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ABSTRACT

Pennsylvania's "Testing for Essential Learning and Literacy Skills" (TELLS) program was instituted during the 1984-85 school year, to identify reading and mathematics problems early in a student's school career. This document describes the intent and legislation behind TELLS, the implementation of the test, population tested, properties of the test, results of the test for noncategorical students and total groups, and analyses of results for each objective. Committees of Pennsylvania reading and mathematics professionals selected objectives to serve as the basis for the tests and chose Charles E. Merrill Publishing Company to provide test items meeting those objectives. The tests were administered in October 1984 to grades 3, 5, and 8. Students falling at or below cut scores became eligible for state-funded remedial instruction. About 35 percent of public school students and 24 percent of nonpublic students became eligible for at least one program. For certain objectives, the performance of above-cut students differed greatly from that of below-cut student. For grade 3 the Multiple Meaning Words objective marked the greatest difference on the reading test; for grades 5 and 8, the Inferential and Critical Comprehension was most indicative. Appendices include: (1) selected sections from the State Board regulations; (2) applicable sections of Act 93; (3) TELLS objectives; and (4) samples of reports. (LMO)

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SUMMARY [1]

Pennsylvania's "Testing for Essential Learning and Literacy Skills" (TELLS) program was instituted during the 1984-85 school year. The program was designed as an "early warning system" to identify reading and mathematics problems early in a student's school career. In April of 1984 committees of Pennsylvania educators selected reading and mathematics objectives to serve as the basis for tests to be administered to students in grades 3, 5 and 8. Test items to measure these objectives were obtained by contracting with the Charles E. Merrill Publishing Company.

The tests were administered in October of 1984. Committees of reading and mathematics teachers used a judgmental process to provide the data needed to develop a cut score for each test. Students scoring at or below these cut scores became eligible for state-funded remedial instruction. The total number of students tested was 428,958. Approximately 84 percent of these students were from public schools. The remainder were from 725 nonpublic schools which participated voluntarily.

Depending upon the specific test area and grade level, students were required to answer correctly between 53 and 63 percent of the items in order not to be identified for remedial assistance. The percentages of scores falling at or below the cut scores ranged from 20.2 percent for grade 3 mathematics to 28.2 percent for grade 3 reading. The total number of scores which fell at or below the cut scores was 212,113. The total number of students who became eligible for at least one remedial program (reading or mathematics or both) was 142,177. About 35 percent of public school students and 24 percent of nonpublic school students became eligible for at least one remedial program. The testing identified 94,461 students for remedial help who were not previously being served by ECIA Chapter 1, by special education or by the limited English proficiency program.

At all three grade levels, higher percentages of males than females became eligible for remediation. As expected, higher percentages of special education and limited English proficiency students than regular students were identified. Approximately 67 percent of the reading scores and 63 percent of the mathematics scores of Chapter 1 public school students fell at or below the cut scores.

For certain objectives the performance of above-cut students differed greatly from that of below-cut students. On the grade 3 reading test the greatest difference occurred on the Multiple Meaning Words objective of the Vocabulary area. On the grade 5 and grade 8 reading tests the area of Inferential and Critical Comprehension was most indicative of such differences. On the grade 3 mathematics test, above-cut and below-cut students differed most in the areas of Problem Solving and Numeration. On the grade 5 mathematics test, items measuring multiplication, division and fractions showed the largest differences. And, on the grade 8 mathematics test, the area of Fractions again was a major determiner of above cut-below cut differences.

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[1] The data summarized in this report do not reflect changes in the number of students tested due to late make-up testings. They also do not reflect revisions made by school district personnel when they discovered inaccuracies in their own data (e.g., finding that a particular student should have been included in the EMR grouping and was not). After all such changes had been made, it was determined that 215,506 students' scores fell at or below the cut scores. This figure differs by about 3400 from that shown in this report.

TESTING FOR ESSENTIAL LEARNING AND LITERACY SKILLS (TELLS)

Summary of Results - 1984

BACKGROUND

Intent and Legislation

On October 17, 1983, Governor Dick Thornburgh announced his comprehensive educational reform package called **Turning the Tide: An Agenda for Excellence in Pennsylvania Public Schools**. Citing the "disturbing ... statistic" of 13 percent of the nation's 17-year-olds not being able to read at the sixth grade level, he advocated a competency test for third, fifth and eighth graders which would be called "Testing for Essential Learning and Literacy Skills," or TELLS. The test would be designed to be an "early warning system" to identify reading and mathematics problems early in a student's school career. The second part of the program would make extra help available for students who needed it through state-funded remedial instruction.

In order to institute TELLS, the State Board of Education added **Chapter 3: Student Testing** to its regulations on June 14, 1984. It required all public school students in grades 3, 5, and 8 to be given a criterion-referenced test in reading and mathematics. Nonpublic schools could choose to participate in the testing. The program was assured of $26 million in funding ($2 million for testing, $24 million for remedial instruction) on June 29, 1984, when the Governor signed into law the 1984-85 appropriations bill (Act 7-A-1984). A companion bill (Act 93 - 1984) required districts to provide remedial instruction programs for students identified by the tests given under the State Board regulation, and it set forth the conditions under which the $24 million would flow to the schools. Appropriate sections of Act 93 are included in the Appendix.

IMPLEMENTATION

Selection of a Contractor

A Request for Proposal for the "Production and Processing of Objective-Referenced Individual Student Achievement Tests for Pennsylvania Statewide Testing Program" was mailed to 22 potential contractors on January 19, 1984 in anticipation of the actions by the State Board and the Legislature. Five proposals were received by the due date of March 16, 1984. After review and evaluation by the staff of the Division of Educational Testing and Evaluation (ET&E), two of the proposals were judged acceptable. The final contractor selection, however, was based on the selection of the list of objectives by a committee of reading and mathematics professionals from across the state. This committee met on April 5 and 6, 1984 and recommended that objectives from the list submitted by the Charles E. Merrill Publishing Company of Columbus, Ohio, be used as the basis for the tests.

The contract could not be consummated, however, until after the budget was approved on June 29, 1984. After the contract was signed, six ET&E testing specialists met with Merrill employees in July to select the items which would measure each objective. Selection was based on item statistics provided by the contractor as well as the specialists' judgments about the appropriateness of the item for Pennsylvania students. At this time, the design process for the test administration manuals and the answer sheets was also begun.

Test Administration

Later in July the districts were notified that the testing dates would be October 16 and 17, 1984. In August, brochures listing the objectives were sent to each participating school. They were to be distributed to teachers of third, fifth and eighth grade students. To notify parents of the testing, districts were encouraged to send home, early in September, a letter explaining the test and listing the dates on which the test administration was planned. A sample letter was supplied to the districts for this purpose, and a Spanish version was made available to appropriate districts. In addition, brochures in a question and answer format were provided to districts in sufficient quantities to distribute to parents approximately a week before the scheduled testing dates. **Guidelines for Testing** were developed, and in September ET&E staff conducted workshops for district and nonpublic school test coordinators in each of the 29 intermediate units.

Test materials were sent from the contractor to the test coordinators who in turn distributed them to the participating school buildings. Teachers, counselors and principals all acted as test administrators, guided by test administration manuals. Suggested testing times ranged from 65 minutes for the Grade 3 reading test to 135 minutes for the Grade 8 mathematics test, although the test administrators were advised to "use the flexibility of the time limits to the students' advantage so that they can show what they have really learned. No student should be penalized because he or she is a slow worker." Between October 16 and 26, more than 353,000 public school students (including almost all categories of special education students) in 2743 school buildings and approximately 75,000 nonpublic students in 725 schools (about one-third of the state's nonpublic schools) took the test. Answer documents were returned to the contractor for scanning and scoring. After all answer documents for a school district were received, that district's materials were processed and the reports were generated. Districts began to receive reports in late November.

The Cut Scores

A cut score divides students into two groups with reference to some purpose or criterion. In Pennsylvania, the purpose was to identify students who could benefit most from additional instruction in reading or mathematics or both. The determination of cut scores is a difficult task and one that was undertaken with a great deal of care. The ultimate decision about how to determine a specific score is a matter of judgment. Although procedures have been devised to aid in the selection of such scores, judgments are involved in every one of them. While the decision is arbitrary, it must not be capricious. That is, the procedure employed must address the primary purpose of the program. In the case of TELLS, that purpose was to identify students for remediation programs.

The information used to determine the Fall 1984 cut scores was provided by committees of Pennsylvania reading and mathematics teachers at a meeting on October 10, 1984. The 58 individuals were selected to be a representative sample of the state's teachers for the two content areas. Since cut scores were needed for both the reading and the mathematics tests at each of the three grade levels, the teachers were divided into six groups. Each group dealt only with one specific grade level and content area.

The teachers were trained to use procedures developed by W.H Angoff (1971)[2] for examining the items of a test. Each group of teachers was asked to think about the entire group of students in need of remedial help in the subject area and at the grade level with which they were concerned. They were then to focus their attention only on those who were at the uppermost point of this group; in effect, on students on the borderline between those in need of remedial help and those requiring no remediation. Their instructions were to estimate the proportion of these students capable of correctly answering each item of the test for which they were establishing the cut score. The sum of these proportions across all the items of the test produced a cut score for this test as determined by this teacher. The average of these scores across all teachers in a group produced the group's determination of the cut score. Each cut score was then compared with national results provided by the test publisher to ascertain whether a common standard could be adopted. The average percentages of items to be answered correctly at the teachers' cut scores were, with some slight variation, 16 percent below the percentages answered correctly by the national samples for the six tests. The "16 percent below national" criterion was therefore adopted as a common standard and each of the six cut scores was adjusted to conform to it.

Table 1 below shows the cut scores for reading and mathematics and some additional information about them. As shown, the procedures resulted in cut scores which were as close to the "16 percent below national" criterion as possible. For example, for Grade 3 reading, the estimated national average percentage correct was 72. Subtracting 16 percent from this leaves 56 percent. A cut score requiring as close to 56 percent correct as possible was needed. Taking 56 percent of the 52 test items leads to a cut score of 29 (.56 x 52 = 29.12 or 29).

For five of the six tests, the final cut score placements resulted in students being required to answer correctly approximately 60 percent of the items in order not to be placed in a remedial program. Both teacher judgments and estimated national results led to the conclusion that the eighth grade mathematics test was more difficult than the other tests. Therefore, students were required to answer 53 percent of the items correctly in order not to be selected for remedial instruction.

Also shown in Table 1 are the percentages of Pennsylvania public school students who qualified for remediation. These figures do not include limited English proficiency students or special education students (except speech and language impaired).

Interpretation and Remediation

In the meantime, the **TELLS Guidelines for Remediation** and the funding applications were being developed and were sent to districts and to intermediate units (which were to serve nonpublic schools) in early December. In addition, test interpretation workshops were conducted by ET&E staff in each intermediate unit during the first two weeks in December, and workshops on remedial instruction topics were held in IU's which requested them.

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[2] Angoff, W. H. (1971). Scales, Norms and Equivalent Scores. R. L. Thorndike (ed.). Educational Measurement (2nd ed.). Washington, D.C.: American Council on Education.

After information from every district was on file, statewide data were tabulated. The PDE report to the media included the number of noncategorical students tested, the number at or below the cut score and the percentage at or below the cut score for each district in each area and at each grade level. The report, entitled **TELLS - 1984-85 Statewide Test Results**, also included the same information for nonpublic schools grouped according to intermediate unit. Many school districts, encouraged by a "data release packet" distributed by the PDE, released their own data in local newspapers.

Applications for funding for the remedial instruction programs were due from districts on January 25, 1985, if the districts wanted the first payment of their monies in February. Most districts began their programs in late January or early February. Intermediate unit applications, to serve identified students in nonpublic schools, were due two weeks later. After this initial half year of remedial instruction, a final report on the operation of each district's program will be required.

Table 1
Cut Score Information

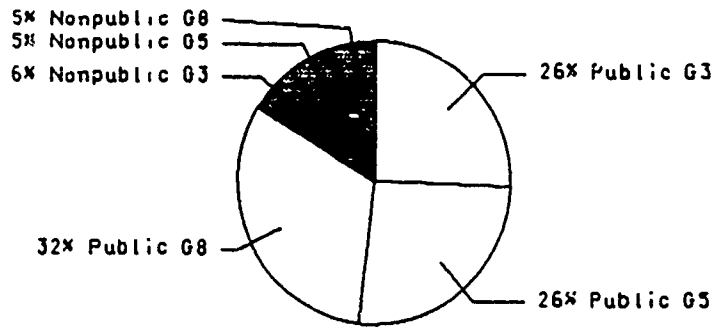
Grade	National Percentage of Items Correct	Percentage Correct at Cut Score	Cut Score	State Percentage of Public School Student Scores at or Below Cut Score*
READING				
3	72	56	29 or below	26.8
5	72	56	37 or below	20.1
8	76	60	46 or below	24.7
MATHEMATICS				
3	78	62	39 or below	19.2
5	77	61	40 or below	26.5
8	68	52	40 or below	22.2

*The results shown are for only regular students and speech and language impaired students.

DESCRIPTION OF THE TESTED POPULATION

For grades 3, 5 and 8 combined, 428,958 students were tested. Of this total, 428,373 took the reading test and 428,626 took the mathematics test. The number of students taking both tests was 428,031 or 99.8% of those involved in the testing.

Figure 1 shows the total numbers of public and nonpublic school students tested at each grade level. Also shown are the percentages of the total sample represented by each group.



☐ Public = 83.9%
Number Tested
Grade 3 - 109,452
Grade 5 - 112,420
Grade 8 - 138,145

■ Nonpublic = 16.1%
Number Tested
Grade 3 - 23,564
Grade 5 - 22,418
Grade 8 - 22,959

Figure 1

At the time of testing, students or their teachers provided information about such aspects of the students as their sex, whether they were being served by Chapter 1 and whether they were being served by special education. This information was used to produce Tables 2 and 3. It should be remembered when examining these tables that each student could be categorized in more than one way. Thus, for example, a student being served in a limited English proficiency program who was also being served in a Chapter 1 reading program would appear in the counts for both programs.

It was the intent of the Department of Education that all public school students in the third, fifth and eighth grades in the Commonwealth should have the opportunity to participate in the testing. This included all limited English proficient (LEP) and special education students, with the exception of those whose mental or physical handicaps would clearly preclude participation.

Table 2 provides a summary of numbers of public school special education students tested. By adding the figures in the "Total" column for the seven categories listed (i.e., speech and language impaired through "other special education"), it can be determined that approximately 25,000 public school special education students were tested.

In an effort to determine how difficult it was for school districts to involve such students in the testing, statewide figures on the total number of special education students of each category were obtained from the Department's Division of Child Accounting and Subsidy Research. Unfortunately, these figures were summed according to four age groupings to fulfill federal reporting requirements (ages 3 -5, ages 6 - 11, ages 12 - 17 and ages 18 - 21).

Table 2
Numbers of Public School Students Tested

	READING				MATH			
	Grade 3	Grade 5	Grade 8	Total	Grade 3	Grade 5	Grade 8	Total
Male[1]	55,934	57,364	71,189	184,487	56,052	57,465	71,150	184,667
Female[1]	52,847	54,599	66.636	174,082	52,902	54,645	66,615	174,162
Chapter 1 Reading	14,809	12,225	7,478	34,512	14,803	12,235	7,481	34,519
Chapter 1 Mathematics	4,979	4,672	3,130	12,781	4,978	4,674	3,132	12,784
Speech & Language Impaired	3,575	1,455	272	5,302	3,580	1,457	272	5,309
Learning Disabled	3,503	4,393	4,969	12,865	3,584	4,476	4,966	13,026
Socially & Emotionally Disturbed	453	642	773	1,868	464	640	772	1,876
Educable Mentally Retarded	866	1,035	1,650	3,551	884	1,050	1,637	3,571
Hearing Impaired	130	99	168	397	135	105	168	408
Physically Handicapped	61	55	46	162	61	55	46	162
Other Special Education	424	350	162	936	437	363	163	963
Limited English Proficiency	836	769	971	2,576	845	787	974	2,606

Table 3
Numbers of Nonpublic Students Tested

	READING				MATH			
	Grade 3	Grade 5	Grade 8	Total	Grade 3	Grade 5	Grade 8	Total
Male[1]	11,609	11,044	11,074	33,727	11,612	11,044	11,072	33,728
Female[1]	11,853	11,330	11,838	35,021	11,851	11,330	11,836	35,017
Chapter 1 Reading	2,645	1,640	541	4,826	2,642	1,641	541	4,824
Chapter 1 Mathematics	1,308	882	567	2,757	1,308	882	566	2,756
Speech & Language Impaired	341	118	39	498	342	119	39	500
Learning Disabled	54	57	31	142	54	56	31	141
Socially & Emotionally Disturbed	4	4	4	12	4	4	4	12
Educable Mentally Retarded	7	2	2	11	6	2	2	10
Hearing Impaired	11	15	3	29	12	15	3	30
Physically Handicapped	4	7	5	16	4	7	5	16
Other Special Education	63	69	35	167	64	70	35	169
Limited English Proficiency	335	314	305	954	336	317	306	959

[1] The sum of males and females should equal the total tested for the grade level. However, at each level some students did not indicate their sex. Students were also asked to indicate whether they were "Black", "White" or of another race. Because so many students did not indicate this, the numbers obtained were not reported.

To produce the desired comparative information, it was necessary to assume that students were distributed equally across the age levels of each grouping. Since both grade 3 and grade 5 students would be included in the age 6 - 11 grouping, the total for this grouping was multiplied by one-third (two age levels out of six) to estimate the number of students who were available at two of the three grade levels. Since grade 8 students would be included in the 12 - 17 grouping, this total was multiplied by one-sixth (one age level out of the six in the grouping). The eighth grade estimate was added to that for grades 3 and 5 to provide an overall estimate of numbers of special education students of each category who could have been involved in the testing.

The total estimate of numbers of special education students who could have been tested was 40,000. As was stated above, 25,000 special education students were tested. Dividing this figure by 40,000 leads to the conclusion that approximately 63 percent of the available special education students were tested.

However, a similar analysis carried out for each category argues against the accuracy of this finding. The following percentages were computed: educable mentally retarded (73 percent of the available students tested); hearing impaired (72 percent tested); learning disabled (88 percent tested); physically handicapped (83 percent tested); socially and emotionally disturbed (72 percent tested); speech and language impaired (32 percent tested); and almost four times as many students were identified as "other special education" as were on record for Pennsylvania schools.

Two conclusions seem warranted from these results. First, some students who should have been categorized into one of the six specific categories were identified as "other special education" students at the time of TELLS testing. Second, since almost all speech and language impaired students have minimal handicaps, there would be no reason to exclude them from testing. It appears that it was very common across the state for district personnel to forget to indicate that such students were being served by special education programs.

If it is therefore assumed that almost all speech and language impaired students were tested, this increases the number of tested special education students by about 11,000. The total which results, 36,000, is approximately 90 percent of the available sample.

An estimate of the numbers of limited English proficient students in public schools was requested from the Department's Division of Communications, Mathematics and Instruction. The figure obtained was 25,000 in kindergarten through grade 12 for the 1983-84 school year.

To use this estimate it was again necessary to assume that equal numbers were enrolled at each grade level. By multiplying 25,000 by 3/13 (3 grade levels tested out of 13 available), an estimate of 5800 possible students to test was computed. As shown in Table 2, about 2600 LEP students were tested. Dividing 2600 by 5800 leads to the conclusion that approximately 45 percent of the LEP students enrolled at the three grade levels were tested.

TELLS results were reported back to school districts both for each individual group shown in Tables 2 and 3 and in terms of two overall groupings. These groupings were termed "categorical" and "noncategorical." Categorical students included limited English proficiency students and special education students with the exception of speech and language impaired. Noncategorical students, then, included speech and language impaired (considered to be minimally handicapped) and all other students tested.

These groupings were developed for reporting purposes only. The intent was to provide districts with results which would have most meaning to them when compared with the results of their usual testing programs and also to provide a reference group (noncategorical) which would be most like that employed by the test company in developing their estimated national norms.

Table 4 provides a summary of the numbers of categorical and noncategorical students tested. Approximately 6.2% of the public school students tested and 1.9% of the nonpublic school students tested were considered categorical.

At the time of testing there were 2,743 public schools with students of at least one of the three TELLS grade levels. There were also 1,492 nonpublic schools with students of at least one of the three.

All public schools with students at the appropriate grade levels were required to participate in the testing. Grade 3 students from 2,013 schools, grade 5 students from 1,857 schools and grade 8 students from 749 schools were tested.

Nonpublic school participation was voluntary. A total of 725 (48.6 percent) of the 1,492 possible schools participated. Table 5 summarizes information on numbers and percentages of schools and students participating. Over 70 percent of nonpublic students were tested. These students were from 48.7 percent of the schools with grade 3 students, from 49.2 percent of the schools with grade 5 students and from 59.6 percent of the schools with grade 8 students.

