

DOCUMENT RESUME

ED 208 053

TH 810 803

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 TITLE Annual Test Report, 1979-80.
 INSTITUTION Montgomery County Public Schools, Rockville, Md.
 Dept. of Educational Accountability.
 PUB DATE Nov 80
 NOTE 439p.; Small print in Appendices.
 EDRS PRICE MF01/PC18 Plus Postage.
 DESCRIPTORS *Achievement Tests; Elementary Secondary Education;
 Local Norms; *Longitudinal Studies; *Scores;
 *Standardized Tests; Testing Programs
 IDENTIFIERS *Montgomery County Public Schools MD.

ABSTRACT

Developed as an easy to use reference on test data for Montgomery County Public Schools (MCPS), this report is divided into two sections: analysis of county data and analysis of school data. Features of the report are as follows: (1) a longitudinal analysis of performance of students tested in MCPS in 1976, 1978 and 1980; (2) school results broken out for students tested in a school more than once and for those transferring into and out of the school; (3) breakdowns of county test results by racial/ethnic and sex groups; (4) College Board results by school; and (5) a graphic presentation of the range of test performance in each school. Appendices include the raw data used for the countywide analysis, and a glossary of the statistical and testing terms used throughout the report. (Author/GK)

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MONTGOMERY COUNTY
PUBLIC SCHOOLS

Annual
Test
Report
1979-80

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EXECUTIVE SUMMARY

The Annual Test Report, 1979-80 has been developed to be an easy to use reference on test data for the Montgomery County Public Schools. The report is divided into two chapters:

- Analysis of County Data
- Analysis of School Data

Some of the features of the report are:

- o A longitudinal analysis of performance of students tested in MCPS in 1976, 1978, and 1980.
- o School results broken out for students tested in a school more than once and for students transferring into and out of the school.
- o Breakdowns of county test results by racial/ethnic and sex groups.
- o College Board results by school.
- o A graphic presentation of the range of test performance in each school.

County Results

Systemwide Trends

Results for the tests administered systemwide in the 1979-1980 school year can generally be characterized as being stable at a high level of performance. This was true for scores on the Iowa Tests of Basic Skills (ITBS), Cognitive Abilities Test (CAT) and the Maryland Functional Reading Test (MFRT).

Grade 7 results on the ITBS and CAT were the most impressive. The majority of ITBS and CAT subtest median scores for that grade increased from 1979. In Grade 5 this was true for the ITBS, while the CAT scores were unchanged. In Grades 3 and 9 the majority of ITBS subtests remained the same as in 1979. The percentage of students demonstrating competency on the MFRT in Grade 7 was the same as the previous year. None of the increases were significant.

In Grades 3, 5, 7, and 9, the majority of subtests were at all-time high points for MCPS. Only in Grade 9 were any subtests (four) at all-time lows. The percentage of students demonstrating competency on the MFRT was also at an all-time high.

The results from the Grade 11 administration of the Tests of Academic Progress (TAP) were also stable with medians on all six subtests being the same as in 1978. However, only two of the subtest medians were at an all-time high; three were at an all-time low.

Across all five grades, 69 percent of the students tested scored at or above the national norm median for the Composite. The percentage scoring this high ranged from 80 in Grade 3 to 58 in Grade 9. All countywide medians on the CAT, ITBS, and TAP were above the national norm medians.

College Board Results

Scholastic Aptitude Test (SAT) average scores for the MCPS class of 1980 were 456 on the Verbal test and 503 on the Math test. The Verbal average was the same as the previous year, the Math average was up by three points. These scores contrast with the national trend which was down three points on the Verbal to 424 and down one point on the Math to 466. Thus, not only are the MCPS scores substantially above the national averages, but they are also counter to the continuing downward trend nationally.

Males outscored females on both SAT tests: 531 to 478 on the Math and 460 to 452 on the Verbal. These differences were similar to those on the national level.

MCPS mean scores increased on 8 of the 12 College Board achievement tests from 1979 to 1980. On 10 of these 12 tests, the MCPS mean was higher than the national mean. Only in Spanish and German was the mean score below the national score. It should be noted that the number of students taking these tests was small, usually less than ten percent of the graduating class. Thus, these scores probably cannot be considered representative of the performance of the entire class.

Scores on the Advanced Placement Examinations declined slightly from 1979 to 1980. In the latter year, 45 percent of the students tested received a score of at least four on this five-point scale. This is compared to 49 percent in 1979. This change might have been related to the fact that 22 percent more students took these tests in 1980. As with the achievement tests, these examinations are taken by a small portion of the graduating class.

Racial/Ethnic Score Differences

From 1977 to 1980 ITBS, TAP, and CAT mean scores for white and black students have generally increased by small amounts across all grades tested. The results for Asians and Hispanics were mixed with increases in some grades and decreases in others. Scores for Asians tended to increase at the elementary level, with Grade 3 females showing the largest increase. A score decrease for Grade 9 Asian students was mostly the result of male scores declining. A decline for third grade Hispanics was caused by lower scores for females in 1980 than in 1979.

Average score differences between black and white students have decreased at a slow but steady rate between 1977 and 1980, but white students still scored significantly higher.

Hispanic/white score differences increased in Grades 3, 5, and 7, decreased in Grade 9, and remained the same in Grade 11. The increasing differences in Grades 3 and 5 are the reverse of the patterns from 1977 to 1979. This indicates that these increases are attributable to increases between 1979 and 1980, not to constant change in one direction over several years. White students scored significantly higher than Hispanic students in both 1977 and 1980.

Asian students generally scored higher than white students. The exceptions to this were in language-related subtests, in elementary grades.

On the MFRT, performance improved for all three minority groups and remained constant for white students in Grade 7. Hispanic students had the largest increase as 87 percent passed the test. This was a six percent increase from 1978. Asian and black students each had a three percent increase to 94 and 74 percent, respectively. Ninety-two percent of the white students passed.

Score Differences by Sex

Test scores for both males and females generally improved from 1978 to 1980 on the ITBS, CAT, and TAP. Females scored higher in 1980 on the Composite in Grades 3, 5, 7, and 9; males scored higher in Grade 11. The largest difference between those groups on the Composite was two NCE points in Grade 3.

Across all five grade levels, females scored higher on language-related subtests. The one exception to this was Reading in Grade 11. On math subtests, males scored higher in the secondary grades; results were mixed in the elementary schools.

Among racial/ethnic groups, the major exception to the overall county trends of score differences by sex was found in Grade 3 where Hispanic males scored higher than Hispanic females.

Results from the MFRT were consistent with those discussed above for language-related subtests. Females had a higher percentage passing the total test and all objective categories.

Longitudinal Results

For several years the average test scores in Grade 7 have been lower than those in Grade 5 and those in Grade 5 have been lower than in Grade 3. This score decline across grades could have many causes that have little or no relationship to the quality of school programs. The possible cause that has been investigated here relates to the influence of possible population changes on the scores at each grade.

The longitudinal analysis showed that students remaining in MCPS scored higher on the ITBS than did those who transferred into or out of the county schools. Specifically, students who took the ITBS three times in MCPS (i.e., Grades 3, 5, and 7 or 5, 7, and 9) had higher mean scores than those tested twice. Additionally, those tested twice generally had higher mean scores than those tested only once.

Similar results for the stable vs. transferring population were found within longitudinal groups when the results for students who transfer between MCPS schools were studied separately. The transfers within MCPS scored lower than those who were tested in the same school twice. Only in the elementary schools was the difference significant.

Countywide score declines from Grade 3 to 5 and from Grade 5 to 7 from 1976 to 1978 were reflected in the score trends of students tested in MCPS more than once (longitudinal groups) as well as in the score trends between the groups of different students tested only once in these years (nonlongitudinal groups).

However, from 1978 to 1980 the countywide decline was seen with the longitudinal groups only. Thus, neither countywide decline (i.e., for 1976 to 1978 or 1978 to 1980) can be attributed to student migration or population changes. In fact, from 1978 to 1980 the entering students reduced the countywide decline slightly (no more than one NCE point).

MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

ANNUAL TEST REPORT

1979-80

November, 1980

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INTRODUCTION TO ANNUAL TEST REPORT

The Annual Test Report, 1979-80 has been developed to be an easy to use reference on test data in the Montgomery County Public Schools (MCPS). The report is divided into two chapters:

Chapter 1: Analysis of County Data

Chapter 2: Analysis of School Data

There also are two appendices, one containing tables of raw data from which the various analyses of county data were performed and one containing a glossary of technical testing terms.

Chapter 1 contains six different analyses of test data. Historical trends on the Iowa Tests of Basic Skills (ITBS), Tests of Academic Progress (TAP), and Cognitive Abilities Test (CAT) are presented for the last seven to nine years. The results for these tests have been broken down and analyzed by racial/ethnic and sex classifications. Additionally, data from these tests have been analyzed longitudinally. That is, the performance of students tested more than once in MCPS has been analyzed. This chapter also includes analyses of MCPS student performance on the Maryland Functional Reading Test and on examinations administered by the College Entrance Examination Board.

Chapter 2 presents test data for each school. This chapter is mostly descriptive. School mean scores are provided for the ITBS, TAP, and CAT. The range of scores between the first and third quartile for each school on the ITBS or TAP is presented in graphic form. This indicates the degree of diversity in achievement in each school. Longitudinal data are presented for each school. These results indicate the trend of achievement test performance of those students tested in the same school in both 1978 and 1980. Also included are the results for students who were in each school for only one of those two test administrations. School population shifts can be indicated by these nonlongitudinal data. College Board results are presented by school in the form of mean scores on the Scholastic Aptitude Tests (SAT) and several of the achievement tests. Finally, the percentage of students passing the Maryland Functional Reading Test is presented for each school.

Appendix A contains the raw data that has been used for the countywide analyses. This is provided for anyone who wishes to do additional analysis.

Appendix B is a glossary of statistical and testing terms which are used throughout the report. Each term is defined, and there is a discussion of how the term can be used appropriately. There also is a discussion of common misuses or misinterpretations of the term.

A review of the major tests used in MCPS was presented in the 1977-78 Annual Test Report. This material is available from the Department of Educational Accountability, Room 110, Educational Services Center.

CHAPTER 1

ANALYSIS OF COUNTY DATA.

INTRODUCTION TO COUNTY DATA ANALYSIS

Overview.

This chapter contains analyses from systemwide standardized testing in MCPS. Data from the administration of the following tests are presented and analyzed:

- Iowa Tests of Basic Skills (ITBS): Grades 3, 5, 7, 9
- Tests of Academic Progress (TAP): Grade 11
- Cognitive Abilities Test (CAT): Grades 3, 5, 7, 9
- Maryland Functional Reading Tests (MFRT): Grade 7
- College Board Scholastic Aptitude Tests (SAT)
- College Board Achievement Tests
- College Board Advanced Placement Examinations (AP)

The tests were administered at the following times during the 1979-1980 school year:

<u>Test</u>	<u>Grade(s)</u>	<u>Administration Dates</u>
ITBS & CAT	3, 5	April 15 - May 15
ITBS & CAT	7, 9	March 3 - March 28
TAP	11	December 3 - January 11
MFRT	7	October 15 - October 31
College Boards	9-12	Several times during the school year

The analyses are presented in sections organized as follows:

- A. Historical Record of MCPS Test Results
- B. Analysis of Test Results by Racial/Ethnic Groups
- C. Analysis of Test Results by Sex
- D. Longitudinal Analysis of Results for Students Tested in 1976, 1978, and/or 1980
- E. Report of Students Achieving Competency on the Maryland Functional Reading Test Countywide and by Sex and Racial/Ethnic Category
- F. MCPS Student Performance on College Board Tests
- G. Summary of County Test Results

Technical terms used in this chapter are defined in detail in Appendix B.

Cautions to be Observed in Interpreting Data

Cautions must always be observed when making inferences based on descriptive data of the type used in this report because of the impossibility of controlling all of the intervening variables which affect these results. This section will discuss some of the cautions which should be observed in interpreting these data.

Differences in Group Membership

Different individuals are tested each year at each grade level. Therefore, groups and subgroups differ from year to year and from grade to grade. Differences in mean scores may occur simply because the groups or categories of students whose performance is being compared are composed of different individuals who vary in many ways. This must be kept in mind when one speaks of "improvements" or "declines" in all of the analyses included in this chapter. This caveat does not apply to the longitudinal groups in Section 1.D. The results for these groups are based on data derived from the same students over two or three testing periods, and differences in mean scores for these groups provide more meaningful information.

Fluctuations of Means of Small Groups

Some analyses involve the description and comparison of the mean scores for rather small groups of students. It is to be expected that these small-group means will probably deviate from county averages or will differ from one another more than the means of large groups. This sampling fluctuation must be taken into account when comparing mean scores between years, across grades, or among groups.

Differences in Tests and Norms

The subtests of the Cognitive Abilities Test, Iowa Tests of Basic Skills, and Tests of Academic Progress have the same or similar names at each grade level. However, the actual items making up the tests at each grade level are different. The Spelling subtest administered in Grade 3 is, therefore, not the same as the Spelling subtest administered in Grade 5 (and so on for other grades or test "levels").

The national norming samples at each grade also differed. Therefore, the national percentile ranks of a particular test battery may not be exactly comparable from grade to grade. (This is discussed in more detail in Appendix B.) Since the Tests of Academic Progress, which are administered in Grade 11, are completely different from the Iowa Tests of Basic Skills, comparisons should not be made between scores on the two batteries even if the subtests have similar names.

Percentile Ranks

The percentile rank (PR) scale is not an equal-interval numerical scale (see Appendix B). A given raw score or raw-score difference does not have the same meaning throughout the entire range of the PR scale. In some segments, a small difference in raw scores can result in a small difference in PR. In other segments of the scales, the same raw-score difference may result in somewhat larger differences in PR. Thus, PRs can magnify small differences in raw-score units and overemphasize the apparent importance of these differences, depending on what part of the score range you are using.

Because the scales are not consistent, PRs should not be subtracted in an attempt to find between-year, between-grade, or between-group differences in amounts of "improvement" or "decline." They should also not be subtracted to identify subject or curriculum areas in which "greater" or "smaller" changes have occurred. Finally, the mean score of PRs should not be computed.

Meaning of Reported Percentile Ranks

The percentile rank (PR) corresponding to the mean or median score of any group on any given test is the PR of an individual student who obtains that score. It does not represent the ranking of that group when compared to other similar groups. For example, let's assume that the PR reported for MCPS on the third grade Vocabulary subtest is 78. That does not mean that MCPS did better than 78 percent of the school districts in the norming sample. It does mean that the student achieving the MCPS mean score did better than 78 percent of the students in the norming sample.

Effect of Normal Curve Equivalent (NCE) Scores on Results

The relationship of normal curve equivalent (NCE) scores to percentile ranks results in some reported NCE scores having slightly different percentile ranks in different parts of the report. This happens because the closeness of PRs in the middle of the score distribution causes there to be less than one NCE point between some PRs. When the precise NCE value is rounded to a whole number, the result is the same NCE for two percentile ranks. For example, an NCE of 54 could be listed with a PR of 57 or 58. If the precise NCE value is between 53.5 and 53.99, the PR will be 57; if the precise NCE value is between 54 and 54.49, the PR will be 58.

Interpretation of Scores on Cognitive Abilities Test

Scores for the Cognitive Abilities Test are treated as achievement test results and analyzed with the Iowa Test scores because performance on the CAT is greatly influenced by what a student has learned and is considered by many experts to be a measure of achievement, not aptitude, ability, or intelligence.

1.A. HISTORICAL RECORD OF MCPS TEST RESULTS.

Introduction

This section presents an historical analysis of the average scores of MCPS students in recent years on the Iowa Tests of Basic Skills (ITBS), Tests of Academic Progress (TAP), and the Cognitive Abilities Test (CAT). Historical data provide a helpful indicator of general trends in achievement for MCPS. They can also be used to suggest instructional areas where teaching practices or curricular content need to be reexamined.

Data

The summary test results for all MCPS students are shown in Tables 1.A.1 to 1.A.4. The data for Grades 3 and 5 go back to 1972. For Grades 7, 9, and 11, the data go back only to 1974. In those latter grades the tests were administered at different times of the year in 1972 and 1973 than in 1974 and after. This would make any comparison of the results misleading.

Three kinds of data are presented here:

1. The national percentile ranks for the MCPS median student score are shown in Table 1.A.1. (The median is the middle score.) The medians are presented to be consistent with the data that have been reported for several years. Table 1.A.2 summarizes these results by indicating the number of subtests on which median scores went up and down and those that are at high and low points.
2. The national percentile ranks for the MCPS mean student score are shown in Table 1.A.3. (The mean is the arithmetic average score.) The means were computed by using grade equivalent (GE) scores to be consistent with the way results are reported to schools and in the Maryland Accountability Program Report (the report on all school districts in Maryland published by the State Department of Education).
3. The number and percentage of MCPS students who performed at or above the national average from 1977 to 1980 on each subtest for each grade is shown in Table 1.A.4.

Analysis

The trend in scores across the years is the most meaningful information that can be derived from these tables. Therefore, the scores are compared to determine whether they are increasing or decreasing at each grade level. No formal statistical analysis is required to make this determination.

Results

The 1980 results showed an increase in median scores¹ in Grades 5 and 7 and stability at a high level of achievement in Grades 3, 9, and 11. Some highlights of the data follow:

- o In 1980 the national percentile rank of the MCPS median score was at the highest for 52 (84 percent) of the 62 subtests administered across Grades 3, 5, 7, 9, and 11.
- o In 1980 the national percentile rank of the MCPS median score was at its lowest for only 7 (11 percent) of the 62 subtests administered throughout all grades. These seven subtests were in Grades 9 and 11.
- o Median scores throughout all grades increased on 24 (39 percent) of the 62 subtests from 1979 to 1980. Only one subtest, in Grade 9, had a declining score from 1979 to 1980.
- o The most substantial increases from 1979 to 1980 occurred in Grades 5 and 7. Students in Grade 5 increased their scores on 8 of the 14 subtests, while students in Grade 7 increased their scores on 13 of the 14 subtests.
- o Scores on Capitalization and Punctuation were consistently among the highest for Grades 3, 5, 7, and 9 in 1980. The highest median score was on third grade Punctuation which was at the 87th percentile.
- o Reading Comprehension scores were lowest or next to lowest in Grades 3, 5, 7, and 9 in 1980.
- o Sixty-nine percent of MCPS students over all grades scored at or above the national norm average in 1980. These percentages ranged from a high of 80 percent in Grade 3 to a low of 58 percent in Grade 9.

¹The results for the MCPS mean are not discussed in detail here because they are almost the same as the results for the median.

TABLE 1.A.1

HISTORICAL RECORD OF MCPS TEST RESULTS

(National Percentile Rank of Student With MCPS Median)

Grade	Year	Cognitive Abilities			Iowa Tests of Basic Skills											
		Verb.	Quant.	Nonv.	Voc.	Rdg.	Spell.	Capt.	Punc.	Usage	Map Rdg.	Graphs	Ref. Mat.	Arith. Conc.	Prob. Solv.	Comp.
3	72	71	77	67	69	63	72	73	75	70	70	68	61	66	62	73
	73	69	77	67	69	63	74	73	75	68	64	68	57	66	62	71
	74	69	77	73	62	63	72	73	71	68	64	68	57	66	62	71
	75	71	79	73	69	66	74	75	81	70	70	68	65	66	70	73
	76	75	83	75	69	68	78	79	83	70	76	76	65	69	70	76
	77	75	81	77	72	71	78	82	86	74	76	76	72	69	79	79
	78	79	83	77	72	71	79	82	87	74	76	83	76	69	79	79
	79	77	83	77	72	71	83	82	87	74	76	83	76	69	79	81
	80	77	83	77	72	71	83	84	87	74	76	83	76	69	79	79
5	72	71	71	69	65	62	65	64	65	69	63	65	64	67	59	70
	73	69	69	69	65	60	62	64	61	65	58	65	64	67	59	67
	74	69	71	73	62	60	62	61	61	65	63	65	64	65	59	64
	75	69	71	73	62	60	62	64	61	65	63	69	66	65	59	67
	76	71	73	77	62	60	65	69	65	65	63	69	66	67	65	70
	77	73	75	77	65	62	65	72	68	69	68	76	66	72	65	70
	78	75	75	81	65	62	67	72	68	69	73	76	68	72	65	72
	79	75	75	81	65	62	71	75	72	72	71	76	70	72	65	74
	80	75	75	81	70	64	74	78	75	72	73	79	70	72	69	74

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TABLE 1.A.1 (Continued)

HISTORICAL RECORD OF MCPS TEST RESULTS

(National Percentile Rank of Student With MCPS Median)

Grade	Year	Cognitive Abilities Test			Iowa Tests of Basic Skills											
		Verb.	Quant.	Nonv.	Voc.	Rdg.	Spell.	Capt.	Punc.	Usage	Map Rdg.	Graphs	Ref. Mat.	Arith. Conc.	Prob. Solv.	Comp.
	74	67	67	71	58	56	54	57	53	61	60	62	60	60	56	60
	75	65	67	71	58	54	54	60	53	57	60	62	60	60	56	60
7	76	67	69	75	60	54	54	64	62	61	64	62	60	64	56	62
	77	67	69	75	58	54	58	64	62	61	64	62	60	64	56	62
	78	67	69	75	60	54	58	64	62	61	64	62	60	64	56	62
	79	67	69	75	58	54	58	64	66	61	64	62	60	64	56	62
	80	69	73		60	56	61	67	66	64	68	68	63	66	62	66
	74	69	75	73	61	58	54	58	59	59	68	59	61	58	55	62
	75	67	73	73	57	56	54	58	59	59	63	54	60	58	50	62
9	76	69	75	77	57	55	52	62	59	59	63	54	60	58	55	62
	77	69	77	77	57	55	54	62	62	59	63	59	61	61	55	62
	78	69	75	77	61	55	54	62	62	59	68	59	60	58	55	62
	79	69	75	77	57	55	54	62	62	59	68	59	61	58	55	62
	80	69	77	79	57	55	54	62	62	59	63	59	61	58	55	62

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TABLE 1.A.1 (Continued)

HISTORICAL RECORD OF MCPS TEST RESULTS

(National Percentile Rank of Student with MCPS Median)

Grade	Year	Cognitive Abilities Test			Tests of Academic Progress						
		Verb.	Nonv.	Quant.	Social Studies	English	Science	Reading	Math.	Lit.	Comp.
11	74	73	--	77	64	62	69	64	71	57	67
	75	71	--	77	61	58	69	64	71	57	67
	76	73	--	81	58	58	64	60	71	57	67
	77	71	--	75	58	58	64	60	69	57	63
	78	71	75	--	54	58	64	60	69	57	63
	79	69	75	--	54	62	64	60	71	57	63
	80	--	--	--	54	62	64	60	71	57	63

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TABLE 1.A.2.

SUMMARY OF COUNTYWIDE TEST SCORE TRENDS ON
CAT, ITBS AND TAP BY GRADE USING MEDIAN

Grade	3		5		7		9		11	Total
	CAT	ITBS	CAT	ITBS	CAT	ITBS	CAT	ITBS	TAP	
Increased From 1978-79	0	1	0	8	3	10	2	0	0	24
Unchanged From 1978-79	3	10	3	3	0	1	1	10	6	37
Decreased From 1978-79	0	0	0	0	0	0	0	1	0	1
All-time high ^a	2 ^c	11	3	11	3	11	3	6	2	52
Unchanged ^b	0	0	0	0	0	0	0	1	1	2
All-time low	0	0	0	0	0	0	0	4	3	7

^aThe high or low points for 9 years in Grades 3 and 5 and for 7 years in Grades 7, 9 and 11.

^bScore has been the same for 9 years in Grades 3 and 5 or for 7 years in Grades 7, 9 and 11.

^cThe county median for CAT Verbal in Grade 3 was between the all-time high and low scores.

