appear to be a significant finding in light of two commonly made observations: 1) The curriculum of the 4th grader often becomes considerably more dependent upon print than was true of learning during the primary years. In Madison, for example, a student will have a textbook for all of the major content areas by the time he enters the fourth

grade. Moreover, considerable emphasis will be placed on independent reading and research in the Instructional Materials Center. 2) There is considerable prima facie evidence that it is at the beginning of fourth grade that many students begin to view school as much less exciting and interesting. To what extent a lack of reading power and its accompanying frustrations are contributing to these perceived attitude shifts of fourth graders is unknown but worthy of investigation.

A third inescapable observation is that considerable numbers of 4th and 7th grade students would appear to be unable to gain much information from the textbooks and reference materials purchased for their use in school.

If this is indeed true, it represents a major problem for teachers, for the Board of Education, and for textbook materials companies. Teachers have long sensed the problem of having to work with materials that far too many of their students find exceedingly difficult to read. Teachers, fortunately, have tended to seek ways to compensate for the problem as, for example, by lecturing on the material to be read, by introducing vocabulary, by having the material read aloud in class, by giving questions in advance, or by using additional aids such as films and filmstrips to supplement the reading assignment. While a few of these pedagogical approaches may be questionable, classroom teachers should be commended for recognizing that students have difficulty with instructional materials and for compensating for that fact. What can be done is to teach teachers the most effective ways for getting students ready to learn by reading. One of the real strengths

of the current Negotiated Reading Inservice Program in the Madison Public Schools is its attempt to provide all teachers with these strategies for helping a child more effectively read his assigned materials.

The conclusion above also presents dilemmas for a Board of Education charged with the responsibility of purchasing instructional materials. Certainly a Board of Education must be troubled by expenditures for printed instructional materials when substantial numbers of students can apparently gain little or no information from those materials. On the other hand, there may be no immediate way out of the dilemma, since more readable materials which maintain grade level interest patterns are generally not available. The problem, moreover, may be even more acute by virtue of the fact that a wide variety of materials is often purchased for Instructional Materials Centers when many of these materials are of unknown usability.

For educational materials companies these data and others that are sure to be gathered are a nightmare. Each of the textbooks used in the literacy study had been recently adopted by the Madison Public Schools. Each represents the most recent, up-to-date and readable text materials currently available. Yet these textbooks would appear to be unreadable by large numbers of students. For companies with multi-million dollar investments in materials development, these data represent a considerable threat. (Data on textbooks by subject area will be included in the final report.)

Finally, the data in this report suggest some literacy differences among attendance areas. However, it is our observation that the differences among attendance areas are relatively small in contrast to the magnitude of the problem across the city. If 42% of the 7th grade students in the West and Memorial Attendance Areas cannot gain information from their textbooks, it is a small consolation to know that this is 12% less than the number in the East Attendance Area (54%) or 11% less than the number in the LaFollette Attendance Area (53%).

Moreover, the pattern of differences noted above parallels differences in reading achievement among attendance areas as measured by the Gates-MacGinitie and STEP Reading Tests. It is inappropriate at this time, however, to draw conclusions as to the meaning of these differences. All these data tell us is that there are differences; hopefully, when data from parents and schools can be analyzed, some insights may be gained into what factors could be contributing to these differences.

C O N C L U S I O N

What you have just read is an interim report of the literacy assessment project. More data will be forthcoming and a final report is contemplated in September, 1972. Of particular interest will be the results for grades 10 and 12.

In this interim report we have avoided the temptation of suggesting recommendations for action. We have done this for two reasons. First, recommendations would be premature before all of the data have been analyzed and discussed. But far more important, the task of drafting recommendations to the Board of Education should ~~not be entrusted~~ to one or two people. Perhaps some thought should be given between now and September as to the mechanism to be used in drafting recommendations.

## FOOTNOTES

<sup>1</sup>John M. Gottman. The Wisconsin State-wide Reading Assessment Plan. Planning, Research, and Evaluation Office, Wisconsin Department of Public Instruction (1971).