Table 4
Numbers of Categorical
and Noncategorical Students Tested

		Public Schools			Nonpublic Schools		
Grade	Subject	Noncategorical	Categorical	Total	Noncategorical	Categorical	Total
3	Reading	102,992	6,204	109,196	23,083	471	23,554
	Mathematics	103,032	6,338	109,370	23,081	472	23,553
5	Reading	104,944	7,269	112,213	21,946	466	22,412
	Mathematics	104,960	7,401	112,361	21,945	468	22,413
8	Reading	129,388	8,653	138,041	22,576	379	22,955
	Mathematics	129,339	8,639	137,978	22,571	380	22,951
Total	Reading	337,324	22,126	359,450	67,605	1,316	68,921
Total	Mathematics	337,331	22,378	359,709	67,597	1,320	68,917

Table 5
Participation of Nonpublic Schools
and Students

Grade	Number of Schools with Students at Each Grade Level	Number of Schools Partici-pating	Percent Partici-pating	Number of Students in State	Number Partici-pating	Percent Partici-pating
3	1,449	706	48.7	33,090	23,564	71.2
5	1,430	703	49.2	31,160	22,418	71.9
8	1,098	654	59.6	31,540	22,958	72.8

PROPERTIES OF THE TESTS

The TELLS instruments were constructed according to an objective-referenced model. Committees of Pennsylvania educators chose the specific objectives to be measured (see Appendix C). Items to measure these objectives were selected from the Charles E. Merrill Company's item bank.

Thus, the tests were "custom made" in the sense that the particular items selected had never all been placed on the same test form. Each item chosen had been tried out with a nationally representative sample of students at both the grade level at which it was used for TELLS and at the grade levels above and below this. But the tests as wholes had never been used with such samples.

A major strength of this approach was the degree of flexibility possible. Pennsylvania's tests were composed of items measuring only objectives which Pennsylvania educators believed almost all students would have been taught by October of the grade level of their testing.

What was lost through the approach was some degree of precision in the national norms. The norms were estimated using the complex procedures of the Rasch model.[3] These procedures took into account the available information about a student's performance on the items he or she answered and information about the difficulty of each item for the students who responded to them to estimate how well a normative sample would have scored had they responded to all the items on a specific TELLS instrument.

The intent of the testing should be kept in mind when examining the properties of the tests. The major intent was to identify students in need of remedial help. It was not to learn how Pennsylvania's achievement or the achievement of individual students compared with a national sample. The items selected were ones which should not have been difficult for most students and, indeed, this proved out when the tests were administered in Pennsylvania.

As with any testing program, a note of caution must be given. The objectives tested are representative of those taught; they are not the only objectives taught in reading and mathematics. The items used to measure the objectives are from a universe of items that could be used to measure them. These facts, together with the usual cautions of time and conditions when the tests were administered, must be considered when interpreting TELLS results. Test scores should not be the only criteria used to evaluate a total educational program.

Table 6 provides a summary of the properties of the tests developed for TELLS. The K-R 20 internal consistency reliability coefficients were quite high; all were above .90. The standard errors of measurement were low when compared with the tests' variabilities, shown as standard deviations.

Also shown in Table 6 are the test means for Pennsylvania students and the estimated national means for each test. For five of the six tests, Pennsylvania students' means were higher than the national means. For the sixth test, grade 5 mathematics, Pennsylvania students scored approximately two points below the estimated national mean.

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[3] See Wright, B. D. and Stone, M. H. Best Test Design. Chicago: MESA Press, 1979.

Table 6
Test Properties for Noncategorical
Pennsylvania Public School Students and
Estimated Means for a National Sample

Grade	Subject Area	No. of Test Items	No. of Students Tested	Mean	Standard Deviation	Standard Error of Measurement	K-R 20 Reliability	Estimated National Mean
3	Reading	52	102,992	36.51	10.37	2.89	.92	35.91
	Mathematics	63	103,032	47.93	9.87	2.93	.91	47.04
5	Reading	65	104,936	48.25	11.94	3.13	.93	45.17
	Mathematics	66	104,952	47.20	11.12	3.20	.92	49.58
8	Reading	76	129,388	55.48	13.43	3.45	.93	54.04
	Mathematics	78	129,339	53.48	15.09	3.58	.94	52.01

TESTING RESULTS FOR NONCATEGORICAL STUDENTS AND FOR THE TOTAL GROUP OF STUDENTS TESTED

Since the overall purpose of the TELLS program is to determine which students in grades 3, 5 and 8 are in need of remedial help, the most meaningful way to report results is in terms of the numbers and percentages of students who scored at or below the cut scores. This section summarizes these results for the total group of students tested and for noncategorical students.

Two other types of analyses of noncategorical student results are presented in this section. First, the distributions of obtained scores will be described both verbally and graphically. Second, the results obtained for each objective will be shown as a means of describing the statewide results more fully.

Numbers and Percentages of Students Scoring At or Below Cut Scores

Table 7 shows the numbers and percentages of the total group tested whose scores were at or below the cut scores. Table 8 provides a similar summary for noncategorical students. As would be expected, the percentages of noncategorical student scores at or below the cut scores were less than for the total group tested. Depending upon grade level and subject area, between 19 and 27 percent of noncategorical public school student scores fell at or below the cut scores. The percentages of students eligible for remedial help were less in nonpublic schools than in public schools.

Tables 7 and 8 provided information about the numbers and percentages of scores which fell at or below the cut scores. There was no attempt in these tables to describe how many individual students became eligible for remedial help, i.e., how many students became eligible for at least one of the two programs. These results are shown in Tables 9 (total sample) and 10 (noncategorical students).

Taking the results shown in Tables 7 through 10 into consideration, the following can be said:

- o TELLS testing resulted in an overall total of 212,113 student scores at or below the cut scores (109,741 reading scores and 102,372 mathematics scores). Of the total group of scores at or below the cut scores, 189,721 occurred in public schools and 22,392 occurred in nonpublic schools.

- o The total number of students eligible for at least one remedial program (reading or mathematics or both) was 142,177 (125,866 public school students plus 16,311 nonpublic school students). About 35 percent of public school students and 24 percent of nonpublic school students became eligible for at least one remedial program.

- o About 50.7 percent of the public school students who were eligible for remedial help were eligible for both reading and mathematics help. About 37.3 percent of the nonpublic students eligible for remedial help were eligible in both areas.

- o A total of 107,011 noncategorical public school students and 15,558 noncategorical nonpublic school students were eligible for at least one remedial program.

Table 7
Total Tested Sample
Numbers and Percentages of Scores
At or Below Cut Scores

Grade	Subject	Public Schools: Scores at or Below Cut Scores No.	Public Schools: %	Nonpublic Schools: Scores at or Below Cut Scores No.	Nonpublic Schools: %	Total Sample: Scores at or Below Cut Scores No.	Total Sample: %
3	Reading	32,382	29.7	5,090	21.6	37,472	28.2
	Mathematics	23,539	21.5	3,359	14.3	26,898	20.2
5	Reading	26,320	23.5	3,489	15.6	29,809	22.1
	Mathematics	33,255	29.6	4,343	19.4	37,598	27.9
8	Reading	38,841	28.1	3,619	15.8	42,460	26.4
	Mathematics	35,384	25.6	2,492	10.9	37,876	23.5
Total	Reading	97,543	27.1	12,198	17.7	109,741	25.6
Total	Mathematics	92,178	25.6	10,194	14.8	102,372	23.9

Table 8
Noncategorical Students
Numbers and Percentages of Scores
At or Below Cut Scores

Grade	Subject	Public Schools: Scores at or Below Cut Scores No.	Public Schools: %	Nonpublic Schools: Scores at or Below Cut Scores No.	Nonpublic Schools: %	Total Sample: Scores at or Below Cut Scores No.	Total Sample: %
3	Reading	27,606	26.8	4,819	20.9	32,425	25.7
	Mathematics	19,746	19.2	3,175	13.8	22,921	18.2
5	Reading	21,094	20.1	3,276	14.9	24,370	19.2
	Mathematics	27,771	26.5	4,173	19.0	31,944	25.2
8	Reading	31,900	24.7	3,441	15.2	35,341	23.3
	Mathematics	28,748	22.2	2,392	10.6	31,140	20.5
Total	Reading	80,600	23.9	11,536	17.1	92,136	22.8
Total	Mathematics	76,265	22.6	9,740	14.4	86,005	21.2

Table 9
Total Tested Sample
Numbers of Students Eligible
for Reading Remediation Only, for Mathematics Remediation Only
and for Remediation in Both Content Areas

Grade	Type of School	Reading Remediation Only	Mathematics Remediation Only	Both Reading and Mathematics Remediation	Number Eligible For at Least One Remedial Program	Percent Eligible For at Least One Remedial Program
3	Public	14,524	5,681	17,858	38,063	34.8
	Nonpublic	2,841	1,110	2,249	6,200	26.3
5	Public	6,515	13,450	19,805	39,770	35.4
	Nonpublic	1,276	2,130	2,213	5,619	25.1
8	Public	12,649	9,192	26,192	48,033	34.8
	Nonpublic	2,000	873	1,619	4,492	19.6
Total	Public	33,688	28,323	63,855	125,866	35.0
Total	Nonpublic	6,117	4,113	6,081	16,311	23.7

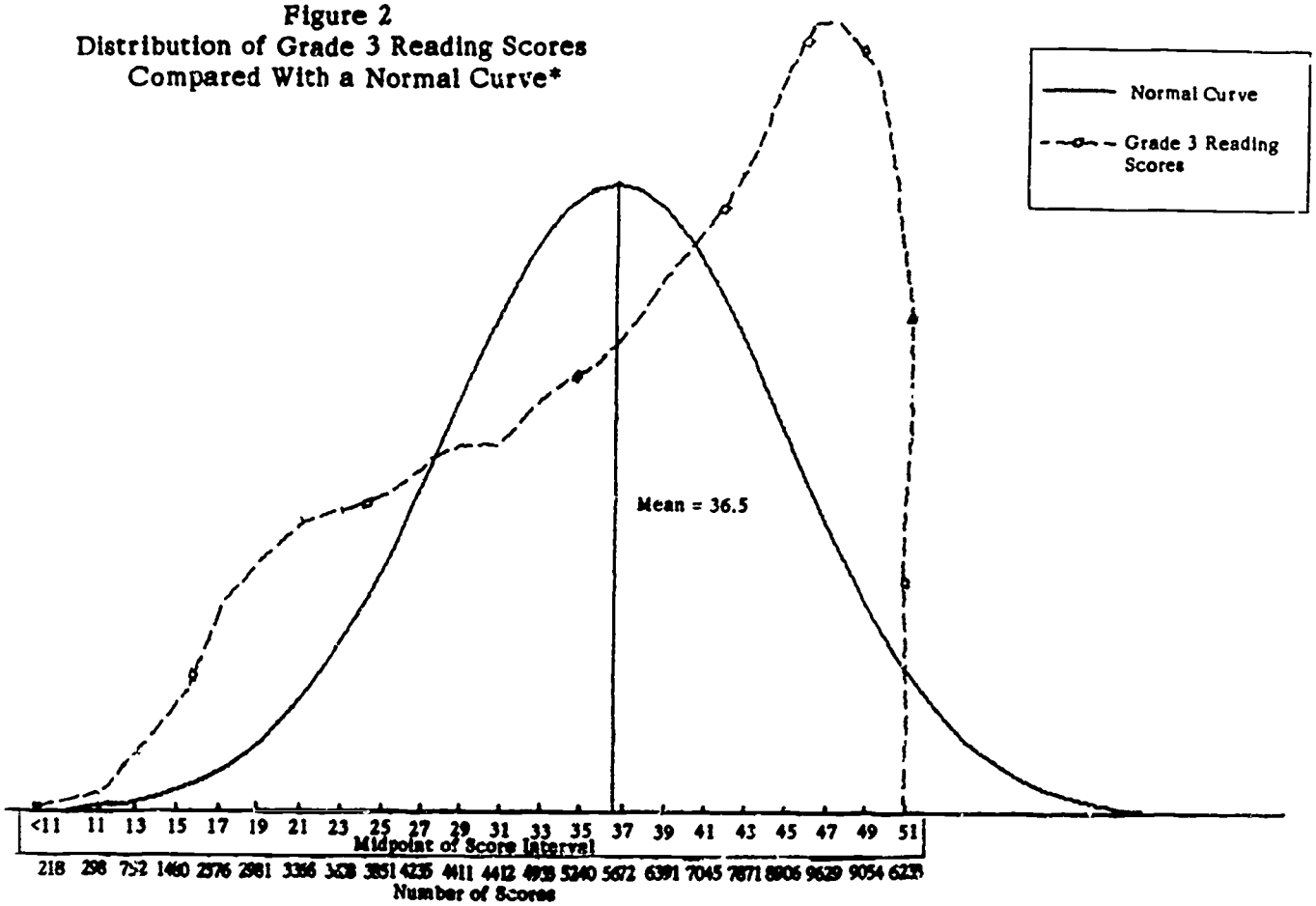
Table 10
Noncategorical Students
Numbers of Students Eligible
for Reading Remediation Only, for Mathematics Remediation Only
and for Remediation in Both Content Areas

Grade	Type of School	Reading Remediation Only	Mathematics Remediation Only	Both Reading and Mathematics Remediation	Number Eligible For at Least One Remedial Program	Percent Eligible For at Least One Remedial Program
3	Public	13,171	5,311	14,435	32,917	31.9
	Nonpublic	2,718	1,074	2,101	5,893	25.5
5	Public	5,835	12,512	15,259	33,606	32.0
	Nonpublic	1,192	2,089	2,084	5,365	24.4
8	Public	11,740	8,588	20,160	40,488	31.3
	Nonpublic	1,908	859	1,533	4,300	19.0
Total	Public	30,746	26,411	49,854	107,011	31.7
Total	Nonpublic	5,818	4,022	5,718	15,558	23.0

Noncategorical Student Score Distributions

Figure 2 pictures the grade 3 distribution of reading total scores for public school students. Superimposed on this distribution is a normal curve. The conclusion which results from this comparison is that the scores on this test are not normally distributed. A similar conclusion would be reached about the other five TELLS instruments.

Figure 2
Distribution of Grade 3 Reading Scores Compared With a Normal Curve*



*The upper tail of the normal curve is shown extending beyond the highest possible test score. This is obviously an impossibility. However, for comparative purposes the normal curve was drawn with a mean of the same magnitude as that of the grade 3 reading test. Because the test's mean was so high, an entire normal curve could not be completely contained within the boundaries of the highest possible test score.

The purpose of the comparison is to show that the TELLS instruments do differ from many typical tests given to measure academic achievement. For the more typical types of tests relatively small numbers of students score well and relatively small numbers score poorly, with the majority scoring somewhere not far from the mean. This leads to a distribution of scores which is normal in shape.

The TELLS tests were designed to contain content which would not be difficult for the majority of students. In fact, students answered correctly an average of between 69 and 76 percent of the items, depending upon the grade level and subject area (see Table 11). This resulted in a score distribution in which larger percentages obtained high scores than low scores. Pictured graphically this meant a concentration of scores above the mean, as shown in Figure 2.

Table 11
Percentages of Items Answered
Correctly on Each Test by Noncategorical
Public School Students

Grade	Reading	Mathematics
3	.70	.76
5	.74	.72
8	.73	.69

Because the concentration of scores occurred above the cut scores, not a large number of students obtained scores right at these scores or only one point removed from them. In fact, for all six tests only two percent scored right at the cut scores and for five of the six tests only two percent scored one point above these. For the sixth test, grade 5 mathematics, three percent scored one point above the cut score. Thus, relatively few students were either placed in remediation or missed being placed in it because of only one or two questions. It should be remembered, also, that even though a particular cut score had to be set, all students eligible for remediation answered incorrectly at least four out of 10 questions (see Table 1).

Results for Specific Objectives

The numbers of objectives measured by the tests ranged from a high of 30 for grade 8 mathematics to a low of 13 for grade 3 reading. Depending upon the specific objective, grade level and subject area, between two and five items were used to measure each objective.

Figures 3-8 were developed to provide a description of student performance in terms of the percentages of items answered correctly for each objective. They are not intended to show strengths and weaknesses but rather to document differences across objectives. The committees of Pennsylvania educators who selected the objectives for each test were well aware that some objectives were more difficult than others for students of the grade levels tested. The national results confirmed this. Thus, the relative differences which occurred across objectives were anticipated beforehand. What could not be predicted accurately before testing were the percentages of items per objective that Pennsylvania students were able to answer correctly and the degree to which some objectives were harder than others for Pennsylvania students.

Reading Objectives

Grade 3

As shown in Figure 3, grade 3 students had the most difficulty overall with Literal Comprehension items and also found the Inferential Comprehension items to be relatively difficult. The objective for which the lowest percent correct occurred (59 percent) was termed Stated Main Idea, i.e., identifies the sentence from the passage that best states the main idea of the passage.

Students answered correctly over 70 percent of the items for all objectives in the areas of Vocabulary and Life/Study and Reference Skills. They had the least difficulty with items measuring their abilities to deal with Multiple Meaning Words and with Reading Maps.

Grade 5

In general, grade 5 students had the most difficulty with Inferential and Critical Comprehension and with Life/Study and Reference Skills (Figure 4). The objective for which their percentage correct was lowest (62 percent) was termed Main Idea, Paraphrase, i.e., selects the sentence that best paraphrases the main idea of a passage. Also among the most difficult were items relating to reading a road map.

None of the objectives in the Literal Comprehension area were among the most difficult. In the area of Vocabulary, grade 5 students did well on the Multiple Meaning Words objective (86 percent correct) and also on the Categorizing objective, i.e., given a category title, selects a word group in which all words belong to the given category (86 percent correct).

Grade 8

As was the case at the grade 5 level, grade 8 students had the most difficulty with items measuring Inferential and Critical Comprehension and Life/Study and Reference Skills (Figure 5). The lowest percentages answered correctly (61 percent) were for objectives measuring Reading Maps and Reading Schedules. Inferential and Critical Comprehension objectives for which the percentages correct were lowest were Drawing Conclusions and Details Supporting the Main Idea, i.e., selecting the sentence containing details that either support or do not support the stated main idea.

Two of the objectives found easiest by students were in the Vocabulary area. Figurative Language/Metaphor was least difficult (84 percent correct). Also among those of least difficulty was Analogies (82 percent correct). In the Inferential and Critical Comprehension area, Distinguishing Fact from Opinion was the least difficult (83 percent correct).

Mathematics Objectives

Grade 3

At the grade 3 level students answered correctly over 90 percent of both Addition Requiring No Renaming problems and Graphing problems requiring them to interpret bar graphs (Figure 6). In the Geometry area they answered correctly 90 percent of the items requiring them to identify plane figures.

The most difficult objective for grade 3 students was Subtraction with Renaming. Only 39 percent of the items for this objective were answered correctly. Grade 3 students also had relatively more difficulty with story problems requiring them to add and subtract; with identifying equivalent numerals for pictured objects in groups of hundreds, tens and ones; and with interpreting pictographs.

Grade 5

As was the case at the grade 3 level, grade 5 students had little difficulty with questions about bar graphs (Figure 7). At this point in time Subtraction with Renaming had become a strength, as was the case for the Numeration objectives. Students also had relatively little trouble with story problems dealing with consumer mathematics.

The most difficult objectives for grade 5 students were Conversions/Metric (45 percent correct) and Division/One Digit Numbers (51 percent correct). Also difficult were Conversions/Customary (55 percent correct) and Multiplication by Two or Three Digits (56 percent correct). The general area of Fractions was a difficult one with, overall, 64 percent of the items of the four objectives answered correctly.

Grade 8

In general, grade 8 students had the least difficulty with story problems and with Graphing, Statistics and Probability objectives (see Figure 8). Finding the sum or difference of two decimals through the thousands place was not at all difficult (90 percent of these items were answered correctly). As was the case at the other two levels, questions about bar graphs were routinely answered (88 percent answered correctly).

Overall, Measurement items were least often answered correctly. More specifically, items assessing conversions from customary measures to equivalent customary measures were among the most difficult (50 percent answered correctly). Dividing Decimals and finding areas were also relatively difficult. Finding Percent of a Number and Conversions/Metric were among the most difficult objectives.