TABLE 1.A.3

HISTORICAL RECORD OF MCPS TEST RESULTS

(National Percentile Rank of Student With MCPS Mean)

Grade	Year	Cognitive Abilities			Iowa Tests of Basic Skills											
		Verb.	Quant.	Nonv.	Voc.	Rdg.	Spell.	Capt.	Punc.	Usage	Map Rdg.	Graphs	Ref. Mat.	Arith. Conc.	Prob. Solv.	Comp.
	72	65	73	67	62	60	68	68	71	64	67	65	61	63	62	71
	73	69	73	67	62	60	68	66	69	62	64	65	61	63	62	68
	74	67	73	69	62	60	68	66	69	60	64	65	57	59	62	68
3	75	69	75	71	62	63	70	71	75	64	67	68	65	63	66	74
	76	73	81	73	65	64	72	73	77	66	70	71	67	66	70	73
	77	75	81	73	69	68	74	75	78	68	73	74	69	69	75	73
	78	77	81	75	69	68	76	77	80	68	73	76	72	69	75	76
	79	77	83	75	72	68	76	77	81	68	76	79	72	73	75	76
	80	77	83	75	72	68	78	79	81	68	76	79	76	69	75	76
	72	67	67	65	62	60	60	61	61	62	63	62	61	67	59	64
	73	69	67	67	60	57	60	59	61	60	61	62	59	67	59	64
	74	69	67	71	60	57	58	59	58	58	63	65	59	65	59	62
5	75	69	69	73	60	57	60	61	59	60	66	65	61	65	64	64
	76	71	73	75	60	60	62	62	61	60	63	67	63	67	62	64
	77	73	75	75	62	60	62	66	63	63	68	69	64	70	61	67
	78	75	75	77	62	62	64	67	65	63	66	72	66	72	65	70
	79	75	75	77	65	62	67	69	67	65	71	72	68	70	65	70
	80	75	75	77	65	64	67	71	68	65	71	74	68	72	69	72

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TABLE 1.A.3 (Continued)

HISTORICAL RECORD OF MCPS TEST RESULTS

(National Percentile Rank of Student With MCPS Mean)

Grade	Year	Cognitive Abilities			Iowa Tests of Basic Skills											
		Verb.	Quant.	Nonv.	Voc.	Rdg.	Spell.	Capt.	Punc.	Usage	Map Rdg.	Graphs	Ref. Mat.	Arith. Conc.	Prob. Solv.	Comp.
7	74	67	67	69	54	54	51	54	51	53	59	58	56	60	52	58
	75	65	67	71	54	52	51	56	51	53	59	56	56	60	52	58
	76	67	73	73	54	52	51	57	54	54	60	56	56	60	52	58
	77	67	71	73	54	52	53	59	56	55	60	58	58	62	52	58
	78	67	71	73	56	52	53	59	56	55	60	58	58	62	54	60
	79	67	71	73	56	52	54	61	58	55	60	59	58	62	54	60
	80	69	73	75	58	54	56	63	59	57	62	62	61	64	56	62
9	74	69	73	73	57	53	49	53	50	52	61	54	55	55	51	58
	75	67	71	73	55	51	49	53	51	52	59	52	55	53	50	56
	76	69	75	77	55	51	48	53	51	53	59	54	53	53	51	56
	77	69	75	77	55	51	49	54	53	53	59	54	55	55	51	56
	78	69	75	79	57	51	49	56	54	53	61	54	55	53	51	58
	79	69	75	79	55	50	51	56	54	53	60	54	55	52	51	56
	80	69	77	79	55	51	51	56	56	54	61	56	56	53	53	58

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TABLE 1.A.3 (Continued)

HISTORICAL RECORD OF MCPS TEST RESULTS

(National Percentile Rank of Students With MCPS Mean)

Grade	Year	Cognitive Abilities Test			Tests of Academic Progress						
		Verb.	Nonv.	Quant.	Social Studies	English	Science	Reading	Math.	Lit.	Comp.
11	74	73	77	-	64	58	69	64	71	57	67
	75	71	77	-	61	58	69	64	71	61	67
	76	73	81	-	58	58	64	60	69	57	63
	77	71	73	-	58	58	64	60	69	57	63
	78	71	-	75	54	58	64	60	69	57	63
	79	71	-	75	54	62	64	60	69	57	63
	80	-	-	-	54	62	64	60	69	57	63

TABLE 1.A.4

NUMBER (#) AND PERCENTAGE (%) OF STUDENTS AT OR ABOVE
THE NATIONAL AVERAGE* ON ITBS, CAT, AND TAP

Grade	Year	Cognitive Abilities Test						Iowa Tests of Basic Skills																							
		Verbal		Quant.		Nonv.		Vocab.		Read. Comp.		Spell.		Capital.		Punc.		Lang. Usage		Map Rdg.		Graphs/Tables		Ref. Mat.		Math. Conc.		Math. Prob.		Comp.	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
3	77	5688	76	5885	79	5653	76	5463	73	5426	73	5990	80	6158	83	5620	75	5736	77	5581	75	5897	79	5293	71	5574	75	5328	71	5748	78
	78	5927	77	6151	80	5904	77	5650	74	5648	74	6250	82	6488	85	5970	78	6020	78	5742	75	6114	80	5572	73	5663	74	5545	72	5973	78
	79	5583	78	5719	80	5526	77	5422	75	5339	74	6070	84	6140	85	5921	82	5613	78	5503	77	5932	83	5234	73	5579	78	5249	73	5711	80
	80	5150	78	5260	79	5116	77	5044	76	4948	74	5631	85	5714	86	5469	82	5189	78	5082	77	5481	83	4931	74	5017	75	4745	71	5289	80
*The national average is a grade equivalent score of 3.7 on the Iowa Tests of Basic Skills and a percentile rank of 50 on the Cognitive Abilities Test.																															
5	77	5893	75	5767	73	6352	81	5349	68	5012	64	5101	65	5616	72	5356	68	5689	73	5450	69	5633	72	5488	70	5593	71	5114	65	5429	70
	78	5906	77	5680	75	6292	83	5244	69	5062	66	5140	67	5609	74	5365	70	5640	74	5429	71	5608	74	5564	73	5578	73	5157	68	5423	72
	79	5710	78	5513	75	6141	84	5521	71	4956	68	5152	70	5522	75	5497	75	5556	76	5261	72	5484	75	5446	75	5294	72	4976	68	5342	73
	80	5904	79	5668	75	6242	83	5436	72	5134	68	5508	73	5829	77	5739	76	5824	77	5412	72	5740	76	5715	76	5450	72	5239	70	5579	75
*The national average is a grade equivalent score of 5.7 on the Iowa Tests of Basic Skills and a percentile rank of 50 on the Cognitive Abilities Test.																															
7	77	6112	68	6329	70	6818	76	5720	64	5349	60	5308	59	5993	67	5611	63	6003	67	6188	69	5617	63	5772	65	5850	65	5478	61	5559	64
	78	5589	69	5774	71	6155	76	5294	65	4943	61	4902	60	5476	67	5233	64	5524	68	5561	68	5091	63	5243	64	5390	66	5029	62	5150	65
	79	9340	69	5513	72	5953	77	4956	64	4645	64	5317	69	5054	66	5248	68	5305	69	4906	64	5020	65	5176	67	4750	62	4882	65		
	80	5128	70	5325	72	5731	78	4923	67	4570	62	4612	63	5245	72	4960	68	5105	70	5245	72	4874	67	5011	68	5081	69	4706	64	4839	68
*The national average is a grade equivalent score of 7.6 on the Iowa Tests of Basic Skills and a percentile rank of 50 on the Cognitive Abilities Test.																															
9	77	6596	70	6887	74	7308	78	4998	53	4854	52	4817	52	5662	61	5447	58	5753	62	5691	61	5345	57	5463	59	5654	61	4717	51	5123	58
	78	6342	70	6584	73	7114	79	4907	54	4704	52	4742	52	5589	62	5281	58	5571	62	5513	61	5169	57	5239	58	5282	59	4564	51	4947	58
	79	6166	70	6390	73	6930	79	4729	53	4774	50	4708	53	5488	62	5231	59	5502	62	5482	62	5058	57	5233	59	5137	58	4450	50	4825	57
	80	5721	71	5926	74	6367	80	4311	53	4128	51	4237	53	4986	62	4923	61	5085	63	4990	62	4708	58	4828	60	4642	58	4181	52	4425	58
*The national average is a grade equivalent score of 9.6 on the Iowa Tests of Basic Skills and a percentile rank of 50 on the Cognitive Abilities Test.																															
Grade	Year	Cognitive Abilities Test						Tests of Academic Progress																							
		Verbal		Quant.		Nonv.		Social Studies		Comp.		Science		Reading		Math		Literature		Composite											
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%										
11	77	6282	71	--	--	6735	76	5527	62	5770	65	5706	64	5742	65	5933	68	5795	66	5643	68										
	78	6126	71	6244	73	--	--	5265	60	5589	64	5610	64	5459	63	5795	67	5517	64	5449	67										
	79	5844	71	5998	73	--	--	5053	60	5565	66	5488	65	5341	64	5742	69	5439	65	5249	67										
	80	--	--	--	--	--	--	5012	60	5476	66	5407	65	5235	63	5646	69	5405	66	5277	67										
*The national average is a percentile rank of 50.																															

1.B. ANALYSIS OF TEST RESULTS BY
RACIAL/ETHNIC GROUPS

Introduction

In the spring of 1978, MCPS released an analysis of results from the 1976-77 testing program which showed a gap in performance between black students and white students at all grade levels. This caused considerable concern among administrators, teachers, and parents. In response, the superintendent of schools identified educational equity as a priority objective for the following five years. One indication of the degree to which MCPS is meeting this objective is obtained from an analysis of the performance of various racial/ethnic groups (white, black, Hispanic, and Asian) on the Iowa Tests of Basic Skills (ITBS), the Tests of Academic Progress (TAP), and the Cognitive Abilities Test (CAT). This analysis will provide answers to the following questions:

1. What was the range of test scores in each racial/ethnic group for 1980?
2. What was the trend of average scores for each racial/ethnic group from 1977 to 1980?
3. How have the differences in average test performance between majority and minority racial/ethnic groups changed between 1977 and 1980?

Data

The stanine distributions for each racial/ethnic group on the ITBS/TAP Composite score for 1980 are listed in Table 1.B.1. This makes it possible to see how entire groups have performed and, therefore, provides data to show the range of test scores.

The NCE mean scores on the Composite for each group for 1977 and 1980 are shown in Table 1.B.2. These scores illustrate the size of the differences between the two years.

The number of subtests on which each racial/ethnic group improved, stayed the same, and declined from 1977 to 1980 is shown in Table 1.B.3. These data show the consistency of the subtest score trend within each group.

The comparisons of white student performance with the performance of black students, Hispanic students, and Asian students are summarized in Tables 1.B.4 to 1.B.6.

The trends of average Composite scores by year from 1977 to 1980 for each racial/ethnic group are illustrated in Figures 1.B.1 to 1.B.4. NCE scores were used to develop these figures. These figures make it easy to see if score increases or decreases represented a four-year trend or were the result of a big change in one year.

The mean scores on each subtest for each group at each grade level are shown in Tables A1 to A6 in the Appendix. These scores are reported as percentile ranks and normal curve equivalents (NCE). The percentages of students tested in each group from 1977 to 1980 are presented in Tables A7 to A10 in the Appendix.

Analysis

The answers to the questions pertaining to the racial/ethnic groups were obtained by looking at test score trends in two ways. First, the pattern of subtest differences between groups was examined. Second, the magnitude of the overall differences between groups was assessed.

In addition, the results were reported in two ways. First, the data were examined within each racial/ethnic group. Second, the majority and the minority group data were compared.

Pattern of Differences

The pattern of differences among subtests was reviewed to see if one group scored consistently higher or lower than another group in a variety of subject areas. When looking at the score difference between groups, only the direction is considered. If scores on a subtest increased from 1977 to 1980, it would count as one increase regardless of the magnitude of the difference. Table 1.B.3 was developed by using the pattern of differences. The significance of the pattern was determined by using the sign test.¹

Magnitude

The size of the score differences between groups is not seen by reviewing the pattern of increases and decreases. To determine whether or not the difference is significant, a comparison of mean Composite scores of those groups was undertaken. Table 1.B.2 shows the size of the difference between NCE Composite scores from 1977 to 1980 for each group. Increases or decreases of more than seven NCE points between the group Composite scores are considered significant.²

Both analyses are needed because they each address different concepts. It is possible to have a significant pattern of increases or decreases without the size of the differences being very large. This could mean that one group scored consistently higher on a significant number of tests, but the

¹The sign test is based on the assumption that the differences will be evenly divided between increases and decreases. If the pattern is substantially different from this assumption, it is considered significant. Significance is defined as any pattern that would have less than a 5 percent probability of occurring by accident if the assumption of equal increases and decreases were true.

²Seven NCE points represent a change of one-third of a standard deviation. This standard is often used in educational evaluation to indicate meaningful change.

differences were small. It is also possible to have a significant size difference with no significant pattern of increases or decreases. This could indicate that one group's average achievement level was higher but the lower group had some strong subject areas.

Results

Highlights

The major conclusions of the analyses of test results by racial/ethnic groups indicate the following points:

- o All four racial/ethnic groups had some students scoring very high (9th stanine) and very low (1st stanine).
- o Test scores have generally improved over the last four years for white and black students. Fewer scores went up for the Asian and Hispanic students.
- o Black students improved on more subtests than any other group. They also had larger improvements than the other groups.
- o Score differences between black and white students have decreased in 59 (95 percent) of 62 subtests over the last four years.
- o Score differences between Hispanic and white students have increased over the last four years in Grades 3, 5, and 7, decreased in Grade 9 and remained the same in Grade 11. Most of the increases at the elementary grades occurred in 1980.
- o Score differences between white and Asian students have decreased since 1977.
- o White students still scored significantly higher than black students and Hispanic students in 1980.
- o Asian students scored higher than white students on a majority of subtests.
- o Most of the score changes on the individual subtests were small.

Range of Scores Within Groups (Question 1)

While there were clear differences in the performance of the four groups studied, each group had students scoring across the full range of scores. This indicates that there were students achieving at various levels in all groups. The stanine distributions in Table 1.B.1 demonstrate this point for the ITBS Composite.

Results Within Groups (Question 2)

White Students. Scores for white students showed an increase on 47 (76 percent) of the 62 subtests across all grade levels from 1977 to 1980. This

included a significant pattern of increases in Grades 3, 5, and 7. Grade 9 had the only subtest that went down. All changes were small, i.e., less than 7 NCE points.

Black Students. Scores for black students showed an increase on 61 (98 percent) of the 62 subtests across all grade levels from 1977 to 1980. This represented a significant pattern of increases in every grade tested. Scores remained the same on one subtest in Grade 3. None of the increases, however, were significant in size.

Hispanic Students. Scores for Hispanic students showed increases on 28 (45 percent) of the 62 subtests from 1979 to 1980. The scores decreased on 24 subtests. This resulted from a significant pattern of increases in Grades 7 and 9 but a significant pattern of decreases in Grade 3. Much of the Grade 3 decline occurred during the last year, 1979 to 1980. Grade 5 Hispanic students also had a decline on a significant number of subtests from 1979 to 1980. This eliminated most of the increases from the previous year. None of the individual subtest increases or decreases were significant in size.

Asian Students. Scores for Asian students showed increases and decreases on the same number of subtests (25 each from 1977 to 1980). Patterns of increases were significant in Grades 3 and 11. The pattern of decreases was significant in Grade 7. None of the increases or decreases on individual subtests were significant in size.

Majority/Minority Comparisons (Question 3)

White Students Compared to Black Students. White students scored higher than black students on every subtest. The difference between black student scores and white student scores decreased on 59 (95 percent) of the 62 subtests over all grades from 1977 to 1980. This represented a significant pattern in every grade. The three subtests on which the difference did not decrease were at the elementary level. However, the size of the decreases was not significant, and the differences in test scores between the two groups was still substantial.

White Students Compared to Hispanic Students. On every subtest white student scores were higher than Hispanic student scores. The difference between the scores of white students and Hispanic students increased on 38 (61 percent) of the 62 subtests over all grades. The differences decreased on 15. The pattern of differences was significant in Grades 3, 5, and 9. The score differences in Grades 3 and 5 increased and the score differences in Grade 9 decreased. The significant pattern of increases in Grade 3 was a complete reversal from the previous year. The size of the increases or decreases was not significant. However, the size of the differences between the two groups was still substantial in most cases.

White Students Compared to Asian Students. Asian students scored higher than white students on 42 (68 percent) of the 62 subtests. On these 42 subtests the differences decreased on the majority (31), and increased on eight. This represented a significant pattern of decreases in Grades 5 and 7. However, the size of the differences was not significant. On the other side, white students scored higher than Asian students on only five subtests. These five subtests all deal with language skills: Vocabulary and Reading Comprehension in Grade 3 and Vocabulary, Capitalization, and Language Usage in Grade 5.

TABLE 1.B.1

PERCENTAGE OF STUDENTS IN EACH RACIAL/ETHNIC GROUP SCORING AT EACH STANINE ON THE ITBS/TAP COMPOSITE

Stanine	Grade 3					Norm**
	White	Black	Asian	Hispanic	County	
9	12	3	12	3	11	4
8	24	10	26	14	22	7
7	22	11	25	14	21	12
6	19	22	17	25	19	17
5	12	20	14	19	13	20
4	5	13	3	13	6	17
3	3	9	2	6	4	12
2	2	8	0	4	3	7
1	1	5	0	1	1	4
Number	5259	750	383	202	6608*	

Stanine	Grade 5					Norm**
	White	Black	Asian	Hispanic	County	
9	10	1	12	2	9	4
8	17	3	19	5	15	7
7	24	9	25	17	22	12
6	19	17	18	22	19	17
5	17	23	15	25	17	20
4	7	18	4	11	8	17
3	4	13	3	7	5	12
2	1	7	1	5	2	7
1	1	9	3	7	2	4
Number	6087	806	365	198	7479*	

Stanine	Grade 7					Norm**
	White	Black	Asian	Hispanic	County	
9	6	1	10	1	5	4
8	12	2	16	5	11	7
7	21	8	23	12	19	12
6	20	12	18	20	19	17
5	20	19	19	23	20	20
4	12	21	9	24	13	17
3	5	15	3	7	6	12
2	3	11	2	7	4	7
1	1	11	1	1	2	4
Number	5818	778	329	221	7160*	

*County total does not equal the sum of the four racial/ethnic groups shown because it includes other small groups.

**Students in national sample who were used to develop the test norms.

TABLE 1.B.1 (Continued)

PERCENTAGE OF STUDENTS IN EACH RACIAL/ETHNIC GROUP SCORING AT EACH STANINE ON THE ITBS/TAP COMPOSITE

Stanine	Grade 9					Norm**
	White	Black	Asian	Hispanic	County	
9	4	1	7	1	4	4
8	13	2	15	7	12	7
7	17	5	18	14	16	12
6	21	11	16	15	19	17
5	23	18	22	26	23	20
4	13	19	14	20	14	17
3	4	18	2	9	6	12
2	3	15	4	7	4	7
1	2	12	2	2	3	4
Number	6418	739	297	220	7686*	

Stanine	Grade 11					Norm**
	White	Black	Asian	Hispanic	County	
9	10	2	16	3	9	4
8	11	3	17	4	10	7
7	15	5	10	8	14	12
6	21	10	15	21	20	17
5	18	16	18	23	18	20
4	12	16	13	15	12	17
3	8	19	5	10	9	12
2	4	14	5	8	5	7
1	2	16	2	9	3	4
Number	6684	662	264	206	7833*	

*County total does not equal the sum of the four racial/ethnic groups shown because it includes other small groups.

**Students in national sample who were used to develop the test norms.

TABLE 1.B.2

ITBS MEAN COMPOSITE SCORES 1977 AND 1980

(Reported in Normal Curve Equivalent Scores)

Race	Grade	1977	1980	Change
White	3	66	68	4
	5	62	65	-3
	7	57	60	3
	9	58	58	0
	11	59	60	1
Black	3	47	51	4
	5	39	44	5
	7	34	41	7
	9	35	38	3
	11	34	38	4
Hispanic	3	59	57	-2
	5	52	52	0
	7	49	50	1
	9	48	50	2
	11	47	48	1
Asian	3	68	70	2
	5	66	66	0
	7	65	64	-1
	9	62	60	-2
	11	62	63	1

TABLE 1.B.3

NUMBER AND SIGNIFICANCE* OF SUBTESTS ON WHICH SCORE
INCREASED (UP) REMAINED THE SAME (SAME) OR DECREASED (DOWN)
FROM 1977 TO 1980 BY RACE

Race	Grade	Up	Down	Same	Significance
White	3	12	0	2	S
	5	14	0	0	S
	7	14	0	0	S
	9	4	1	9	NS
	11	3	0	3	NS
	Totals	47	1	14	S
Black	3	13	0	1	S
	5	14	0	0	S
	7	14	0	0	S
	9	14	0	0	S
	11	6	0	0	S
	Totals	61	0	1	S
Hispanic	3	1	12	1	S
	5	4	8	2	NS
	7	8	2	4	S
	9	12	0	2	S
	11	3	2	1	NS
	Totals	28	24	10	NS
Asian	3	11	1	2	S
	5	5	4	5	NS
	7	0	9	5	S
	9	3	11	0	NS
	11	6	0	0	S
	Totals	25	25	12	NS

*Significance refers to the pattern of increases and decreases as determined by the sign test. S = significant pattern, NS = nonsignificant pattern.

TABLE 1.B.4

NUMBER AND SIGNIFICANCE* OF SUBTESTS ON WHICH
SCORE DIFFERENCES BETWEEN 1977 AND 1980 INCREASED AND
DECREASED BETWEEN WHITE STUDENTS AND BLACK STUDENTS

(For all tests at all grades, performance of white
students was above performance of black students.)

Grade	Difference Decreased	Difference Increased	Difference Same	Significance
3	12	1	1	S
5	13	0	1	S
7	14	0	0	S
9	14	0	0	S
11	6	0	0	S
Total	59	1	2	S

TABLE 1.B.5

NUMBER AND SIGNIFICANCE* OF SUBTESTS ON WHICH
SCORE DIFFERENCES BETWEEN 1977 AND 1980 INCREASED AND
DECREASED BETWEEN WHITE STUDENTS AND HISPANIC STUDENTS

(For all tests at all grades, performance of white
students was above performance of Hispanic students.)

Grade	Difference Decreased	Difference Increased	Difference Same	Significance
3	0	13	1	S
5	0	13	1	S
7	2	8	4	NS
9	10	1	3	S
11	3	3	0	NS
Totals	15	38	9	S

Significance refers to the pattern of increases and decreases as determined by the sign test. S = significant pattern, NS = nonsignificant pattern.

TABLE 1.B-6

NUMBER AND SIGNIFICANCE* OF SUBTESTS ON WHICH
SCORE DIFFERENCES BETWEEN 1977 AND 1980 INCREASED AND
DECREASED BETWEEN WHITE STUDENTS AND ASIAN STUDENTS

(White Students Scored Higher)

Grade	No. of Subtests	Difference Decreased	Difference Increased	Difference Same	Significance
3	2	1	1	0	**
5	3	0	3	0	**
7	0	0	0	0	**
9	0	0	0	0	**
11	0	0	0	0	**
Totals	5	1	4	0	NS

(Asian Students Scored Higher)

Grade	No. of Subtests	Difference Decreased	Difference Increased	Difference Same	Significance
3	10	4	4	2	NS
5	9	9	0	0	S
7	10	10	0	0	S
9	11	8	2	1	NS
11	2	0	2	0	NS
Totals	42	31	8	3	S

*Significance refers to the pattern of increases and decreases as determined by the sign test. S = significant pattern, NS = nonsignificant pattern.

**There are too few cases to do a test of significance.

(On the remaining 15 subtests, neither the white students nor the Asian students scored higher in both years.)