<sup>2</sup>John R. Bormuth. Development of Standards of Readability: Toward a Rational Criterion of Passage Performance (Final Report) Office of Education, Bureau of Research, U.S. Department of Health, Education, and Welfare., (1971) Project No. 9-0237.

<sup>3</sup>For terms of the agreement see An Agreement Between the Department of Public Instruction, Madison Public Schools, and the Instructional Research Laboratory for the Pilot Testing of the Department of Public Instruction Reading Assessment Proposal. Copies are on file in the office of each agency.

<sup>4</sup>See Footnote <sup>2</sup> above (pp. 13-17).

<sup>5</sup>The document cited in Footnote <sup>2</sup> above describes in detail five major studies conducted over a six year period to establish the literacy model.

<sup>6</sup>John R. Bormuth. The Implications and Use of Cloze Procedure in the Evaluation of Instructional Programs. Center for the Study of Evaluation of Instructional Programs, University of California, Los Angeles (1967) p. 9.

<sup>7</sup>W. H. MacGinitie. "Contextual Constraint in English Prose Paragraphs," Journal of Psychology 51 (January, 1961) pp. 121-130.

<sup>8</sup>John R. Bormuth. Comparisons Among Cloze Test Scoring Methods. Paper read at the annual convention of the California Educational Research Association (1965). (A copy of this paper is on file in the research office of the Madison Public Schools.)

<sup>9</sup>John R. Bormuth. "Illiteracy in the Suburbs." (In preparation) (A draft of this paper is available in the research office of the Madison Public Schools.)

ED 079704

H 7

Gr 4

General Information

NAME AND NUMBER LABEL
-----------------------

1. Street address: \_\_\_\_\_
2. Circle one:      boy      girl
3. How old are you?    7    8    9    10    11
4. Do you like to read?    yes    sometimes    no
5. Do you like to receive books as gifts?    yes    no
6. How good a reader are you?
 

\_\_\_\_\_ reading is easy for me

\_\_\_\_\_ sometimes reading is hard for me

\_\_\_\_\_ reading is hard work for me
7. Have you gotten a book from the school library (IMC) this week?
 

yes      no
8. Have you been to a public library this week?    yes    no
9. Would you rather read a book than watch television?
 

yes      no

For Staff Use Only			
TI:	yes	no	CB _____ STEP Reading _____
VI	_____	GMV	_____
NVI	_____	GMC	_____

## GUESS THE MISSING WORD

### DIRECTIONS

Today you are going to read some different kinds of paragraphs. A sample paragraph is on the bottom of this page. The paragraphs were taken from materials fourth graders read. Every fifth word was left out, and blank spaces were put where the words were taken out.

Your job will be to guess what word was left out of each space and to write that word in that space. Some of the words will be very easy and some of the words will be very hard. Try to fill in every blank with the word that we took out. Make the best guess you can.

### CLUES

Here are some clues to help you:

1. Write only one word in each space.
2. Do the easy ones first and come back to the harder ones.
3. Spell the word like it sounds if you're not sure of the spelling.
4. If an ordinary word does not fit, try:
  - . a number like 157 and 1970.
  - . words like can't and isn't.
  - . abbreviations like Mrs. and U.S.A.
  - . a word that goes together with other words, like up-to-date.

#### SAMPLE

Here is a sample story. Fill each blank with the word you think was taken out.

#### ANTEATERS

How would you like to have this \_\_\_\_\_ for a pet? A \_\_\_\_\_ anteater would surely be \_\_\_\_\_ helpful to have along \_\_\_\_\_ a picnic!

1. \_\_\_\_\_ animal    2. \_\_\_\_\_ pet    3. \_\_\_\_\_ very    4. \_\_\_\_\_ on



STUDENTS' GUIDE TO USING THE DICTIONARY

When words are spoken aloud, \_\_\_\_\_ is not  
 necessary to think \_\_\_\_\_ the place where one  
 syllable \_\_\_\_\_ and another begins. But in  
 \_\_\_\_\_ or printing sentences, it is \_\_\_\_\_  
 necessary to divide longer words \_\_\_\_\_ the end of  
 a line. \_\_\_\_\_ reader's attention must not be  
 \_\_\_\_\_ any more than can \_\_\_\_\_ helped.  
 This sentence would \_\_\_\_\_ be easy to read:

I shall soon be go-  
 ing away.