Figure 3

PERCENT CORRECT BY OBJECTIVE
GRADE 3 READING

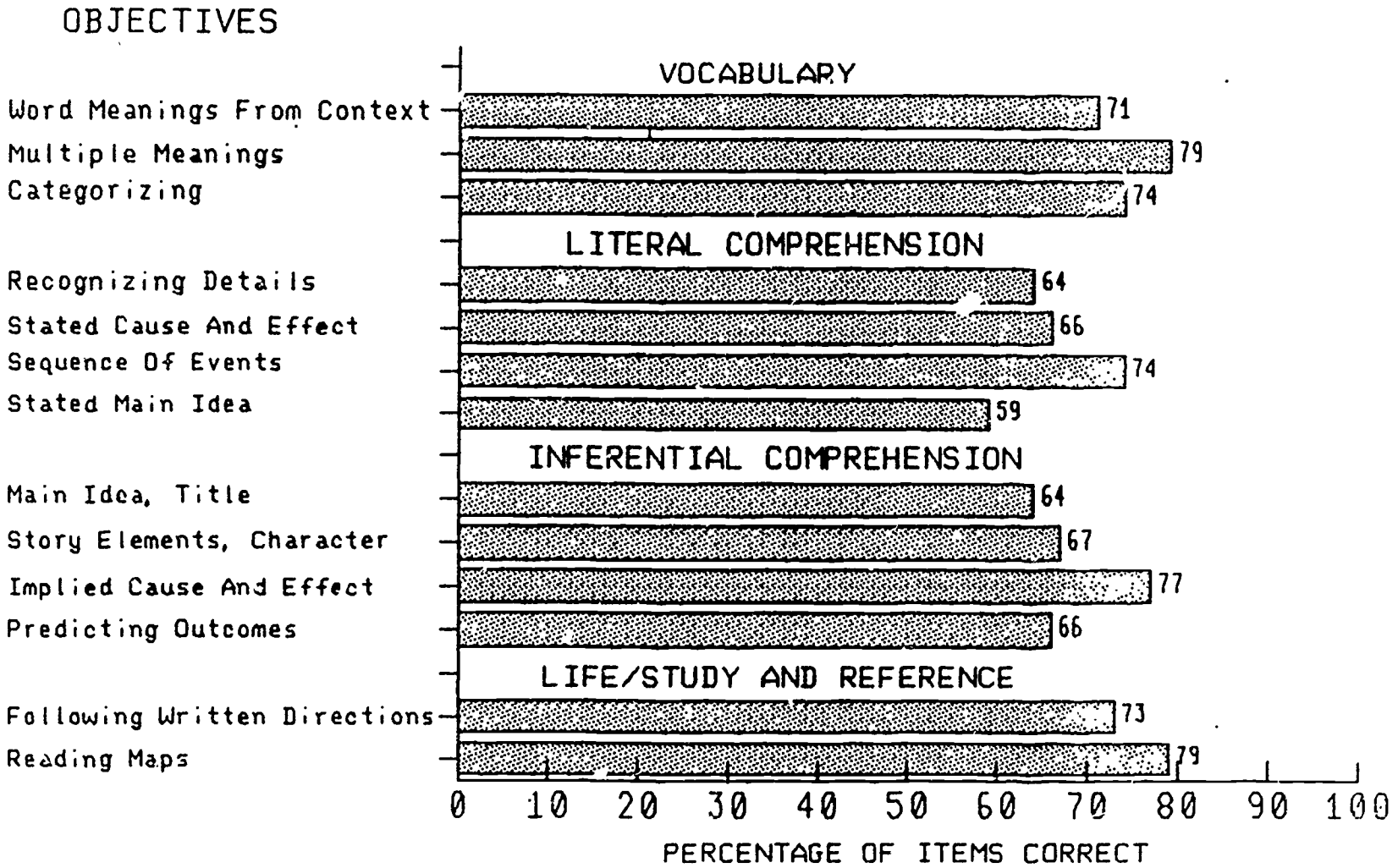


Figure 4

PERCENT CORRECT BY OBJECTIVE
GRADE 5 READING

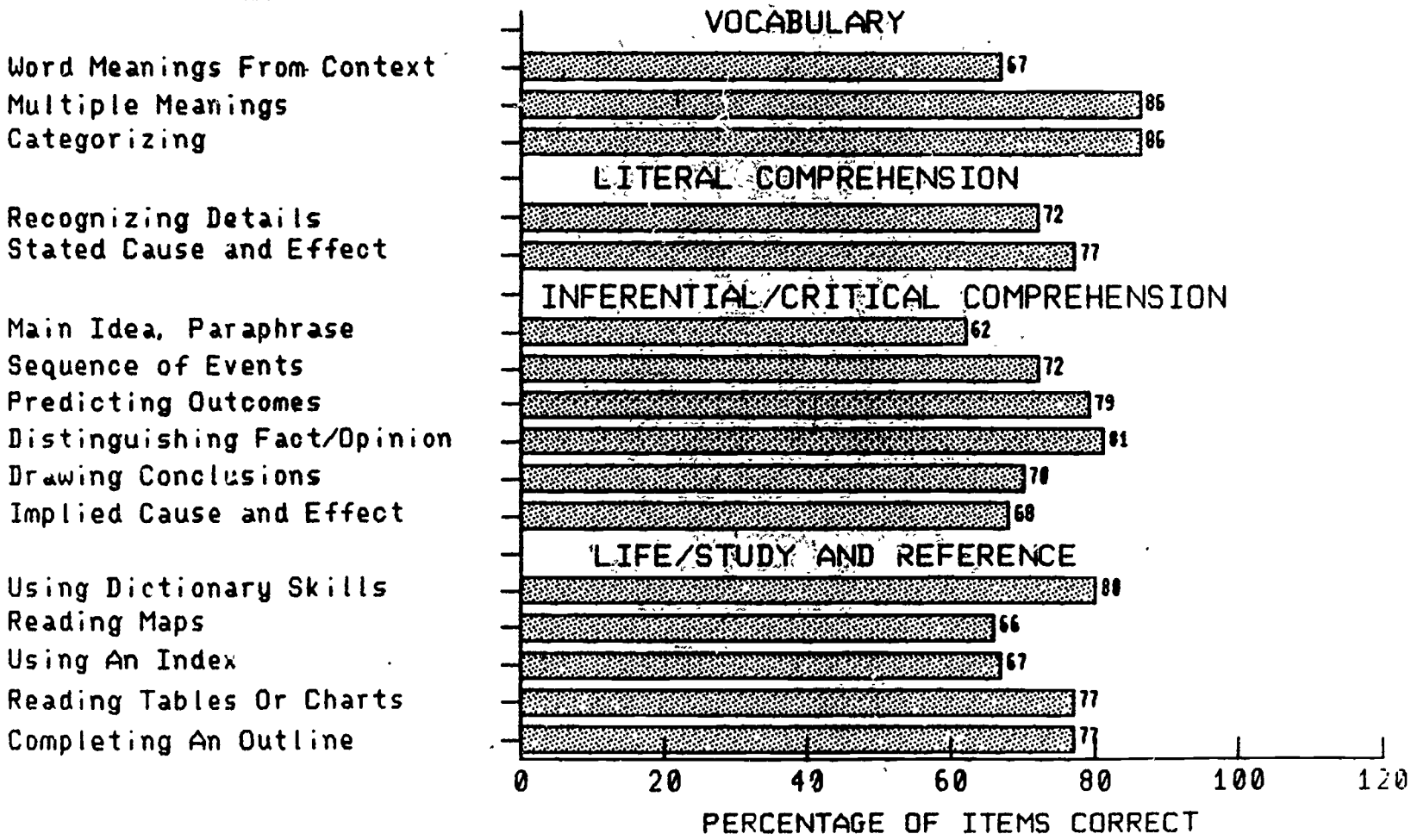


Figure 5

PERCENT CORRECT BY OBJECTIVE
GRADE 8 READING

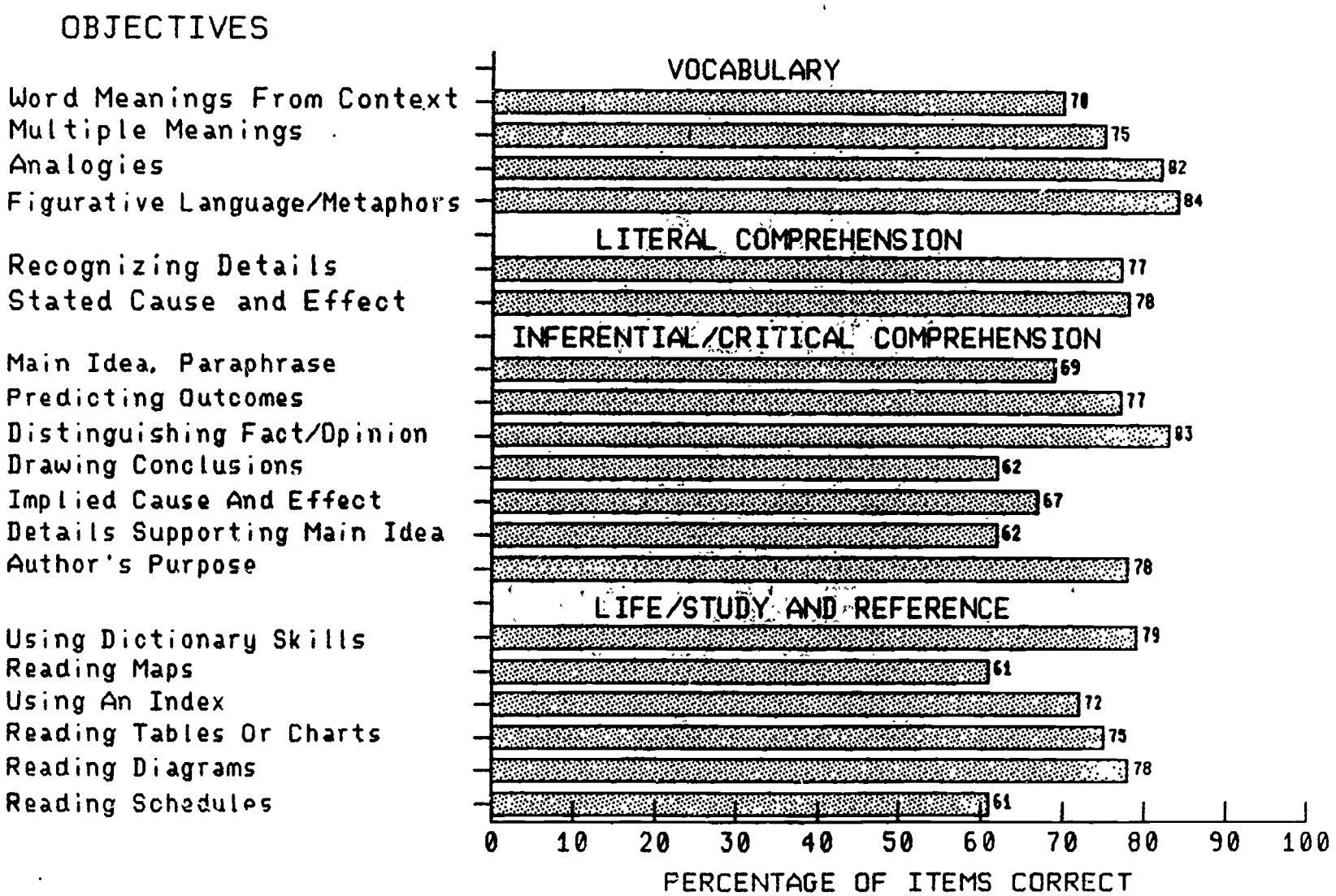


Figure 6

PERCENT CORRECT BY OBJECTIVE
GRADE 3 MATHEMATICS

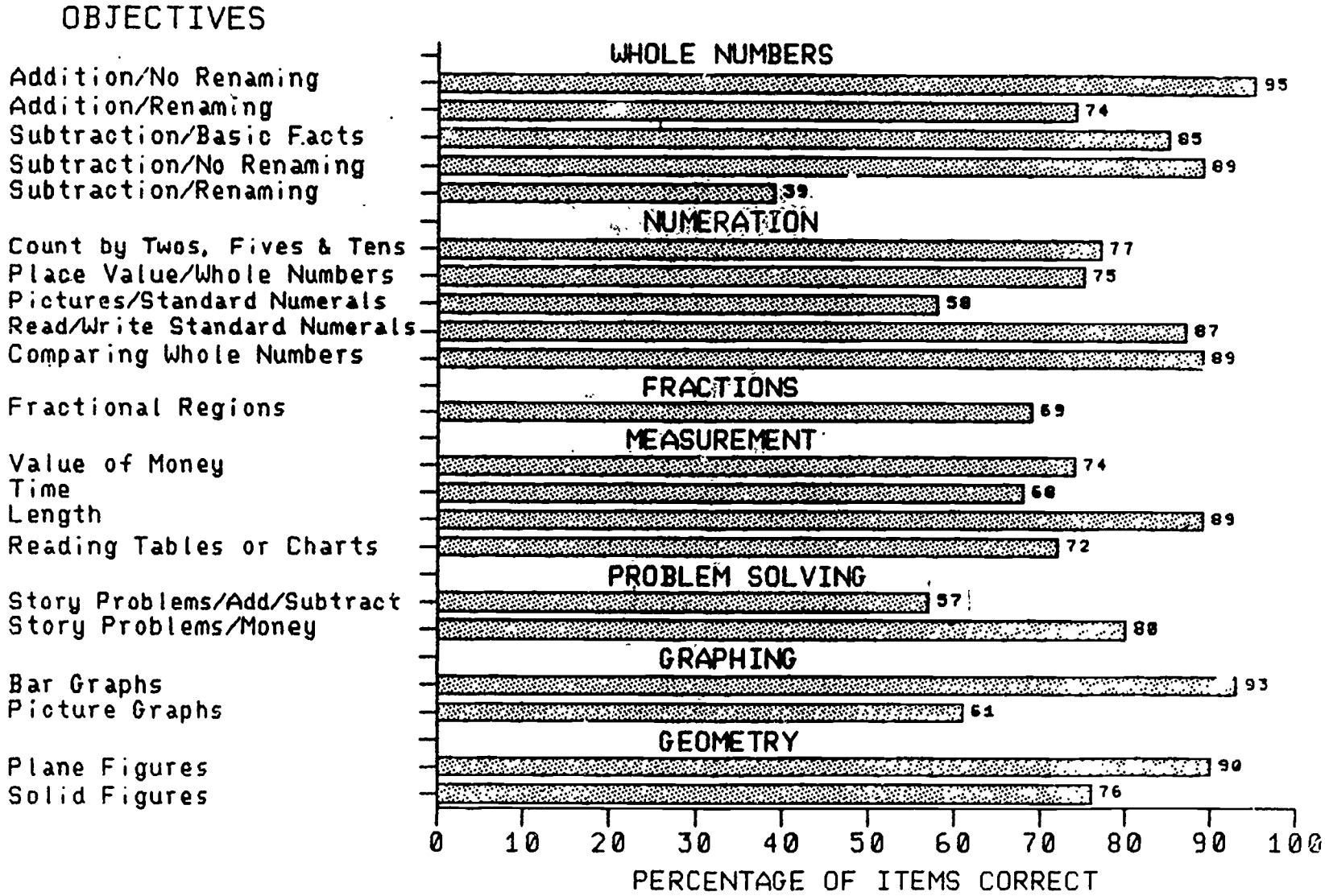


Figure 7

PERCENT CORRECT BY OBJECTIVE
GRADE 5 MATHEMATICS

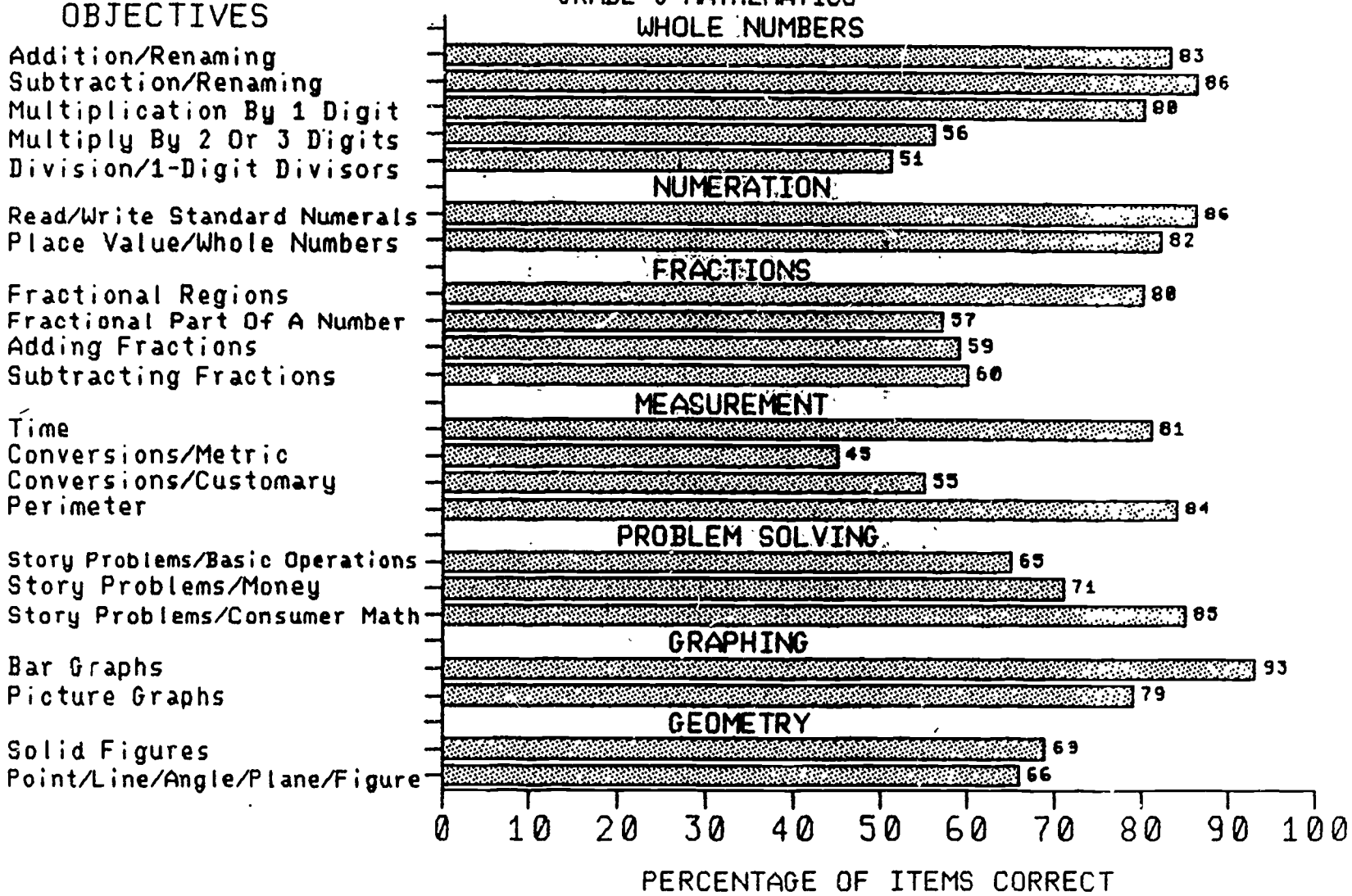
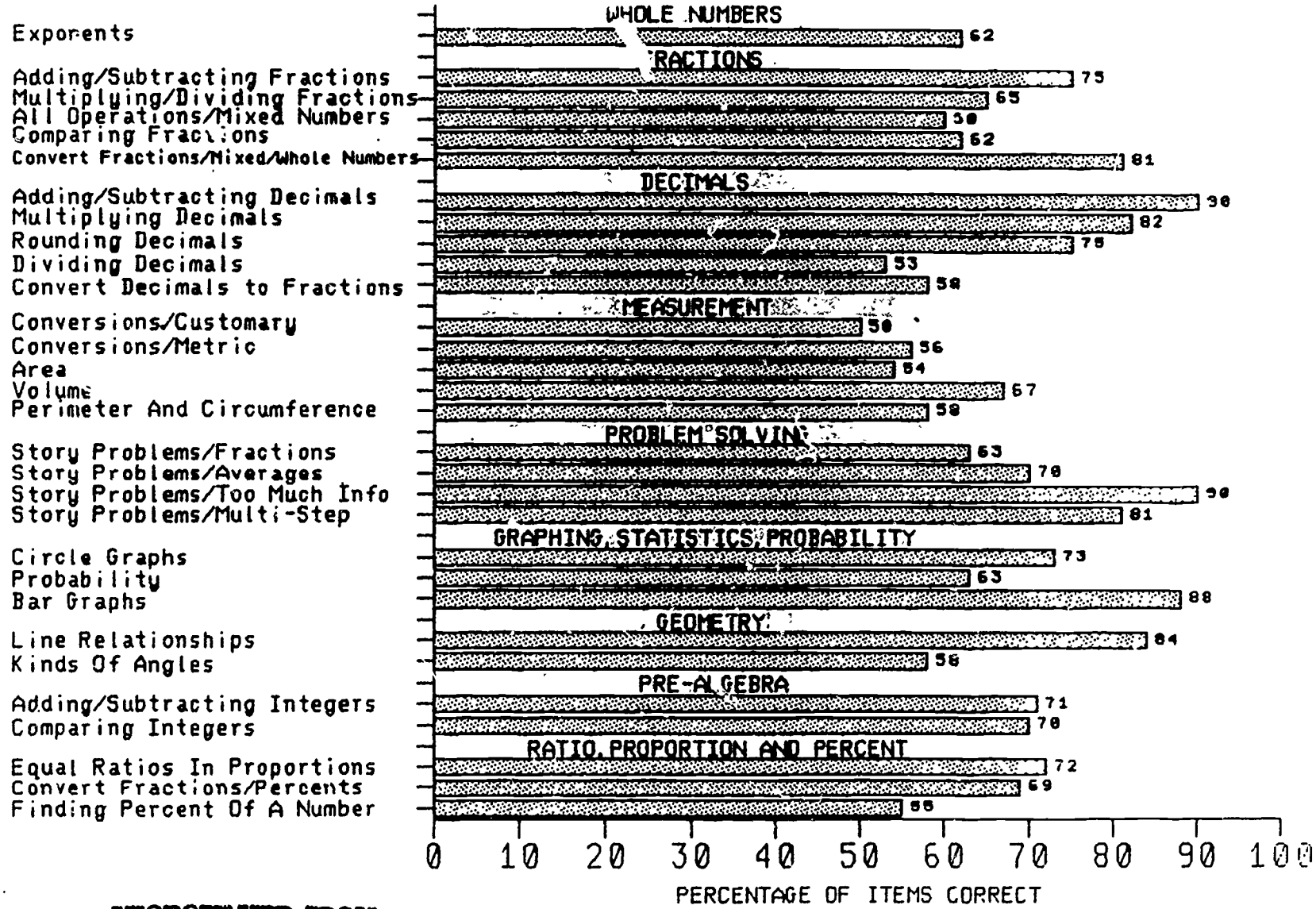


Figure 8

PERCENT CORRECT BY OBJECTIVE
GRADE 8 MATHEMATICS



TESTING RESULTS FOR GROUPS

Through use of the additional information provided at the time of testing by students or their teachers, it was possible to summarize the results achieved by a number of different groups. This chapter contains such results for males and females, for Chapter 1 students, for special education students and for limited English proficiency students. Also presented is an analysis showing numbers of students identified by TELLS for remediation who were not previously being served by special education, by Chapter 1 or by the limited English proficiency program.