Figure 1.B.1
Trends from 1977 to 1980
on ITBS Composite
for White Students

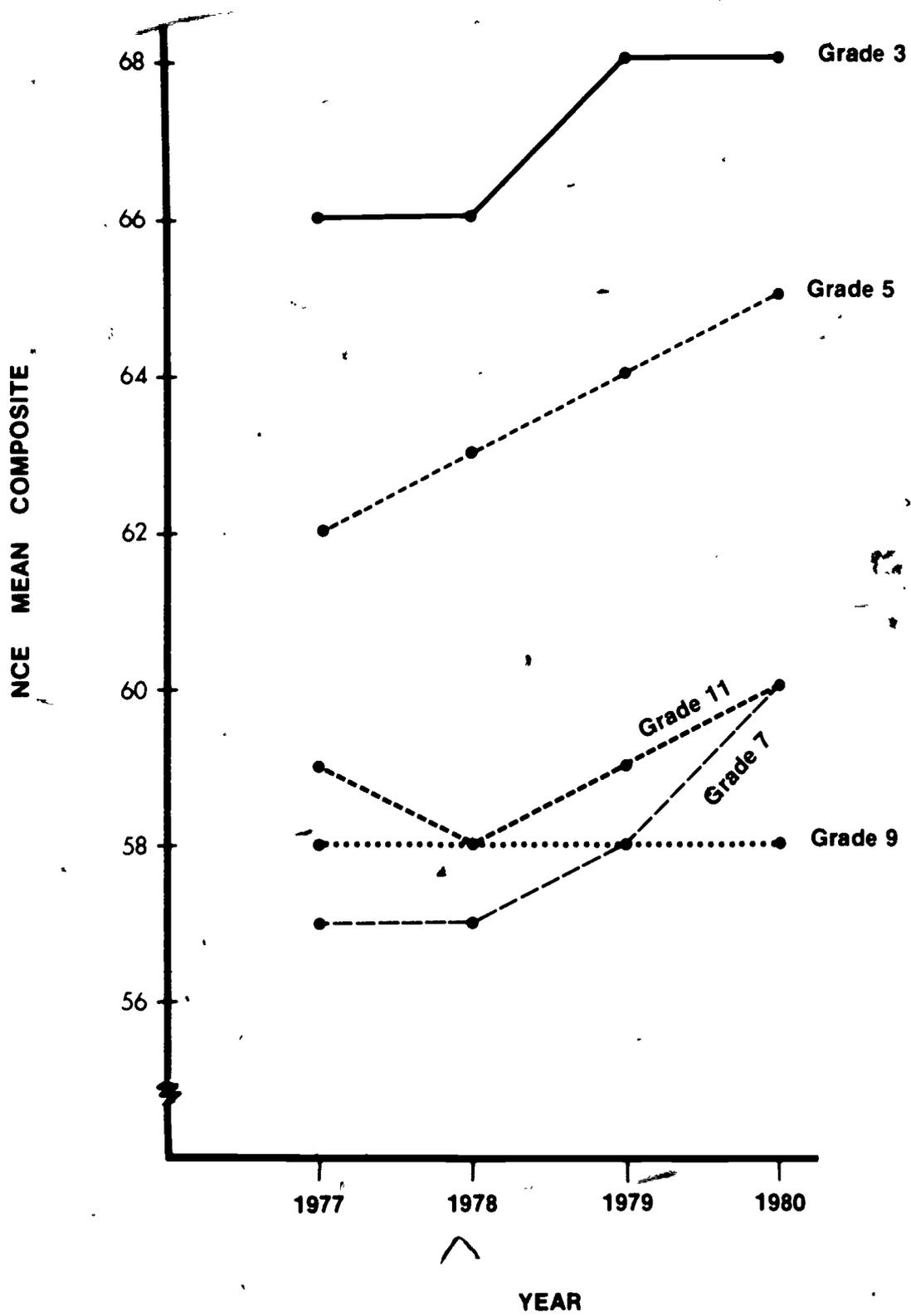


Figure 1.B.2
Trends from 1977 to 1980
on ITBS Composite
for Black Students

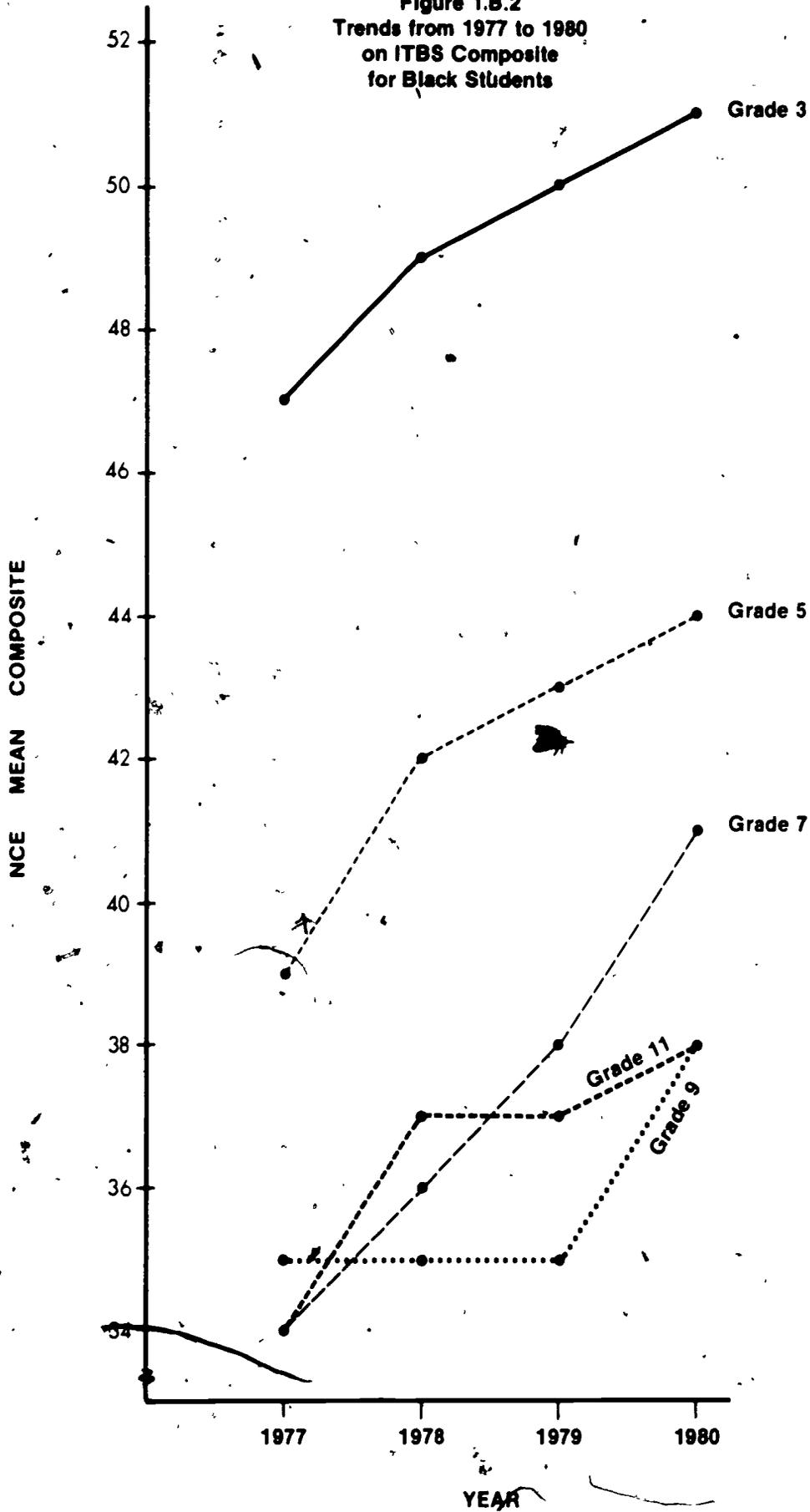


Figure 1.B.3
Trends from 1977 to 1980
on ITBS Composite
for Hispanic Students

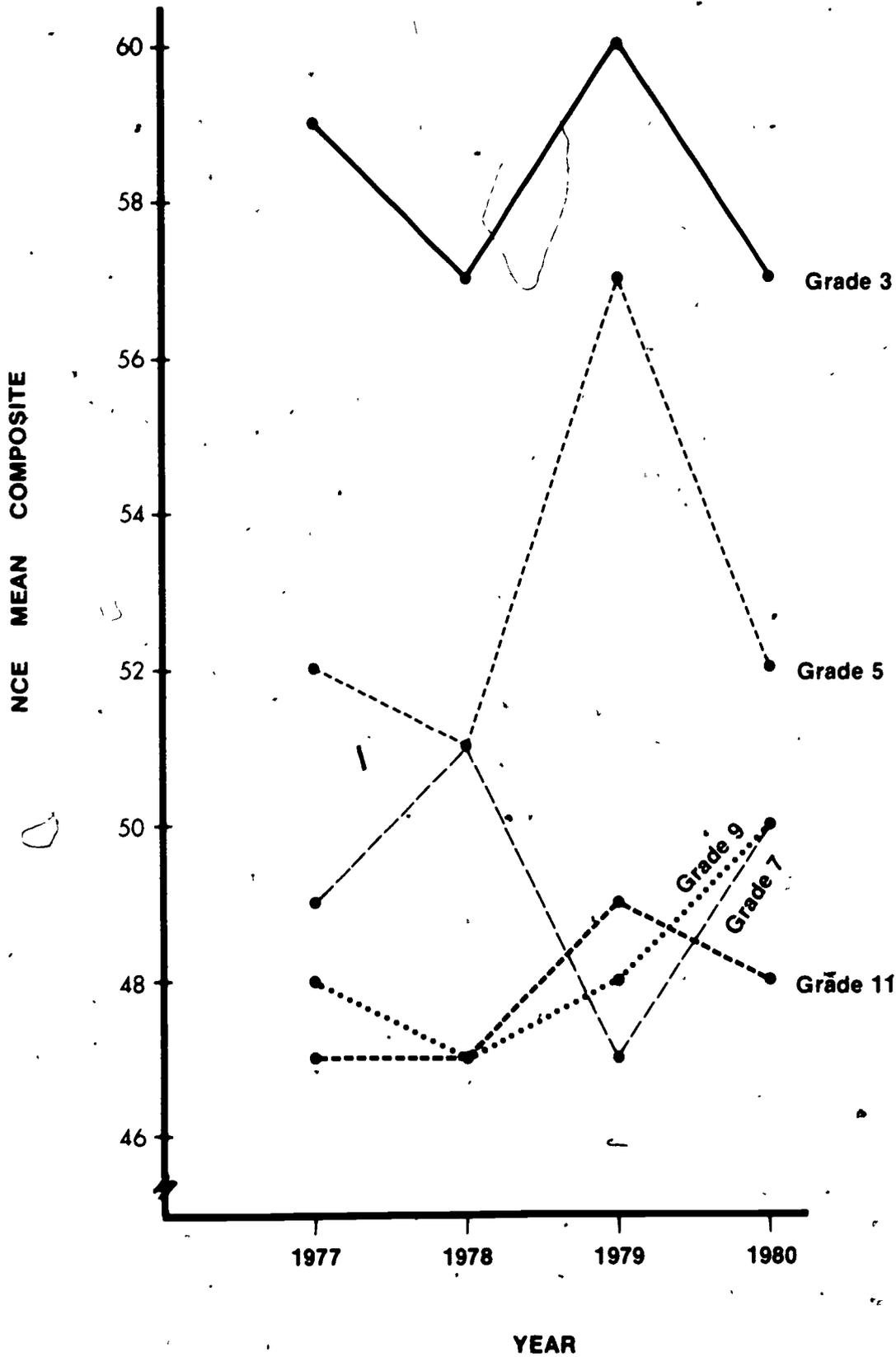
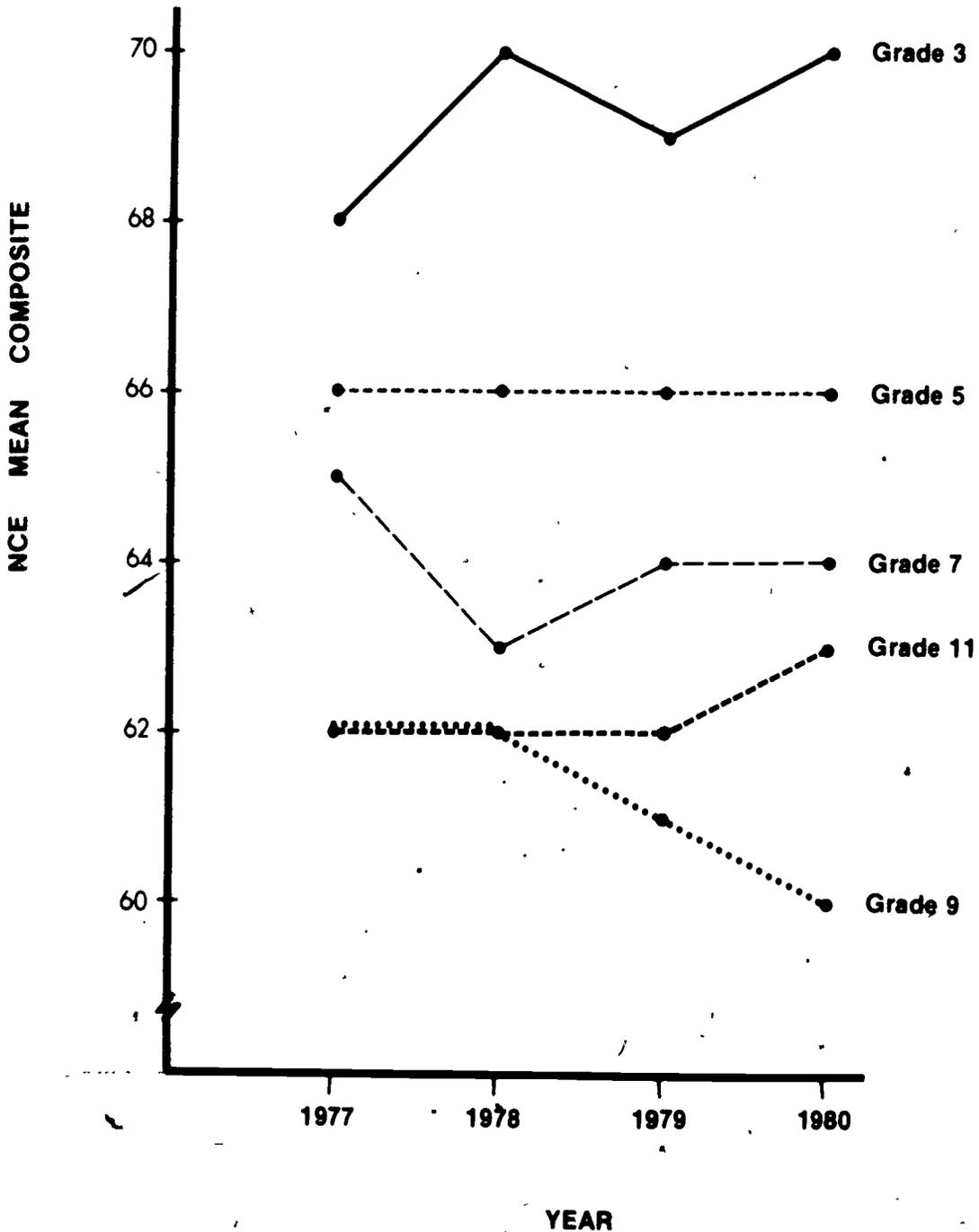


Figure 1.B.4
Trends from 1977 to 1980
on ITBS Composite
for Asian Students



1.C. ANALYSIS OF TEST RESULTS BY SEX

Introduction

As part of a continuing effort to monitor educational equity in MCPS, scores on the Iowa Tests of Basic Skills (ITBS), Tests of Academic Progress (TAP), and the Cognitive Abilities Test (CAT) have been analyzed by sex. Additional breakdowns of test results by sex are provided for the Maryland Functional Reading Test (MFRT) in Section 1.E, and College Board examinations in Section 1.F.

The analysis in this section will answer the following questions:

1. What were the patterns of scores for males and females from 1978 to 1980?
2. Were there differences in performance between males and females? Did these differences occur in specific subject areas?
3. Did the differences in the performance of males and females within racial/ethnic groups deviate from the differences between the males and females in the total population?

Data

The pattern of subtest increases and decreases from 1978 to 1980 for males and females is presented in Table 1.C.1. The trends of NCE mean Composite scores for males and females from 1978 to 1980 are illustrated in Figures 1.C.1 to 1.C.5. These data address Question 1.

The comparison of male and female test performance on each subtest in 1979 and 1980 is shown in Table 1.C.2. These data can be used to answer Question 2. They provide a way to determine if a group tended to score higher in certain subject areas across all grades. They also show if there was any change in the direction of group differences.

The comparison of male and female test performance on each subtest within racial/ethnic groups for 1979 and 1980 is presented in Tables 1.C.3 to 1.C.7. These data relate to Question 3.

Test results for males and for females who were tested in 1978, 1979, and 1980 are presented in Tables A11 to A14 in the Appendix. The results for males and females within racial/ethnic groups by grade for 1980 are presented in Tables A15 to A19. The tables show the mean normal curve equivalent (NCE) score and its percentile rank for all subtests.

Analysis

The data were examined from two perspectives. First, the pattern of subtest differences between groups was examined. Second, the magnitude of the overall differences between groups was assessed.

Pattern of Differences

The pattern of differences among subtests was reviewed to see if one group scored consistently higher or lower than another group in a variety of subject areas. When looking at the score difference between groups, only the direction is considered. If scores on a subtest increased from 1978 to 1980, it would count as one increase regardless of the magnitude of the difference. Table 1.Q.1 was developed by using the pattern of differences. The significance of the pattern was determined by using the sign test.¹

Magnitude

The size of the score differences between groups is not seen by reviewing the pattern of increases and decreases. To determine whether or not the difference is significant in size, a comparison of mean Composite scores was undertaken. Table 1.C.2 includes the size and direction of the difference between NCE Composite scores for 1979 and 1980 for each group. Increases or decreases of more than seven NCE points between the group Composite scores are considered significant.²

Both analyses are needed because they each address different concepts. It is possible to have a significant pattern of increases or decreases without the size of the differences being very large. This could mean that one group scored consistently higher on a significant number of tests, but the differences were small. It is also possible to have a significant size difference with no significant pattern of increases or decreases. This could indicate that one group's achievement level was higher but the lower group had some strong subject areas.

Results

Highlights

Analysis of test results by sex reveals the following:

- o The test scores for both males and females generally improved from 1978 to 1980.
- o On language subtests females scored higher in all cases from 1978 to 1980, with the exception of Reading in Grade 11 in 1979 and 1980.

¹The sign test is based on the assumption that differences will be evenly divided between increases and decreases. If the pattern is substantially different from this assumption, it is considered significant. Significance is defined as any pattern that would have less than a 5 percent probability of occurring by accident if the assumption of equal increases and decreases were true.

²Seven NCE points represent a change of one-third of a standard deviation. This standard is often used in educational evaluation to indicate meaningful change.

- o On math subtests males tended to score higher at the secondary level while results were mixed in Grades 3 and 5.
- o Females tended to score slightly higher than males on the Composite score in all grades except Grade 11. However, the differences were quite small; the largest difference was two NCE points in Grade 3.
- o The patterns highlighted above were generally true across all racial/ethnic groups. However, a major exception was noted in Grade 3 where Hispanic males scored higher than females on nine subtests. This was a deviation from the 1980 county trend, as well as from the 1979 trend for Hispanics. The Composite difference changed eight NCE points; that is, females were six points higher in 1979 and males were two points higher in 1980.
- o Almost all of the changes were modest in size.

Comparisons Within Each Group--1978 to 1980 (Question 1)

At all grade levels, subtest scores showed more increases than decreases from 1978 to 1980 for both males and females. The number of increases was significant for males at all grade levels, while the number of increases was significant for females in Grade 7 only. None of the changes in subtest scores were significant.

These same patterns were reflected generally in the mean Composite scores. These scores helped to emphasize that most changes were small. The best example of this was for Grade 9 males whose mean Composite did not change even though six of the 11 ITBS subtests showed increases. These were all one-point increases and were mostly in tests that have little weight in the computation of the Composite.

Male/Female Comparisons--1980 (Question 2)

Females scored higher than males on more than half of the subtests in Grades 3, 5, 7, and 9; however, the pattern in each grade was not significant. In Grade 11 males scored higher on three subtests and females scored higher on two subtests. The reason for this change from earlier grades is not at all clear. Two possible reasons for the change are differences in content on the TAP and ITBS and different levels of motivation for males and females as they move into senior high school. Males scoring higher in senior high school is consistent with results of the Scholastic Aptitude Tests (SAT) of the College Board (see Section 1.F.).

Analysis of 1980 scores on subtests grouped by subject area shows that, in general, females continued to score higher than males on language-related subtests; and males continued to score higher on mathematics, science, and social studies subtests. Females scored higher than males across all grade levels on the ITBS subtests included in the Language Total, namely, Spelling, Capitalization, Punctuation, and Language Usage. They also scored higher on the English Composition and Literature subtests in the TAP battery. Further, in Grades 3, 5, 7, and 9, females scored higher than males on Reading Comprehension. In Grade 11 the two groups were even in this area.

Males scored higher than females on all mathematics subtests in Grades 7, 9, and 11, and males scored higher on Science, and Social Studies in Grade 11. In Grade 3 females scored higher on the Mathematics Problem Solving subtest, and males scored higher on the Mathematics Concepts subtest. In Grade 5 both groups scored the same on the Mathematics Problem Solving subtest, and again males scored higher on Mathematics Concepts.

The analysis of the mean Composite NCE scores was consistent with the pattern of subtest differences. Females scored higher than males in Grades 3, 5, 7, and 9. The magnitude was less in 1980 than it was in 1979 in Grades 3 and 7, equal in Grade 5, and greater in Grade 9. In Grade 11 males scored one point higher than females. This was consistent with 1979 but a reversal of the 1978 trend. The largest difference in 1980 was two points in Grade 3, well below the seven-point standard of significance. The trends for these groups can be seen in Figures 1.C.1 to 1.C.5.

Exceptions to the County Pattern Within Racial/Ethnic Groups--1980 (Question 3)

The most noteworthy deviation from the county pattern among racial/ethnic groups was between Hispanic males and females in Grade 3. At this level Hispanic males scored higher on more than half of the subtests. This resulted in an eight-point NCE score difference change on the Composite for this grade. Males scored two points higher in 1980. Females had scored six points higher in 1979.

Two other noteworthy trend reversals were noted in the scores of Asian students. In Grade 5 females had a Composite mean four points higher than males in 1980. In 1979 the males had scored two points higher. In Grade 9 Asian males and females had the same Composite mean in 1980 after males had scored seven points higher in 1979. Both of these cases were consistent with the county trend in 1980 but had been inconsistent with it in 1979.

There were exceptions to the trend of females scoring higher than males on language-related subtests among racial/ethnic groups. White males scored higher on Vocabulary in Grades 5, 7, and 9. Hispanic males scored higher on Vocabulary in Grades 7 and 9 and on Reading Comprehension in Grade 9.

Several of the subtest score differences among the racial/ethnic groups were more than seven NCE points. This represents a substantial change. These subtests, by group and grade, are identified in Tables 1.C.3 to 1.C.7.

In 1980 the pattern of higher performance of females on a larger number of subtests countywide deviated among the racial/ethnic groups only to the extent that the pattern was significant for some of the these groups, while it was not significant in any grade countywide. The significant patterns were for white and Asian students in Grade 3; black, Asian, and Hispanic students in Grade 5; and black students in Grade 7.

TABLE 1.C:1

NUMBER AND DIRECTION OF SUBTEST SCORE CHANGES
FROM 1978 TO 1980 BY SEX AND GRADE

	Females			Males		
	Number of Subtests			Number of Subtests		
	Higher	Unchanged	Lower	Higher	Unchanged	Lower
ITBS/CAT (14 Subtests)						
Grade 3	9	3	2	12*	2	0
Grade 5	9	3	2	13*	1	0
Grade 7	14*	0	0	14*	0	0
Grade 9	6	7	1	9*	4	1
TAP/CAT (6 Subtests)						
Grade 11	2	3	1	6*	0	0
Total	40*	16	6	54*	7	1

*Indicates that the number of increases is significant.

TABLE 1.C.2

DIRECTION AND SIZE OF DIFFERENCES BETWEEN MALES AND FEMALES
IN EACH GRADE BY SUBTEST, 1979 AND 1980

(Direction is indicated by M for male scoring higher,
F for female scoring higher. Size is indicated by the number
and this is reported in NCE points.)

IOWA TESTS OF BASIC SKILLS	GRADE 3		GRADE 5		GRADE 7		GRADE 9	
	1979*	1980	1979	1980	1979	1980	1979	1980
Composite	F3	F2	F1	F1	F3	F1	-	F1
Vocabulary	F1	F1	-	-	F2	-	M1	-
Reading	F3	F3	-	F1	F2	F1	F1	F1
Spelling	F5	F5	F6	F6	F8	F6	F7	F7
Capitalization	F5	F5	F4	F4	F7	F5	F5	F6
Punctuation	F6	F6	F6	F7	F7	F7	F5	F6
Language Usage	F5	F3	F5	F4	F7	F7	F6	F6
Map Reading	M1	M2	M3	M2	M3	M2	M5	M5
Graphs and Tables	F3	F1	M3	M3	-	-	M3	M3
Ref. Materials	F6	F4	F3	F4	F4	F3	F3	F2
Math Concepts	-	M1	M2	M2	M1	M2	M3	M2
Math Prob. Solv.	F1	F1	-	-	M1	M1	M2	M3
COGNITIVE ABILITIES TEST								
Verbal	F4	F3	F2	F3	F3	F2	F2	F3
Quantitative	F1	M1	M1	M1	F1	-	M1	M1
Nonverbal	F1	F1	F1	-	F2	F1	M1	-

TESTS OF ACADEMIC PROGRESS	GRADE 11	
	1979	1980
Composite	M1	M1
Social Studies	M4	M5
Composition	F7	F8
Science	M5	M6
Reading	-	-
Mathematics	M5	M4
Literature	F3	F2

*Indicates that the number of differences is significant in favor of females.

TABLE 1.C.3

DIRECTION AND SIZE OF DIFFERENCES BETWEEN MALES AND FEMALES
IN GRADE 3 BY SUBTEST WITHIN RACE, 1979 AND 1980

(Direction is indicated by M for male scoring higher,
F for female scoring higher. Size is indicated by the number
and this is reported in NCE points.)

IOWA TESTS OF BASIC SKILLS	White		Black		Asian		Hispanic		County	
	1979*	1980*	1979*	1980	1979*	1980*	1979*	1980	1979*	1980
Composite	F3	F3	F3	F2	F2	F2	F6	M2	F3	F2
Vocabulary	F1	F1	M1	-	F2	F1	F4	-	F1	F1
Reading	F3	F3	F3	F2	F3	F3	F5	M1	F3	F3
Spelling	F5	F6	F6	F6	F2	F5	F5	-	F5	F5
Capitalization	F5	F5	F6	F4	F2	F4	F6	F3	F5	F5
Punctuation	F6	F5	F6	F6	F3	F6	F8	F1	F6	F6
Language Usage	F5	F5	F5	F3	F4	F4	F7	F2	F5	F3
Map Reading	M2	M2	-	M2	M2	M2	F3	M5	M1	M2
Graphs and Tables	F2	F1	F4	F3	F2	F1	F6	M4	F3	F1
Ref. Materials	F6	F5	F7	F4	F4	F3	F7	M2	F6	F4
Math Concepts	M1	-	F1	M1	F1	F1	F3	M5	-	M1
Math Prob. Solv.	F2	F2	F2	-	-	F2	F5	M5	F1	F1
COGNITIVE ABILITIES TEST										
Verbal	F4	F5	F4	F2	F4	F5	F8	M3	F4	F3
Quantitative	-	-	F3	-	M1	-	F5	M5	F1	M1
Nonverbal	F2	F2	F3	F3	-	F2	F9	M5	F1	F1

*Indicates that the trend of higher subtests scores is significant in favor of females.

TABLE 1.C.4

DIRECTION AND SIZE OF DIFFERENCES BETWEEN MALES AND FEMALES
IN GRADE 5 BY SUBTEST WITHIN RACE, 1979 AND 1980

(Direction is indicated by M for male scoring higher,
F for female scoring higher. Size is indicated by the number
and this is reported in NCE points.)