GEOLOGY AND GEOPHYSICS

When you see a beautiful mountain, a river, or

\_\_\_\_\_ cliff, you probably wonder \_\_\_\_\_ it

was formed. You \_\_\_\_\_ be curious to know \_\_\_\_\_

some land is flat \_\_\_\_\_ some hilly. You may

\_\_\_\_\_ wonder what the bottom \_\_\_\_\_ the

ocean is like.

\_\_\_\_\_ men, too, wondered about \_\_\_\_\_

things and made up \_\_\_\_\_ stories to account for the

shape of the land.

LANGUAGE AND HOW TO USE ITVariety in Patterns

In the last chapter, you and the \_\_\_\_\_ joined forces in discovering \_\_\_\_\_ different kinds of sentences. \_\_\_\_\_ Venutian classified the sentences \_\_\_\_\_ to the ways students \_\_\_\_\_ to them. In addition, \_\_\_\_\_ classified according to their \_\_\_\_\_. In this chapter, you \_\_\_\_\_ be asked to take \_\_\_\_\_ close look at "statement" \_\_\_\_\_, "question" sentences, and "request" sentences.

LANGUAGE AND HOW TO USE ITBeginnings of the English Language

Long before America was \_\_\_\_\_ or anyone ever  
dreamed \_\_\_\_\_ was such a place, \_\_\_\_\_  
English language had its \_\_\_\_\_ in the place now  
\_\_\_\_\_ as England or Great \_\_\_\_\_.

England is an island. \_\_\_\_\_ earliest times  
different groups \_\_\_\_\_ people landed on the  
\_\_\_\_\_ and decided it was \_\_\_\_\_ good  
place to live. One group was the Romans.

RULES FOR BIKE DRIVERS:

- . Drive close to the right side of the \_\_\_\_\_,  
single file, and pass \_\_\_\_\_ cars with care.
- . Sit \_\_\_\_\_ the bicycle seat when \_\_\_\_\_,  
and never carry extra \_\_\_\_\_ -- no "trick" riding.
- . Never \_\_\_\_\_ rides on other vehicles.
- . \_\_\_\_\_ carry loads which prevent \_\_\_\_\_  
from keeping at least \_\_\_\_\_ hand on the handlebars  
\_\_\_\_\_ all times. (Or better, attach a basket to your  
bike for packages, so you always have both hands free for  
driving.)

LANGUAGE AND HOW TO USE ITTypes of Sentences

"Earth people are creatures of habit!"

\_\_\_\_\_ those words, the Venutian \_\_\_\_\_  
a fateful lecture on \_\_\_\_\_ 402Q44, one of the  
\_\_\_\_\_ than three thousand stations \_\_\_\_\_  
thought-o-vision programs on \_\_\_\_\_. His lecture  
stirred up \_\_\_\_\_ interest, and letters poured  
\_\_\_\_\_ from all over the \_\_\_\_\_. These  
letters appeared to \_\_\_\_\_ into three categories.  
First, there were those who felt that Earth people must be  
very dull if they behaved the way the lecturer said they did.

"IMPORTANT EMERGENCY INFORMATION"

For Your Safety. The Federal Aviation Agency requires

\_\_\_\_\_ passengers know how to \_\_\_\_\_ the  
aircraft quickly in \_\_\_\_\_ of an emergency landing.

\_\_\_\_\_ this booklet is a \_\_\_\_\_ plan of the  
aircraft \_\_\_\_\_ are in, showing the \_\_\_\_\_

of the exits and \_\_\_\_\_ they are opened. When

\_\_\_\_\_ the aircraft in an \_\_\_\_\_, move

directly to the exit nearest you; do not stop for personal

belongings.