Male-Female Comparisons

Tables 12 and 13 contain male-female comparisons for public and nonpublic schools, respectively. These tables summarize the fact that at all three grade levels and in both types of schools larger percentages of boys than girls became eligible for reading remediation. This same trend existed for mathematics at all three grade levels in public schools and at the grade 8 level in nonpublic schools. The percentages of nonpublic school males and females who became eligible for mathematics remediation were approximately equal at the grade 3 and 5 levels.

Chapter 1 Student Results

Table 14 summarizes the ECIA Chapter 1 student results for both public and nonpublic schools. Overall, about two-thirds of the reading scores of students enrolled in Chapter 1 reading programs fell at or below the cut scores. About 60 percent of the mathematics scores of students enrolled in Chapter 1 mathematics programs fell at or below the cut scores. Differences between public school and nonpublic school percentages were much greater for mathematics than for reading.

Table 12
Public School Males and Females
Numbers and Percentages of Scores
At or Below Cut Scores

		Reading			Mathematics		
			Scores at or Below Cut Scores			Scores at or Below Cut Scores	
Grade	Sex	No. Tested	No.	%	No. Tested	No.	%
3	Female	52,847	13,471	25.5	52,902	10,802	20.4
	Male	55,934	18,762	33.5	56,052	12,612	22.5
5	Female	54,592	10,688	19.6	54,638	14,994	27.4
	Male	57,363	15,523	27.1	57,464	18,149	31.6
8	Female	66,636	17,473	26.2	66,615	15,725	23.6
	Male	71,189	21,251	29.9	71,150	19,561	27.5

Table 13
Nonpublic School Males and Females
Numbers and Percentages of Scores
At or Below Cut Scores

		Reading			Mathematics		
Grade	Sex	No. Tested	Scores at or Below Cut Scores No.	%	No. Tested	Scores at or Below Cut Scores No.	%
3	Female	11,853	2,186	18.4	11,851	1,689	14.3
	Male	11,609	2,878	24.8	11,612	1,646	14.2
5	Female	11,330	1,545	13.6	11,330	2,169	19.1
	Male	11,044	1,933	17.5	11,044	2,157	19.5
8	Female	11,838	1,776	15.0	11,836	1,150	9.7
	Male	11,074	1,833	16.6	11,072	1,333	12.0

Table 14
Chapter 1 Students
Numbers and Percentages of Scores
At or Below Cut scores

		Public Schools			Nonpublic Schools		
Grade	Subject	No. Tested	Scores at or Below Cut Scores No.	%	No. Tested	Scores at or Below Cut scores No.	%
3	Reading	14,809	10,196	68.9	2,645	1,619	61.2
	Mathematics	4,978	2,533	50.9	1,308	525	40.1
5	Reading	12,225	7,462	61.0	1,640	937	57.1
	Mathematics	4,674	3,350	71.7	882	454	51.5
8	Reading	7,478	5,555	74.3	541	340	62.9
	Mathematics	3,132	2,223	71.0	566	255	45.1
Total Reading		34,512	23,213	67.3	4,826	2,896	60.0
Total Mathematics		12,784	8,106	63.4	2,756	1,234	44.8

Table 15
Public School Special Education Students
Numbers and Percentages of Scores At or Below Cut Scores

Category	Subject	Grade 3			Grade 5			Grade 8		
		No. Tested	Scores at or Below Cut Scores No.	%	No. Tested	Scores at or Below Cut Scores No.	%	No. Tested	Scores at or Below Cut Scores No.	%
Educable Mentally Retarded	Reading	866	837	96.7	1035	1002	96.8	1650	1634	99.0
	Mathematics	864	811	91.7	1050	1021	97.2	1637	1603	97.9
Hearing Impaired	Reading	130	91	70.0	99	50	50.5	168	108	64.3
	Mathematics	135	53	39.3	105	36	34.3	168	75	44.6
Learning Disabled	Reading	3503	2748	78.4	4393	3221	73.3	4969	3967	79.8
	Mathematics	3584	2087	58.2	4476	3450	77.1	4966	3868	77.9
Physically Handicapped	Reading	61	26	42.6	55	23	41.8	46	16	34.8
	Mathematics	61	30	49.2	55	28	50.9	46	18	39.1
Socially and Emotionally Disturbed	Reading	453	331	73.1	642	405	63.1	773	555	71.8
	Mathematics	464	275	59.3	640	460	71.9	772	591	76.6
Speech and Language Impaired	Reading	3575	1027	28.7	1453	397	27.3	272	106	39.0
	Mathematics	3580	674	18.8	1455	506	34.8	272	73	26.8
Other Special Education Category	Reading	424	220	51.9	350	154	44.0	162	87	53.7
	Mathematics	437	195	44.6	363	169	46.6	163	69	41.6

Table 16
Nonpublic School Special Education Students
Numbers and Percentages of Scores At or Below Cut Scores

Category	Subject	Grade 3			Grade 5			Grade 8		
		No. Tested	Scores at or Below Cut Scores No.	%	No. Tested	Scores at or Below Cut Scores No.	%	No. Tested	Scores at or Below Cut Scores No.	%
Educable Mentally Retarded	Reading	7	7	100.0	2	2	100.0	2	1	50.0
	Mathematics	6	6	100.0	2	2	100.0	2	1	50.0
Hearing Impaired	Reading	11	5	45.5	15	10	66.7	3	1	33.3
	Mathematics	12	2	16.7	15	7	46.7	3	2	66.7
Learning Disabled	Reading	54	37	68.5	57	35	61.4	31	20	64.5
	Mathematics	54	31	57.4	56	36	64.3	31	13	41.9
Physically Handicapped	Reading	4	2	50.0	7	4	57.1	5	3	60.0
	Mathematics	4	1	25.0	7	5	71.4	5	2	40.0
Socially and Emotionally Disturbed	Reading	4	3	75.0	4	3	75.0	4	3	75.0
	Mathematics	4	3	75.0	4	1	25.0	4	2	50.0
Speech and Language Impaired	Reading	341	95	27.9	118	32	27.1	39	23	59.0
	Mathematics	285	57	16.7	119	38	31.9	39	14	35.9
Other Special Education Category	Reading	63	44	69.8	69	31	44.9	35	20	57.1
	Mathematics	64	31	48.4	70	34	48.6	36	13	36.1

Special Education Student Results

Tables 15 and 16 (see pages 27 and 28) present the results of the testing of special education students. As shown, almost all of the educable mentally retarded students who were tested scored at or below the cut scores. As expected, results for speech and language impaired students did not differ greatly from those for all noncategorical students. For all other special education categories the percentages at or below the cut scores were much greater than were those for noncategorical students.

Limited English Proficiency Student Results

Table 17 summarizes the results of the testing of limited English proficiency students. As might be expected, the percentages of these students' scores falling at or below the cut scores were greater for reading than for mathematics.

Table 17
Limited English Proficiency Students
Numbers and Percentages of Scores
At or Below Cut Scores

		Public Schools			Nonpublic Schools		
Grade	Subject	No. Tested	Scores at or Below Cut Scores No.	%	No. Tested	Scores at or Below Cut scores No.	%
3	Reading	836	577	69.0	335	180	53.7
	Mathematics	845	386	45.7	336	114	33.9
5	Reading	769	440	57.2	314	130	41.4
	Mathematics	787	382	48.5	317	86	27.1
8	Reading	971	660	68.0	305	136	44.6
	Mathematics	974	475	48.8	306	71	23.2
Total	Reading	2,576	1,677	65.1	954	446	46.8
Total	Mathematics	2,606	1,243	47.7	959	271	28.3

Students Identified by TELLS Who Were Not Previously Being Served by Other Programs

One measure of the impact of the TELLS program is the number of students now given access to a remedial program who were not previously being provided special help. A subtraction process was required to estimate this, taking away numbers of students being served by special education, by Chapter 1 and by the limited English proficiency program from the total number of students identified by TELLS for at least one remedial program. The numbers which resulted from this subtraction are obviously estimates since it is not known how many students were being served in local remedial programs not identified as special education, Chapter 1 or limited English proficiency.

The analysis which was performed is summarized in Table 18. As can be seen, the TELLS program identified for remediation 82,166 public school students and 12,295 nonpublic school students who were not previously being served by special education, Chapter 1 or the limited English proficiency program. Thus, a total of 94,461 unserved students were identified.

Table 18
Students Identified by TELLS
Who Were Not Previously Served

Grade	Type of School	Eligible Noncategorical (1)	Total Eligible Noncategorical Chapter 1 (2)	No. Eligible Who Were Not Not Being Served (3)
3	Public	32,298	9,982	22,316
	Nonpublic	5,827	1,610	4,217
5	Public	33,219	8,169	25,050
	Nonpublic	5,338	1,094	4,244
8	Public	40,400	5,600	34,800
	Nonpublic	4,283	449	3,834
Total Public		105,917	23,751	82,166
Total Nonpublic		15,448	3,153	12,295
Total Grade 3		38,125	11,592	26,533
Total Grade 5		38,557	9,263	29,294
Total Grade 8		44,683	6,049	38,634
Overall Total		121,365	26,904	94,461

(1) The numbers of students unserved by special education or the limited English Proficiency (LEP) program are equal to noncategorical students minus speech and language impaired.

(2) The numbers of Chapter 1 students eligible for at least one remedial program who were not being served by special education or the LEP program.

(3) Unserved by the LEP program, by Chapter 1 or by special education. This column was produced by subtracting column 2 from column 1.

ANALYSES OF RESULTS FOR EACH OBJECTIVE

This section presents two types of analyses of test data. First, the results achieved on each objective by students whose scores fell above cut scores will be compared with those of students whose scores fell at or below cut scores. This analysis was performed to help identify the specific skill deficiencies which were most responsible for locating students in need of remedial help.

The second analysis to be described is similar to the first. The results for schools which had the lowest percentages of students identified for remediation will be compared with those of schools which had the highest percentages identified. These results will be examined in light of what was found on the first analysis to determine whether the content areas which were most responsible for identifying students for remediation were the same ones which most described differences across the two groups of schools.

Comparisons of Results for Students Above and Below the Cut Scores

This analysis was performed using testing results for noncategorical students from public schools. For each of the six tests, students whose scores fell above the cut score formed one group and those whose scores fell at or below the cut score formed the comparison group. For each of the two groups the percentages of students correctly answering each item were determined. For each group, then, the averages of the percentages correct for the items measuring each objective were calculated. These average percentages correct for each objective are shown in Figures 9-14.

Reading Test Results

Grade 3

At the grade 3 level (Figure 9), the objective for which differences were greatest was Multiple Meanings, in the Vocabulary area. Students whose scores were above the cut score answered an average of 90 percent of these items correctly. Students whose scores fell at or below the cut score answered correctly, on the average, only 47 percent of the Multiple Meanings items. Other objectives for which the greatest differences occurred were Main Idea - Title and Predicting Outcomes, in the Inferential Comprehension area; Word Meanings from Context, in the Vocabulary area; and Stated Cause and Effect, in the Literal Comprehension area.

The objective for which the least amount of difference took place was Stated Main Idea in the Literal Comprehension area. The difference between the average percentages correct for this objective was only .26 (.66 minus .40).

Grade 5

At the grade 5 level (Figure 10), the area of Inferential and Critical Comprehension was most descriptive of differences between above cut and below cut students. For all objectives of this area except Distinguishing Fact/Opinion, the differences between the average percentages correct of the two groups were greater than .40. For two other objectives of the test the differences between the averages of the two groups were above .40. These were Word Meanings from Context, in the area of Vocabulary, and Using an Index, in the Life/Study and Reference area.

For two objectives, differences between the average percentages correct of the two groups were below .30. These were Categorizing (.25), in the Vocabulary area, and Reading Tables or Charts (.26), in the Life/ Study and Reference area.

Grade 8

As was the case for grade 5 students, grade 8 students above and below the cut score differed most in their abilities to correctly answer Inferential and Critical Comprehension items (Figure 11). In this area the greatest differences existed on Drawing Conclusions items. Above cut students averaged 73 percent of these items correct; below cut students averaged only 31 percent correct. Another Inferential and Critical Comprehension objective for which large differences occurred (.40) was Distinguishing Fact/Opinion. Other objectives which were among those showing the greatest differences were Recognizing Details, in the Literal Comprehension area, and Word Meanings from Context, in the Vocabulary area.

On four objectives, differences between the groups of less than .30 existed. The smallest difference (.25) occurred on the Reading Diagrams objective of the Life/Study and Reference area. The other three were Multiple Meanings (.28) and Analogies (.29), in the area of Vocabulary, and Stated Cause and Effect (.29), in the area of Literal Comprehension.

Mathematics Test Results

Grade 3

Overall at the grade 3 level (Figure 12) above cut and below cut students differed most in the areas of Problem Solving and Numeration. The specific objectives for which the greatest differences occurred were Addition/Renaming (.46), Place Value/Whole Numbers (.46), Counting by Twos, Fives and Tens (.40) and Time (.39).

There was little difference between the two groups on Addition/No Renaming items (.97 vs .86). Among the other objectives for which the smallest differences occurred were Subtraction/No Renaming (.22), Length (.22), Comparing Whole Numbers (.23), Bar Graphs (.23) and Plane Figures (.23).

Grade 5

Figure 13 depicts the fact that grade 5 above cut and below cut students differed most on items measuring multiplication, division and fractions. The specific objectives for which the greatest differences occurred were Picture Graphs (.42), Subtracting Fractions (.40), Adding Fractions (.38), Fractional Part of a Number (.36), Multiplication by Two or Three Digits (.36), Division/One-Digit Divisors (.36) and Story Problems/Money (.36).

For four objectives, differences between the two groups' averages were .25 or less. These objectives were Bar Graphs (.15), Addition/Renaming (.18), Read/Write Standard Numerals (.25) and Point/Line/Angle/Plane/Figure (.25).

Grade 8

At the grade 8 level (Figure 14) the area of Fractions again was a major determiner of above cut-below cut differences. Four of the seven objectives for which the largest differences occurred had to do with Fractions. These were Adding/Subtracting Fractions (.50), Multiplying Fractions (.45), Converting Fractions/Mixed Numbers/Whole Numbers (.43) and Story Problems/Fractions (.45). Other objectives which were among those for which the largest differences occurred were Whole Numbers/ Exponents (.45), Story Problems/Averages (.42) and Equal Ratios in Proportions (.46).

The objective for which the smallest difference was computed was Adding/Subtracting Decimals (.19). Among others for which relatively small differences occurred were Circle Graphs (.21), Bar Graphs (.23), Story Problems/Too Much Information (.24) and Dividing Decimals (.24).

Comparisons of Results for Schools with the Largest and Smallest Percentages At or Below the Cut Scores

In order to obtain the data for this analysis, the 50 schools which had the greatest percentages of noncategorical students at or below the cut score and the 50 schools which had the smallest percentages of noncategorical students at or below the cut score were first identified for each test. Then, in a similar way to that just described for above cut and below cut students, average percentages correct for each objective were computed for the two groups of schools. The results obtained in these comparisons were contrasted with those just described for above cut and below cut students to determine whether the greatest differences found in each analysis took place for the same objectives.

To reduce the complexity of this comparative study it was decided to report the results for each content area rather than for each objective. These results are shown in Tables 19 and 20 for reading and mathematics, respectively.

These tables show, first of all, that the differences between the two groups of schools were not of as great a magnitude as the differences between above cut and below cut students. This is due to the fact that the average percentages of items correct for the two groups of schools were computed using data for all noncategorical students tested at each grade level. Thus, each average shown in the school analysis is based upon results for both students above the cut scores and students below the cut scores.

Further examination of this data leads to the conclusion that the two types of analyses did not isolate exactly the same content areas as the ones for which the greatest differences existed. However, for all three grade levels the reading content area for which differences were greatest was the same in the two analyses. These areas were Vocabulary at the grade 3 level and Inferential and Critical Comprehension at both the grade 5 and 8 levels.

The two analyses both identified Problem Solving as the greatest area of difference in the grade 3 mathematics testing. At the grade 8 level, although the same one area was not identified as that showing the greatest difference, the three areas with the greatest difference were the same for the two analyses. These were Whole Numbers/Exponents, Fractions and Pre-Algebra.

The grade 5 mathematics content areas for which the greatest differences occurred were not the same for the two analyses. The above cut-below cut analysis identified Fractions as the area of greatest difference; the school analysis identified both Whole Numbers/Division and Geometry. Why the two analyses produced differing results for this test or, for that matter, why they produced some divergence in results for all tests is not clear at this point. It may be that the school analysis is more sensitive to such factors as curriculum differences. Further analyses of this type should help clarify these findings.