IOWA TESTS OF BASIC SKILLS	White		Black		Asian		Hispanic		County	
	1979	1980	1979*	1980*	1979	1980*	1979	1980*	1979	1980
Composite	F1	F1	F4	F3	M2	F4	F3	F3	F1	F1
Vocabulary	M1	M1	F2	-	M4	F3	F2	F1	M1	-
Reading	F1	F1	F3	F4	M1	F6	F2	F4	-	F1
Spelling	F6	F6	F9	F7	F3	F6	F4	F8	F6	F6
Capitalization	F5	F4	F4	F5	F1	F5	F4	F4	F4	F4
Punctuation	F6	F6	F8	F8	F5	F7	F6	F5	F6	F6
Language Usage	F5	F4	F6	F4	F3	F8	F8	F4	F5	F5
Map Reading	M3	M3	-	-	M5	M2	M1	F3	M3	M3
Graphs and Tables	M3	M4	M1	M1	M5	F1	M1	M2	M3	M3
Ref. Materials	F4	F4	F5	F4	F2	F4	F3	F5	F3	F3
Math Concepts	F2	M3	-	F1	M3	F2	M1	F1	M2	M2
Math Prob. Solv.	-	-	F2	-	M5	F1	-	M2	-	-
COGNITIVE ABILITIES TEST										
Verbal	F2	F2	F5	F4	M7	F5	F4	F3	F2	F2
Quantitative	M1	M1	M1	-	M4	-	M1	F1	M1	M1
Nonverbal	F1	F1	F1	F2	M3	F2	F2	F4	F1	F1

*Indicates that the trend of higher subtests scores is significant in favor of females.

TABLE 1.G.5

DIRECTION AND SIZE OF DIFFERENCES BETWEEN MALES AND FEMALES
IN GRADE 7 BY SUBTEST WITHIN RACE, 1979 AND 1980

(Direction is indicated by M for male scoring higher,
F for female scoring higher. Size is indicated by the number
and this is reported in NCE points.)

IOWA TEST OF BASIC SKILLS	White		Black		Asian		Hispanic		County	
	1979	1980	1979*	1980*	1979	1980	1979	1980	1979	1980
Composite	F2	F1	F3	F2	-	M1	-	M1	F3	F1
Vocabulary	-	M1	F1	-	M2	-	M2	M3	-	-
Reading	F2	F1	F2	F2	M1	F1	M1	-	F2	F1
Spelling	F7	F6	F9	F7	F6	F5	F2	F4	F8	F5
Capitalization	F7	F6	F9	F7	F3	F2	F5	F4	F7	F5
Punctuation	F8	F7	F5	F6	F8	F4	-	F5	F7	F7
Language Usage	F7	F6	F7	F4	F7	F6	F4	F4	F7	F7
Map Reading	M3	M2	M2	M2	M6	M5	M8	M5	M3	M2
Graphs and Tables	-	-	-	-	M2	M3	M1	M3	-	-
Ref. Materials	F5	F4	F6	F5	F1	-	F2	F	F4	F3
Math Concepts	M1	M2	F1	-	M4	M4	M2	M2	M1	M2
Math Prob. Solv.	M1	M2	F1	F2	M3	M2	M2	M2	M1	M1
COGNITIVE ABILITIES TEST										
Verbal	F3	F3	F4	F1	-	M1	M2	M1	F3	F2
Quantitative	F1	-	F1	F2	M3	M3	M1	M1	F1	-
Nonverbal	F1	F2	F3	-	M2	F1	F2	F2	F2	F1

*Indicates that the trend of higher subtests scores is significant in favor of females.

TABLE 1.C.6

DIRECTION AND SIZE OF DIFFERENCES BETWEEN MALES AND FEMALES
IN GRADE 9 BY SUBTEST WITHIN RACE, 1979 AND 1980

(Direction is indicated by M for male scoring higher,
F for female scoring higher. Size is indicated by the number
and this is reported in NCE points.)

IOWA TESTS OF BASIC SKILLS	White		Black		Asian		Hispanic		County	
	1979	1980	1979	1980	1979*	1980	1979	1980	1979	1980
Composite	F1	-	F2	F3	M7	-	M3	-	-	F1
Vocabulary	-	M1	-	-	M7	F1	M1	M1	M1	-
Reading	F1	F1	F1	F2	M6	-	M1	M3	F1	F1
Spelling	F7	F7	F8	F9	F2	F5	F3	F5	F7	F7
Capitalization	F6	F6	F5	F7	M1	F4	F3	F4	F5	F6
Punctuation	F6	F6	F5	F5	M2	F5	F2	F5	F5	F6
Language Usage	F5	F6	F5	F6	-	F6	F4	F4	F6	F6
Map Reading	M4	M6	M5	M3	M12	M4	M9	M6	M5	M5
Graphs and Tables	M3	M3	-	-	M9	M4	M3	M3	M3	M3
Ref. Materials	F3	F2	F4	F5	M4	F1	F1	-	F3	F2
Math Concepts	M2	M3	M1	-	M7	M4	M3	M2	M3	M2
Math Prob. Solv.	M2	M3	-	M1	M7	M6	M5	M1	M2	M3
COGNITIVE ABILITIES TEST										
Verbal	F3	F3	F3	F4	M7	F4	-	F1	F2	F3
Quantitative	-	M1	-	F1	M9	M2	M5	-	M1	M1
Nonverbal	-	-	M1	-	M7	-	M4	M1	M1	-

*Indicates that the trend of higher subtest scores is significant in favor of males.

TABLE 1.C.7

DIRECTION AND SIZE OF DIFFERENCES BETWEEN MALES AND FEMALES
IN GRADE 11 BY SUBTEST WITHIN RACE, 1979 AND 1980

(Direction is indicated by M for male scoring higher,
F for female scoring higher. Size is indicated by the number
and this is reported in NCE points.)

TESTS OF ACADEMIC PROGRESS	White		Black		Asian		Hispanic		County	
	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
Composite	M1	M1	F4	F1	M8	M2	F5	-	M1	M1
Social Studies	M4	M5	F2	M1	M9	M6	M1	M4	M4	M5
English	F8	F8	F9	F8	F1	F4	F9	F5	F7	F8
Science	M5	M5	F3	M3	M12	M6	M1	M4	M5	M6
Reading	-	-	F3	F1	M5	M2	F1	-	-	-
Mathematics	M4	M4	M1	-	M11	M1	-	M2	M5	M4
Literature	F3	F2	F5	F5	M1	-	F6	F3	F3	F2

Figure 1.C.1
Trends from 1978 to 1980
for Males and Females
Grade 3

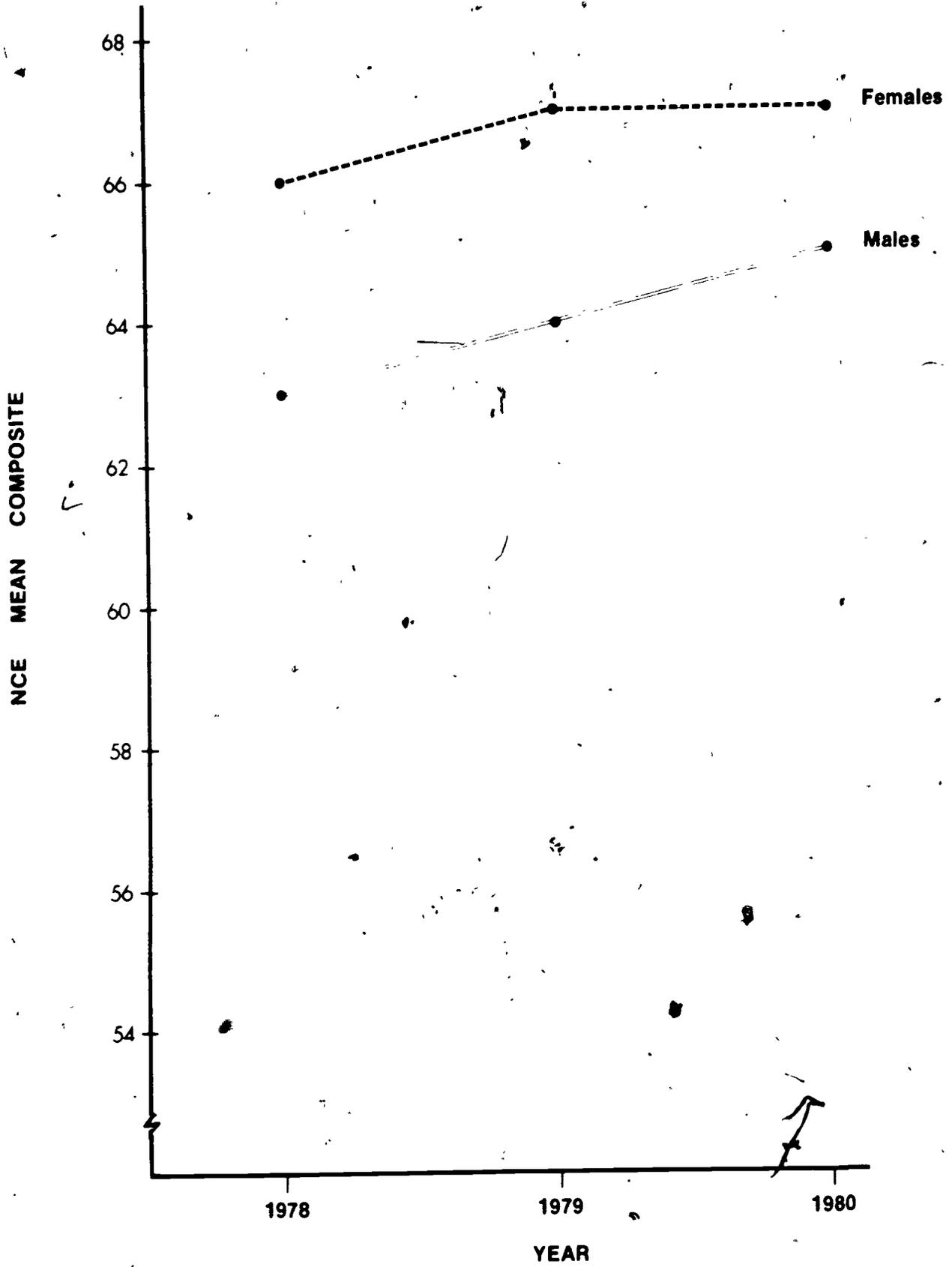


Figure 1.C.2
Trends from 1978 to 1980
for Males and Females
Grade 5

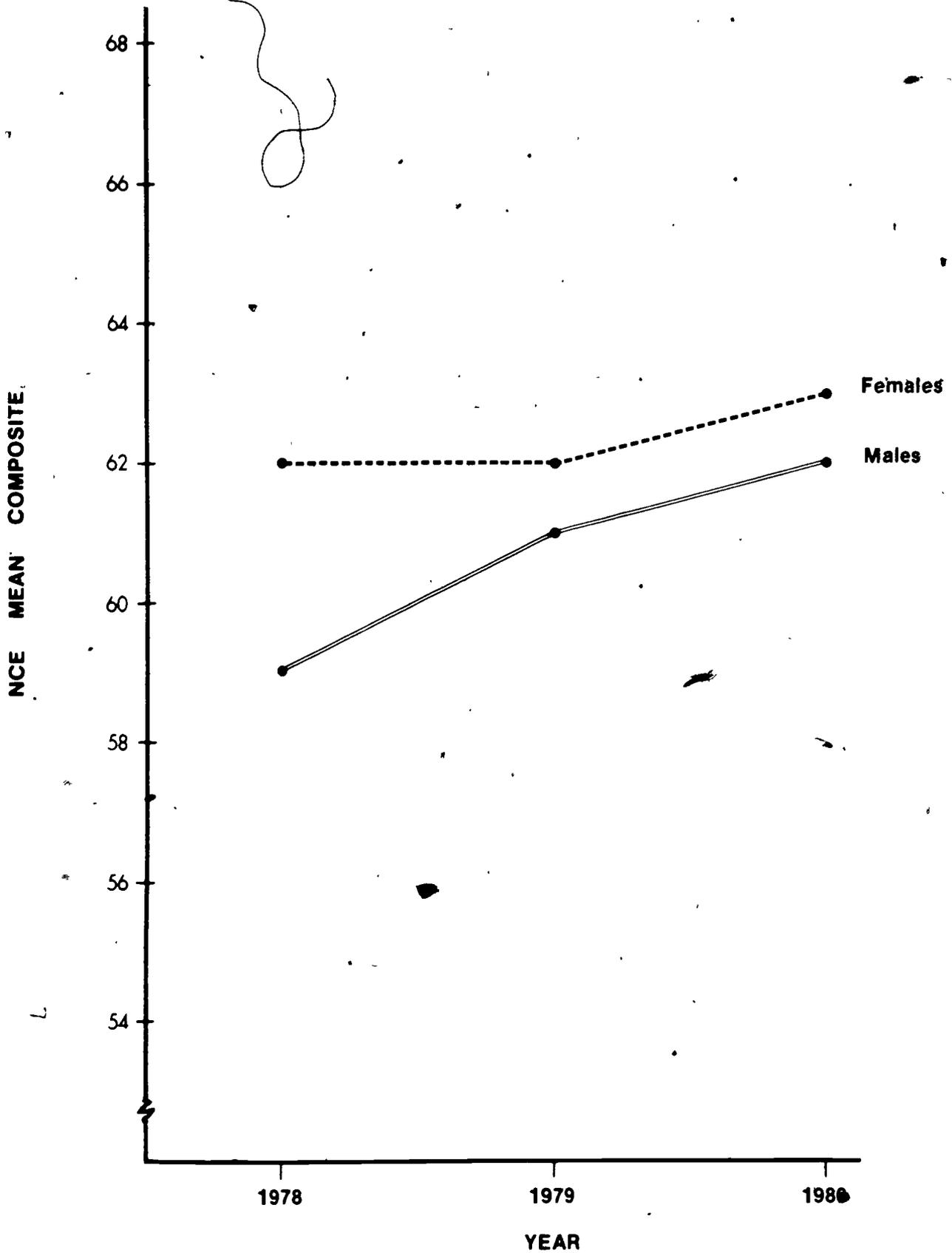


Figure 1.C.3
Trends from 1978 to 1980
for Males and Females
Grade 7

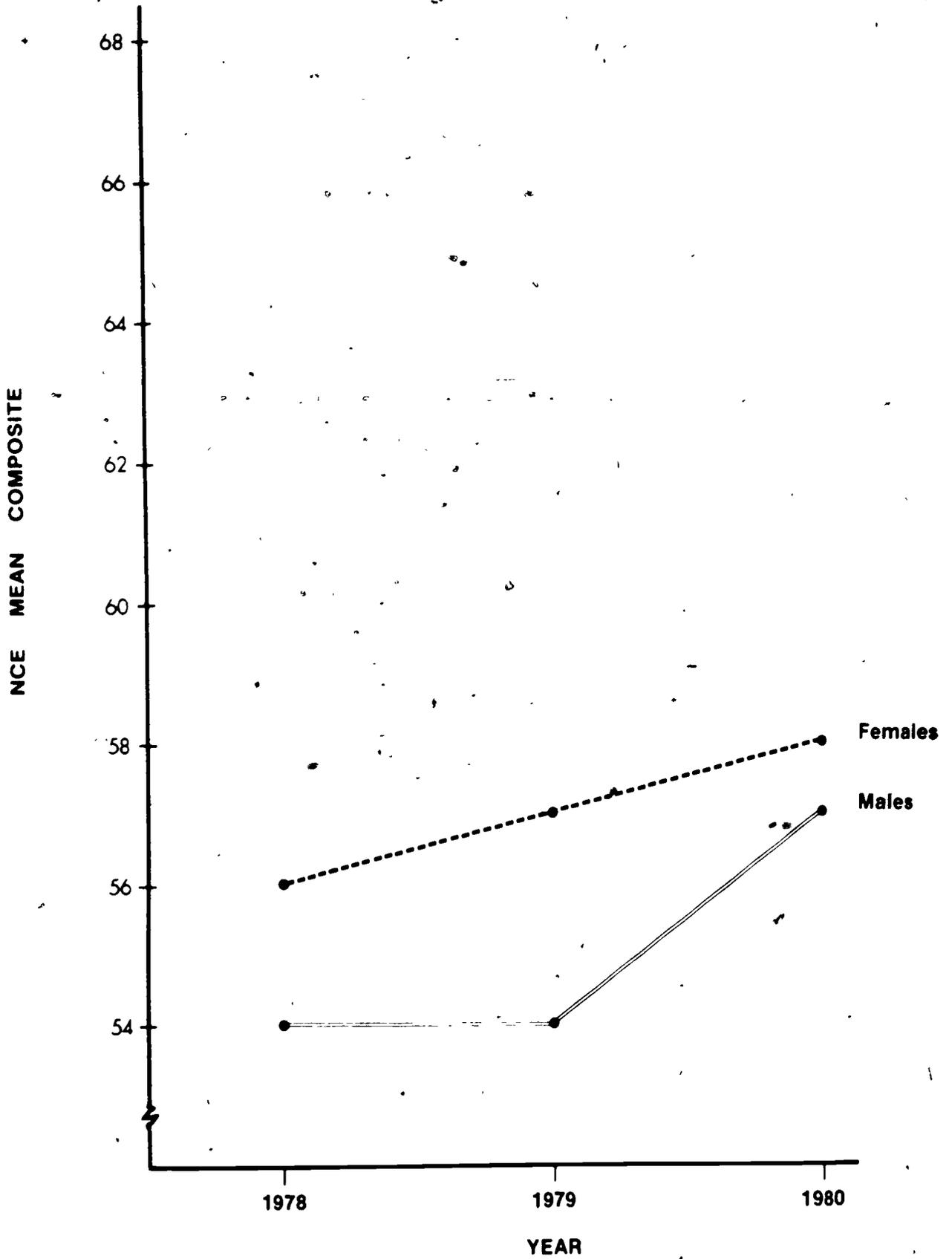


Figure 1.C.4
Trends from 1978 to 1980
for Males and Females
Grade 9

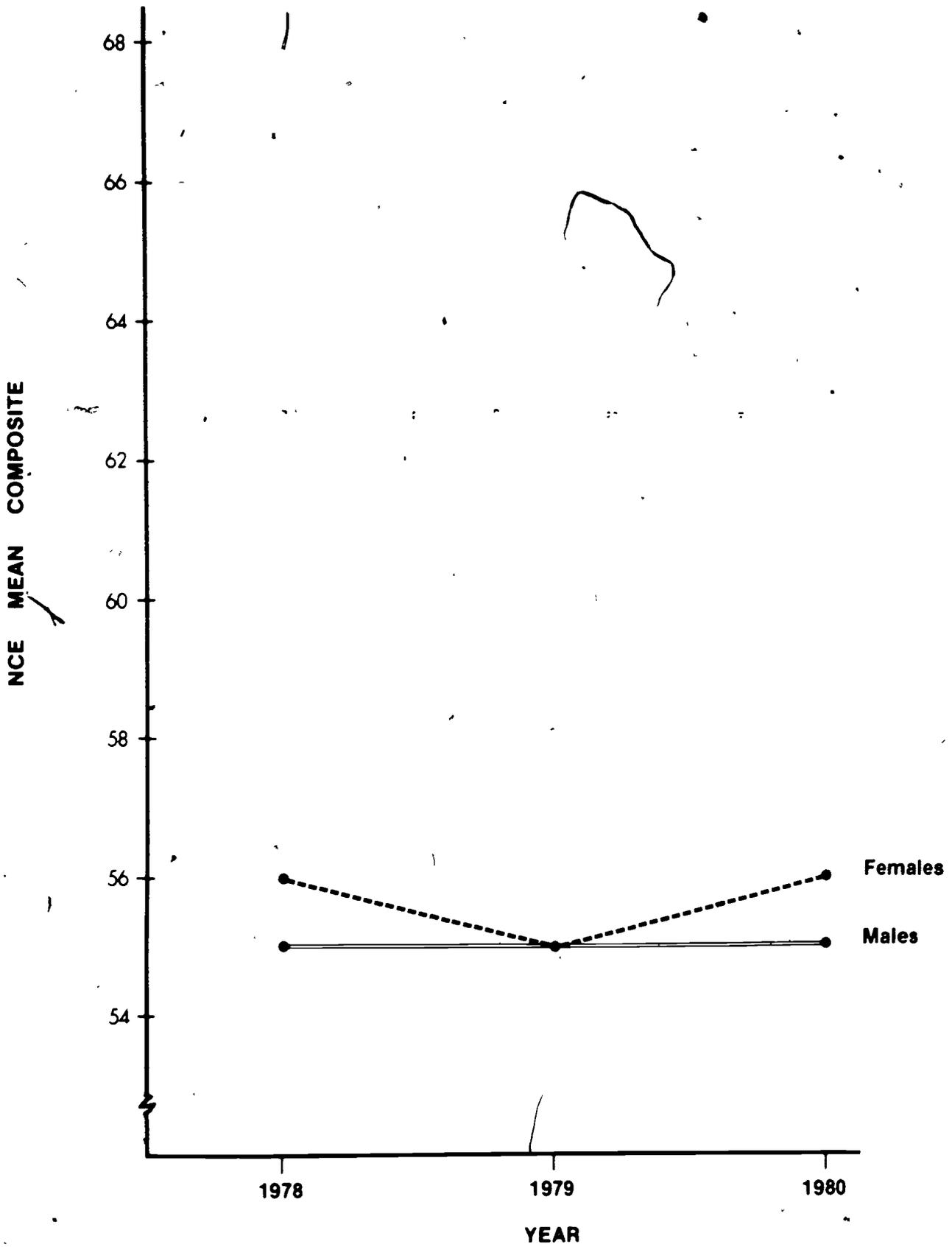
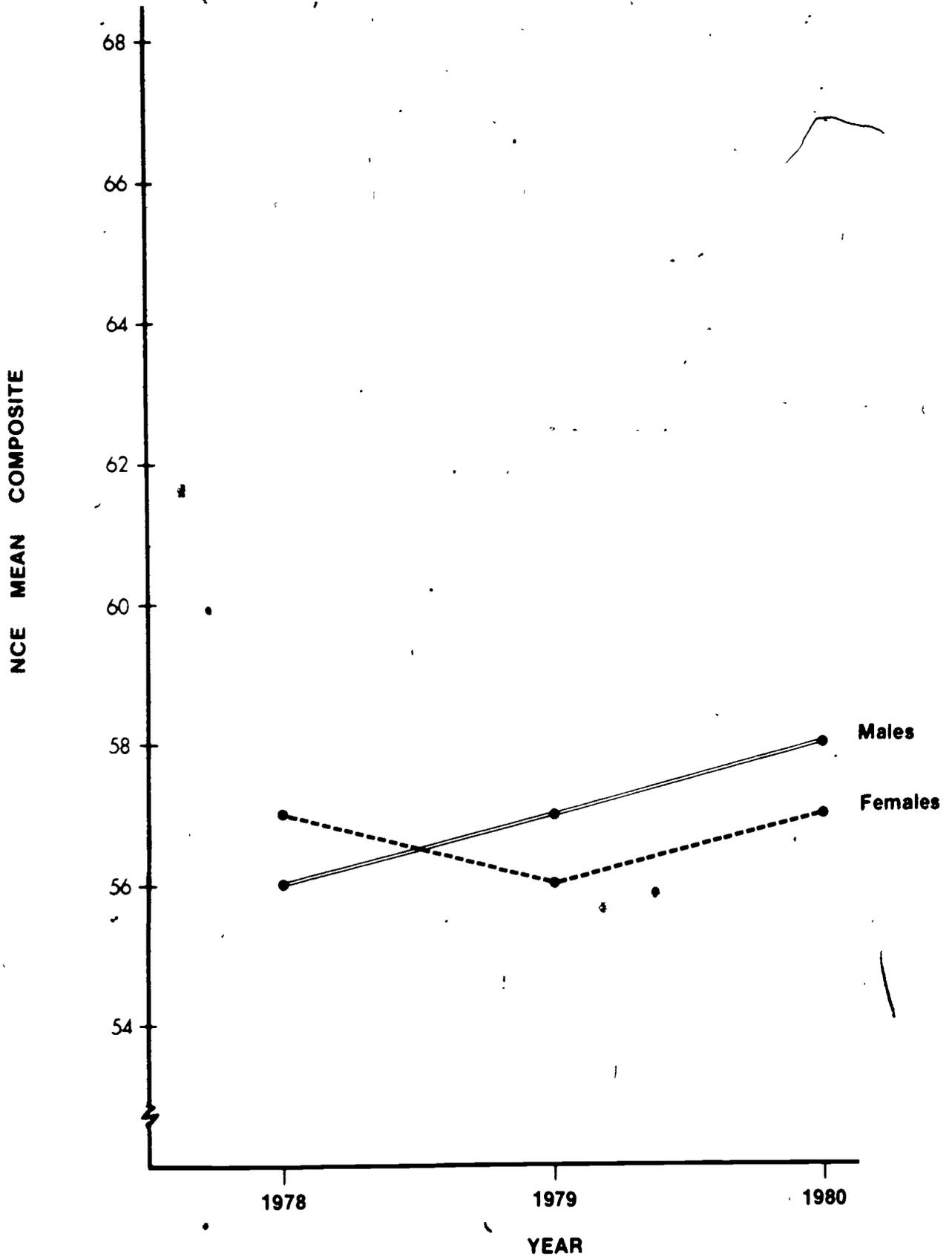


Figure 1.C.5
Trends from 1978 to 1980
Males and Females
Grade 11



1.D. LONGITUDINAL ANALYSIS OF RESULTS FOR
STUDENTS TESTED IN 1976, 1978, AND/OR 1980

Introduction

In recent years the average test score of MCPS students has declined relative to the national norm¹ from Grade 3 to Grade 7. The data presented in Section 1.A show that this trend occurred again in 1980. This decline has caused much concern and discussion. Several explanations for this trend can be hypothesized. These include possible sampling error in the norms for each grade, differential degree of match between the MCPS curriculum and the content of the ITBS in different grades, different testing dates for elementary and secondary grades, or simply declining achievement. The hypothesis dealing with different testing dates was investigated in the 1978-79 Annual Test Report. The different dates were found to account for part of the score decline indicated above. Comprehensive research studies would be needed to investigate fully the other hypotheses. This cannot be done with the available data.