LANGUAGE AND HOW TO USE ITThe Nucleus of a Sentence

As you worked on \_\_\_\_\_ last chapter, you no  
\_\_\_\_\_ were able to discover \_\_\_\_\_ Class II  
words play \_\_\_\_\_ important role in English  
\_\_\_\_\_. You may be sure \_\_\_\_\_ others,  
besides yourself, have \_\_\_\_\_ the importance of  
Class \_\_\_\_\_ words as well. Indeed, \_\_\_\_\_  
Venutian, our busy friend \_\_\_\_\_ outer space, had  
a keen interest in languages and the study of words, as we  
noticed in his article that was reprinted in an earlier chapter.



OPEN HIGHWAYSRubbing a Quarter Away

With your left hand pick the \_\_\_\_\_ up from  
the floor. \_\_\_\_\_ it in your hand. \_\_\_\_\_  
your left hand behind \_\_\_\_\_ neck. Go on rubbing.  
\_\_\_\_\_ the quarter once more. \_\_\_\_\_  
it up again and \_\_\_\_\_ rubbing. After a minute  
\_\_\_\_\_ your hand away from \_\_\_\_\_ elbow.  
The quarter is \_\_\_\_\_. Show both hands. They are  
empty. So are your sleeves.

## FINAL QUESTIONS

Answer the following questions by putting a circle around the number that comes closest to what you feel at each question:

1. I found the whole test to be:

1	2	3	4	5
very	little	all	pretty	very
hard	hard	right	easy	easy

2. I thought the test was:

1	2	3	4	5
awfully	boring	all	fun	a lot
boring		right		of fun

3. Now that the test is over I feel

1	2	3	4	5
very	pretty	all	pretty	in good
tired	tired	right	good	shape

R-5

307

ED 079704

001078

General Information

1.

NAME: _____
-------------

2. Street address: \_\_\_\_\_

3. School: \_\_\_\_\_

4. Circle one:    boy    girl

5. How old are you?    10    11    12    13    14

6. Would you like more help with reading from your teacher?

yes    no

7. How many hours did you spend reading for pleasure yesterday?

0    1    2    3    4

8. How good a reader are you?

\_\_\_\_\_ I read better than most students

\_\_\_\_\_ I am an average reader

\_\_\_\_\_ I have some trouble with reading

\_\_\_\_\_ I think I am a poor reader

For Staff Use Only

TI:                    Iowa R \_\_\_\_\_

VI \_\_\_\_\_        Iowa L \_\_\_\_\_

NVI \_\_\_\_\_

858 000 658

## WORD DETECTIVE

### DIRECTIONS

001079

Today you will be reading a group of passages taken from types of material seventh graders are likely to read. As you can see in the sample paragraph at the bottom of the page, every fifth word has been taken out and replaced by a blank space.

Your job is to be a word detective. Decide what word was removed and write that word in the blank space. Some of the words will be very easy while others may be very hard. Try to fill in every blank with the original word. Make the best guess you can.

### CLUES

Here are some clues to help you:

1. Write only one word in each space.
2. Do the easy ones first and come back to the harder ones.
3. Spell the word like it sounds if you're not sure of the spelling.
4. If an ordinary word does not fit, try:
  - . a number like 157 and 1970.
  - . contractions like can't and isn't.
  - . abbreviations like Mrs. and U.S.A.
  - . part of a hyphenated word like up-to-date.

### SAMPLE

Here is a sample story. Fill each blank with the word you think was taken out.

#### THE INTELLIGENT DOLPHINS

Dolphins are quick learners who enjoy doing tricks.

\_\_\_\_\_ you have seen dolphins \_\_\_\_\_ tricks

at a big \_\_\_\_\_, such as the one \_\_\_\_\_

Marineland, Florida. Or you \_\_\_\_\_ have seen dolphins

on \_\_\_\_\_. Dolphins have been taught \_\_\_\_\_

shake hands with a \_\_\_\_\_, blow a horn, and \_\_\_\_\_

through a hoop.