Table 19
Reading Content Areas
Average Percentages Correct of Groups
Compared in Two Analyses

		Student Analysis			School Analysis		
Grade	Content Area	Above Cut Students	Below Cut Students	Above Cut/ Below Cut Difference	Schools with Smallest Percents at or Below Cuts	Schools with Largest Percents at or Below Cuts	Smallest Percent Below/ Largest Percent Below Difference
3	Vocabulary	.85	.45	.40	.86	.58	.28
	Literal Comprehension	.75	.40	.35	.76	.53	.23
	Inferential Comprehension	.80	.41	.39	.80	.54	.26
	Life/Study and Reference	.86	.50	.36	.87	.61	.26
5	Vocabulary	.87	.52	.35	.87	.67	.20
	Literal Comprehension	.82	.46	.36	.82	.64	.18
	Inferential/ Critical Comprehension	.80	.40	.40	.81	.59	.21
	Life/Study and Reference	.80	.46	.34	.81	.61	.20
8	Vocabulary	.85	.54	.31	.85	.65	.20
	Literal Comprehension	.86	.51	.35	.85	.67	.18
	Inferential/ Critical Comprehension	.80	.43	.37	.79	.58	.21
	Life/Study and Reference	.79	.48	.31	.78	.60	.18

Table 20
Mathematics Content Areas
Average Percentages Correct of Groups
Compared in Two Analyses

Grade	Content Area	Student Analysis: Above Cut Students	Student Analysis: Below Cut Students	Student Analysis: Above Cut/ Below Cut Difference	School Analysis: Schools with Smallest Percents at or Below Cuts	School Analysis: Schools with Largest Percents at or Below Cuts	School Analysis: Smallest Percent Below/ Largest Percent Below Difference
3	Whole Nos./ Addition	.90	.62	.28	.92	.75	.17
	Subtraction	.76	.50	.26	.80	.62	.18
	Numeration	.84	.49	.35	.86	.66	.20
	Fractions	.75	.44	.31	.78	.60	.18
	Measurement	.82	.50	.32	.84	.65	.19
	Problem Solving	.76	.39	.37	.80	.56	.24
	Graphing	.82	.56	.26	.85	.65	.20
	Geometry	.89	.61	.28	.91	.71	.20
5	Whole Nos./ Addition	.88	.70	.18	.86	.77	.09
	Subtraction	.93	.67	.26	.91	.77	.14
	Multiplication	.78	.42	.36	.76	.58	.18
	Division	.61	.25	.36	.63	.43	.20
	Numeration	.92	.63	.29	.91	.72	.19
	Fractions	.74	.37	.37	.74	.58	.16
	Measurement	.73	.46	.27	.73	.58	.15
	Problem Solving	.82	.51	.31	.81	.65	.16
	Graphing	.94	.65	.29	.93	.74	.19
	Geometry	.76	.46	.30	.77	.57	.20
8	Whole Nos./ Exponents	.71	.26	.45	.76	.48	.28
	Fractions	.78	.34	.44	.84	.53	.31
	Decimals	.78	.47	.31	.82	.57	.25
	Measurement	.64	.32	.32	.69	.44	.25
	Problem Solving	.84	.47	.37	.86	.63	.23
	Graphing/ Statistics/ Probability	.81	.53	.28	.84	.62	.22
	Geometry	.78	.48	.30	.83	.57	.26
	Pre-Algebra	.79	.41	.38	.83	.55	.28
	Ratio/Proportion/Percent	.73	.36	.37	.77	.51	.26

Figure 9

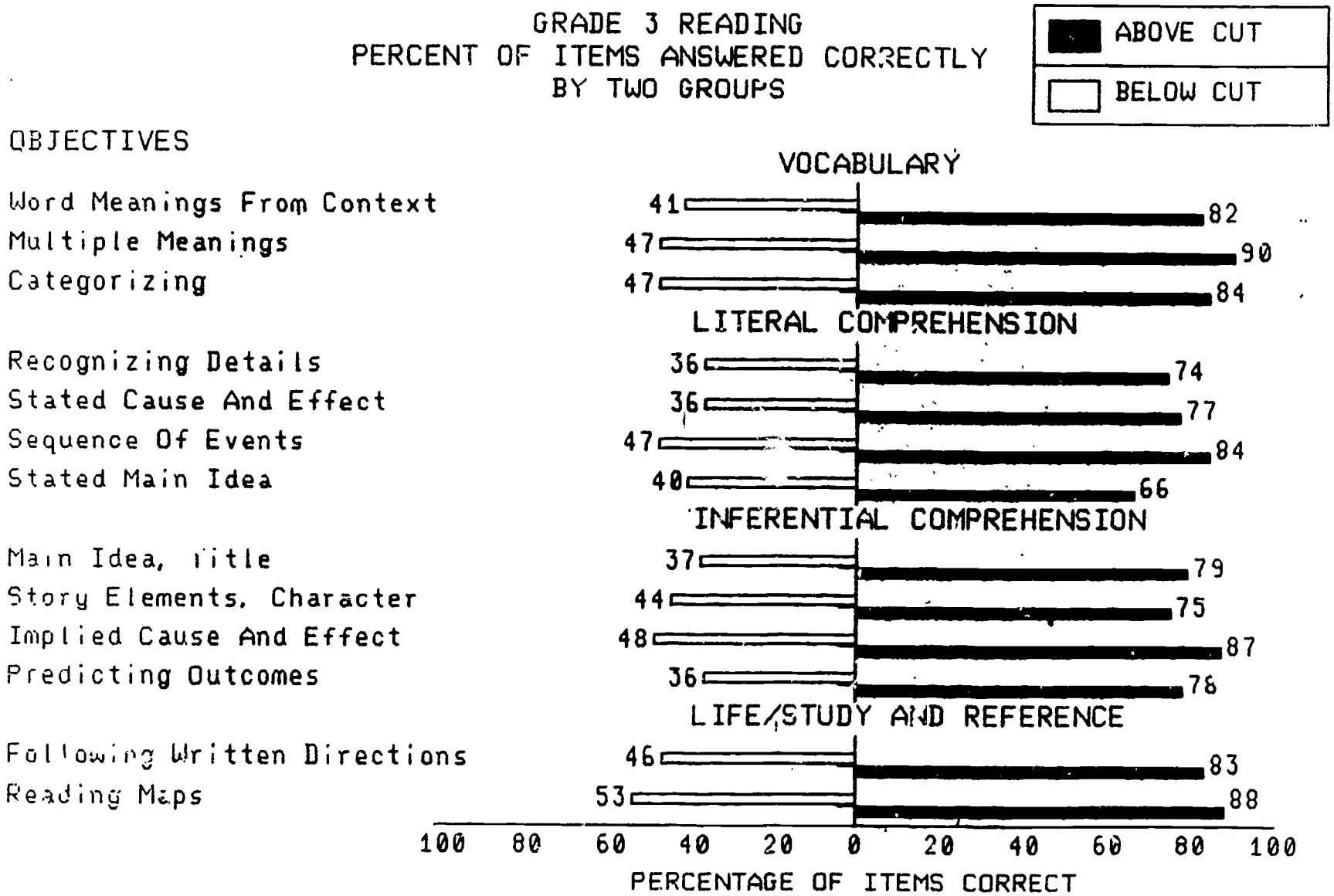

GRADE 3 READING
PERCENT OF ITEMS ANSWERED CORRECTLY
BY TWO GROUPS
ABOVE CUT
BELOW CUT
OBJECTIVES
VOCABULARY
Word Meanings From Context
41
82
Multiple Meanings
47
90
Categorizing
47
84
LITERAL COMPREHENSION
Recognizing Details
36
74
Stated Cause And Effect
36
77
Sequence Of Events
47
84
Stated Main Idea
40
66
INFERENTIAL COMPREHENSION
Main Idea, Title
37
79
Story Elements, Character
44
75
Implied Cause And Effect
48
87
Predicting Outcomes
36
78
LIFE/STUDY AND REFERENCE
Following Written Directions
46
83
Reading Maps
53
88
100 80 60 40 20 0 20 40 60 80 100
PERCENTAGE OF ITEMS CORRECT