Still another hypothesis that can be presented as a reason for the score decline is change in the population from grade to grade. The analyses presented in this section attempt to deal with that hypothesis. This is done by looking at the effect on the score decline of groups of students who have attended MCPS schools for varying amounts of time. This should show if the decline can be attributed to groups transferring into and out of MCPS; to groups remaining in MCPS for several years; to groups transferring within MCPS; or to some combination of these groups.

The specific questions to be addressed in this section are:

1. Did students who remained in MCPS score higher or lower than students who transferred into or out of MCPS?
2. Was the countywide test score decline from Grade 3 to Grade 7 caused by the score trend for students who remained in MCPS or by differences in performance between those students who transferred into or out of MCPS?
3. Was the score difference between students transferring into and out of MCPS large enough to indicate a meaningful change in the level of achievement in MCPS?
4. How did the test scores of students who remained in the same school compare to the scores of students who transferred from one MCPS school to another?

Data

Test results are presented and compared for two categories of students: longitudinal (L) and nonlongitudinal (NL). Students in the first category are

¹The national norm was established in 1970.

those tested in MCPS in two or three consecutive test administrations in 1976, 1978, and 1980. Students in the nonlongitudinal category were tested in MCPS in only one of these years. The groups within each category are listed below in Table 1.D.1. The table shows the grade in which the group was tested each year.

TABLE 1.D.1
GRADES TESTED, BY YEAR, FOR LONGITUDINAL (L)
AND NONLONGITUDINAL (NL) GROUPS

Group	Year Tested		
	1976	1978	1980
L1		3	5
L2	3	5	7
L3	3	5	
L4		5	7
L5	5	7	9
L6	5	7	
L7		7	9
NL1a		3	
NL1b			5
NL2	3		
NL3		5	
NL4			7
NL5	5		
NL6		7	
NL7			9

The mean Composite scores for each longitudinal and nonlongitudinal group are listed in Tables 1.D.2 to 1.D.4. These data are presented for the county and for each major racial/ethnic group in MCPS. The first three questions are answered using these data.

The county results from Table 1.D.2 to 1.D.4 are presented in graphic form in Figures 1.D.1 to 1.D.3. This provides an easy way to compare the trends of the various groups.

Two of the longitudinal groups (those with fifth or ninth grade students in 1980) have been further broken down to compare the performance of students tested in the same school twice to the performance of students transferring between MCPS schools. The mean Composite scores for these two groups are reported in Table 1.D.5.

The detailed data relating to this section are presented in Tables A20 to A39 in the Appendix. The longitudinal groups are organized by their 1980 grade. All of the nonlongitudinal groups are reported in one table. The results are reported for the total county and for each major racial/ethnic group in MCPS. Mean normal curve equivalent (NCE) scores are reported with their percentile ranks.

Analysis

The answers to all four questions were obtained by looking at the differences in mean Composite scores between the relevant longitudinal and nonlongitudinal groups. In these comparisons, differences of more than seven NCE points were considered significant.²

Results

Highlights

The summary of the results of the longitudinal analysis for students tested in 1976, 1978, and/or 1980 follows.

- o Students who remained in MCPS tended to score higher on the Iowa Tests of Basic Skills than students who transferred into or out of the MCPS. However, in only 4 of 24 comparisons was the difference significant. In one case the group transferring out of MCPS scored one point higher than the group remaining.
- o The overall county test score declines from Grade 3 to 5 and from Grade 5 to 7 were generally reflected by both longitudinal (L) and nonlongitudinal (NL) groups between 1976 and 1978. L groups declined two to three NCE points, while the score differences between NL groups were six to ten points. However, from 1978 to 1980 only the longitudinal groups in these grades had a score decline. Again the L groups had declines of two to three points. This time the students transferring into MCPS scored the same as those who had transferred out after one testing. Thus, between the last two years the students entering MCPS actually reduced the score decline slightly.
- o For Asian and Hispanic students, there were generally significant differences in mean scores between students entering MCPS and those leaving. In most cases the entering groups had lower scores than the exiting groups. The longitudinal groups for Asian and Hispanic students showed little change during this time.
- o Students who remained in the same school across two test periods scored higher than those who transferred between MCPS schools. The difference was significant only at the elementary level.
- o Students who remained in the same school and students who transferred between MCPS schools showed similar declines in test scores.

²This represents a change of more than one-third of a standard deviation, a standard often used in educational evaluation to indicate meaningful change.

Test Performance and Time in MCPS (Question 1)

Students tested in MCPS at least three times (i.e., Grades 3, 5, and 7 or 5, 7, and 9) had higher mean Composite scores than students tested in the same grades who were in MCPS for only one or two testings. In 4 of 14 comparisons the scores for the group remaining in MCPS across a four-year period were significantly higher than the scores for the other groups. Students in MCPS for two test administrations generally had mean Composite scores higher than the scores for students tested only once in MCPS. None of these differences were significant. The only exception to this trend was in Grade 5 in 1976 where the group tested once scored one NCE point higher than the group that stayed in MCPS to be tested twice.

The fact that time in MCPS and the size of test scores were related is not a definite indication of school system quality. Such a cause and effect relationship is difficult to establish. There are several possible reasons for this relationship. Certainly it is possible that the MCPS instructional program is of higher quality than those programs which students are exposed to in other school districts. Additionally, when students are in the same school or school system for several years, the problems they have will most likely be identified and remedied, thus, improving achievement. If the student changes schools often such an identification is less likely. However, the score patterns could have little relationship to what takes place in the schools. They could be the result of certain characteristics of groups of students who tend to stay in the same area for several years. These characteristics could be effected by such nonschool-related factors as the employment history of parents, effects of moves upon children, etc.

Effect of Longitudinal and Nonlongitudinal Group Score Trends on County Trends (Question 2)

From 1976 to 1978 all groups being studied in this section -- three-year longitudinal, two-year longitudinal, and nonlongitudinal -- contributed to the decline in test scores between Grades 3 and 7. The one trend in that period that was significant was a ten-NCE-point difference between the NL groups in Grades 5 (1976) and 7 (1978). This was considerably larger than the two- to three-point declines for both longitudinal groups between these grades.

In contrast, the score declines from 1978 to 1980 were influenced only by the groups that were in MCPS longer. The longitudinal groups in Grades 5 and 7 (1980) showed a two- to three-point decline from two years earlier. The nonlongitudinal groups in each grade scored the same. Thus, the small countywide score declines from 1978 to 1980 between Grades 3 and 5 and Grades 5 and 7 were caused completely by the longitudinal groups.

Score Trends Between Groups Transferring Into and Out of MCPS (Question 3)

The only indication of a possible countywide population change in achievement level was found from Grade 5 to 7 between 1976 and 1978. Here a decline of ten NCE points was noted. While this decline between nonlongitudinal groups was significant in magnitude, it did not signal a major impact on the level of achievement in MCPS because the 370 students in the Grade 7 group were only 6 percent of the total number tested. Thus, their entry into that class did not create much of a change in the average test performance of the total class.

The scores for the nonlongitudinal groups of Asian and Hispanic students showed considerable differences from one test administration to the next. The largest difference was an 18-NCE-point decline for Asian students from Grade 5 (1976) to Grade 7 (1978). Several other declines for both groups were beyond the seven-point standard of significance. One possible reason for the large score fluctuations could have been the small size of these groups. However, the significant score declines could also have resulted from a lack of fluency with English for the entering students. Many of the students in the entering groups are new to the United States. Their lack of familiarity with English could make high performance on this test difficult.³

Effect of Students Transferring Between MCPS Schools (Question 4)

Students who remained in the same school for two test administrations (i.e., at least two years) scored higher than those who transferred between MCPS schools. The difference between these groups was significant only at the elementary level (eight points in both Grades 3 and 5):

When the scores of students transferring between MCPS elementary schools were compared to those of students entering or leaving MCPS, little difference was found. However, at the secondary level a sizeable difference was found. In Grade 7 in 1978 the group transferring within MCPS scored nine points higher. In 1980, this difference was six points.

Finally, an analysis of test scores of students remaining in the same school and those transferring within MCPS indicated that both groups had a two-point decline in scores between Grades 3 and 5. At the secondary level the comparison between these groups led to a similar conclusion as scores between Grades 7 and 9 remained the same for students tested in the same school and increased by one point for students tested in different MCPS schools.

TABLE 1.D.2

MEAN COMPOSITE SCORES FOR LONGITUDINAL AND NONLONGITUDINAL GROUPS, 1980 GRADE 5

Group	1978 (Grade 3)		1980 (Grade 5)	
	Longitudinal	Nonlongitudinal	Longitudinal	Nonlongitudinal
County	66	58	63	58
Asian	70	67	70	59
Black	50	45	46	40
Hispanic	58	55	56	44
White	68	60	65	63

³It should be noted that students identified as not being able to take a standardized test written in English are excused from taking the tests. This means that the mean scores for groups of Asian and Hispanic students probably indicated a higher level of achievement than would be the case if all students in these groups were tested. This was true for the few cases where the NL mean scores went up for these groups as well as the majority of cases where the mean scores went down.

TABLE 1.D.3

MEAN COMPOSITE SCORES FOR LONGITUDINAL AND NONLONGITUDINAL GROUPS,
1980 GRADE 7

Group	Grade Tested	1976 (Grade 3)		1978 (Grade 5)		1980 (Grade 7)	
		Longitudinal	Nonlongitudinal	Longitudinal	Nonlongitudinal	Longitudinal	Nonlongitudinal
County	3-5-7	64	58	52	52	59	52
	3-5	60	58	58	52	57	52
	5-7			59	52		
Asian	3-5-7	68	65	69	53	68	57
	3-5	72	65	74	53		
	5-7			58	53	60	57
Black	3-5-7	47	37	45	32	43	38
	3-5	43	37	40	32	40	38
	5-7			41	32		
Hispanic	3-5-7	55	48	55	40	54	46
	3-5	55	48	52	40	47	46
	5-7			45	40		
White	3-5-7	65	61	64	57	61	56
	3-5	61	61	60	57	60	56
	5-7			63	57		

TABLE 1.D.4

MEAN COMPOSITE SCORES FOR LONGITUDINAL AND NONLONGITUDINAL GROUPS,
1980 GRADE 9

Group	Grade Tested	1976 (Grade 5)		1978 (Grade 7)		1980 (Grade 9)	
		Longitudinal	Nonlongitudinal	Longitudinal	Nonlongitudinal	Longitudinal	Nonlongitudinal
County	5-7-9	60	56	58	46	58	50
	5-7	55	56	52	46		
	7-9			53	46	55	50
Asian	5-7-9	67	65	66	47	67	47
	5-7	62	65	62	47		
	7-9			57	47	59	47
Black	5-7-9	40	38	39	27	40	32
	5-7	37	38	35	27		
	7-9				27	39	32
Hispanic	5-7-9	54	49	53	54	55	45
	5-7	50	49	51	54		
	7-9			46	54	48	45
White	5-7-9	62	57	59	49	59	54
	5-7	57	57	54	49		
	7-9			57	49	58	54

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TABE 1.D.5

TEST RESULTS FOR LONGITUDINAL GROUP STUDENTS TESTED IN THE SAME AND DIFFERENT MCPS SCHOOLS, 1978 AND 1980

(Mean scores are for the Composite and are computed using NCE scores.)

Grade	Year	Students Tested in Same School Both Years		Students Tested in Different MCPS School Each Year		All Students Tested in MCPS Both Years	
		Number	Mean	Number	Mean	Number	Mean
3	1978	4918	67	1151	59	6069	66
5	1980	4918	65	1151	57	6069	63
7	1978	3938	58	2186	55	6124	57
9	1980	3938	58	2186	56	6124	57

Figure 1.D.1
Trends for Longitudinal and
Nonlongitudinal Groups for
the 1980 Grade 5 Class

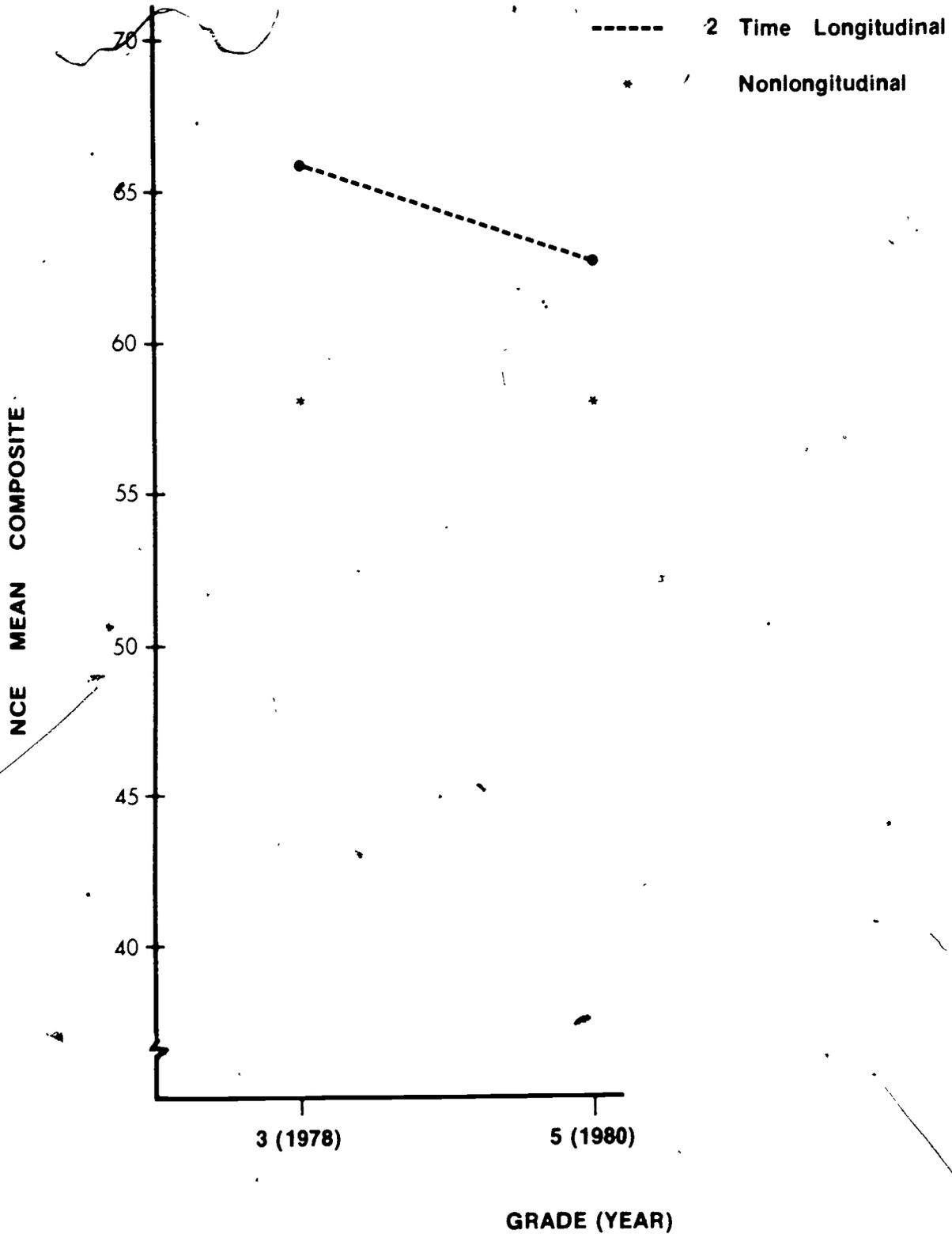


Figure 1.D.2
Trends for Longitudinal and
Nonlongitudinal Groups for
the 1980 Grade 7 Class

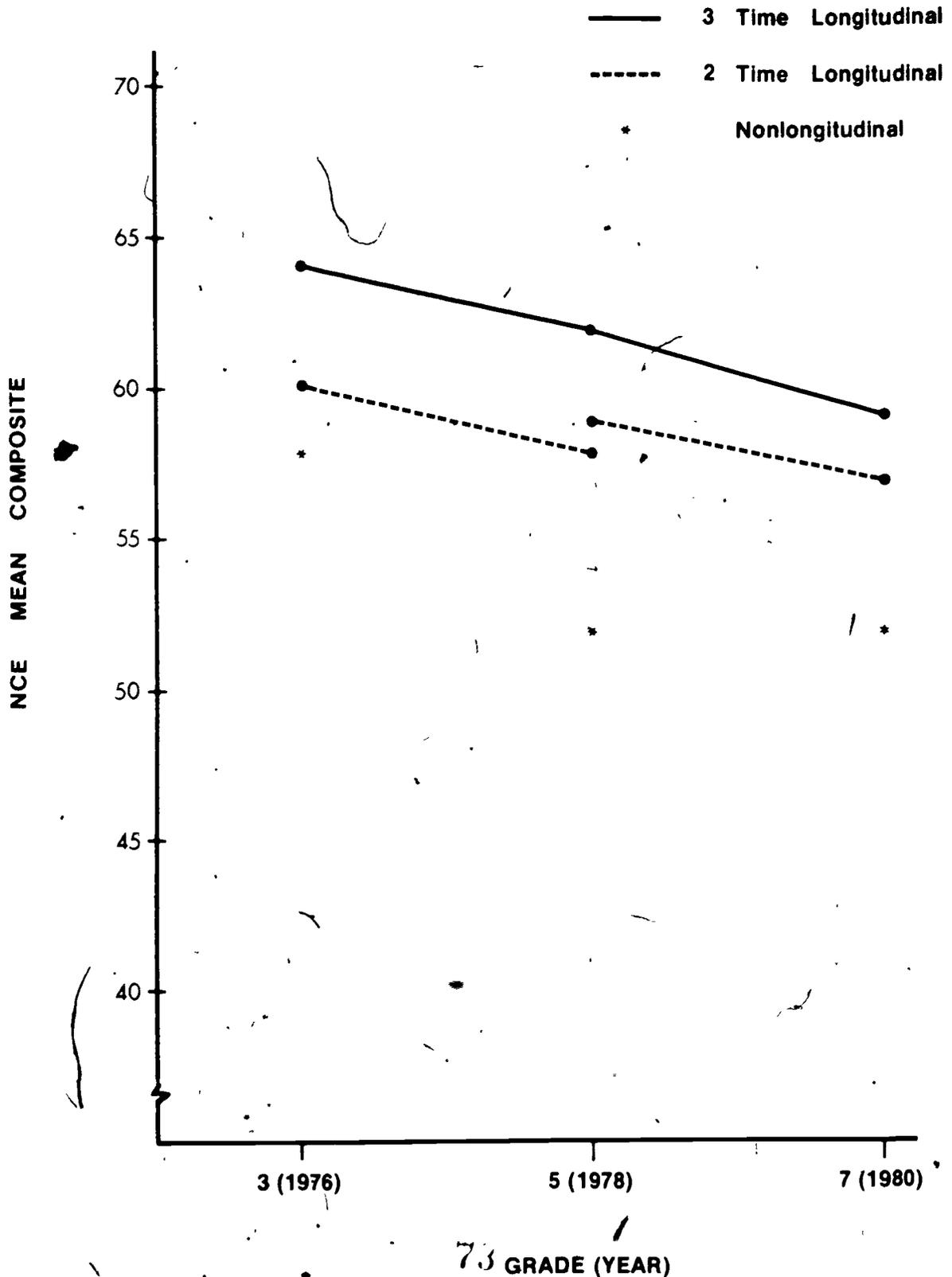
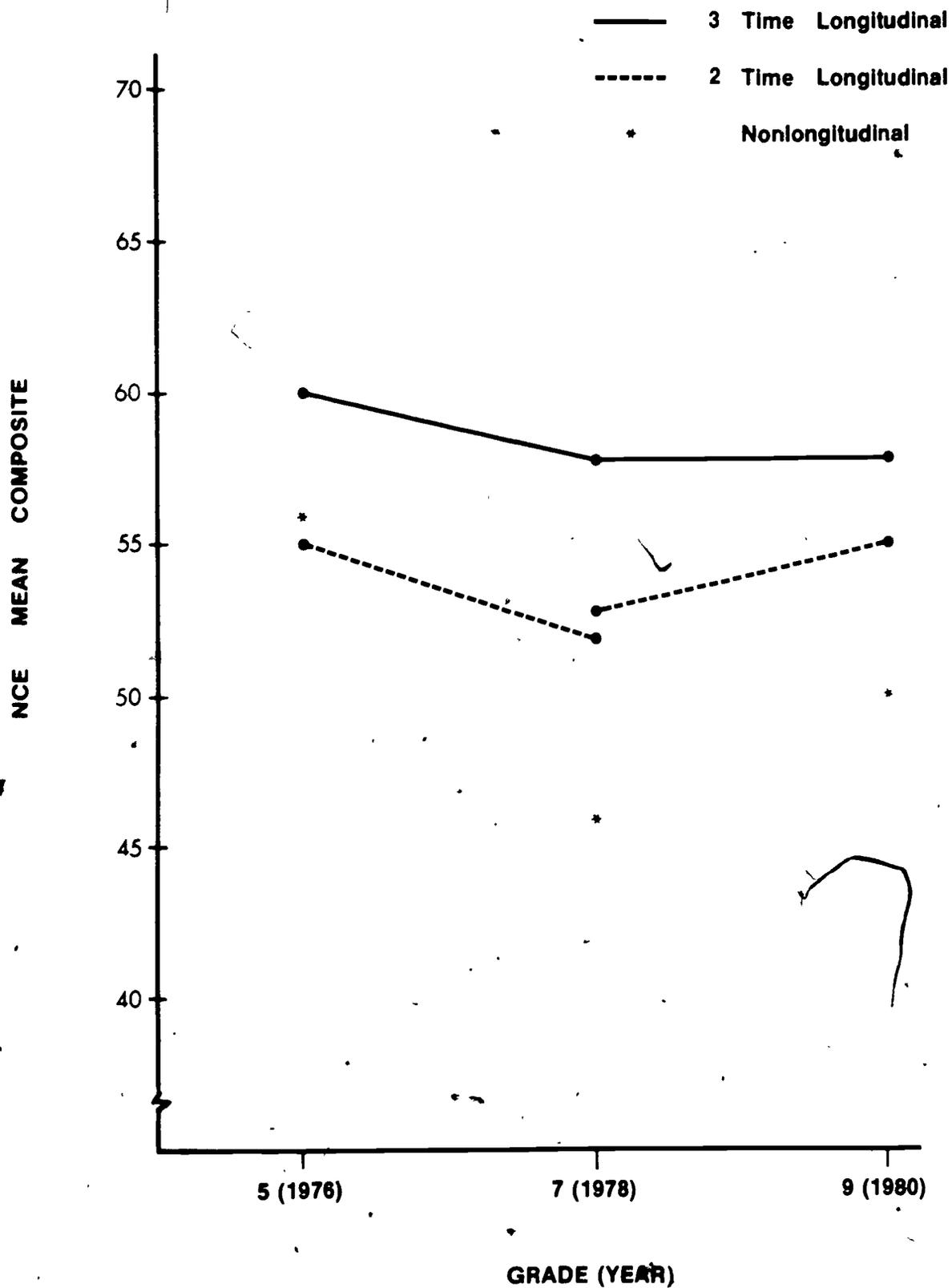


Figure 1.D.3
Trends for Longitudinal and
Nonlongitudinal Groups for
the 1980 Grade 9 Class



1.E. REPORT ON STUDENTS' ACHIEVING COMPETENCY ON THE
MARYLAND FUNCTIONAL READING TEST, COUNTYWIDE AND
BY SEX AND RACIAL/ETHNIC CATEGORY

Introduction

The Maryland Functional Reading Test (MFRT) is part of the Maryland State minimum competency testing program. The results provide a measure of how well students have attained the minimal literacy skills determined by the Maryland State Department of Education (MSDE) necessary for a high school diploma. Starting with the graduating class of 1982, the MFRT will be a high school graduation requirement. To pass this test a student must answer correctly at least 80 percent of the questions. The analyses of test performance presented here address the following questions:

1. What were the countywide score trends?
2. Were there performance differences by racial/ethnic category?
3. Were there differences in performance by sex?

Data

Table 1.E.1 reports the percentage of students achieving the 80 percent competency score for each category of the MFRT and for the total test. These data are reported for Grade 7 and are broken out by racial/ethnic groups and by sex. Results from the Grade 9 administration of the MFRT are not reported because the test that was mandated by MSDE was later declared invalid by MSDE.

Analysis

No formal statistical analyses have been done. The data are descriptive.

Results

Highlights

An analysis of the data from the October, 1979, administration of the Maryland Functional Reading Test in Grade 7 has produced the following results:

- o Countywide, 90 percent of the Grade 7 students tested passed the MFRT. This was the same as the previous year.
- o A breakdown of the data by racial/ethnic groups shows that the percentage passing increased in each minority group. Hispanic students had a passing rate of 87 percent, a 6 percent increase from 1978. Asian and black students had passing rates of 94 and 74

percent, respectively. This was an increase of 3 percent in each case. Ninety-two percent of the white students tested passed, the same as in 1978.

- o Females again outperformed males 93 to 87 percent, the same as last year.
- o There was an increase for every group on the category "Understanding Forms" from 1978 to 1979. The increase for Asian and white students was 5 percent; the increase was 15 percent for both black and Hispanic students.

County Data (Question 1)

The percentage of MCPS students in Grade 7 who passed the total test remained the same as it was the previous year (90 percent). Student performance increased on Understanding Forms, remained the same on Gaining Information, and decreased on Locating Information and Following Directions.