1. Perhaps
2. doing
3. aquarium
4. at
5. may
6. TV
7. to
8. flipper
9. jump

"A B C D Spells FIRE"

Why Classify a Fire?

Because as man and his technology progressed, he  
\_\_\_\_\_ to be confronted with \_\_\_\_\_  
variety of fires, many \_\_\_\_\_ which could no longer  
\_\_\_\_\_ contained by the primary \_\_\_\_\_ agent  
known as water.

What Are The Other Extinguishing Agents?

\_\_\_\_\_ Chemicals, Carbon Dioxide, Dry \_\_\_\_\_  
and Foams.

What Means is Used to Employ These Agents?

The portable \_\_\_\_\_ extinguisher which is often  
\_\_\_\_\_ to as "the first \_\_\_\_\_ of defense"  
against fire.

MACRAME

3. To begin knotting, take the \_\_\_\_\_ outside cord  
and bring \_\_\_\_\_ the 2 center cords. Illustration 1.
4. \_\_\_\_\_, take the left outside \_\_\_\_\_ and  
place this under \_\_\_\_\_ right side cord and  
\_\_\_\_\_ the 2 center cords. Illustration 2.
5. \_\_\_\_\_ take the left outside \_\_\_\_\_ and  
bring it under \_\_\_\_\_ right outside cord.  
Illustration 3. Half \_\_\_\_\_ knot is completed.

"EARTH PEOPLE ARE CREATURES OF HABIT!"

"Earth people are creatures of habit! On any \_\_\_\_\_ day, at any particular \_\_\_\_\_, you can usually find \_\_\_\_\_ at the same place \_\_\_\_\_ found them on any \_\_\_\_\_ particular day at the \_\_\_\_\_ time. There are some \_\_\_\_\_ to this rule, but \_\_\_\_\_ many.

"If you should \_\_\_\_\_ a trip to Earth, \_\_\_\_\_ would know exactly what I am talking about.

RULES FOR BIKE DRIVERS:

- . Drive close to the right side of the \_\_\_\_\_,  
single file, and pass \_\_\_\_\_ cars with care.
- . Sit \_\_\_\_\_ the bicycle seat when \_\_\_\_\_,  
and never carry extra \_\_\_\_\_ -- no "trick" riding.
- . Never \_\_\_\_\_ rides on other vehicles.
- . \_\_\_\_\_ carry loads which prevent \_\_\_\_\_  
from keeping at least \_\_\_\_\_ hand on the handlebars  
\_\_\_\_\_ all times. (Or better, attach a basket to your  
bike for packages, so you always have both hands free for  
driving.)



USING SETS IN DIVISION

REVERSING THINGS. A magician owned a wonderful machine

\_\_\_\_\_ he described to his \_\_\_\_\_ Alfred:

"If you put \_\_\_\_\_ whole number in one

\_\_\_\_\_ hole and a second \_\_\_\_\_ number in

the other \_\_\_\_\_ hole of my machine, \_\_\_\_\_

then press button A, \_\_\_\_\_ sum of the input

\_\_\_\_\_ drops from the output \_\_\_\_\_. Press

button S and you get the difference of the input numbers--

at least you do when the machine doesn't jam.

HOW PAPER FOR KIDS MAGAZINE IS MADE

When the day finally came for our \_\_\_\_\_ and we  
arrived at \_\_\_\_\_ Aviation at Logan Airport  
\_\_\_\_\_ Boston, we were surprised \_\_\_\_\_  
see our plane. It \_\_\_\_\_ a jet, just large \_\_\_\_\_  
to seat the five \_\_\_\_\_ us from KIDS, our \_\_\_\_\_,  
Tim Samway, and our \_\_\_\_\_ pilots. The trip was  
\_\_\_\_\_ and we saw some of Great Northern's two and one  
half million acres of forest.

INTEREST CHARGES

Not only does a bank \_\_\_\_\_ interest for lending money, \_\_\_\_\_ also pays interest or \_\_\_\_\_ on money deposited in \_\_\_\_\_ bank. When a bank \_\_\_\_\_ interest, it usually compounds \_\_\_\_\_.