Figure 10

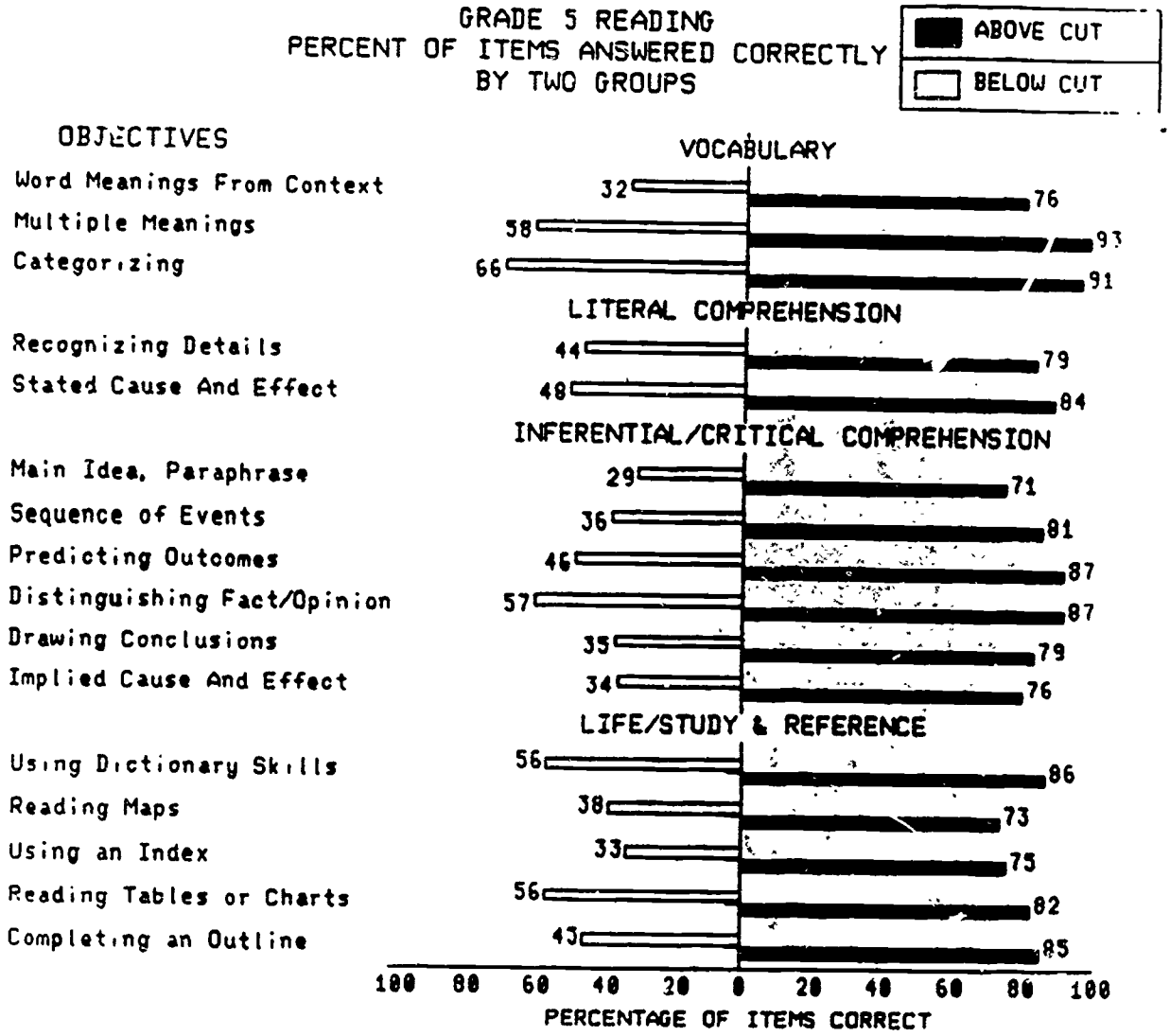


Figure 11

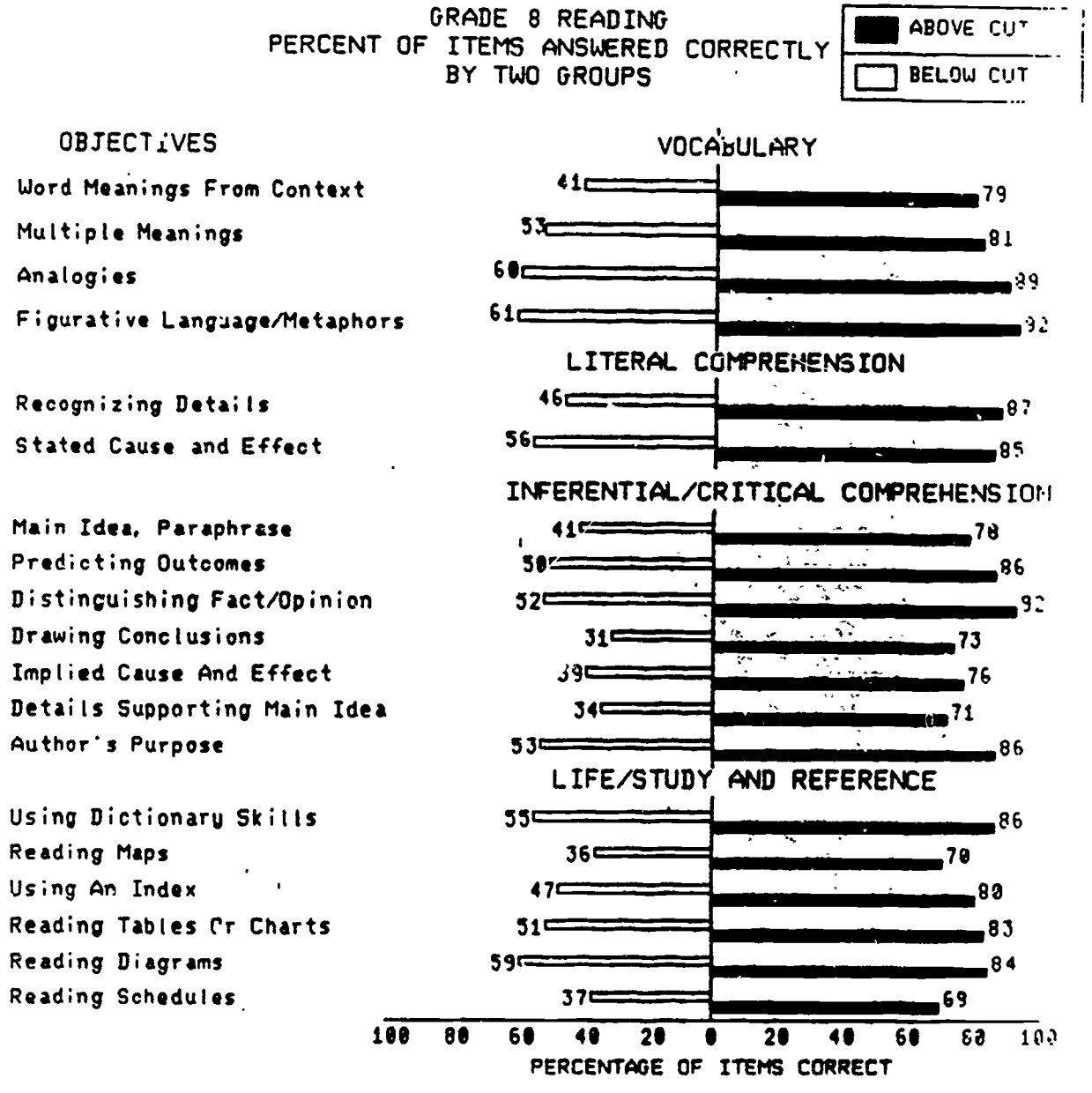


Figure 12

GRADE 3 MATHEMATICS
PERCENT OF ITEMS ANSWERED CORRECTLY
BY TWO GROUPS

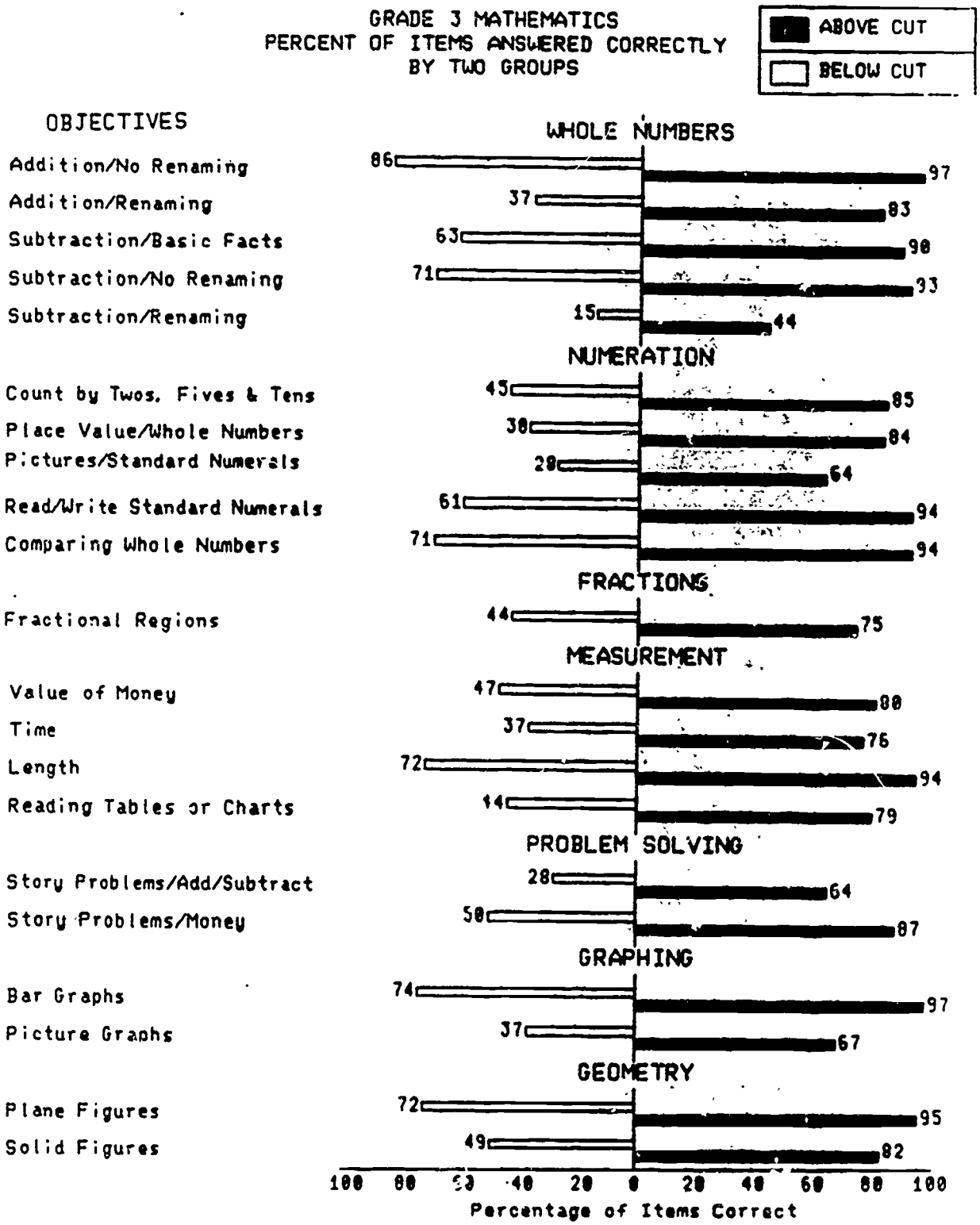


Figure 13

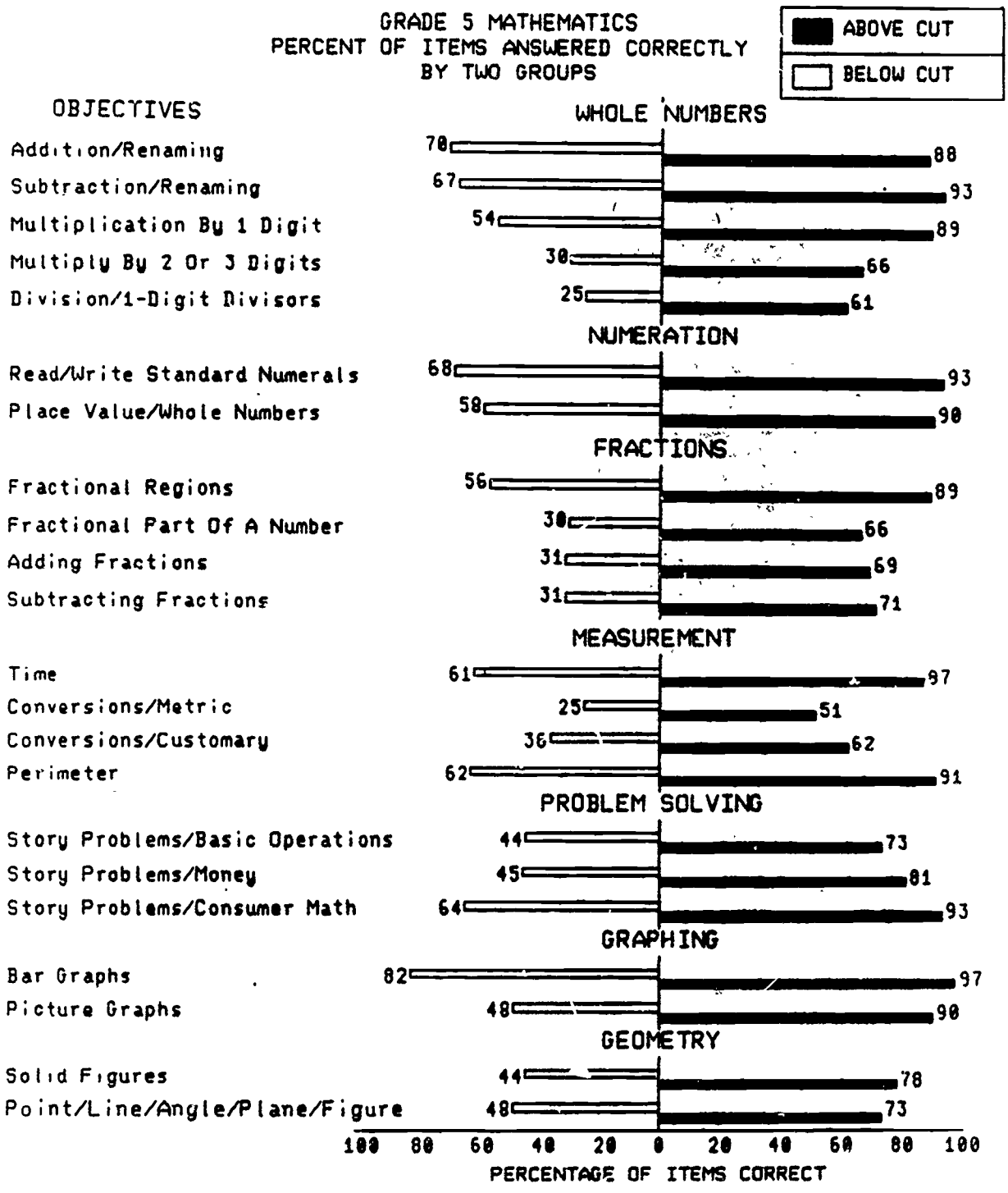
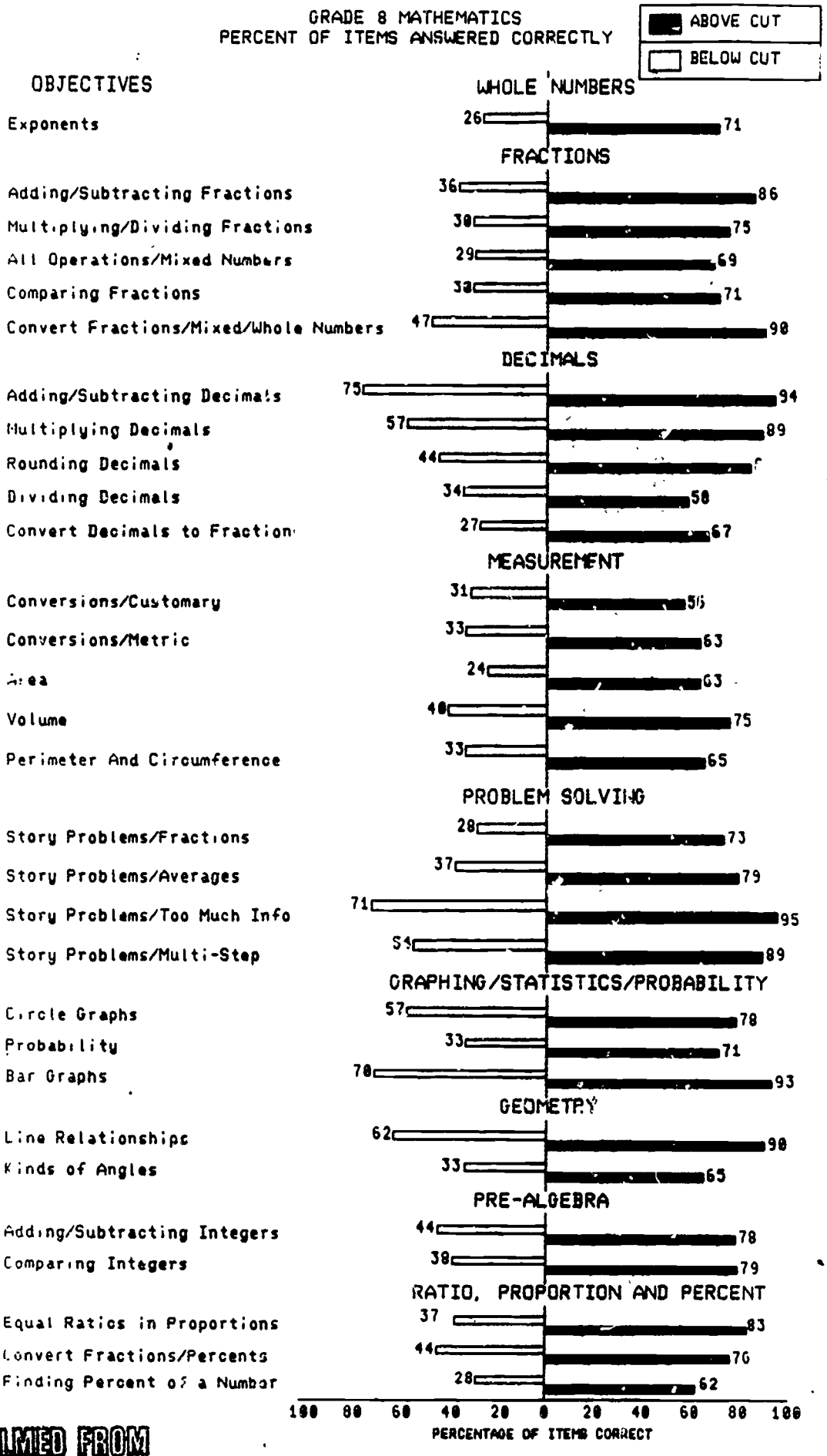


Figure 14



APPENDIX A: SELECTED SECTIONS, CHAPTER 3: STUDENT TESTING STATE BOARD OF EDUCATION REGULATIONS

22 PA Code
Chapter 3. Student Testing

*Presented below

3.1 Statutory authority

The statutory authority for this chapter is found at section 290.1 of the Public School Code of 1949 (24 P.S. ss.2-290.1) and sections 1317-1319 of The Administrative Code of 1929 (71 P.S. ss.367-369).

3.2 Compliance schedule

(a) This chapter shall become effective in the 1984-85 school term and thereafter.
(b) The Testing for Essential Learning and Literacy Skills program (TELLS) testing program shall be given for the first time in the 1984-85 school term in accordance with a schedule to be developed by the Secretary and shall continue on an annual basis.

3.4 General purpose

The TELLS program is designed to identify student competencies in the basic skill areas of reading and mathematics.

3.5 TELLS testing program administration

(a) Grade levels to be tested. Public school students, except those exempted in Section 3.6 ... enrolled in grades 3, 5 and 8 shall be tested in accordance with this chapter.
(b) Type of testing. The tests in reading and mathematics shall be of a criterion referenced type and shall be as prescribed by the Secretary.
(c) Test selection. The Secretary will have the authority to develop the tests or to contract for the development of any portions of the tests and for related services necessary for the conduct of the testing program.

3.6 Students to be exempted from TELLS testing program

(a) Category exemptions. The Secretary may exempt certain categories of students from the TELLS testing program ..... when in the judgment of the Secretary exemption is merited. School districts may submit written requests to the Secretary that additional categories of students be exempted.
(b) Individual exemptions. Where the Secretary does not exempt a certain category of students from testing, a school district superintendent may grant exemptions to individual students based upon the individual educational program of such students and guidelines that the Secretary may issue.

3.7 Scope

(a) All public school districts shall participate in the TELLS testing program.
(b) .....

3.10 Nonpublic schools participation

(a) Nonpublic schools which desire to participate in the TELLS testing program shall notify the Secretary in writing of their desire in accordance with the annual TELLS schedule to be established by the Secretary.
(b) Nonpublic schools which choose to participate in the TELLS testing program shall conform to Department guidelines pertaining to the conduct and administration of the TELLS testing program.

APPENDIX B: APPLICABLE SECTIONS, ACT 93

Portions of Act 93 are included here to help clarify the purposes of TELLS.

Section 1511.1 - Remedial Programs. (a) Approved programs in reading and in mathematics shall be established by each school district for its public school students and by each intermediate unit for nonpublic school students to serve those students identified as requiring assistance as a result of falling below an acceptable level of performance on tests developed and administered pursuant to regulations adopted by the State Board of Education. Annually, each school district and intermediate unit shall submit an application to the department for approval of a program of remediation services to be funded through funds distributed pursuant to subsection (b). Upon approval of the program, each school district and intermediate unit shall be eligible for State funds made available for such programs, as provided in subsection (b).

(b) Funds appropriated for remediation services and not distributed through sections 2501(19), 2502(d) and 2502.5 shall be distributed by the Department of Education to school districts based on the number of public school students identified for remediation and to intermediate units on behalf of nonpublic school students for remediation. Funds distributed to intermediate units shall be for services that are in addition to any services provided in accordance with the provisions of section 922.1 and such funds shall be in addition to those distributed in accordance with the provisions of section 922.1(d).

Section 2502(d). For the 1983-1984 school year and each school year thereafter, each school district participating, during the 1984-1985 school year and each school year thereafter, in a statewide program for testing and remediation which is designed to identify and provide remediation services to individual students pursuant to section 1511.1, shall be paid by the Commonwealth on account of instruction of the district's pupils an amount to be determined by multiplying the district's market value/income aid ratio by the factor for educational expense, one thousand seven hundred twenty-five dollars ($1,725), and by the weighted average daily membership of the district. This subsidy may be used for strengthening curriculum, increasing standards, improving student achievement and providing remedial programs.

APPENDIX C: 1984 OBJECTIVES

TELLS
READING OBJECTIVES

Grade 3

Vocabulary

- Selects the meaning of an unfamilar word from the context of two given sentences.
- Selects the meaning for a multiple-meaning word from the context of the sentence.
- Given four words belonging to the same category or a category title, selects the corresponding title or the four words belonging to the category.

Literal comprehension

- Identifies a detail stated in a passage.
- Identifies the cause of an explicitly stated cause-effect relationship occurring within a passage.
- Identifies the event that happens first or last within a passage.
- Identifies the sentence from the passage that best states the main idea of the passage.

Inferential comprehension

- Demonstrates comprehension of the main idea by selecting the best title for a passage.
- Selects the implied feelings, motives, or traits of the character(s) within a passage.
- Selects the implied cause of a cause-effect relationship occurring within a passage.
- Determines the most probable outcome of a passage or of an event in a passage.

Life/study and reference

- Given written directions describing a procedure with four steps, uses the directions to select the correct procedure.

TELLS
READINC OBJECTIVES

Grade 5

Vocabulary

Indicates which word or phrase best describes the meaning of an unfamiliar word inferred from the context of a passage.
Selects the meaning for a multiple-meaning word from the context of the sentence.
Given a category title, selects a word group in which all words belong to the given category.

Literal comprehension

Identifies a detail stated in a passage.
Identifies the cause of an explicitly stated cause-effect relationship occurring within a passage.

Inferential and critical comprehension

Selects the sentence that best paraphrases the main idea of a passage.
Selects the sequence of two or more events within a passage.
Determines the most probable outcome of a passage or of an event in a passage.
Determines whether a given statement is a fact or an opinion.
Given a passage, selects the conclusion that can best be inferred from information stated in the passage.
Selects the implied cause of a cause-effect relationship occurring within a passage.

Life/study and reference

Given two dictionary entries of homographs, selects the meaning of the word used in context and identifies appropriate guide words for the word.
Given a road map containing a key and a compass, selects a direction, a distance or a location.
Given an index with main topics, subtopics, and cross-references, selects the page numbers containing the requested information.
Given a table that includes six rows under five categories, selects information from each category.
Given a partially completed outline, selects the place in the outline where a given main topic or subtopic belongs.

TELLS
READING OBJECTIVES

Grade 8

Vocabulary

Indicates which word or phrase best describes the meaning of an unfamiliar word inferred from the context of a passage.
Selects the meaning for a multiple-meaning word from the context of the sentence.
Given an incomplete sentence containing three words of an analogy, determines which of four words best completes the analogy.
Selects the two elements of comparison in a sentence containing a metaphor.

Literal comprehension

Identifies a detail stated in a passage.
Identifies either the cause or the effect of an explicitly stated cause-effect relationship occurring within a passage.

Inferential and critical comprehension

Selects the sentence that best paraphrases the main idea of a passage.
Determines the most probable outcome of a passage or of an event within the passage.
Determines whether a given statement is an opinion.
Selects the conclusion that can best be inferred from information stated in the passage.
Selects the implied cause or the implied effect of a cause-effect relationship occurring within a passage.
Selects the sentence containing details that either support or do not support the stated main idea.
Determines the author's purpose for writing a passage.

Life/study and reference

Given two dictionary entries of homographs, selects the meaning of the word used in contex and identifies appropriate guide words for the word.
Given a road map containing a key, a scale and a compass, selects a direction, a distance or a location.
Given an index with main topics, subtopics and cross-references, selects the page numbers containing the requested information.
Given a table that includes nine rows under five categories, selects information from each category.
Given a diagram of a passenger liner with a key, selects numbers or labels in the diagram.
Given a bus schedule, selects information from the schedule.

TELLS
MATHEMATICS OBJECTIVES

Grade 3

Whole numbers: addition

Given either a two-digit and three-digit addend or two 3-digit addends, finds the sum without renaming (regrouping).
Given two 2-digit addends, uses renaming (regrouping) once to find the sum.

Whole numbers: subtraction

Given a number less than 10 to be subtracted from a number less than 19, finds the difference.
Given a three-digit number and a two- or three-digit number, finds the difference without renaming (regrouping).
Given a two-digit number and a one- or two-digit number, uses renaming (regrouping) once to find the difference.

Numeration

Given three or four numbers that require counting by twos, fives or tens, identifies the missing number.
Given a designated digit in a standard numeral through the thousands place, identifies the place of the designated digit.
Given pictured objects in groups of hundreds, tens, and ones (less than 1000), identifies the equivalent standard numeral.
Given a number through thousands written in digits and words, identifies the equivalent standard numeral.
Given two whole numbers less than 1000, identifies which of the two whole numbers is either greater or less.

Fractions

Given a shape with a shaded fractional part (halves, thirds or fourths), identifies the fractional part shaded.

Measurement

Given pictured coins (half dollars, quarters, dimes, nickels and pennies) and pictured one dollar bills, finds the value of the money pictured.
Given a pictured clock face showing time, identifies the correct time.
Given a pictured object and a pictured ruler, finds the length of the object.
Given a pictured calendar month, identifies information about dates and days of the week.

Problem solving

Given a story problem requiring addition or subtraction, finds the sum or difference.
Given a story problem requiring the addition or subtraction of money, finds the sum or difference.

(Continued)

(Grade 3 - Continued)

Graphing

Given a bar graph scaled by 1, demonstrates an understanding of the graph by making identifications and comparisons.
Given a picture graph (pictograph) scaled by 2, demonstrates an understanding of the graph by making identifications and comparisons.

Geometry

Given a pictured circle, rectangle, square or triangle, identifies the name of the shape.
Given a pictured cone, cube, cylinder or sphere, identifies the name of the shape.

TELLS
MATHEMATICS OBJECTIVES

Grade 5

Whole numbers: addition

Given three 4-digit addends or four 3-digit addends, uses renaming (regrouping) to find the sum.

Whole numbers: subtraction

Given two 4-digit numbers, uses renaming (regrouping) to find the difference.

Whole numbers: multiplication

Given a three- or four-digit factor multiplied by a one-digit factor, uses renaming (regrouping) to find the product.
Given a three-digit factor multiplied by a two- or three-digit factor, uses renaming (regrouping) to find the product.

Whole numbers: division

Given a three-digit dividend and a one-digit divisor, finds the quotient with or without a remainder.

Numeration

Given a number through hundred thousands written in words, identifies the equivalent standard numeral.
Given a designated digit in a standard numeral through the hundred thousands place, identifies the place of the designated digit.

Fractions

Given a shape with a shaded fractional part (fifths, sixths, sevenths, or eighths), identifies the fractional part shaded.
Given a fraction and a whole number, finds the fractional part of the whole number (e.g., 1/5 of 25 =).
Given two fractions less than 1 with like denominators, finds the sum.
Given two fractions less than 1 with like denominators, finds the difference.

Measurement

Given a pictured clock face showing time in five-minute or one-minute intervals, identifies the correct time.
Given a metric measure, finds the equivalent metric measure.
Given a customary measure (e.g., 1 in., 1 lb., 1 qt.), finds an equivalent customary measure.
Given a polygon with its dimensions shown, finds the perimeter.

(Continued)

(Grade 5 - Continued)

Problem solving

Given a story problem requiring addition, subtraction, multiplication or division, finds the sum, difference, product or quotient.
Given a story problem requiring the addition, subtraction, multiplication or division of money, finds the sum, difference, product or quotient.
Given a menu listing items and prices and story problems requiring the addition, subtraction or multiplication of money, finds the sum, difference or product.

Graphing

Given a bar graph scaled by 1, demonstrates an understanding of the graph by making identifications, comparisons and calculations.
Given a labeled picture graph (pictograph) scaled by 10, demonstrates an understanding of the graph by making identifications, comparisons and calculations.

Geometry

Given a pictured cone, cube, cylinder, rectangular prism or sphere, identifies the name of the shape.
Given a point, line, angle, or plane figure, identifies the name of the shape or figure.

TELLS
MATHEMATICS OBJECTIVES

Grade 8

Whole numbers: multiplication

Given a one-digit number with an exponent, finds the equivalent standard numeral.

Fractions

Given two fractions less than 1 with unlike denominators, finds the sum or difference.
Given two fractions less than 1 or a fraction less than 1 and a whole number, finds the product or quotient.
Given two mixed numbers, finds the sum, difference, product or quotient.
Given two fractions with unlike denominators and the symbols for greater than, less than and equal to, compares the two fractions and identifies the symbol that describes the relationship between the fractions.
Given a fraction greater than 1 or a mixed number, finds the mixed number or whole number for the given fraction or the fraction for the given mixed number.

Decimals

Given two decimals through the thousandths place, finds the sum or difference.
Given two decimals, finds the product that does not exceed the ten thousandth place.
Given a decimal, selects the number that is the rounded number to the nearest tenth or hundredth for the given decimal.
Given a dividend through the ten thousandths place and a divisor through the hundredths place (both decimals have a digit in the ones place), finds the quotient to the nearest tenth and hundredth.
Given a decimal through tenths, hundredths or thousandths, identifies the equivalent fraction in lowest terms.

Measurement

Given a customary measure (e.g., 15 in., 15 lb., 15 qt.), finds an equivalent customary measure.
Given a metric measure, finds the equivalent metric measure.
Given a square, rectangle, triangle, parallelogram or circle with its dimensions shown and 3.14 for pi, finds the area.
Given a pictured rectangular prism or cube with its dimensions shown, finds the volume.
Given a polygon or circle with its dimensions shown and 3.14 for pi, finds the perimeter or circumference.

(Continued)

(Grade 8 - Continued)

Problem solving

Given a story problem requiring addition, subtraction, multiplication or division of fractions or mixed numbers, finds the sum, difference, product or quotient.
Given a story problem with a sequence of no more than six numbers, finds the average.
Given a story problem with too much information, requiring addition, subtraction, multiplication or division, finds the answer.
Given a story problem with whole numbers, fractions or decimals (including standard dollar notation) requiring more than one step, finds the answer.

Graphing, statistics and probability

Given a circle graph with percents, demonstrates an understanding of the graph by making comparisons and calculations.
Given a listing of the possible outcomes of an event, finds the probability requested.
Given a bar graph scaled by 10, demonstrates an understanding of the graph by making identifications, comparisons and calculations.

Geometry

Given a pair of lines, identifies the best name of the relationship between the lines (intersecting, parallel or perpendicular).
Given an angle, identifies the kind of angle shown (acute, obtuse or right).

Pre-algebra

Given a one-digit integer and a two-digit integer and operation sign, finds the sum or difference.
Given two integers and the symbols for greater than, less than and equal to, compares the two integers and identifies the symbol that describes the relationship between the integers.

Ratio, proportion, and percent

Given a proportion in which one of the ratios has a missing number (e.g. 18/24 = y/20), finds the value of the unknown.
Given a fraction (less than one), a decimal (through hundredths place) or a percent (no greater than 99%), changes the given fraction or decimal to a percent or changes the given percent to a fraction or decimal.
Given a problem with the percent known and the number known (e.g., Find 12% of 144), finds the unknown percent of the number (part).

APPENDIX D: SAMPLE REPORTS

DISTRICT REPORT (1 bound copy and 1 unbound copy)

SAMPLE A: District Performance Frequency and Summary, Summary Report Page 1 of 4

This summary is a listing, for each grade for reading and mathematics, of the following:

a. Raw scores - number of items correct
b. District count - number of students obtaining each score
   District pct - percentage of students obtaining each score
c. District percent - cumulative percentage of students in district obtaining up to each score point. For example, a percentage of 56 opposite a raw score of 41 means that 56 percent of the students in the district scored 41 correct or less. The percentages of regular students falling below the cutoff score can be obtained by using columns a and c.
d. National percent - estimated cumulative percentage of students in a national sample obtaining up to each score point. For example, a percentage of 68 opposite a raw score of 41 means 68 percent of the students in a national sample scored 41 correct or less. Comparing this to the district in the example above, the district scored better than the national sample.

SAMPLE B: District Performance Summary by Groups, Summary Report Page 2 of 4

This summary is a listing, for each grade for reading and mathematics, of the following:

a. District student count - number of students tested in each category (group)
b. Average number of items correct, district - by each group tested and listed
c. Percentage of items correct, district - by each group tested and listed
d. Top Quartile Point Q3 - the number and percentage of items correct for the student who is above 75 out of 100 students in the district

   Median MDN - the number and percentage of items correct for the student who is at the median or is above 50 out of 100 students in the district

   Bottom Quartile Point Q1 - the number and percentage of items correct for the student who is above 25 out of 100 students in the district

   NOTE: The SLI, Chapter I Reading and Chapter I Mathematics figures are listed separately but are also included with non-categorical students above and the calculations for pages 1, 3 and 4. Categorical Students are listed separately and are not included in the calculations above or for pages 1, 3 and 4.