Results by Racial/Ethnic Group (Question 2)

In 1979 Asian students scored higher than all other groups on the total test and every category. This was a reversal from the previous year when the white students had the highest scores. However, the difference between Asian and white students in percentage passing was only 2 percent on the total test and ranged from 1 to 4 percent on the objective categories.

In 1979 the percentage of white students passing the MFRT remained the same on the total test as in 1978. There was an increase of 5 percent on one category and a decrease of from 1 to 4 percent on three categories.

Black students increased their scores in the past year on the total test and in three of the four categories. White students scored higher than black students with 18 percent more white students passing the test. This was a decline from the 21 percent difference the year before.

Hispanic students increased or remained the same in 1979 on the total test and all categories. The differences between their scores and those of white students decreased from 1978 to 1979, even though the white students were still higher in every case. Five percent more white students passed the test than did Hispanics. This was a decline from the 11 percent difference the year before.

Results by Sex (Question 3)

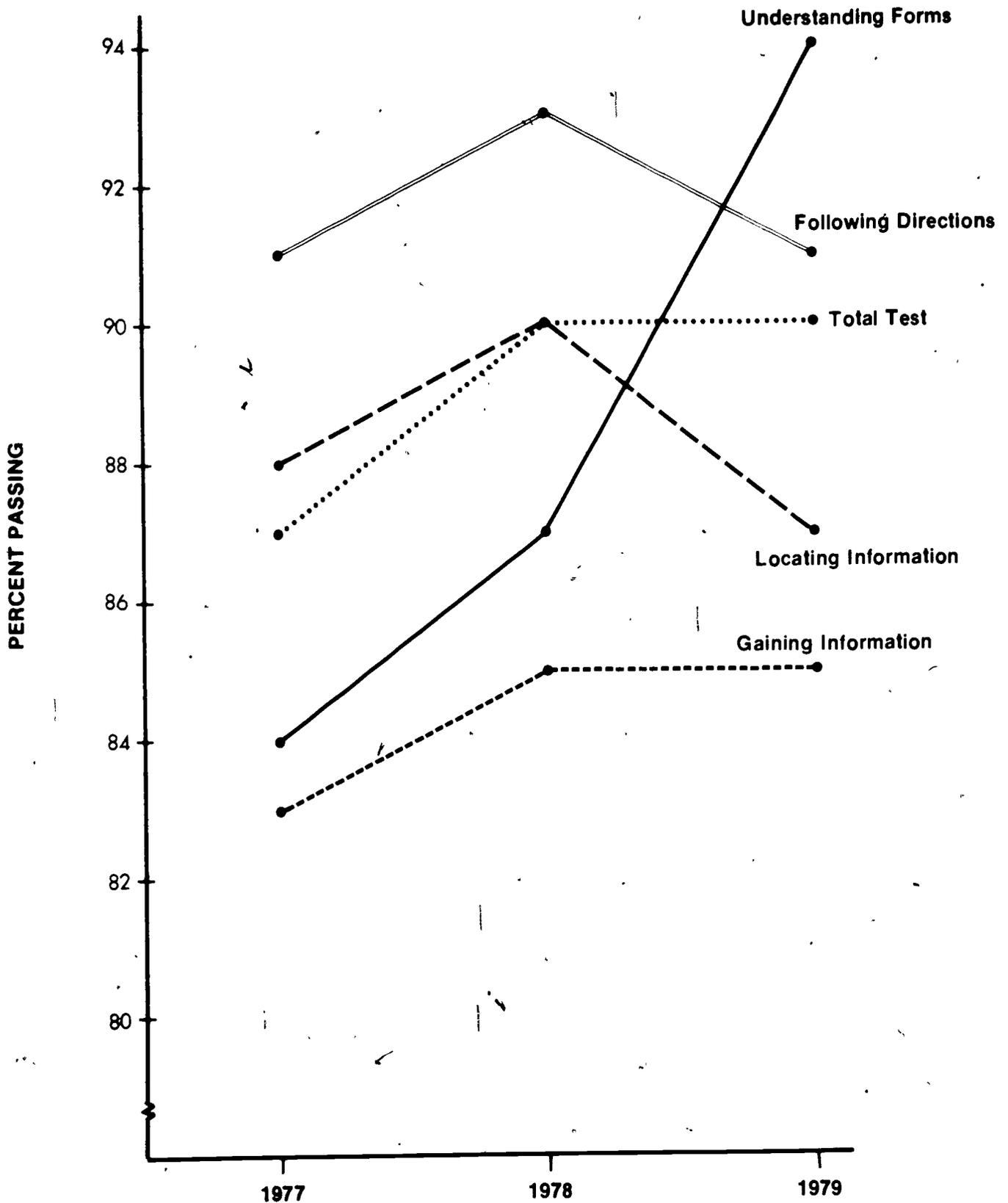
Females scored higher than males on the total test and on all objective categories in each of the three years reported.

TABLE 1.E.1

MCPS RESULTS FROM THE OCTOBER 1979 ADMINISTRATION
OF THE MARYLAND FUNCTIONAL READING TEST, GRADE 7

	Year	Asian	Black	Hispanic	White	Male	Female	MCPS
Locating Information								
(Percentage Passing)	1979	92	72	83	89	83	91	87
	1978	93	71	83	93	87	93	90
	1977	94	69	82	90	84	91	88
Understanding Forms								
(Percentage Passing)	1979	96	83	94	95	92	96	94
	1978	91	68	79	90	83	91	87
	1977	91	61	78	87	79	88	84
Gaining Information								
(Percentage Passing)	1979	91	67	79	87	82	88	85
	1978	86	63	72	88	82	89	85
	1977	91	57	68	84	78	84	83
Following Directions								
(Percentage Passing)	1979	94	77	89	93	88	94	91
	1978	92	80	88	95	91	96	83
	1977	95	74	88	92	89	94	91
Total Test								
(Percentage Passing)	1979	94	74	87	92	87	93	90
	1978	91	71	81	92	87	93	90
	1977	96	63	84	90	84	91	87
Number Tested								
	1979	343	824	237	6,007	3,758	3,669	7,427
	1978	282	796	213	6,521	3,928	3,909	7,834
	1977	247	816	215	7,009	4,122	4,208	8,340
Percentage of								
September 30								
Enrollment Tested	1979	90	98	92	99	98	99	99
	1978	92	98	91	97	96	98	97
	1977	82	99	83	98	97	98	97

Figure 1.E.1
Percent of MCPS Students Achieving Competency
on the Maryland Functional Reading Test
Objective Categories and Total Test
from 1977 to 1979



1.F. MCPS STUDENT PERFORMANCE ON COLLEGE BOARD TESTS

Introduction

The College Entrance Examination Board (CEEB) tests are examinations generally taken by college bound senior high school students. The Scholastic Aptitude Tests (SAT), the most widely taken tests in this group, were administered to approximately 68 percent of the 1980 MCPS graduating class. The CEEB Achievement Tests and the Advanced Placement Examinations (AP) were taken by less than 25 percent of this class, but these students were generally achieving at the top of the graduating class.

It is often claimed that the results from College Board tests provide a measure of how well county students are prepared for college. Scores on the SATs and achievement tests are data used by colleges to help make admissions decisions. AP results may be used to earn college credit or advanced standing in colleges. For these reasons performance on these tests may be a more accurate indicator of the skills of college bound students than the Tests of Academic Progress (TAP) administered in Grade 11. Because of the importance of the CEEB results to individual students, the students are likely to be better motivated than when taking the TAP.

Data

The SAT results for the last eight years are in Table 1.F.1. It shows the mean scores for males, females, and the total county. National results are also presented for those years. Also shown in this table is the percentage of the Grade 12 enrollment that was tested each year. The SAT score trends from 1979 to 1980 and the differences between MCPS and national means in 1980 are summarized in Table 1.F.2.

The MCPS and national mean scores for the last four years for each of the CEEB achievement tests are shown in Table 1.F.3. The trends from 1979 to 1980 and the differences between the MCPS and the national means are summarized in Table 1.F.4.

The results reported for the SAT and achievement tests are for graduating seniors the last time they took the test. That is, if they took the test in Grade 11 and not in Grade 12, their eleventh grade score would be included in these results. If they took the test in the twelfth grade, only the twelfth grade score would be included. Results have been reported in this way since 1973. Before then, Grade 11 and Grade 12 scores were reported separately. Therefore, pre-1973 results are not easily comparable to current data.

The AP results are presented in Table 1.F.5. as the percentage of students who attained each score on the five-point scale. Also provided are the numbers tested on each test and the cumulative percentages of students scoring at each point on the scale.

The AP results are for all students tested in 1980. Thus, they include students who are not 1980 seniors. This is being done to be consistent with previous years so data can be compared.

Analysis

The results from these tests are studied in two ways: score trends and differences between MCPS and national results. No formal statistical tests were performed.

Results

Highlights

- o The mean scores on the Scholastic Aptitude Test (SAT) for the class of 1980 were 503 on the Math test and 456 on the Verbal test. These scores represented a three-point increase on Math from 1979 and no change on Verbal.
- o The MCPS mean scores were well above the national average of 466 on Math and 424 on Verbal. The national trends were declines of one and three points on Math and Verbal, respectively.
- o Males outscored females on both SAT tests: 531 to 478 on Math and 460 to 452 on Verbal. These differences were similar to those on the national level.
- o MCPS mean scores increased on 8 of the 12 College Board achievement tests from 1979 to 1980. On 10 of the 12 achievement tests, the MCPS mean was higher than the national mean.
- o Scores on the Advanced Placement Examination declined slightly in 1980 as 45 percent of the students received a score of four or five. This was compared to 49 percent in 1979. This decline might have been related to the fact that 22 percent more students took these tests.

SAT Results

MCPS average score trends from 1979 to 1980 on the SATs were counter to the national trend. While the MCPS average went up three points on Math, the national trend was a one-point decline. The MCPS average remained the same on the Verbal test, while there was a three-point national decline.

The stable status of the Verbal mean resulted from a two-point increase by males and a one-point decrease by females. Both groups increased on Math; males five points and females two points. Females made up 53 percent of the group tested. Additionally, 71 percent of the females in the class were tested and only 65 percent of the males. The fact that a slightly larger percentage of females was tested could be related to their lower scores. This statement is based on the assumption that, since this is a college admission test, only higher achieving students choose to take the test. If more of one group takes the test, this could mean lower achieving members of that group are being tested.

The racial/ethnic breakdown of students taking the tests was the same as the breakdown for the graduating class. Fifteen percent of the students in the class were minority group members. Exact data as to the percentage of minority group members tested was not available because supplying such information was voluntary. However, 15 percent of those students who indicated their race were minority group members. This was an increase from 13 percent in 1979 and 12 percent in 1978. Scores by racial/ethnic group were not reported by the College Board.

Achievement Test Results

The average score for MCPS students increased on 8 of 12 of the CEEB achievement tests from 1979 to 1980. The largest MCPS increases were 24 points in Biology and 21 points in Physics. Nationally, these tests had 4- and 12-point increases.

The average score for MCPS decreased on four achievement tests. Spanish had the largest decrease, 37 points. This compared to an 18-point decline nationally.

The MCPS average was higher than the national average on all achievement tests except Spanish and German. The MCPS averages were seven and four points below the national average. The tests farthest above the national average were Chemistry and Literature, each 42 points above the national score.

It should be noted that the numbers of students taking each achievement test were a small portion of the graduating class. English was taken by the largest group, 1782. This was only 20 percent of the 1980 seniors in MCPS. The only other tests with more than 500 students were Mathematics I and Mathematics II. These small numbers made it difficult to evaluate score changes. This was partly because the groups being tested cannot be considered representative of the entire class. Thus, it was not evident whether score changes were a result of instructional strengths or weaknesses or simply a result of the changing composition of groups of students who took the tests.

Advanced Placement Results

Forty-five percent of the scores on Advanced Placement (AP) exams taken by MCPS students were four or five.¹ This was a decline of 4 percent from the previous year, indicating only a slight change. An increase of 22 percent (from 1170 to 1430) in the number of students tested could have been a factor in this decline. The AP program is designed for high achieving students. As with the achievement tests discussed above, it might be expected that the average achievement level would decline when the number of students in such a program increased.

The most popular courses, as in the past, were English (442 students) and Math Calculus (283). As with the achievement tests discussed above, the number of students taking these tests was so small that the groups cannot be considered representative of the graduating class and score changes were difficult to evaluate.

¹The AP scores range from one to five.

TABLE 1.F.1

SCHOLASTIC APTITUDE TEST RESULTS FOR MCPS AND NATIONAL, 1973-1980

(Mean Scores)

Year	MCPS						Number Tested	Percentage of Sept. 30 Enrollment	National					
	Verbal			Math					Verbal			Math		
	Male	Female	Total	Male	Female	Total			Male	Female	Total	Male	Female	Total
1973	484	479	481	539	490	514	5,486	62	446	443	445	502	460	481
1974	483	478	480	534	489	511	5,657	62	447	442	444	501	459	480
1975	469	462	465	526	476	499	5,988	65	437	431	434	495	449	472
1976	466	461	463	531	480	504	6,289	67	433	430	431	497	446	472
1977	466	461	464	534	479	506	5,986	63	431	427	429	497	445	470
1978	466	464	465	529	482	505	5,823	62	433	425	429	494	444	468
1979	458	453	456	526	476	500	5,999	65	431	423	427	493	443	467
1980	460	452	456	531	478	503	6,179	68	428	420	424	491	443	466

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TABLE 1.F.2

SCHOLASTIC APTITUDE TEST SCORE TRENDS
1979 TO 1980

	1979 to 1980 Trend in MCPS	1979 to 1980 Trend Nationally	1980 Difference Between MCPS and National (MCPS Always Higher)	MCPS 1980 Number Tested	Percentage of 1980 MCPS Enrollment Tested
SAT Verbal - Total	0	-3	32	6,179	68
SAT Verbal - Male	+2	-3	32	2,900	65
SAT Verbal - Female	-1	-3	32	3,279	71
SAT Math - Total	+3	-1	97	6,179	68
SAT Math - Male	+5	-3	40	2,899	65
SAT Math - Female	+2	0	35	3,280	71

TABLE 1.F.3

COLLEGE ENTRANCE EXAMINATION BOARD ACHIEVEMENT TEST RESULTS

Test	MCPS								National			
	1977		1978		1979		1980		1977	1978	1979	1980
	Mean	Number Tested	Mean	Mean	Mean	Mean						
American History	540	340	537	297	511	305	525	240	492	496	480	501
Biology	572	365	562	311	559	324	583	359	543	544	547	551
Chemistry	626	323	615	369	602	357	615	381	574	577	575	573
English	560	1,632	556	1,648	553	1,627	556	1,782	516	512	514	518
European History	568	48	540	66	566	71	571	78	526	507	524	539
French	591	331	583	337	577	297	563	371	553	552	554	550
German	564	33	585	37	571	50	548	51	551	553	550	552
Literature	575	197	577	202	570	181	566	214	520	521	522	514
Mathematics I	569	991	559	940	556	961	561	1,096	547	541	537	536
Mathematics II	704	434	701	510	684	539	685	635	666	665	657	653
Physics	621	83	623	72	594	94	615	73	593	591	580	592
Spanish	545	192	553	215	554	206	517	267	535	544	542	524
Average	575	1679	572	1,709	566	1,688	569	1,854	533	531	529	532

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TABLE 1.F.4

COLLEGE ENTRANCE EXAMINATION BOARD
 ACHIEVEMENT TEST SCORE TRENDS
 1979 TO 1980

	1979 to 1980 Trend in MCPS	1979 to 1980 Trend Nationally	1980 Difference Between MCPS and National*	MCPS 1980 Number Tested
American history	+14	+21	+24	240
Biology	+24	+ 4	+32	359
Chemistry	+13	- 2	+42	381
English	+ 3	+ 4	+38	1,782
European History	+ 5	+15	+32	78
French	-14	- 4	+13	371
German	-23	+ 2	- 4	51
Literature	- 4	+ 2	+42	214
Mathematics I	+ 5	- 1	+25	1,096
Mathematics II	+ 1	- 4	+32	635
Physics	+21	+12	+23	73
Spanish	-37	-18	- 7	267
Average	+ 3	+ 3	+37	1,854

* "+" = MCPS mean is higher; "-" = MCPS mean is lower.

TABLE 1.F.5

ADVANCED PLACEMENT EXAMINATION GRADE DISTRIBUTIONS, 1978-80

(Percentage Obtaining Each Score)

Score Year	1			2			3			4			5			Number Tested		
	78	79	80	78	79	80	78	79	80	78	79	80	78	79	80	78	79	80
American History	2	4	3	14	7	11	26	32	31	39	35	30	20	22	26	133	111	147
Biology	4	4	1	13	14	12	31	30	37	23	24	16	29	28	34	126	131	155
Chemistry	1	2	0	9	16	13	40	34	30	25	25	29	25	23	29	68	83	94
English	1	1	1	15	13	14	41	38	43	24	27	24	18	22	19	314	356	442
European History	4	6	7	13	13	15	40	38	37	23	25	29	19	18	12	94	149	171
French Language	0	8	9	12	12	17	22	32	32	22	20	15	44	28	28	32	25	47
Math Calculus	11	13	13	9	14	17	27	29	31	20	23	23	33	21	15	199	228	283
Physics	7	4	10	11	8	29	26	23	21	33	33	27	72	33	13	27	52	52
Spanish Language	3	0	2	28	11	10	34	31	41	28	37	22	6	20	24	32	35	41
Total Percentage	4	5	5	13	13	14	34	33	36	25	27	24	24	22	21	1,025	1,170	1,432
Cumulative Percentage	100	100	100	96	95	95	83	82	81	49	49	45	24	22	21			

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CHAPTER 2
ANALYSIS OF SCHOOL DATA

INTRODUCTION TO SCHOOL DATA ANALYSIS

Test results for individual schools for 1979-80 are presented in this chapter to provide an easily accessible source of data that is often needed for activities such as program planning and sampling. The chapter is divided into five sections:

- 2.A. ITBS or TAP Mean Scores and Longitudinal Data
- 2.B. School Interquartile Ranges on ITBS or TAP
- 2.C. Maryland Functional Reading Test
- 2.D. College Board Test Results
- 2.E. Cognitive Abilities Test Mean Scores

The tables of mean scores, by school, for each subtest of the Iowa Tests of Basic Skills (ITBS) or the Tests of Academic Progress (TAP) are presented in Section 2.A. This is part of the data that was provided to each school for its Annual School Report.

This section also contains results from a longitudinal/migration analysis that, separately, considered students who had been in each school for two test administrations and those who were there for only one. These data are reported for students who were tested in the same elementary school in Grade 3 (1978) and Grade 5 (1980) or the same junior high school in Grade 7 (1978) and Grade 9 (1980). These results give an indication of both the school's success with the students it has had for at least two years and the effect that students' transferring into and out of the school have on the school's results.

The national percentile ranks of the students scoring at the first quartile, median, and third quartile for each school are presented in Section 2.B. These data, presented in graphic format, provide a better picture of the overall level of achievement, as measured by standardized tests, than can be provided by the mean score alone. These interquartile ranges show the spread of scores of the middle half of the students in each school.

The percent of students in each school in Grade 7 who passed the Maryland Functional Reading Test is provided in Section 2.C.

School mean scores on tests administered by the College Entrance Examination Board are listed in Section 2.D. The scores presented are for the Scholastic Aptitude Tests (SAT) and several of the achievement tests.

A list of the school mean scores on the Cognitive Abilities Test is shown in the final section of this chapter, 2.E.

The cautions to be observed when reviewing test data that were discussed in Chapter 1 apply with school data also. Special attention needs to be paid to results from small groups and changing populations when reviewing school results.

2.A. ITBS AND TAP MEAN SCORES AND LONGITUDINAL DATA

Introduction

This section contains a copy of the table of mean scores for the Iowa Tests of Basic Skills (ITBS) or the Tests of Academic Progress (TAP) that was provided to each school for inclusion in its Annual School Report. Putting these tables in one source document provides a handy reference for reviewing the scores of specific schools. Review of the average test scores of the students in a school provides an indication of possible instructional strengths or weaknesses for that school.

Also presented in this section are the results from a longitudinal analysis for each school. This analysis has been done to remove a confounding factor in the review of school test data. Test scores for some students do not reflect their achievement in a given school because these students have been in that school for only a short period of time. The inclusion of the test scores of these students in the data for that school can lead to incorrect impressions about the success of the school's instructional program. This is especially true if a substantial proportion of the students in a given school have been in the school for a relatively brief period of time. A better indication of the quality of a school's program can be provided by the test scores of students who have been in the same school for at least two years, the period of time between administrations of systemwide tests to specific students. These school longitudinal data can be used to answer the following questions:

1. Did the score trend of a school longitudinal group indicate a substantial change in the achievement for that group?
2. How did students entering or leaving the school affect the overall school results?
3. Did students who were tested in the same school in both 1978 and 1980 score higher than students who were tested in that school for only one year?

Data

Countywide mean scores for students tested in the same school at two consecutive test administrations (1978 and 1980) are shown in Table 2.A.1. The trends of these mean scores can be used to help answer Question 1. This table is set up to make this easier by also including the magnitude of a score increase or decrease that would be considered substantial for a school longitudinal group, based on the county trend. Any NCE score change equal to or greater than the number in the table indicates a school that may have a very good program (if the trend is positive) or a program that might need help (if the trend is negative). These substantial changes are indicated in the individual school tables by a plus or minus.

Similar data are presented in Table 2.A.2 for students tested in a school only once. Substantial score changes here indicated changes in the school population, especially if the number of students in the group was a large proportion of the number in the grade.

The school pages contain two different tables. The top table reports the school mean scores. The bottom table reports the longitudinal analysis.

School Means. The tables reporting mean scores contain grade equivalent (GE) scores for the ITBS and standard scores (SS) for the TAP. In addition, the national percentile rank, based on student norms, is reported for each mean score.¹ The mean scores for these tables have been computed using GEs and SSs rather than normal curve equivalents (NCE) which were used for most of the other data in this report. This computational method has been used to be consistent with the method required by the Maryland Accountability Program. The results generally would be very close to the results that would be found if NCEs were used.

Longitudinal Analysis. The tables for the longitudinal analysis contain mean test scores for students who were tested in the same school in both 1978 and 1980 (longitudinal groups). Also shown are the mean scores for students tested in each school in only one of the two years (nonlongitudinal groups). Substantial score changes (defined in the Analysis section) are indicated by "+" for increases and "-" for decreases. It should be remembered that the students in the two nonlongitudinal groups are completely different students. The results reported are for 1978 Grade 3 and 1980 Grade 5 in elementary schools and 1978 Grade 7 and 1980 Grade 9 in junior high schools.

Four mean scores are reported for each group, longitudinal (L) and nonlongitudinal (NL), for each year. These are the means for Reading Comprehension, Language (Spelling, Punctuation, Capitalization, and Usage), Mathematics (Concepts and Problem Solving), and the Composite. The mean scores were computed using normal curve equivalents because the analysis of these data involved determining score differences. (See NCEs in Appendix B.)

Scores of groups with fewer than ten members were not included in these tables because the mean scores of groups that small could fluctuate considerably as a result of one or two exceptionally high or low scores. If the longitudinal group for a school had fewer than 10 students, no data were reported for that school.

¹This is the percentile rank for a student who obtains the mean score. It does not represent the ranking of that school when compared to other schools.

The results are reported on a separate page for each school. The schools are in alphabetical order and are grouped by grade. The pages where each grade group starts follow:

Grades 3 and/or 5 - Page 81
Grades 7 and/or 9 - Page 205
Grade 11 - Page 244

Analysis

- A. School Means. No formal analysis was performed with the data in the tables of mean scores. These data are descriptive. The percentile ranks can be used to compare performance on the subtests to that on the Composite to determine strengths and weaknesses within a school.
- B. Longitudinal Analysis. Trend analysis is the most useful way to look at the data for longitudinal and nonlongitudinal groups. The important information is related to whether scores increased or decreased, not how high the scores are. This trend analysis is based on the assumption that a student or group of students should maintain the same relative standing (i.e., percentile rank) from year to year. If the longitudinal group trend fluctuates from this assumption beyond normal error limits, it could be a sign of a noteworthy program or of a program that needs some improvement. If a change of this magnitude occurs between nonlongitudinal groups, it could signify a substantial population shift.

The NCE mean scores should be compared to determine if score differences are substantial. A standard of greater than seven NCE points has been established to indicate that a difference was larger than might be expected to be caused by test error. However, because score differences across grades could be caused by factors extraneous to school programs, this standard has been adjusted. Some of these extraneous factors were discussed in Section 1.D, which deals with countywide longitudinal data. They include possible weaknesses in test norming, curricular changes impacting some grades more than others, and the time of the year that tests are administered. To account for these factors the seven point standard is computed from the countywide trends for school longitudinal and school nonlongitudinal groups. The amount of change needed to be considered substantial is shown in Table 2.A.1 for longitudinal groups and 2.A.2 for nonlongitudinal groups.

Data for any groups of less than 35 students should be treated with caution because of the possibility of fluctuation of means caused by relatively few extreme scores.