This means that each \_\_\_\_\_ the bank adds the \_\_\_\_\_ to the principal, and \_\_\_\_\_ next year it pays \_\_\_\_\_ on the new principal.

FINAL QUESTIONS

Answer the following questions as best you can. Under each question is a scale with numbers and words. Circle the number/word combination that best represents your feelings at that moment.

1. I found this test to be:

1	2	3	4	5
really hard	pretty hard	all right	pretty easy	very easy

2. I was:

1	2	3	4	5
very bored	bored	not very interested	interested	really interested

3. Now that I have finished; I feel:

1	2	3	4	5
very tired	a little tired	all right	I could do more	ready for more

W-1

ASSESSMENT OF READING ABILITY

Madison Public Schools

Related Information

1.	Name: _____
2.	Street Address _____
3.	School _____
4.	Grade: (circle one)    10    12
5.	Sex: (circle one)    male    female

ED 079704

6. List the ages of all the children in your family (including yourself) from the oldest to the youngest in the boxes below. (circle the box containing your age)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

7. How many years have you lived in Madison?

(circle one)    less than one    1    2    3    4    5    6    7    8    9    10+

8. What school did you attend in:

Grade 3			
	school		city
Grade 6			
	school		city
Grade 9			
	school		city

9. Father's occupation: \_\_\_\_\_  
(type of work; not place of work)

10. Mother's occupation: \_\_\_\_\_  
(type of work; not place of work)

11. Father's education: circle the number of the last grade or year of school.

Elementary								High School				Tech/or College				Graduate School			
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	1	2	3	4

12. Mother's education: circle the number of the last grade or year of school.

Elementary								High School				Tech/or College				Graduate School			
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	1	2	3	4

859 000 658

3541

13. Are you planning additional education beyond high school?  
(Circle one)     yes     no

If "yes", check below the kind of additional education you are planning:

- college or university
- technical school
- trade school
- apprenticeship
- business school
- other \_\_\_\_\_

14. Have you chosen a tentative occupational area? (Please circle)  
  
                              yes     no

If yes, please describe the occupational area in a word or two:

\_\_\_\_\_

15. How many hours a day on the average would you estimate you watch television? (check as appropriate)

- School day:      0-1;      1-2;      2-3;      3-4;      5+
- Saturday:         0-1;      1-2;      2-3;      3-4;      5+
- Sunday:           0-1;      1-2;      2-3;      3-4;      5+

16. List the newspapers that your family reads regularly.

\_\_\_\_\_

\_\_\_\_\_

17. Estimate the number of magazines to which your family subscribes:

(circle one)     0   1   2   3   4   5   6   7   8   9   10

18. Estimate how many of the books in your home belong to you:

- books 0-1
- books 2-5
- books 6-10
- books 11 or more

19. Estimate the number of hours each day on the average that you read for pleasure. (read books, magazines, & newspapers because you want to.)

- 0
- Less than one
- 1-2
- 2-3
- 3-4
- 4+

3891

CLOZE PASSAGES

DIRECTIONS

Today you will be reading a group of passages taken from types of material society expects you to be able to read as a student and citizen. As you can see in the sample paragraph at the bottom of the page, every fifth word has been taken out and replaced by a blank space. This is called a cloze passage.

Your task is to decide what words were removed from each passage and write the words in the blank spaces. Some of the words will be easy while others may be quite difficult. Try to fill in every blank with the original word. Make the best guess you can.

CLUES

Here are some clues to help you:

1. Write only one word in each space.
2. Do the easy ones first and come back to the harder ones.
3. Spell the word like it sounds if you're not sure of the spelling.
4. If an ordinary word does not fit, try:
  - . a number like 157 or 1970.
  - . contractions like can't or isn't.
  - . abbreviations like Mrs. or U.S.A.
  - . part of a hyphenated word like up-to-date.

SAMPLE

Here is a sample story. Fill each blank with the word you think was taken out.