SAMPLE C: District Objectives Performance Summary, Reading
Summary Report Page 3 of 4

For each objective, this report lists the following:

a. Number of students tested
b. Average number of items correct in the district
c. Average number of items correct in the national sample
d. Percentage of students by number of items correct. For example, a 13 in a -2- column means that 13 percent of the students in the district had 2 items correct out of 5 total possible for that objective.
e. Number of items by objective - the total possible for the objective
f. District percentage of items correct - percentage of items correct out of the total possible for the district
g. National percentage of items correct - percentage of items correct out of the total possible for a national sample

SAMPLE D: District Objectives Performance Summary, Mathematics
Summary Report Page 4 of 4

This page has the same information for mathematics as page 3 has for reading.

(NOTE: The letters --A-- through --F-- on these pages refer to positions to locate labels which can be attached later to provide state normative data.)

SAMPLE E: District Ranked Lists -
Pages following District Summary

Rank order list - For district by grade, this rank order list shows student names with background data in the sequence from low to high score for reading and in similar sequence for mathematics. This list will enable the district to determine the number of remediation cases in each subject once the cut scores have been set as well as categorical information about those students. Worksheets will be provided for this purpose. In the column headed "RM", an "R" indicates that the student reported that he or she was in a Chapter I Reading program and an "M" indicates participation in a Chapter I Mathematics program. In the column headed "ESL", a single "Y" indicates that one of the two language proficiency items had a positive response; a double "Y" indicates both items had a positive response. A student with a double "Y" was classified as Limited English Proficient for purposes of scoring. In the column headed "SE" are each of the special education student codes. (SLI are not counted as special education categorical students and were included in the scoring as regular students.)

SAMPLE F: District Roster of Scores

District roster - For district by grade, this roster lists students alphabetically and gives the number and percent of items correct in reading and mathematics and number of items correct by objective. Also, background information and student codes are shown.

STUDENT REPORTS (2 copies for school, 1 copy for parents; 1 label)

SAMPLE G: Student reports for the school

These reports are being delivered to the district for distribution to the school. One of the two copies should be placed in the student's permanent file; the second copy is available for remediation planning. Included on the report are the student's number and percent of items correct in reading and mathematics with comparisons to district and estimated national percentages. For special education students, the district and national percentages are omitted and an "NA" is substituted. Also shown is the achievement of the student by objective.

SAMPLE H: Parent report

These reports are being delivered to the district for distribution to the parent via the school and student; they are attached to the student reports. The method of distribution to the parents should be similar to the measures used for delivery of report cards. Each contains the student's number and percent of items correct in reading and mathematics with comparisons to district and estimated national percentages. Also included is an explanation to the parent of the program and the scores.

SAMPLE I: Student labels

These labels are being delivered to the districts to be distributed to the schools. They should be placed on the student's permanent file folder. They contain the number and percent of items correct in reading and mathematics with comparisons to district and estimated national percentages.

SCHOOL REPORTS (1 bound copy and 1 unbound copy per school)

SAMPLE J: School Report

These reports are similar to the district reports described above except that data are presented by school instead of by district. District data are included for comparisons. On page 2 of 4, all calculations except student count are excluded because the small number of students in many buildings may create unfair comparisons. If there is only one school at a grade level in the district, the figures for the school may be obtained from the district report.

DISTRICT PERFORMANCE FREQUENCY AND SUMMARY

SUMMARY REPORT PAGE 1 OF 4

Testing for Essential Learning and Literacy Skills

DISTRICT 113910022
BLUE WATERS

GRADE 03

READING
TOTAL READING PERFORMANCE

READING RAW SCORES	FREQUENCY COUNTS BY RAW SCORES: DISTRICT COUNT	DISTRICT PCT	CUMULATIVE PERCENTAGES: DISTRICT PERCENT	CUMULATIVE PERCENTAGES: ESTIMATED NATIONAL PERCENT -- A --
52	1	1	100	100
51	4	4	99	100
50	3	3	95	99
49	6	6	92	99
48	5	5	86	97
47	2	2	81	95
46	5	5	79	92
45	4	4	74	89
44	3	3	70	85
43	6	6	67	79
42	5	5	61	73
41	4	4	56	68
40	7	7	52	63
39	1	1	44	57
38	5	5	43	52
37	5	5	38	48
36	2	2	33	44
35	4	4	31	40
34	2	2	27	37
33	3	3	25	34
32	4	4	22	31
31	4	4	18	29
30	3	3	14	26
29	2	2	11	24
28	1	1	9	21
27	1	1	8	19
26	0	0	7	18
25	3	3	7	16
24	1	1	4	14
23	1	1	3	13
22	0	0	2	11
21	0	0	2	10
20	1	1	2	8
19	0	0	1	6
18	0	0	1	4
17	0	0	1	3
16	0	0	1	2
11-15	1	1	1	1
6-10	0	0	0	0
1-5	0	0	0	0
0	0	0	0	0

SAMPLE
A

TELLS

MATHEMATICS
TOTAL MATHEMATICS PERFORMANCE

MATHEMATICS RAW SCORES	FREQUENCY COUNTS BY RAW SCORES: DISTRICT COUNT	DISTRICT PCT	CUMULATIVE PERCENTAGES: DISTRICT PERCENT	CUMULATIVE PERCENTAGES: ESTIMATED NATIONAL PERCENT -- B --
63	0	0	100	100
62	2	2	100	99
61	6	6	98	98
60	6	6	92	96
59	3	3	86	94
58	5	5	83	92
57	7	7	78	89
56	8	8	71	86
55	4	4	63	82
54	3	3	59	77
53	4	4	56	72
52	9	9	52	67
51	8	8	42	62
50	3	3	34	57
49	5	5	31	52
48	8	8	26	47
47	2	2	18	43
46	1	1	16	39
45	4	4	15	36
44	2	2	11	32
43	1	1	9	30
42	2	2	8	27
41	0	0	6	25
40	1	1	6	22
39	1	1	5	20
38	1	1	4	18
37	1	1	3	16
36	0	0	2	15
35	0	0	2	13
34	0	0	2	12
33	0	0	2	11
32	1	1	2	9
31	0	0	1	8
30	0	0	1	7
29	0	0	1	7
28	0	0	1	6
27	0	0	1	5
26	0	0	1	4
21-25	0	0	1	4
11-20	1	1	1	2
1-10	0	0	0	0
0	0	2	0	0

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DISTRICT PERFORMANCE SUMMARY BY GROUPS

SUMMARY REPORT PAGE 2 OF 4

Testing for Essential Learning and Literacy Skills

DISTRICT 113910022
BLUE WATERS

GRADE 03

TELLS

READING
READING PERFORMANCE BY GROUPS

GROUP		AVERAGE NUMBER OF ITEMS CORRECT: NUMBER OF STUDENTS TESTED DISTRICT STUDENT COUNT	AVERAGE NUMBER OF ITEMS CORRECT: DISTRICT	PERCENTAGE OF ITEMS CORRECT: DISTRICT
NON-CATEGORICAL STUDENTS (INCLUDING SLI)	MEAN	99	39.3	76
TOP QUARTILE POINT	Q3		45.5	88
MEDIAN	MDN		40.0	77
BOTTOM QUARTILE POINT	Q1		33.0	63
SLI - SPEECH & LANG IMP		3	47.0	90
CHAPTER I READING		9	29.2	56
CHAPTER I MATHEMATICS				
CATEGORICAL STUDENTS				
LD - LEARNING DISABIL.		7	23.7	46
SED - SOCIAL & EMOT DIS				
EMR - MENTALLY RETARDED		2	16.5	32
HI - HEAKING IMPAIRED				
PH - PHYSICALLY HANDIC.				
OTH - OTHER SPECIAL ED.				
LIMITED ENGLISH PROF.				

SAMPLE
B

MATHEMATICS
MATHEMATICS PERFORMANCE BY GROUPS

AVERAGE NUMBER OF ITEMS CORRECT: NUMBER OF STUDENTS TESTED DISTRICT STUDENT COUNT	AVERAGE NUMBER OF ITEMS CORRECT: DISTRICT	PERCENTAGE OF ITEMS CORRECT: DISTRICT
99	52.0	83
	57.0	90
	52.0	83
	48.0	76
3	59.7	95
9	47.6	75
7	41.6	66
2	19.5	31

DISTRICT OBJECTIVES PERFORMANCE SUMMARY

SUMMARY REPORT PAGE 3 OF 4

Testing for Essential Learning and Literacy Skills

DISTRICT 113910022
BLUE WATERS

GRADE 03

TELLS

READING PERFORMANCE BY NUMBER OF ITEMS CORRECT

READING PERFORMANCE BY PERCENT OF ITEMS CORRECT

READING OBJECTIVES	NUMBER OF STUDENTS TESTED: DISTRICT STUDENT COUNT	AVERAGE NUMBER OF ITEMS CORRECT: DISTRICT	AVERAGE NUMBER OF ITEMS CORRECT: NATIONAL -- C --	PERCENTAGE OF STUDENTS BY NUMBER OF ITEMS CORRECT -0-	-1-	-2-	-3-	-4-	-5-	NUMBER OF ITEMS BY OBJECTIVES: ITEM COUNT	PERCENTAGE OF ITEMS CORRECT: DISTRICT	PERCENTAGE OF ITEMS CORRECT: NATIONAL -- D --
VOCABULARY												
WORD MEANINGS FROM CONTEXT	99	3.8	3.8	2	5	13	13	29	37	5	75	75
MULTIPLE MEANINGS	99	4.2	4.1	1	3	5	14	19	58	5	84	82
CATEGORIZING	99	4.0	3.9	1	2	8	19	26	43	5	80	78
LITERAL COMPREHENSION												
RECOGNIZING DETAILS	99	2.9	2.6	3	10	26	20	40	XXX	4	72	65
STATED CAUSE AND EFFECT	99	2.9	2.7	2	10	22	29	36	XXX	4	72	67
SEQUENCE OF EVENTS	99	3.4	3.1	0	3	15	25	57	XXX	4	84	78
STATED MAIN IDEA	99	3.0	3.1	2	13	20	26	28	10	5	60	61
INFERENTIAL COMPREHENSION												
MAIN IDEA, TITLE	99	2.2	2.0	3	23	30	43	XXX	XXX	3	72	65
STORY ELEMENTS, CHARACTER	99	3.0	2.8	0	2	24	46	27	XXX	4	75	70
IMPLIED CAUSE AND EFFECT	99	3.2	3.1	2	3	13	37	44	XXX	4	80	76
PREDICTING OUTCOMES	99	2.0	2.2	7	20	36	36	XXX	XXX	3	68	73
LIFE/STUDY AND REFERENCE												
FOLLOWING WRITTEN DIRECTIONS	99	2.4	2.1	3	10	34	53	XXX	XXX	3	79	71
READING MAPS	99	2.6	2.3	2	3	25	70	XXX	XXX	3	88	76

SAMPLE
C

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DISTRICT OBJECTIVES PERFORMANCE SUMMARY

SUMMARY REPORT PAGE 4 OF 4

Testing for Essential Learning and Literacy Skills

DISTRICT 113910022
BLUE WATERS

GRADE 03

TELLS

MATHEMATICS PERFORMANCE BY NUMBER OF ITEMS CORRECT

AVERAGE NUMBER OF ITEMS CORRECT

MATHEMATICS OBJECTIVES	NUMBER OF STUDENTS TESTED: DISTRICT STUDENT COUNT	AVERAGE NUMBER OF ITEMS CORRECT: DISTRICT	AVERAGE NUMBER OF ITEMS CORRECT: NATIONAL -- E --	PERCENTAGE OF STUDENTS BY NUMBER OF ITEMS CORRECT -0-	-1-	-2-	-3-	-4-	-5-
WHOLE NUMBERS									
ADDITION/NO RENAMING	99	2.9	2.9	0	1	7	92	XXX	XXX
ADDITION/RENAMING	99	2.6	2.3	4	7	19	70	XXX	XXX
SUBTRACTION/BASIC FACTS	98	2.6	2.8	6	4	11	79	XXX	XXX
SUBTRACTION/NO RENAMING	98	2.8	2.6	0	1	16	83	XXX	XXX
SUBTRACTION/RENAMING	99	1.5	1.7	38	7	19	35	XXX	XXX
NUMERATION									
COUNT BY TWOS, FIVES & TENS	99	2.7	2.6	4	1	13	82	XXX	XXX
PLACE VALUE/WHOLE NUMBERS	97	2.8	2.4	2	4	5	89	XXX	XXX
PICTURES/STANDARD NUMERALS	99	2.2	2.4	10	15	23	52	XXX	XXX
READ/WRITE STANDARD NUMERALS	99	2.8	2.6	2	4	5	89	XXX	XXX
COMPARING WHOLE NUMBERS	99	2.7	2.7	3	4	11	82	XXX	XXX
FRACTIONS									
FRACTIONAL REGIONS	98	1.9	2.6	13	22	30	35	XXX	XXX
MEASUREMENT									
VALUE OF MONEY	99	2.5	2.1	1	13	21	65	XXX	XXX
TIME	99	2.6	2.0	4	8	8	80	XXX	XXX
LENGTH	99	2.8	2.7	2	2	7	89	XXX	XXX
READING TABLES OR CHARTS	99	2.3	2.2	1	18	35	45	XXX	XXX
PROBLEM SOLVING									
STORY PROBLEMS/ADD/SUBTRACT	99	1.9	1.7	6	29	37	27	XXX	XXX
STORY PROBLEMS/MONEY	99	2.6	2.6	3	6	17	74	XXX	XXX
GRAPHING									
BAR GRAPHS	99	2.8	2.5	2	2	6	90	XXX	XXX
PICTURE GRAPHS	99	1.9	1.6	1	43	18	37	XXX	XXX
GEOMETRY									
PLANE FIGURES	99	2.9	2.4	1	4	2	93	XXX	XXX
SOLID FIGURES	99	2.4	2.1	3	17	19	61	XXX	XXX

SAMPLE
D

MATHEMATICS PERFORMANCE BY PERCENT OF ITEMS CORRECT

PERCENTAGE OF ITEMS CORRECT

MATHEMATICS OBJECTIVES	NUMBER OF ITEMS BY OBJECTIVES: ITEM COUNT	PERCENTAGE OF ITEMS CORRECT: DISTRICT	PERCENTAGE OF ITEMS CORRECT: NATIONAL -- F --
WHOLE NUMBERS			
ADDITION/NO RENAMING	3	97	96
ADDITION/RENAMING	3	85	78
SUBTRACTION/BASIC FACTS	3	87	93
SUBTRACTION/NO RENAMING	3	93	87
SUBTRACTION/RENAMING	3	51	56
NUMERATION			
COUNT BY TWOS, FIVES & TENS	3	91	88
PLACE VALUE/WHOLE NUMBERS	3	92	80
PICTURES/STANDARD NUMERALS	3	72	80
READ/WRITE STANDARD NUMERALS	3	94	86
COMPARING WHOLE NUMBERS	3	91	88
FRACTIONS			
FRACTIONAL REGIONS	3	62	86
MEASUREMENT			
VALUE OF MONEY	3	83	71
TIME	3	88	65
LENGTH	3	94	89
READING TABLES OR CHARTS	3	75	74
PROBLEM SOLVING			
STORY PROBLEMS/ADD/SUBTRACT	3	62	56
STORY PROBLEMS/MONEY	3	87	86
GRAPHING			
BAR GRAPHS	3	95	84
PICTURE GRAPHS	3	64	54
GEOMETRY			
PLANE FIGURES	3	96	80
SOLID FIGURES	3	79	71

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DISTRICT RANKED LISTS — TESTING FOR ESSENTIAL LEARNING AND LITERACY SKILLS — 1984 TELLS — PAGE 1

DISTRICT BLUE WATERS — CODE 113910022 — GRADE 03 — DATE OCTOBER 1984

STUDENTS RANKED BY NUMBER OF ITEMS ANSWERED CORRECTLY
STUDENTS LISTED FROM LOWEST TO HIGHEST SCORE

STUDENTS RANKED BY READING SCORE

ID NUMBER	BIRTHDAY	STUDENT NAME			RM	ESL	SE	SEX	SCORE	*LINE*
	03/18/75	BORDERS	COREY	J	--	--	EMR	M	13	* 1*
	02/27/75	MANNING	DAVID	A	--	--	EMR	M	15	* 2*
	01/28/75	ZOUNDS	MICHAEL	D	--	--	LD	M	16	* 3*
	02/04/75	NETTLETON	MARK	W	--	--	EMR	M	18	* 4*
	04/08/75	BIVENS	JACQUELI	M	--	--	LD	F	19	* 5*
	12/29/74	LANDERS	AMY		R	--		F	20	* 6*
	12/29/74	ROBERTS	DOUGLAS	A	--	--	LD	M	22	* 7*
	03/25/75	WARMAN	JEFFREY	J	--	--	LD	M	22	* 8*
	01/26/75	BAILEY	VINCENT	A	R	--		M	23	* 9*
	11/09/74	COX	ASHLEY		--	--		M	24	* 10*
	10/10/75	CLAUSEN	JODIE	A	--	--		F	25	* 11*
	08/05/75	MARRONE	MELINA	R	--	--		F	25	* 12*
	08/16/75	RODGERS	BERNARD		--	--		M	25	* 13*
	07/29/75	SAUNDERS	SHERI	L	--	--	LD	F	25	* 14*
	07/18/75	TAYLOR	MATTHEW	J	R	--		M	27	* 15*
	03/04/75	GATES	CHAD	A	R	--		M	28	* 16*
	06/01/75	LESTER	GARY		--	--	LD	M	29	* 17*
	07/08/76	SMITH	LISA		--	--		F	29	* 18*
	12/28/75	WESTERMAN	JEREMY		--	--		M	29	* 19*
	10/23/75	MUGHLEY	KARL	D	R	--		M	30	* 20*
	11/29/75	MARTIN	GAIL		--	--		F	30	* 21*
	06/29/75	SMITH	ANGELA		--	--		F	30	* 22*
	04/27/75	HIPPENHAMME	DAVID	M	R	--		M	31	* 23*
	07/30/76	HORTON	ANDREA	R	R	--		F	31	* 24*
	10/16/75	LAWSON	JENNIFER	R		--		F	31	* 25*
	09/30/75	LOSTMAN	BRYNT	B		--		M	31	* 26*
	10/20/75	AIKENS	DAVID			--		M	32	* 27*
	09/03/76	CESSMAN	SHAWN			--		M	32	* 28*
	01/29/76	DRAKE	BRIDGET	A		--		F	32	* 29*
	08/16/76	DUNNINGTON	STEVEN			--		M	32	* 30*
	03/10/75	JACKSON	ANDREW	R		--	LD	M	33	* 31*
	12/23/75	LAZARUS	JAMIE	R		--		F	33	* 32*
	09/06/75	PRATT	AMANDA	L		--		F	33	* 33*
	10/26/74	SMITH	KELLY			--		F	33	* 34*
	04/24/76	DEAN	CHARLES			--		M	34	* 35*
	04/01/76	RICHARDSON	JAYNE			--		F	34	* 36*
	02/15/76	ARCHER	SHERRY	L	R	--		F	35	* 37*
	09/25/76	CANDY	SHANNON	E		--		M	35	* 38*
	09/05/76	FOX	TONYA	R		--		F	35	* 39*
	03/07/76	MELLINGS	CHAD	M		--		M	35	* 40*
	06/25/76	CLAY	BENJAMIN	D		--		M	36	* 41*
	08/17/75	SCHREFFLER	CHRISTY	D		--		F	36	* 42*
			ROBIN	R		--		F	37	* 43*
		IAN	TRAVIS			--		M	37	* 44*
			MELINDA			--		F	37	* 45*
			BRADLEY	R		--		M	37	* 46*
SAMPLE		ERG	BRIDGET	L		--		F	37	* 47*
			SCOTT			--		M	38	* 48*
E			AMY	L		--		F	38	* 49*
		DS	LORI	S		--		F	38	* 50*