TABLE 2.A.1

COUNTYWIDE MEANS AND MAGNITUDE OF TREND NEEDED
TO INDICATE SUBSTANTIAL* CHANGE FOR LONGITUDINAL GROUPS

	Elementary School Comparison				Secondary School Comparison			
	1978	1980	Substantial Increase	Substantial Decrease	1978	1980	Substantial Increase	Substantial Decrease
	Grade 3 NCE Mean	Grade 5 NCE Mean			Grade 7 NCE Mean	Grade 9 NCE Mean		
Reading Comprehension	62	60	6	10	54	54	8	8
Language	69	65	4	12	58	58	8	8
Mathematics	66	65	7	9	58	57	7	9
Composite	67	65	6	10	58	58	8	8

TABLE 2.A.2

COUNTYWIDE MEANS AND MAGNITUDE OF TREND NEEDED
TO INDICATE SUBSTANTIAL* CHANGE FOR NONLONGTUDINAL GROUPS

	Elementary School Comparison				Secondary School Comparison			
	1978	1980	Substantial Increase	Substantial Decrease	1978	1980	Substantial Increase	Substantial Decrease
	Grade 3 NCE Mean	Grade 5 NCE Mean			Grade 7 NCE Mean	Grade 9 NCE Mean		
Reading Comprehension	55	53	6	10	51	51	8	8
Language	61	58	5	11	52	52	8	8
Mathematics	58	58	8	8	53	51	6	10
Composite	59	57	6	10	53	53	8	8

*Substantial is defined as greater than 7 NCE points above or below the county trend.

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.0	62	5.9	56
Vocabulary	3.8	52	5.7	49
Reading Comprehension	3.7	49	5.6	47
Spelling	4.5	68	5.9	54
Capitalization	4.2	62	6.1	57
Punctuation	4.9	77	6.3	61
Language Usage	3.9	54	6.2	58
Map Reading	4.3	70	5.6	47
Graphs and Tables	4.6	76	6.2	62
Reference Materials	4.0	61	5.9	54
Math Concepts	3.8	52	6.1	60
Math Problem Solving	4.1	66	5.8	52
NUMBER TAKING ALL SUBTESTS		21	28	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	15	49	48	12	60	68
	5	15	51	52	13	44-	38
Language Total	3	15	62	72	12	65	76
	5	15	58	65	13	51-	51
Math Total	3	15	54	58	12	65	76
	5	15	56	62	13	53-	56
Composite	3	15	54	57	12	64	75
	5	15	57	63	13	47-	44

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	6.8	78
Vocabulary	4.9	84	6.7	74
Reading Comprehension	5.0	83	6.5	69
Spelling	5.3	83	7.2	77
Capitalization	5.2	82	7.4	78
Punctuation	5.3	83	7.1	75
Language Usage	5.3	81	7.3	77
Map Reading	4.8	83	6.8	77
Graphs and Tables	4.9	83	7.1	81
Reference Materials	4.7	83	6.9	75
Math Concepts	4.6	79	6.7	75
Math Problem Solving	4.6	85	6.5	75
NUMBER TAKING ALL SUBTESTS		39	38	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years*			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	15	73	86	11	77	90
	5	15	63-	73	23	59-	67
Language Total	3	15	78	91	11	79	91
	5	15	72	85	23	68-	80
Math Total	3	15	79	92	11	79	91
	5	15	68-	81	23	65-	76
Composite	3	15	80	92	11	79	92
	5	15	70-	83	23	66-	77

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	6.6	74
Vocabulary	4.8	82	6.7	74
Reading Comprehension	4.7	76	6.4	67
Spelling	4.8	74	6.4	64
Capitalization	5.3	84	7.1	74
Punctuation	5.3	83	6.9	72
Language Usage	5.0	76	7.0	72
Map Reading	5.0	86	6.6	73
Graphs and Tables	5.2	88	6.8	76
Reference Materials	4.8	85	6.8	73
Math Concepts	4.6	79	6.6	72
Math Problem Solving	5.0	92	6.4	72
NUMBER TAKING ALL SUBTESTS		29	25	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	17	63	73	13	64	74
	5	17	58	65			
Language Total	3	18	67	79	13	63	73
	5	18	66	77			
Math Total	3	18	65	76	13	61	70
	5	18	65	76			
Composite	3	16	67	79	13	66	77
	5	16	67	79			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	6.9	80
Vocabulary	4.7	80	7.0	80
Reading Comprehension	4.8	78	6.7	73
Spelling	5.3	83	7.0	74
Capitalization	5.5	87	7.1	74
Punctuation	5.9	90	6.9	72
Language Usage	5.1	78	7.1	74
Map Reading	4.6	78	6.7	75
Graphs and Tables	4.9	83	7.0	79
Reference Materials	4.7	83	7.0	77
Math Concepts	4.8	84	7.1	83
Math Problem Solving	4.6	85	6.5	75
NUMBER TAKING ALL SUBTESTS		40	62	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	48	67	79	13	73	86
	5	48	66	77	14	60	69
Language Total	3	48	71	84	13	66	77
	5	48	68	80	14	63	73
Math Total	3	48	71	84	13	73	86
	5	48	72	85	14	60	69
Composite	3	48	73	86	13	73	80
	5	48	71	84	14	61	70

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	6.7	76
Vocabulary	4.4	72	6.6	72
Reading Comprehension	4.4	68	6.5	69
Spelling	5.3	83	6.8	71
Capitalization	5.1	81	7.2	75
Punctuation	5.4	84	7.0	73
Language Usage	4.6	68	6.7	67
Map Reading	4.3	70	6.7	75
Graphs and Tables	4.8	81	6.9	78
Reference Materials	4.3	72	6.7	71
Math Concepts	4.2	66	6.4	67
Math Problem Solving	4.3	75	6.6	77
NUMBER TAKING ALL SUBTESTS		66	69	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	53	63	73	16	57	63
	5	53	61	70			
Language Total	3	53	72	85	16	64	74
	5	53	65	76			
Math Total	3	54	65	76	16	62	71
	5	54	65	76			
Composite	3	52	68	81	16	63	73
	5	52	66	78			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.0	88	6.9	80
Vocabulary	4.7	80	6.7	74
Reading Comprehension	5.1	84	6.6	71
Spelling	5.6	87	7.3	79
Capitalization	5.6	88	7.5	80
Punctuation	6.0	92	7.3	78
Language Usage	5.2	80	7.3	77
Map Reading	4.8	83	7.0	81
Graphs and Tables	5.1	86	7.5	87
Reference Materials	5.0	89	7.1	79
Math Concepts	4.6	79	6.8	77
Math Problem Solving	4.7	87	6.8	81
NUMBER TAKING ALL SUBTESTS		46		67

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year.		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	53	68	81	11	63	73
	5	53	64	74	14	59	66
Language Total	3	53	77	90	11	75	88
	5	53	73	86	14	61	70
Math Total	3	53	71	84	11	72	85
	5	53	70	83	14	63	73
Composite	3	53	74	87	11	72	85
	5	53	71	84	14	63	73

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.5	72
Vocabulary	4.5	75	6.3	65
Reading Comprehension	4.5	71	6.3	64
Spelling	5.1	79	7.0	74
Capitalization	5.3	84	6.8	69
Punctuation	5.5	86	6.9	72
Language Usage	4.7	70	7.0	72
Map Reading	4.9	84	6.6	73
Graphs and Tables	5.0	84	6.7	74
Reference Materials	4.4	76	6.6	70
Math Concepts	4.8	84	6.4	67
Math Problem Solving	4.4	79	6.3	69
NUMBER TAKING ALL SUBTESTS		74	86	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	73	61	70	26	65	76
	5	73	57	63	13	61	70
Language Total	3	73	68	80	26	74	87
	5	73	65	76	13	66	78
Math Total	3	73	62	71	26	67	79
	5	73	61	70	13	62	72
Composite	3	73	64	75	26	70	83
	5	73	62	72	13	64	74

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	3.9	58	6.1	62
Vocabulary	3.7	49	5.9	54
Reading Comprehension	3.8	52	5.9	55
Spelling	4.3	64	5.9	54
Capitalization	4.2	62	6.1	57
Punctuation	4.3	65	5.9	54
Language Usage	3.9	54	6.4	62
Map Reading	3.9	56	6.6	73
Graphs and Tables	4.5	74	6.3	65
Reference Materials	3.9	57	6.3	64
Math Concepts	3.9	56	6.1	60
Math Problem Solving	3.9	57	6.1	62
NUMBER TAKING ALL SUBTESTS		34	42	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	34	52	54	15	57	63
	5	34	53	56			
Language Total	3	34	58	64	15	59	67
	5	34	55	59			
Math Total	3	34	57	63	15	60	68
	5	34	61	70			
Composite	3	34	57	63	15	58	65
	5	34	58	64			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	7.2	86
Vocabulary	4.8	82	7.1	82
Reading Comprehension	4.9	81	6.9	78
Spelling	5.6	87	7.4	80
Capitalization	5.6	88	7.7	82
Punctuation	5.8	89	6.9	72
Language Usage	4.9	74	7.3	77
Map Reading	4.9	84	7.3	86
Graphs and Tables	4.9	83	7.4	85
Reference Materials	4.8	85	7.2	81
Math Concepts	4.6	79	7.2	85
Math Problem Solving	4.5	82	7.0	85
NUMBER TAKING ALL SUBTESTS		54	53	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	35	77	90	16	71	84
	5	35	72	85	18	55	60
Language Total	3	35	82	94	16	76	89
	5	35	76	89	18	60	68
Math Total	3	35	79	92	16	72	85
	5	35	78	91	18	66	78
Composite	3	35	83	94	14	75	88
	5	35	78	91	18	62	72

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	7.0	82
Vocabulary	4.7	80	6.8	76
Reading Comprehension	4.7	76	6.8	76
Spelling	5.7	89	7.1	76
Capitalization	5.5	87	7.7	82
Punctuation	6.2	94	7.3	78
Language Usage	5.2	80	7.2	76
Map Reading	4.8	83	6.8	77
Graphs and Tables	4.9	83	7.5	87
Reference Materials	4.6	81	7.0	77
Math Concepts	5.0	89	7.2	85
Math Problem Solving	4.7	87	6.7	79
NUMBER TAKING ALL SUBTESTS		60	76	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	50	64	75	11	69	82
	5	50	65	76	26	64	75
Language Total	3	50	72	85	11	73	86
	5	50	71	84	26	69	82
Math Total	3	50	65	76	11	64	75
	5	50	74+	87	26	68	80
Composite	3	50	70	83	11	72	85
	5	50	71	84	26	68	81

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.1	90	7.3	88
Vocabulary	4.9	84	7.1	82
Reading Comprehension	5.4	89	6.9	78
Spelling	5.3	83	7.4	80
Capitalization	5.2	82	7.9	85
Punctuation	5.8	89	7.7	84
Language Usage	5.1	78	7.4	79
Map Reading	5.3	90	7.5	88
Graphs and Tables	5.3	89	7.8	90
Reference Materials	4.9	87	7.1	79
Math Concepts	4.9	87	7.5	90
Math Problem Solving	4.7	87	7.0	85
NUMBER TAKING ALL SUBTESTS		35	51	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	39	78	91	13	69	82
	5	39	68	81	12	61	70
Language Total	3	39	78	91	13	75	88
	5	39	73	86	12	75	88
Math Total	3	39	81	93	13	74	87
	5	39	77	90	12	77	90
Composite	3	39	81	93	13	75	88
	5	39	75	88	12	72	85

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	3.3	38	5.2	38
Vocabulary	3.1	33	5.0	33
Reading Comprehension	3.0	29	5.0	32
Spelling	4.0	57	5.4	43
Capitalization	3.7	50	5.7	50
Punctuation	3.7	49	5.4	43
Language Usage	3.5	45	5.5	46
Map Reading	2.9	24	5.4	41
Graphs and Tables	3.5	43	5.5	44
Reference Materials	3.4	39	5.5	44
Math Concepts	3.3	34	5.3	38
Math Problem Solving	3.2	33	5.1	34
NUMBER TAKING ALL SUBTESTS		24	28	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	3	16	48	46	16	47	44
Comprehension	5	16	42	35	12	37-	27
Language Total	3	16	59	67	16	59	66
	5	16	48	46	12	45-	40
Math Total	3	16	48	47	16	46	43
	5	16	42	35	12	42	36
Composite	3	16	50	50	16	50	50
	5	16	43	37	12	39-	30

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	6.8	78
Vocabulary	4.3	69	6.8	76
Reading Comprehension	4.3	66	6.5	69
Spelling	4.8	74	7.1	76
Capitalization	5.2	82	7.6	81
Punctuation	5.4	84	7.2	77
Language Usage	4.5	66	7.2	76
Map Reading	4.5	76	6.4	68
Graphs and Tables	4.7	79	6.8	76
Reference Materials	4.3	72	6.6	70
Math Concepts	4.3	69	7.3	87
Math Problem Solving	4.5	82	6.6	77
NUMBER TAKING ALL SUBTESTS		60	43	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	31	68	80	21	51	52
	5	31	61	70		61+	70
Language Total	3	31	74	87	21	59	66
	5	31	69	82	12	71+	84
Math Total	3	31	71	84	20	57	63
	5	31	72	85	12	71+	84
Composite	3	31	71	84	19	56	62
	5	31	68	80	12	69+	82

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.1	90	7.7	93
Vocabulary	5.2	90	7.5	88
Reading Comprehension	5.0	83	7.4	87
Spelling	5.6	87	8.1	89
Capitalization	5.6	88	8.1	88
Punctuation	5.5	86	7.7	84
Language Usage	5.1	78	8.0	88
Map Reading	5.0	86	7.7	90
Graphs and Tables	5.0	84	8.0	92
Reference Materials	4.8	85	7.4	84
Math Concepts	4.8	84	7.8	93
Math Problem Solving	4.7	87	7.5	92
NUMBER TAKING ALL SUBTESTS		27	34	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3), AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	24	70	83	13	67	79
	5	24	72	85	10	77+	90
Language Total	3	24	74	87	13	73	86
	5	24	79+	91	10	80+	92
Math Total	3	24	75	88	13	74	87
	5	24	84+	94	10	82+	94
Composite	3	24	75	88	13	73	86
	5	24	80	92	10	84+	95

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.0	62	5.4	44
Vocabulary	3.8	52	5.2	38
Reading Comprehension	3.7	49	5.2	37
Spelling	4.6	70	5.5	45
Capitalization	4.8	75	5.5	46
Punctuation	4.7	73	6.0	56
Language Usage	3.9	54	5.4	44
Map Reading	3.7	49	5.5	44
Graphs and Tables	4.3	68	5.6	47
Reference Materials	3.9	57	5.4	41
Math Concepts	3.8	52	5.6	46
Math Problem Solving	3.8	53	5.4	41
NUMBER TAKING ALL SUBTESTS		20	68	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	19	53	56	11	42	35
	5	19	54	57	49	39	30
Language Total	3	19	57	63	11	49	48
	5	19	56	61	49	45	41
Math Total	3	19	54	57	11	47	45
	5	19	61+	70	49	41	34
Composite	3	19	54	58	11	42	36
	5	19	57	63	49	40	32

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.3	71	7.1	84
Vocabulary	4.2	65	6.6	72
Reading Comprehension	4.3	66	6.8	76
Spelling	4.7	72	7.3	79
Capitalization	4.7	73	8.0	87
Punctuation	4.6	71	7.6	83
Language Usage	4.6	68	7.3	77
Map Reading	4.1	64	7.2	84
Graphs and Tables	4.3	68	7.7	89
Reference Materials	4.0	61	7.2	81
Math Concepts	4.0	59	7.5	90
Math Problem Solving	3.9	57	6.9	83
NUMBER TAKING ALL SUBTESTS		92	79	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	43	66	78	43	53	56
	5	43	68	80	36	63+	73
Language Total	3	43	73	86	43	59	66
	5	43	76	89	37	71+	84
Math Total	3	43	72	85	44	57	63
	5	43	78	91	37	74+	87
Composite	3	43	72	85	43	55	59
	5	43	74	87	36	71+	84

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.2	91	7.5	90
Vocabulary	5.0	86	7.2	84
Reading Comprehension	5.1	84	7.3	85
Spelling	5.4	84	7.6	83
Capitalization	5.5	87	8.2	89
Punctuation	5.8	89	8.0	88
Language Usage	5.1	78	7.4	79
Map Reading	5.2	89	7.5	88
Graphs and Tables	5.3	89	7.8	90
Reference Materials	4.9	87	7.4	84
Math Concepts	5.1	91	7.9	94
Math Problem Solving	5.0	92	7.3	90
NUMBER TAKING ALL SUBTESTS		60	95	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year			
	Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean	
Reading	3	56	71	84	13	70	83
Comprehension	5	56	70	83	39	74	87
Language Total	3	55	79	91	13	76	89
	5	55	77	90	39	76	89
Math Total	3	56	79	92	13	79	92
	5	56	82	93	39	82	94
Composite	3	55	78	91	13	76	89
	5	55	77	90	39	80	92

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.4	73	5.8	54
Vocabulary	4.5	75	5.6	47
Reading Comprehension	4.2	63	5.6	47
Spelling	4.9	76	6.2	60
Capitalization	5.2	82	6.4	62
Punctuation	5.2	81	6.2	59
Language Usage	4.5	66	5.8	51
Map Reading	4.3	70	5.5	44
Graphs and Tables	4.4	71	6.1	60
Reference Materials	4.1	65	6.0	57
Math Concepts	4.2	66	5.9	54
Math Problem Solving	4.3	75	5.8	52
NUMBER TAKING ALL SUBTESTS		42	37	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA, 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	3	20	58	65			
Comprehension	5	20	48-	47	17	48	46
Language Total	3	20	72	85			
	5	20	59-	67	17	51	52
Math Total	3	20	69	82			
	5	20	57-	63	17	50	50
Composite	3	20	69	82			
	5	20	54-	58	17	50	50

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.6	74
Vocabulary	4.5	75	6.5	70
Reading Comprehension	4.6	74	6.5	69
Spelling	5.1	79	6.8	71
Capitalization	5.0	79	7.0	72
Punctuation	5.2	81	6.7	68
Language Usage	4.7	70	6.7	67
Map Reading	4.7	81	6.4	68
Graphs and Tables	4.8	81	6.7	74
Reference Materials	4.5	79	6.6	70
Math Concepts	4.3	69	7.0	81
Math Problem Solving	4.4	79	6.1	62
NUMBER TAKING ALL SUBTESTS	74		67	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	46	70	83	19	60	69
	5	46	67	79	21	44-	39
Language Total	3	45	74	87	20	61	70
	5	45	72	85	21	47-	44
Math Total	3	46	76	89	19	61	70
	5	46	72	85	21	48-	47
Composite	3	45	75	88	19	62	71
	5	45	72	85	21	46-	42

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	6.5	72
Vocabulary	4.4	72	6.4	67
Reading Comprehension	4.3	66	6.4	67
Spelling	5.2	81	7.0	74
Capitalization	5.1	81	7.0	72
Punctuation	5.0	78	6.8	70
Language Usage	4.6	68	6.8	69
Map Reading	4.3	70	6.6	73
Graphs and Tables	4.7	79	6.7	74
Reference Materials	4.4	76	6.7	71
Math Concepts	4.4	73	6.3	65
Math Problem Solving	4.2	70	6.1	62
NUMBER TAKING ALL SUBTESTS		58	69	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	48	66	77	11	53	55
	5	48	63	73	21	52	53
Language Total	3	48	79	91	11	66	77
	5	48	70	83	21	52	54
Math Total	3	48	74	87	11	58	65
	5	48	62	72	21	53	55
Composite	3	48	74	87	11	60	69
	5	48	67	79	21	54	58

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.2	91	7.0	82
Vocabulary	5.1	88	7.0	80
Reading Comprehension	5.2	86	6.8	76
Spelling	5.5	86	7.1	76
Capitalization	5.9	92	6.9	71
Punctuation	6.2	94	7.0	73
Language Usage	5.3	81	7.3	77
Map Reading	5.2	89	7.1	83
Graphs and Tables	5.1	86	7.3	84
Reference Materials	5.1	90	6.9	75
Math Concepts	5.1	91	7.1	83
Math Problem Solving	4.8	89	6.9	83
NUMBER TAKING ALL SUBTESTS		36	59	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	44	67	79	16	65	76
	5	44	65	76			
Language Total	3	44	76	89	16	65	76
	5	44	67	79			
Math Total	3	44	83	94	16	68	81
	5	44	74	87			
Composite	3	42	77	90	15	70	83
	5	42	71	84			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.2	68	6.4	70
Vocabulary	4.5	75	6.2	62
Reading Comprehension	4.1	60	6.6	71
Spelling	4.9	76	6.5	65
Capitalization	4.3	64	6.4	62
Punctuation	4.5	69	6.4	63
Language Usage	4.1	58	6.4	62
Map Reading	3.9	58	6.2	63
Graphs and Tables	4.2	65	6.4	67
Reference Materials	3.8	53	6.3	64
Math Concepts	4.0	59	6.2	62
Math Problem Solving	3.9	57	6.7	79
NUMBER TAKING ALL SUBTESTS		78		91

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	77	67	79	16	66	77
	5	77	64	74	15	58	65
Language Total	3	76	70	83	16	69	82
	5	76	59	67	15	52	54
Math Total	3	77	62	71	16	62	71
	5	77	64	74	15	58	65
Composite	3	76	69	82	16	68	81
	5	76	63	73	15	56	61

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.6	74
Vocabulary	4.6	78	6.6	72
Reading Comprehension	4.8	78	6.5	69
Spelling	5.1	79	6.5	65
Capitalization	4.8	75	6.4	62
Punctuation	4.9	77	6.4	63
Language Usage	4.9	74	6.4	62
Map Reading	4.9	84	6.8	77
Graphs and Tables	5.1	86	7.0	79
Reference Materials	4.8	85	6.7	71
Math Concepts	4.4	73	6.6	72
Math Problem Solving	4.4	79	6.5	75
NUMBER TAKING ALL SUBTESTS		34	46	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	30	59	67	24	52	53
	5	30	60	68	15	63+	73
Language Total	3	30	60	69	24	49	48
	5	30	56	62	15	63+	73
Math Total	3	31	65	76	24	52	54
	5	31	66	77	15	63+	73
Composite	3	30	63	73	24	51	52
	5	30	63	73	15	66+	78

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.6	74
Vocabulary	4.6	78	6.4	67
Reading Comprehension	4.6	74	6.3	64
Spelling	5.2	81	6.8	71
Capitalization	5.1	81	7.1	74
Punctuation	5.1	80	7.1	75
Language Usage	4.9	74	6.9	71
Map Reading	4.5	76	6.5	71
Graphs and Tables	4.7	79	7.0	79
Reference Materials	4.6	81	6.5	68
Math Concepts	4.3	69	6.9	79
Math Problem Solving	4.3	75	6.5	75
NUMBER TAKING ALL SUBTESTS		62	87	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	56	65	76	35	57	63
	5	56	60	69	32	54	58
Language Total	3	56	68	81	35	59	66
	5	56	68	81	31	62	71
Math Total	3	56	68	80	35	54	57
	5	56	71	84	32	60	69
Composite	3	56	68	80	35	57	63
	5	56	67	79	31	59	67

SCHOOL MEAN SCORES: IQWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.1	65	5.7	51
Vocabulary	3.8	52	5.5	44
Reading Comprehension	4.1	60	5.7	50
Spelling	4.7	72	5.7	50
Capitalization	4.4	66	5.7	50
Punctuation	4.4	67	5.7	49
Language Usage	4.3	62	5.4	44
Map Reading	4.1	64	5.9	55
Graphs and Tables	4.2	65	5.9	55
Reference Materials	4.0	61	5.9	54
Math Concepts	4.0	59	5.8	52
Math Problem Solving	3.7	49	5.3	39
NUMBER TAKING ALL SUBTESTS		35	51	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	17	54	58	12	55	59
	5	17	47	44	34	51	51
Language Total	3	17	56	62	12	57	63
	5	17	47	44	34	49	49
Math Total	3	17	51	52	12	53	55
	5	17	44	39	34	50	50
Composite	3	17	54	57	12	55	60
	5	17	48	46	34	49	49

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	6.5	72
Vocabulary	4.4	72	6.3	65
Reading Comprehension	4.3	66	6.3	64
Spelling	4.9	76	6.6	67
Capitalization	5.0	79	7.3	77
Punctuation	5.2	81	6.6	67
Language Usage	4.5	66	6.7	67
Map Reading	4.4	73	6.4	68
Graphs and Tables	4.6	76	6.7	74
Reference Materials	4.2	69	6.2	61
Math Concepts	4.4	73	6.5	70
Math Problem Solving	4.2	70	6.1	62
NUMBER TAKING ALL SUBTESTS		61	65	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	53	57	63	14	72	85
	5	53	58	65	11	60-	68
Language Total	3	54	59	66	14	75	88
	5	54	64+	74	11	67	79
Math Total	3	53	53	56	14	68	80
	5	53	60+	68	11	64	75
Composite	3	52	58	64	14	75	88
	5	52	62	71	11	64-	75

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.9	80
Vocabulary	4.7	80	6.7	74
Reading Comprehension	4.6	74	6.6	71
Spelling	5.2	81	7.2	77
Capitalization	5.1	81	7.4	78
Punctuation	5.5	86	7.1	75
Language Usage	4.8	72	7.2	76
Map Reading	4.5	76	6.8	77
Graphs and Tables	5.0	84	7.2	83
Reference Materials	4.7	83	7.1	79
Math Concepts	4.4	73	7.3	87
Math Problem Solving	4.5	82	6.8	81
NUMBER TAKING ALL SUBTESTS		71	108	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	91	64	74	23	61	70
	5	91	62	71	17	60	68
Language Total	3	91	74	87	23	70	83
	5	91	70	83	17	66	78
Math Total	3	91	71	84	13	68	80
	5	91	73	86	17	75	88
Composite	3	91	71	84	23	68	80
	5	91	69	82	17	68	80