HE'S NOT A BIRD. HE'S NOT A PLANE.

If anyone has the background to jump the Grand Canyon on a \_\_\_\_\_, it is Evel Knievel. \_\_\_\_\_ the past two years \_\_\_\_\_ has earned his living \_\_\_\_\_ a motorcycle from one \_\_\_\_\_ to another. He claims \_\_\_\_\_ have made one hundred \_\_\_\_\_ dollars in 1967. "You \_\_\_\_\_ say I have a \_\_\_\_\_ comfortable living," he says, "\_\_\_\_\_ it's pretty uncomfortable."

8. might 9. pretty 10. but
1. motorcycle 2. for 3. he 4. jumping 5. ramp 6. to 7. thousand

QUICK-MIX CAKES

Use special recipes for quick-\_\_\_\_\_ cakes--don't  
try to \_\_\_\_\_ conventional cake recipes to \_\_\_\_\_  
quick-mix method, or \_\_\_\_\_ face the possibility of  
\_\_\_\_\_ results.

Stir the shortening \_\_\_\_\_ soften before you add  
\_\_\_\_\_ dry ingredients. Sift in \_\_\_\_\_ the dry  
ingredients over \_\_\_\_\_ shortening. Then, usually, add  
\_\_\_\_\_ part of the liquid or milk in the first stage of mixing.



RULES FOR BIKE DRIVERS:

- . Drive close to the right side of the \_\_\_\_\_,  
single file, and pass \_\_\_\_\_ cars with care.
- . Sit \_\_\_\_\_ the bicycle seat when \_\_\_\_\_,  
and never carry extra \_\_\_\_\_ -- no "trick" riding.
- . Never \_\_\_\_\_ rides on other vehicles.
- . \_\_\_\_\_ carry loads which prevent \_\_\_\_\_  
from keeping at least \_\_\_\_\_ hand on the handlebars  
\_\_\_\_\_ all times. (Or better, attach a basket to your  
bike for packages, so you always have both hands free for  
driving.)

THE LORGE-THORNDIKE INTELLIGENCE TESTSTest Instructions

You will mark all your answers on your \_\_\_\_\_  
answer sheet. The answer \_\_\_\_\_ will also help  
you \_\_\_\_\_ keep the right place \_\_\_\_\_ each  
test. It has \_\_\_\_\_ spaces for marking only  
\_\_\_\_\_ exercises that you are \_\_\_\_\_ to  
try. Do not \_\_\_\_\_ in this booklet.

Look \_\_\_\_\_ the first sample exercise \_\_\_\_\_.

It is correctly marked on the answer sheet. Study it care-  
fully to see for yourself just how you are to mark your answers.

POLITICAL FEATURE--"IN MY OPINION--MAIER SAYS IT'S TIME FOR  
SPECIFIC ANSWERS FROM CANDIDATES FOR  
GOVERNOR"

Next week I will evaluate the positions of \_\_\_\_\_  
candidates for governor regarding \_\_\_\_\_ issues of great  
concern \_\_\_\_\_ city of Milwaukee.

\_\_\_\_\_ I sent the list of \_\_\_\_\_ to the two  
gubernatorial \_\_\_\_\_, I said that the \_\_\_\_\_  
were nonpartisan. Let's look \_\_\_\_\_ those issues:

Redistribution of \_\_\_\_\_ Taxes: Our present unfair  
\_\_\_\_\_ of state aids and shared taxes is hurting homeowners  
and renters alike in city, town and village, both rural, and urban,  
Democrats and Republicans and independents.

3871

FABRIC PARTS FOR BLOUSECut Out Fabric Parts

Fabric parts must be cut so that \_\_\_\_\_ edges  
are smooth in \_\_\_\_\_ to make even lines \_\_\_\_\_  
stitching. When cutting, use \_\_\_\_\_ a section of the  
\_\_\_\_\_ and never the full \_\_\_\_\_ up to the  
points, \_\_\_\_\_ this creates jagged-edges. \_\_\_\_\_  
the fingers of the \_\_\_\_\_ hand firmly along the  
\_\_\_\_\_ of the pattern piece to prevent them from  
slipping.