STUDENTS RANKED BY MATHEMATICS SCORE

ID NUMBER	BIRTHDAY	STUDENT NAME			RM	ESL	SE	SEX	SCORE
	03/18/75	BORDERS	COREY	J		--	EMR	M	18
	02/27/75	MANNING	DAVID	A		--	EMR	M	19
	02/04/75	NETTLETON	MARK	W		--	EMR	M	20
	03/25/75	WARMAN	JEFFREY	J		--	LD	M	30
	07/30/76	HORTON	ANDREA	R	R	--		F	32
	01/28/75	ZOUNDS	MICHAEL	D		--	LD	M	36
	12/29/74	LANDERS	AMY		R	--		F	37
	01/26/75	FOSTER	CHRISTOP	B		--		M	38
	04/08/75	BIVENS	JACQUELI	M		--	LD	F	39
	08/05/75	MARRONE	MELINA	R		--		F	39
	10/10/75	CLAUSEN	JODIE	A		--		F	40
	03/10/75	JACKSON	ANDREW	R		--	LD	M	40
	02/15/76	ARCHER	SHERRY	L	R	--		F	42
	07/16/76	WILLIAMSON	DARRELL	S		--		M	42
	11/10/75	CHASE	JAMES	M		--		M	43
	06/25/76	CLAY	BENJAMIN	D		--		M	44
	12/23/75	LAZARUS	JAMIE	R		--		F	44
	07/29/75	SAUNDERS	SHERI	L		--	LD	F	44
	03/28/76	CLINT	MICHAEL	J		--		M	45
	09/05/76	FOX	TONYA	R		--		F	45
	09/06/75	PRATT	AMANDA	L		--		F	45
	07/18/75	TAYLOR	MATTHEW	J	R	--		M	45
	12/28/75	WESTERMAN	JEREMY			--		M	46
	04/24/76	DEAN	CHARLES			--		M	47
	08/18/75	WEEKS	MICHAEL	W		--		M	47
	03/21/76	COLE	MATTHEW	J		--		M	48
	08/16/76	DUNNINGTON	STEVEN			--		M	48
	09/30/75	LOSTMAN	BRYNT	B		--		M	48
	11/04/74	MCCARTHY	MARK			--		M	48
	08/16/75	RODGERS	BERNARD			--		M	48
	01/25/76	SCHIELDS	LORI	S		--		F	48
	01/04/75	SIMS	SHAWNNA	M		--		F	48
	09/13/76	WARD	OULUMES	A		--		F	48
	01/29/76	DRAKE	BRIDGET	A		--		F	49
	05/06/75	HIGHTOWER	HEATHER			--		F	49
	11/17/75	KUNDERMAN	ROBERT	L		--		M	49
	02/02/76	LEADS	AMY	L		--		F	49
	11/04/75	TOWNSEND	MANDY	M		--		F	49
	07/30/75	DYMEK	NEIL	E		--		M	50
	10/16/75	LAWSON	JENNIFER	R		--		F	50
	03/07/76	MELLINGS	CHAD	M		--		M	50
	04/12/76	ALTMAN	ROBIN	R		--		F	51
	05/17/75	BAXTER	SCOTT	A		--		M	51
	09/03/76	CESSMAN	SHAWN			--		M	51
	03/04/75	GATES	CHAD	A	R	--		M	51
	09/29/75	GRAYS	CHRIS	C		--		M	51
	06/01/75	LESTER	GARY			--	LD	M	51
	04/04/76	NABERS	NICHOLE			--		F	51
	05/01/76	NICHOLSON	JOHN			--		M	51
	12/29/74	ROBERTS	DOUGLAS	A		--	LD	M	51

DISTRICT BLUE WATERS

DISTRICT ROSTER OF SCORES

Testing for Essential Learning and Literacy Skills

PAGE 1

TELLS CODE
Grade 3 113910022

Pennsylvania Department of Education 1984

STUDENT NAME / DATE OF BIRTH	SEX	CHILD'S NAME	ESL	STUDENT ID OR OPTIONAL CODES	SE CODE
AIKENS 10/20/75	M	DAVID --			
ALTMAN 04/12/76	F	ROBIN --	R		
ARCHER 02/15/76	F	SHERRY R --	L		
ARMSTEAD 01/02/76	M	DAVID --	L		SLI
ASHMAN 03/08/76	M	CHRIS --	A		
BAILEY 01/26/75	M	VINCENT R --	A		
BAXTER 05/17/75	M	SCOTT --	A		
BIVENS 04/08/75	F	JACQUELI --	M		LD
BORDERS 03/18/75	M	COREY --	J		MRE
BROWN 08/28/75	M	THOMAS --	A		
BYERS 06/24/75	M	SCOTT --			
CANDY 08/26/76	M	SHANNON --	E		
			I		

SAMPLE
F

READING

NUMBER OF ITEMS PER OBJECTIVE

5	5	5	4	4	4	5	3	4	4	3	3	3	2
3	4	3	3	0	2	3	1	2	3	2	3	3	
TOTAL 32 OF 52 OR 62 PCT													
3	5	5	3	3	3	4	2	3	2	1	1	2	
TOTAL 37 OF 52 OR 71 PCT													
1	4	4	2	3	3	4	3	2	2	3	1	3	
TOTAL 35 OF 52 OR 67 PCT													
5	5	5	3	3	4	4	3	4	4	3	3	3	
TOTAL 49 OF 52 OR 94 PCT													
5	5	5	4	4	4	2	2	4	4	3	3	3	
TOTAL 48 OF 52 OR 92 PCT													
2	2	1	1	2	3	2	2	2	2	0	1	3	
TOTAL 23 OF 52 OR 44 PCT													
4	3	5	4	3	4	2	3	2	3	2	2	3	
TOTAL 40 OF 52 OR 77 PCT													
2	1	1	1	2	1	2	0	4	1	1	2	1	
TOTAL 19 OF 52 OR 37 PCT													
1	1	2	0	1	2	1	0	2	1	0	2	0	
TOTAL 13 OF 52 OR 25 PCT													
5	5	5	4	4	3	5	3	2	4	2	3	3	
TOTAL 48 OF 52 OR 92 PCT													
4	5	4	2	3	2	3	2	3	3	3	1	3	
TOTAL 38 OF 52 OR 73 PCT													
3	3	4	3	3	4	3	2	1	3	1	3	2	
TOTAL 35 OF 52 OR 67 PCT													
5	5	3	4	4	3	2	2	4	3	2	2	0	
TOTAL 39 OF 52 OR 75 PCT													
4	3	3	3	4	3	3	1	1	2	1	2	2	
TOTAL 32 OF 52 OR 62 PCT													
3	5	4	4	2	3	4	3	3	3	1	2	3	
TOTAL 40 OF 52 OR 77 PCT													

MATHEMATICS

NUMBER OF ITEMS PER OBJECTIVE

3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
3	2	2	3	0	3	3	3	3	2	1	3	3	3	1	3	3	3	3	3	3			
TOTAL 53 OF 63 OR 84 PCT																							
3	3	3	3	0	3	3	2	3	2	2	2	3	3	3	2	3	3	1	1	3			
TOTAL 51 OF 63 OR 81 PCT																							
3	3			2	2	3	1	2	2	2	2	3	0	2	1	3	3	2	3	3			
TOTAL 42 OF 63 OR 67 PCT																							
3	3	3	3	3	3	3	3	3	3	2	2	1	3	2	3	3	3	3	3	3			
TOTAL 58 OF 63 OR 92 PCT																							
3	3	3	3	2	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3			
TOTAL 60 OF 63 OR 95 PCT																							
3	2	3	3	3	3	3	3	3	3	3	3	3	2	2	2	3	2	3	2				
TOTAL 57 OF 63 OR 90 PCT																							
3	3	2	3	2	3		1	3	3	1	3	3	3	1	2	3	3	3	3	3			
TOTAL 51 OF 63 OR 81 PCT																							
3	3	2	3	1	3	2	0	3	3	1	2	3	2	2	1	1	1	1	1				
TOTAL 39 OF 63 OR 62 PCT																							
1	1	0	3	1	0	1	1	0	0	0	3	1	0	2	2	1	0	1	1	0	0	1	
TOTAL 18 OF 63 OR 29 PCT																							
3	3	3	3	3	3	3	3	3	3	0	3	3	3	3	2	3	3	3	3	1			
TOTAL 57 OF 63 OR 90 PCT																							
2	3	2	3	3	3	3	1	1	3	0	3	3	2	3	3	3	3	2	3	2			
TOTAL 52 OF 63 OR 83 PCT																							
3	3	3	3	2	3	3	2	3	3	3	3	3	3	2	2	3	3	3	3	3			
TOTAL 59 OF 63 OR 94 PCT																							
3	3	3	3	3	3	3	2	3	3	2	2	3	3	3	1	3	3	1	3	3			
TOTAL 56 OF 63 OR 89 PCT																							
3	2	1	3	0	3	3	2	3	3	0	3	3	3	2	3	3	3	3	2				
TOTAL 51 OF 63 OR 81 PCT																							
3	1	3	2	3	0	3	2	3	3	0	3	3	3	3	1	0	0	1	3	3			
TOTAL 43 OF 63 OR 68 PCT																							

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DISTRICT BLUE WATERS

SCHOOL MARTIN LUTHER KING ELEM

STUDENT YELLOW BEN M

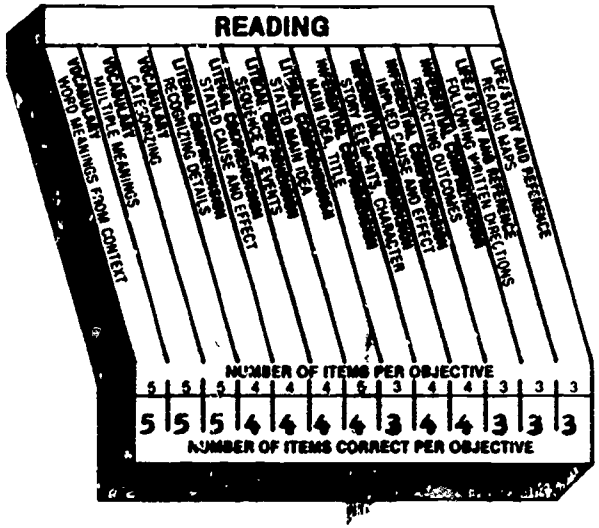
D.O.B. 03/19/76 SEX M

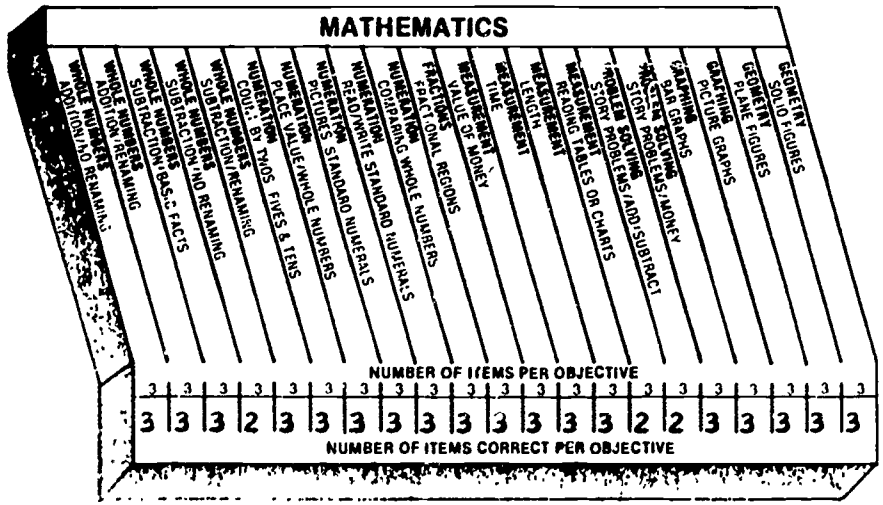
I.D. NO.

TELLS

Grade 3

TEST SCORES	READING	MATH
NUMBER OF ITEMS ANSWERED CORRECTLY	51 OF 52	60 OF 63
PERCENT OF ITEMS ANSWERED CORRECTLY	98	95
DISTRICT AVERAGE		
PERCENT OF ITEMS ANSWERED CORRECTLY	76	83
NATIONAL AVERAGE		
ESTIMATED PERCENT OF ITEMS ANSWERED CORRECTLY	72	78





63

SAMPLE G

84

85

Testing for Essential Learning and Literacy Skills

DISTRICT BLUE WATERS

SCHOOL MARTIN LUTHER KING ELEM

STUDENT YELLOW BEN M

D.O.B. 03/19/76 SEX M

I.D. NO.

TELLS

Grade 3

TEST SCORES	READING	MATH
NUMBER OF ITEMS ANSWERED CORRECTLY	51 OF 52	60 OF 63
PERCENT OF ITEMS ANSWERED CORRECTLY	98	95
DISTRICT AVERAGE		
PERCENT OF ITEMS ANSWERED CORRECTLY	76	83
NATIONAL AVERAGE		
ESTIMATED PERCENT OF ITEMS ANSWERED CORRECTLY	72	78

TO THE PARENT OR GUARDIAN:

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Earlier this year your child was tested in Reading and Matnematics as part of the Pennsylvania statewide individual testing program known as Testing for Essential Learning and Literacy Skills (TELLS). This report is intended to inform you of the results of those tests.

As you can see from the TEST SCORES box above, the Reading test was made up of items. Your child's performance on that test is listed as the number of items answered correctly out of the 52. Likewise, there were 63 items on the Mathematics test, and your child's performance is listed as the number correct out of the 63. On the next line, these numbers have been converted into percent of items answered correctly.

These percents allow you to compare your child's perfc·mance to that of all the other third grade students in your district (in the DISTRICT AVERAGE section of the TEST SCORES box). You can also compare your child's and your district's scores to an estimated national percent correct (in the NATIONAL AVERAGE section of the TEST SCORES box). If you have questions about the meaning or uses of these scores, please contact your child's school.

86

87

SAMPLE
H

mputer Software Inc., Trenton, NJ

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STUDENT NAME DISTRICT BLUE WATERS GRADE
BIRTHDATE DISTRICT BLUE WATERS SCHOOL
1984 TELLS DISTRICT BLUE WATERS READING of MATHEMATICS of

STUDENT NAME DISTRICT BLUE WATERS GRADE
BIRTHDATE SCHOOL BLUE WATERS ELEMENTARY SCHOOL
XXXXXXXXXXXXXXXXXXXXXXXX

STUDENT NAME ARCHER SHERRY L GRADE 03
BIRTHDATE 02/15/76 SEX F I.D.# SCHOOL BLUE

1984 TELLS — TEST SCORES	READING	MATHEMATICS
NUMBER OF ITEMS CORRECT	35 of 52	42 of 63
PERCENT OF ITEMS CORRECT	67	67
DISTRICT AVERAGE PERCENT CORRECT	76	83
NATIONAL AVERAGE PERCENT CORRECT	72	78

STUDENT NAME BIVENS JACQUELI M GRADE 03
BIRTHDATE 04/08/75 SEX F I.D.# SCHOOL BLUE

1984 TELLS — TEST SCORES	READING	MATHEMATICS
NUMBER OF ITEMS CORRECT	19 of 52	39 of 63
PERCENT OF ITEMS CORRECT	37	62
DISTRICT AVERAGE PERCENT CORRECT	NA	NA
NATIONAL AVERAGE PERCENT CORRECT	NA	NA

STUDENT NAME BORDERS COREY J GRADE 03
BIRTHDATE 03/18/75 SEX M I.D.# SCHOOL BLUE

1984 TELLS — TEST SCORES	READING	MATHEMATICS
NUMBER OF ITEMS CORRECT	13 of 52	18 of 63
PERCENT OF ITEMS CORRECT	25	29
DISTRICT AVERAGE PERCENT CORRECT	NA	NA
NATIONAL AVERAGE PERCENT CORRECT	NA	NA

STUDENT NAME CARD ANGELA M GRADE 03
BIRTHDATE 02/05/76 SEX F I.D.# SCHOOL BLUE

1984 TELLS — TEST SCORES	READING	MATHEMATICS
NUMBER OF ITEMS CORRECT	39 of 52	56 of 63
PERCENT OF ITEMS CORRECT	75	89
DISTRICT AVERAGE PERCENT CORRECT	76	83
NATIONAL AVERAGE PERCENT CORRECT	72	78

STUDENT NAME CHASE JAMES M GRADE 03
BIRTHDATE 11/10/75 SEX M I.D.# SCHOOL BLUE

1984 TELLS — TEST SCORES	READING	MATHEMATICS
NUMBER OF ITEMS CORRECT	40 of 52	43 of 63
PERCENT OF ITEMS CORRECT	77	68
DISTRICT AVERAGE PERCENT CORRECT	76	83
NATIONAL AVERAGE PERCENT CORRECT	72	78

STUDENT NAME CLAUSEN JUDIE A GRADE 03
BIRTHDATE 10/10/75 SEX F I.D.# SCHOOL BLUE

1984 TELLS — TEST SCORES	READING	MATHEMATICS
NUMBER OF ITEMS CORRECT	25 of 52	40 of 63
PERCENT OF ITEMS CORRECT	48	63
DISTRICT AVERAGE PERCENT CORRECT	76	83
NATIONAL AVERAGE PERCENT CORRECT	72	78

SAMPLE I

STUDENT NAME COLE MATTHEW J GRADE 03
BIRTHDATE 03/21/76 SEX M I.D.# SCHOOL BLUE

1984 TELLS — TEST SCORES	READING	MATHEMATICS
NUMBER OF ITEMS CORRECT	41 of 52	48 of 63
PERCENT OF ITEMS CORRECT	79	76
DISTRICT AVERAGE PERCENT CORRECT	76	83
NATIONAL AVERAGE PERCENT CORRECT	72	78

STUDENT NAME FOSTER CHRISTOP B GRADE 03
BIRTHDATE 01/26/75 SEX M I.D.# SCHOOL BLUE

1984 TELLS — TEST SCORES	READING	MATHEMATICS
NUMBER OF ITEMS CORRECT	42 of 52	38 of 63
PERCENT OF ITEMS CORRECT	81	60
DISTRICT AVERAGE PERCENT CORRECT	76	83
NATIONAL AVERAGE PERCENT CORRECT	72	78

STUDENT NAME GATES CHAD A GRADE 03
BIRTHDATE 03/04/75 SEX M I.D.# SCHOOL BLUE

1984 TELLS — TEST SCORES	READING	MATHEMATICS
NUMBER OF ITEMS CORRECT	28 of 52	51 of 63
PERCENT OF ITEMS CORRECT	54	81
DISTRICT AVERAGE PERCENT CORRECT	76	83
	72	78

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SCHOOL PERFORMANCE FREQUENCY AND SUMMARY

SUMMARY REPORT PAGE 1 OF 4

Testing for Essential Learning and Literacy Skills

DISTRICT 113910022
BLUE WATERS

SCHOOL 4503
MARTIN LUTHER KING ELEM

GRADE 03

TELLS

READING
TOTAL READING PERFORMANCE

CUMULATIVE PERCENTAGES

READING RAW SCORES	FREQUENCY COUNTS BY RAW SCORES SCHOOL COUNT	SCHOOL PCT	SCH DIST PCT	CUMULATIVE PERCENTAGES SCH DIST PCT	ESTIMATED NATIONAL PERCENT -- A --
52	0	0	100	100	100
51	1	2	100	99	100
50	2	4	98	95	99
49	2	4	93	92	99
48	2	4	89	86	97
47	0	0	84	81	95
46	1	2	84	79	92
45	2	4	82	74	89
44	2	4	78	70	85
43	3	7	73	67	79
42	2	4	67	61	73
41	2	4	62	56	68
40	2	4	58	52	63
39	0	0	53	47	57
38	2	4	53	43	52
37	2	4	49	38	48
36	0	0	44	33	44
35	3	7	44	31	40
34	2	4	38	27	37
33	2	4	33	25	34
32	3	7	29	22	31
31	1	2	22	18	29
30	3	7	20	14	26
29	2	4	13	11	24
28	0	0	9	9	21
27	0	0	9	8	19
26	0	0	9	7	18
25	1	2	9	7	16
24	1	2	7	4	14
23	1	2	4	3	13
22	0	0	2	2	11
21	0	0	2	2	10
20	1	2	2	2	8
19	0	0	0	1	6
18	0	0	0	1	4
17	0	0	0	1	3
16	0	0	0	1	2
11-15	0	0	0	1	1
6-10	0	0	0	0	0
1-5	0	0	0	0	0
0	0	0	0	0	0

SAMPLE
J

MATHEMATICS
TOTAL MATHEMATICS PERFORMANCE

CUMULATIVE PERCENTAGES

MATHEMATICS RAW SCORES	FREQUENCY COUNTS BY RAW SCORES SCHOOL COUNT	SCHOOL PCT	SCH DIST PCT	CUMULATIVE PERCENTAGES SCH DIST PCT	ESTIMATED NATIONAL PERCENT -- B --
63	0	0	100	100	100
62	0	0	100	100	99
61	4	9	100	98	98
60	4	9	91	92	96
59	1	2	82	86	94
58	4	9	80	83	92
57	4	9	71	78	89
56	3	7	62	71	86
55	1	2	56	63	82
54	1	2	53	59	77
53	3	7	51	56	72
52	5	11	44	52	67
51	3	7	33	42	62
50	1	2	27	34	57
49	1	2	24	31	52
48	3	7	22	26	47
47	2	4	16	18	43
46	1	2	11	16	39
45	3	7	9	15	36
44	0	0	2	11	32
43	0	0	2	9	30
42	0	0	2	8	27
41	0	0	2	6	25
40	0	0	2	6	22
39	0	0	2	5	20
38	0	0	2	4	18
37	1	2	2	3	16
36	0	0	0	2	15
35	0	0	0	2	13
34	0	0	0	2	12
33	0	0	0	2	11
32	0	0	0	2	9
31	0	0	0	1	8
30	0	0	0	1	7
29	0	0	0	1	7
28	0	0	0	1	6
27	0	0	0	1	5
26	0	0	0	1	4
21-25	0	0	0	1	4
11-20	0	0	0	1	2
1-10	0	0	0	0	0
0	0	0	0	0	0

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