329

POLITICAL FEATURE--"DISILLUSIONMENT FOGS END OF UN SESSION"

United Nations, N.Y.--AP--The United Nations General Assembly's

silver \_\_\_\_\_ session began three months \_\_\_\_\_

in a spirit of \_\_\_\_\_ hope. It is ending \_\_\_\_\_

a note of disillusionment.

\_\_\_\_\_ absence of many world \_\_\_\_\_, the

collapse of UN \_\_\_\_\_ negotiations on the Middle

\_\_\_\_\_ and failure to produce \_\_\_\_\_ Big Four

summit contributed \_\_\_\_\_ the general pessimism

prevailing in the closing hours Thursday.

"SCHOOL BUS EVACUATION DRILLS"

The State Department of Public Instruction recommends that school \_\_\_\_\_ emergency evacuation drills be \_\_\_\_\_ several times a year \_\_\_\_\_ each bus load. School \_\_\_\_\_ evacuation drills should be \_\_\_\_\_ much like a fire \_\_\_\_\_ --preparation for actual emergency. \_\_\_\_\_ accident situations have confirmed \_\_\_\_\_ value of such drills. \_\_\_\_\_ possible hazards the Madison \_\_\_\_\_ offers:

Heavy traffic of all kinds.

Winter weather and icy roads.

Any bad weather conditions--with remote possibility of

tornado.

3891

REFERENDA STATEMENTS

Official Referendum Ballot.

Shall Section 24 of Article VII of the Constitution  
 be \_\_\_\_\_ to provide a uniform \_\_\_\_\_  
 retirement date for Supreme \_\_\_\_\_ Justices  
 and Circuit Judges \_\_\_\_\_ July 31st following  
 attainment \_\_\_\_\_ retirement age, instead  
 of \_\_\_\_\_ month of attaining retirement  
 \_\_\_\_\_? (Note--Supreme Court Justices  
 \_\_\_\_\_ Circuit Judges now must \_\_\_\_\_  
 at the end of \_\_\_\_\_ month of attaining  
 retirement age.

JOHNNY WINTER TAPED A SESSION WITH JIMI HENDRIX

"For some reason he just \_\_\_\_\_ like  
long hair, but \_\_\_\_\_ stage that night the  
\_\_\_\_\_ loved him and when \_\_\_\_\_  
came off he was \_\_\_\_\_ crying. Then he goes  
\_\_\_\_\_ starts all that bad \_\_\_\_\_,  
not only with me \_\_\_\_\_ also with some  
innocent \_\_\_\_\_ photographer. Jerry Lee  
nearly \_\_\_\_\_ close to hitting the poor guy  
for no reason whatsoever.

†



THE LONELINESS OF THE LONG-DISTANCE RUNNER

I once saw a bloke try to kill \_\_\_\_\_.

I'll never forget the \_\_\_\_\_ because I

was sitting \_\_\_\_\_ the house one Saturday

\_\_\_\_\_, feeling black and fed-\_\_\_\_\_

because everybody in the \_\_\_\_\_ had gone

to the \_\_\_\_\_, except me who'd for

\_\_\_\_\_ reason been left out \_\_\_\_\_

it. 'Course, I didn't know \_\_\_\_\_ that I

would soon see something you can never see in the

same way on the pictures, a real bloke stringing

himself up.

THE CROSSROADS OF THE WORLD

These lands are studied \_\_\_\_\_ the region \_\_\_\_\_  
they are alike in \_\_\_\_\_ ways. The climate  
of \_\_\_\_\_ region is generally hot \_\_\_\_\_  
dry. In fact, much \_\_\_\_\_ the land is barren  
\_\_\_\_\_. Getting enough water just \_\_\_\_\_  
everyday needs is a \_\_\_\_\_. Most of the  
people \_\_\_\_\_ poor farmers, town dwellers  
\_\_\_\_\_ nomads. Most of them speak the  
Arabic language and follow the Moslem religion.