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.8	83	6.6	74
Vocabulary	4.6	78	6.6	72
Reading Comprehension	4.6	74	6.4	67
Spelling	4.9	76	6.9	72
Capitalization	5.2	82	7.0	72
Punctuation	5.5	86	6.8	70
Language Usage	4.7	70	6.9	71
Map Reading	4.9	84	6.6	73
Graphs and Tables	5.1	86	6.7	74
Reference Materials	4.5	79	6.5	68
Math Concepts	4.6	79	7.1	83
Math Problem Solving	4.5	82	6.3	69
NUMBER TAKING ALL SUBTESTS		92	98	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	45	67	79	19	64	74
	5	45	60	69	53	59	66
Language Total	3	45	78	91	19	73	86
	5	45	69	82	53	62	71
Math Total	3	45	73	86	19	70	83
	5	45	72	85	53	64	74
Composite	3	45	74	87	19	70	83
	5	45	68	80	53	63	73

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.4	73	5.8	54
Vocabulary	3.8	52	5.8	52
Reading Comprehension	3.9	55	5.3	39
Spelling	4.8	74	5.9	54
Capitalization	5.1	81	5.8	52
Punctuation	5.3	83	6.0	56
Language Usage	4.5	66	5.9	53
Map Reading	4.5	76	6.0	58
Graphs and Tables	4.9	83	6.5	69
Reference Materials	4.3	72	6.2	61
Math Concepts	4.7	82	6.3	65
Math Problem Solving	4.5	82	5.8	52
NUMBER TAKING ALL SUBTESTS		39	23	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	11	49	49	17	63	73
	5	11	40	32	12	47-	45
Language Total	3	11	68	81	17	73	86
	5	11	52-	53	12	52-	53
Math Total	3	11	74	87	16	82	93
	5	11	57-	63	12	55-	60
Composite	3	11	63	73	16	75	88
	5	11	51-	52	12	52-	54

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	5.7	51
Vocabulary	4.2	65	5.7	49
Reading Comprehension	4.3	66	5.5	44
Spelling	5.1	79	5.9	54
Capitalization	5.0	79	6.0	55
Punctuation	4.9	77	6.0	56
Language Usage	4.3	62	5.8	51
Map Reading	4.2	67	5.9	55
Graphs and Tables	4.6	76	5.8	52
Reference Materials	4.2	69	5.7	49
Math Concepts	4.3	69	5.8	52
Math Problem Solving	4.4	79	5.6	47
NUMBER TAKING ALL SUBTESTS		33	61	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	47	53	56	13	54	58
	5	47	51	51	14	32-	20
Language Total	3	47	59	66	13	65	76
	5	47	55	60	14	41-	33
Math Total	3	47	56	62	13	61	70
	5	47	54	57	14	41-	34
Composite	3	47	56	62	13	60	69
	5	47	54	58	14	37-	27

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.7	76
Vocabulary	4.4	72	6.6	72
Reading Comprehension	4.5	71	6.4	67
Spelling	5.1	79	6.9	72
Capitalization	5.5	87	7.3	77
Punctuation	5.2	81	6.8	70
Language Usage	4.7	70	7.2	76
Map Reading	4.5	76	6.6	73
Graphs and Tables	4.9	83	7.0	79
Reference Materials	4.5	79	6.6	70
Math Concepts	4.4	73	6.9	79
Math Problem Solving	4.2	70	6.6	77
NUMBER TAKING ALL SUBTESTS		33		65

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	49	64	74	10	49	49
	5	49	61	70	16	57+	63
Language Total	3	49	67	79	10	50	50
	5	49	69	82	16	60+	68
Math Total	3	49	66	77			
	5	49	69	82	16	63	73
Composite	3	49	67	79			
	5	49	67	79	16	61	70

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.1	62
Vocabulary	4.3	69	5.8	52
Reading Comprehension	4.6	74	5.8	52
Spelling	5.1	79	6.3	62
Capitalization	5.1	81	6.8	69
Punctuation	5.6	87	6.6	67
Language Usage	4.6	68	6.1	57
Map Reading	4.5	76	5.9	55
Graphs and Tables	4.8	81	6.5	69
Reference Materials	4.4	76	6.0	57
Math Concepts	4.5	76	6.4	67
Math Problem Solving	4.4	79	5.9	55
NUMBER TAKING ALL SUBTESTS		80	92	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	69	60	68	16	51	51
	5	69	52	53	23	47	44
Language Total	3	69	66	78	16	51	52
	5	69	60	68	23	57+	63
Math Total	3	69	64	74	16	54	58
	5	69	60	68	23	54	58
Composite	3	69	64	74	16	51	51
	5	69	57	63	23	51	52

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	7.1	84
Vocabulary	4.7	80	6.8	76
Reading Comprehension	4.7	76	6.7	73
Spelling	5.2	81	7.0	74
Capitalization	5.3	84	7.4	78
Punctuation	5.8	89	7.4	80
Language Usage	5.1	78	7.2	76
Map Reading	4.7	81	7.0	81
Graphs and Tables	5.0	84	7.5	87
Reference Materials	4.8	85	7.2	81
Math Concepts	4.8	84	7.4	89
Math Problem Solving	4.7	87	6.9	83
NUMBER TAKING ALL SUBTESTS		51	87	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	55	62	72	12	61	70
	5	55	62	72	32	67+	79
Language Total	3	55	67	79	12	64	74
	5	55	69	82	32	70+	83
Math Total	3	55	69	82	12	68	81
	5	55	74	87	32	77+	90
Composite	3	55	67	79	12	65	76
	5	55	70	83	32	73+	86

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.7	76
Vocabulary	4.5	75	6.6	72
Reading Comprehension	4.7	76	6.4	67
Spelling	5.1	79	6.9	72
Capitalization	5.0	79	6.9	71
Punctuation	5.5	86	6.7	68
Language Usage	4.8	72	6.8	69
Map Reading	4.8	83	6.7	75
Graphs and Tables	5.0	84	6.9	78
Reference Materials	4.7	83	6.8	73
Math Concepts	4.5	76	6.5	70
Math Problem Solving	4.5	82	6.4	72
NUMBER TAKING ALL SUBTESTS		104	97	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	3	75	67	79	21	57	63
Comprehension	5	75	64	74	25	48	47
Language Total	3	75	75	88	21	66	78
	5	75	67	79	25	54	57
Math Total	3	75	68	80	21	56	62
	5	75	67	79	24	51	51
Composite	3	74	74	87	21	61	70
	5	74	69	82	23	55	59

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.7	76
Vocabulary	4.5	75	6.6	72
Reading Comprehension	4.5	71	6.5	69
Spelling	5.1	79	6.8	71
Capitalization	5.0	79	6.8	69
Punctuation	5.1	80	7.0	73
Language Usage	4.6	68	6.8	69
Map Reading	4.5	76	6.6	73
Graphs and Tables	5.0	84	6.9	78
Reference Materials	4.4	76	6.7	71
Math Concepts	4.4	73	6.7	75
Math Problem Solving	4.6	85	6.5	75
NUMBER TAKING ALL SUBTESTS		80	88	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	65	63	73	10	59	67
	5	65	61	70	23	62	72
Language Total	3	65	70	83	10	69	82
	5	65	64	74	23	64	75
Math Total	3	65	68	80	10	63	73
	5	65	65	76	23	69	82
Composite	3	65	69	82	10	66	77
	5	65	65	76	23	66	78

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.0	62		
Vocabulary	4.0	59		
Reading Comprehension	3.8	52		
Spelling	4.3	64		
Capitalization	4.3	64		
Punctuation	4.5	69		
Language Usage	3.9	54		
Map Reading	3.9	56		
Graphs and Tables	4.1	61		
Reference Materials	3.9	57		
Math Concepts	3.8	52		
Math Problem Solving	3.7	49		
NUMBER TAKING ALL SUBTESTS		50		

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.3	67
Vocabulary	4.4	72	6.2	62
Reading Comprehension	4.5	71	6.2	62
Spelling	5.2	81	6.7	69
Capitalization	4.7	73	6.8	69
Punctuation	5.0	78	6.5	65
Language Usage	4.6	68	6.4	62
Map Reading	4.7	81	6.5	71
Graphs and Tables	4.6	76	6.6	72
Reference Materials	4.3	72	6.5	68
Math Concepts	4.4	73	6.3	65
Math Problem Solving	4.2	70	5.9	55
NUMBER TAKING ALL SUBTESTS		28	41	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
	Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3: 29	62	72	19	54	58
	5: 29	60	69	12	47	45
Language Total	3: 29	66	77	19	55	59
	5: 29	64	75	12	54	58
Math Total	3: 29	67	79	19	56	62
	5: 29	59	66	12	54	57
Composite	3: 29	66	78	19	56	62
	5: 29	64	74	12	54	57

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.7	76
Vocabulary	4.7	80	6.5	70
Reading Comprehension	4.7	76	6.5	69
Spelling	5.3	83	6.8	71
Capitalization	4.9	77	6.6	66
Punctuation	5.2	81	6.5	65
Language Usage	4.8	72	7.0	72
Map Reading	4.4	73	6.8	77
Graphs and Tables	4.7	79	7.2	83
Reference Materials	4.3	72	6.6	70
Math Concepts	4.3	69	7.1	83
Math Problem Solving	4.4	79	6.4	72
NUMBER TAKING ALL SUBTESTS		72	78	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	52	59	66	17	57	63
	5	52	59	67	26	62	72
Language Total	3	52	65	76	17	60	68
	5	52	63	73	26	63	73
Math Total	3	52	62	72	17	62	72
	5	52	68	81	26	70+	83
Composite	3	52	64	75	17	60	69
	5	52	65	76	26	65	76

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	6.8	78
Vocabulary	4.7	80	6.6	72
Reading Comprehension	5.0	83	6.5	69
Spelling	5.4	84	7.3	79
Capitalization	5.3	84	7.4	78
Punctuation	5.6	87	7.2	77
Language Usage	5.2	80	7.4	79
Map Reading	4.8	83	6.7	75
Graphs and Tables	5.3	89	7.2	83
Reference Materials	4.9	87	6.8	73
Math Concepts	4.5	76	6.7	75
Math Problem Solving	4.5	82	6.4	72
NUMBER TAKING ALL SUBTESTS		63	65	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	47	68	81	16	65	76
	5	47	64	74	18	51	52
Language Total	3	47	80	92	16	79	91
	5	47	74	87	18	61	70
Math Total	3	47	72	85	16	68	81
	5	47	67	79	18	60	69
Composite	3	47	76	89	16	73	86
	5	47	70	83	18	59	67

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.4	94	7.7	93
Vocabulary	5.6	95	7.3	86
Reading Comprehension	5.0	83	7.3	85
Spelling	5.5	86	7.4	80
Capitalization	6.2	96	8.5	93
Punctuation	6.4	96	8.2	90
Language Usage	5.4	83	8.0	88
Map Reading	5.3	90	8.0	93
Graphs and Tables	5.6	92	8.4	96
Reference Materials	5.2	92	7.6	88
Math Concepts	5.2	92	8.1	96
Math Problem Solving	4.8	89	7.3	90
NUMBER TAKING ALL SUBTESTS		44	66	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	50	77	90			
	5	50	73	86	16	71	84
Language Total	3	50	83	94			
	5	50	81	93	16	78	91
Math Total	3	50	84	95			
	5	50	85	95	16	79	91
Composite	3	50	85	95			
	5	50	82	94	16	79	91

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score	Percentile Rank	Grade Equivalent Score	Percentile Rank
COMPOSITE	(3.7)* 4.2	(52)* 68	(5.7)* 5.4	(51)* 44
Vocabulary	4.0	59	5.2	38
Reading Comprehension	4.2	63	5.4	42
Spelling	4.9	76	5.9	54
Capitalization	4.5	68	5.8	52
Punctuation	5.0	78	5.6	47
Language Usage	4.3	62	5.6	48
Map Reading	4.1	64	5.2	36
Graphs and Tables	4.2	65	5.4	42
Reference Materials	4.0	61	5.6	47
Math Concepts	3.8	52	5.3	38
Math Problem Solving	3.9	57	5.2	36
NUMBER TAKING ALL SUBTESTS		66	46	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	31	55	59	23	55	60
	5	31	52	54	15	31-	18
Language Total	3	31	64	75	23	64	75
	5	31	56	62	15	35-	24
Math Total	3	31	54	57	23	55	60
	5	31	48	46	15	32-	19
Composite	3	31	57	63	23	60	68
	5	31	52	53	15	30-	17

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.6	74
Vocabulary	4.5	75	6.3	65
Reading Comprehension	4.6	74	6.3	64
Spelling	5.0	78	6.8	71
Capitalization	5.1	81	7.0	72
Punctuation	5.0	78	6.6	67
Language Usage	4.6	68	6.6	65
Map Reading	4.5	76	6.9	79
Graphs and Tables	4.7	79	7.1	81
Reference Materials	4.4	76	6.6	70
Math Concepts	4.5	76	6.7	75
Math Problem Solving	4.3	75	6.4	72
NUMBER TAKING ALL SUBTESTS		47	80	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	61	63	73	23	59	67
	5	61	58	64	19	57	63
Language Total	3	61	70	83	23	65	76
	5	61	63	73	20	62	71
Math Total	3	62	69	82	23	59	67
	5	62	66	77	20	62	71
Composite	3	60	69	82	23	62	71
	5	60	64	74	19	61	70

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.8	83	6.7	76
Vocabulary	4.5	75	6.3	65
Reading Comprehension	4.5	71	6.4	67
Spelling	5.3	83	6.7	69
Capitalization	5.6	88	6.6	66
Punctuation	5.3	83	6.8	70
Language Usage	4.8	72	7.0	72
Map Reading	4.7	81	6.9	79
Graphs and Tables	5.1	86	7.0	79
Reference Materials	4.7	83	6.7	71
Math Concepts	4.8	84	6.7	75
Math Problem Solving	4.7	87	6.5	75
NUMBER TAKING ALL SUBTESTS		23	27	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test*	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	21	68	80	10	58	65
	5	21	61	70			
Language Total	3	21	73	86	10	72	85
	5	21	64	75			
Math Total	3	21	75	88	10	70	83
	5	21	66	78			
Composite	3	21	74	87	10	68	81
	5	21	66	77			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.4	73	6.7	76
Vocabulary	4.4	72	6.4	67
Reading Comprehension	4.3	66	6.5	69
Spelling	5.0	78	6.8	71
Capitalization	4.9	77	7.6	71
Punctuation	4.9	77	7.1	75
Language Usage	4.6	68	7.0	72
Map Reading	4.5	76	6.9	79
Graphs and Tables	4.6	76	7.0	79
Reference Materials	4.2	69	6.7	71
Math Concepts	4.3	69	6.8	77
Math Problem Solving	4.1	66	6.3	69
NUMBER TAKING ALL SUBTESTS		43	29	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	26	59	67	16	50	50
	5	26	61	70			
Language Total	3	26	65	76	16	60	68
	5	26	67	79			
Math Total	3	26	65	76	16	57	63
	5	26	65	76			
Composite	3	26	65	76	16	56	62
	5	26	66	77			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.2	68	6.9	80
Vocabulary	4.2	65	6.5	70
Reading Comprehension	4.2	63	6.8	76
Spelling	4.2	62	6.8	71
Capitalization	3.8	52	7.0	72
Punctuation	4.4	67	7.0	73
Language Usage	4.4	64	7.2	76
Map Reading	4.2	67	7.0	81
Graphs and Tables	4.4	71	7.6	88
Reference Materials	4.2	69	6.9	75
Math Concepts	4.0	59	7.1	83
Math Problem Solving	3.9	57	6.6	77
NUMBER TAKING ALL SUBTESTS		47	42	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	27	66	77	18	51	51
	5	27	66	78	15	64+	75
Language Total	3	27	63	73	18	55	60
	5	27	66	77	15	66+	77
Math Total	3	27	66	78	18	53	55
	5	27	73+	86	15	66+	77
Composite	3	27	67	79	18	54	58
	5	27	70	83	15	65+	76

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	5.8	54
Vocabulary	4.0	59	5.8	52
Reading Comprehension	4.4	68	5.8	52
Spelling	4.7	72	6.2	60
Capitalization	5.3	84	6.3	61
Punctuation	5.6	87	6.1	58
Language Usage	4.7	70	5.7	50
Map Reading	4.7	81	5.5	44
Graphs and Tables	4.9	83	6.0	57
Reference Materials	4.2	69	6.0	57
Math Concepts	4.7	82	5.6	46
Math Problem Solving	4.5	82	5.8	52
NUMBER TAKING ALL SUBTESTS		70	70	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	47	54	57	32	58	64
	5	47	51	52	23	50	50
Language Total	3	47	70	83	32	68	81
	5	47	56	61	23	52	54
Math Total	3	47	59	66	32	60	68
	5	47	51	51	23	51	51
Composite	3	47	60	68	32	61	70
	5	47	52	54	23	53	55

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.0	62	5.6	49
Vocabulary	3.8	52	5.4	42
Reading Comprehension	4.2	63	5.5	44
Spelling	4.3	64	5.7	50
Capitalization	4.4	66	5.9	54
Punctuation	4.5	69	5.5	45
Language Usage	3.9	54	5.4	44
Map Reading	4.0	60	5.5	44
Graphs and Tables	4.0	58	5.7	49
Reference Materials	3.8	53	5.9	54
Math Concepts	4.1	63	6.1	60
Math Problem Solving	3.8	53	5.4	41
NUMBER TAKING ALL SUBTESTS		90	72	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	45	54	58	57	52	54
	5	45	51	51	28	38	29
Language Total	3	45	57	63	57	53	56
	5	45	51	52	28	44	39
Math Total	3	45	52	53	57	52	53
	5	45	57	63	29	42	36
Composite	3	45	56	61	57	51	52
	5	45	53	55	27	40	31

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.7	76
Vocabulary	4.5	75	6.2	62
Reading Comprehension	4.5	71	6.5	69
Spelling	5.4	84	6.9	72
Capitalization	5.3	84	7.5	80
Punctuation	5.2	81	7.2	77
Language Usage	4.7	70	6.9	71
Map Reading	4.5	76	7.1	83
Graphs and Tables	4.6	76	6.9	78
Reference Materials	4.2	69	6.8	73
Math Concepts	4.5	76	6.7	75
Math Problem Solving	4.3	75	6.4	72
NUMBER TAKING ALL SUBTESTS		41	53	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	46	61	70	21	56	62
	5	46	62	71			
Language Total	3	43	64	75	21	66	78
	5	43	68+	80			
Math Total	3	46	58	65	20	60	68
	5	46	65+	76			
Composite	3	42	64	74	19	60	69
	5	42	66	78			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.3	71	6.6	74
Vocabulary	4.1	62	6.4	67
Reading Comprehension	4.1	60	6.7	73
Spelling	5.0	78	6.5	65
Capitalization	4.8	75	6.5	64
Punctuation	5.1	80	6.7	68
Language Usage	4.6	68	6.7	67
Map Reading	4.4	73	6.7	75
Graphs and Tables	4.5	74	6.9	78
Reference Materials	4.1	65	6.7	71
Math Concepts	4.0	59	6.2	62
Math Problem Solving	4.1	66	6.3	69
NUMBER TAKING ALL SUBTESTS		30	39	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	26	69	82	13	54	58
	5	26	67	79			
Language Total	3	26	70	83	13	54	57
	5	26	64	74			
Math Total	3	26	67	79	13	53	56
	5	26	62	72			
Composite	3	26	71	84	13	55	60
	5	26	67	79			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	6.9	80
Vocabulary	4.7	80	6.7	74
Reading Comprehension	4.8	78	6.5	69
Spelling	5.1	79	7.0	74
Capitalization	5.4	85	7.4	78
Punctuation	5.6	87	7.3	78
Language Usage	5.0	76	7.1	74
Map Reading	4.8	83	6.8	77
Graphs and Tables	5.1	86	7.2	83
Reference Materials	4.8	85	7.0	77
Math Concepts	4.7	82	7.3	87
Math Problem Solving	4.5	82	6.7	79
NUMBER TAKING ALL SUBTESTS		79	82	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	40	66	77	18	57	63
	5	40	60	69	42	61	70
Language Total	3	40	74	87	18	66	77
	5	40	69	82	42	68	81
Math Total	3	40	68	81	18	58	64
	5	40	74	87	42	71+	84
Composite	3	40	71	84	18	62	71
	5	40	69	82	42	68+	80



SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.7	76
Vocabulary	4.4	72	6.7	74
Reading Comprehension	4.6	74	6.3	64
Spelling	5.0	78	6.6	67
Capitalization	5.0	79	7.4	78
Punctuation	5.2	81	7.1	75
Language Usage	4.8	72	6.9	71
Map Reading	4.7	81	6.7	75
Graphs and Tables	4.9	83	7.1	81
Reference Materials	4.6	81	6.6	70
Math Concepts	4.6	79	6.6	72
Math Problem Solving	4.5	82	6.4	72
NUMBER TAKING ALL SUBTESTS		44	63	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	3	40	62	71	14	53	56
Comprehension	5	40	61	70	23	53	55
Language Total	3	40	68	81	14	61	70
	5	40	70	83	23	60	68
Math Total	3	40	62	71	13	63	73
	5	40	66	77	23	61	70
Composite	3	40	65	76	13	61	70
	5	40	68	81	23	60	69

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	6.5	72
Vocabulary	4.2	65	7.3	86
Reading Comprehension	4.4	68	6.1	60
Spelling	4.7	72	6.7	69
Capitalization	5.1	81	6.8	69
Punctuation	5.5	86	6.7	68
Language Usage	4.9	74	6.5	63
Map Reading	4.3	70	6.2	63
Graphs and Tables	4.7	79	6.7	74
Reference Materials	4.3	72	6.3	64
Math Concepts	4.3	69	6.5	70
Math Problem Solving	4.3	75	5.9	55
NUMBER TAKING ALL SUBTESTS		77	79	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	47	62	72	22	62	71
	5	47	56	62	32	52	54
Language Total	3	47	73	86	21	71	84
	5	47	66	78	32	55	60
Math Total	3	47	71	84	21	64	75
	5	47	63	73	32	52	54
Composite	3	47	71	84	21	68	80
	5	47	67	79	32	58	64

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.3	71	6.5	72
Vocabulary	4.1	62	6.4	67
Reading Comprehension	4.1	60*	6.4	67
Spelling	4.7	72	6.7	69
Capitalization	4.8	75	7.0	72
Punctuation	5.0	78	6.8	70
Language Usage	4.3	62	6.5	63
Map Reading	4.3	70	6.7	75
Graphs and Tables	4.4	71	6.9	78
Reference Materials	4.3	72	6.6	70
Math Concepts	4.2	66	6.5	70
Math Problem Solving	4.1	66	6.3	69
NUMBER TAKING ALL SUBTESTS		74	78	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	48	64	75	18	56	62
	5	48	65	76	30	49	49
Language Total	3	48	67	79	18	57	63
	5	48	66	77	30	57	63
Math Total	3	48	67	79	18	56	62
	5	48	67	79	30	54	57
Composite	3	47	68	80	17	55	60
	5	47	68	80	30	54	58

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4:2	68	6.2	64
Vocabulary	4.1	62	6.1	60
Reading Comprehension	4.1	60	6.2	62
Spelling	4.8	74	6.7	69
Capitalization	4.8	75	6.5	64
Punctuation	5.2	81	6.4	63
Language Usage	4.3	62	6.4	62
Map Reading	4.0	60	6.2	63
Graphs and Tables	4.4	71	6.2	62
Reference Materials	4.1	65	6.4	66
Math Concepts	4.2	66	6.3	65
Math Problem Solving	4.0	62	6.1	62
NUMBER TAKING ALL SUBTESTS		55	63	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	47	62	71	26	54	58
	5	47	57	63	17	53	55
Language Total	3	47	65	76	26	61	70
	5	47	61	70	17	55	59
Math Total	3	47	61	70	26	56	61
	5	47	60	69	17	53	55
Composite	3	47	64	74	26	58	65
	5	47	60	69	16	52	53

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	6.7	76
Vocabulary	4.4	72	6.6	72
Reading Comprehension	4.4	68	6.5	69
Spelling	5.0	78	7.0	74
Capitalization	5.2	82	7.3	77
Punctuation	5.4	84	7.0	73
Language Usage	4.5	66	7.0	72
Map Reading	4.6	78	6.9	79
Graphs and Tables	4.7	79	7.1	81
Reference Materials	4.4	76	6.8	73
Math Concepts	4.2	66	6.6	72
Math Problem Solving	3.9	57	6.4	72
NUMBER TAKING ALL SUBTESTS		100	100	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	85	63	73	15	52	54
	5	85	60	69	45	59+	66
Language Total	3	85	70	83	15	56	62
	5	85	67	79	15	64+	75
Math Total	3	85	65	76	15	52	54
	5	85	65	76	15	62+	71
Composite	3	85	68	81	15	54	57
	5	85	67	79	15	62+	72

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.9	80
Vocabulary	4.7	80	6.7	74
Reading Comprehension	4.7	76	6.8	76
Spelling	5.0	78	6.8	71
Capitalization	5.0	79	6.8	69
Punctuation	5.2	81	7.0	73
Language Usage	5.0	76	7.2	76
Map Reading	4.9	84	6.9	79
Graphs and Tables	4.8	81	7.2	83
Reference Materials	4.4	76	6.7	71
Math Concepts	4.5	76	7.2	85
Math Problem Solving	4.4	79	7.0	85
NUMBER TAKING ALL SUBTESTS		27	28	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	18	69	82	15	54	57
	5	18	65	76	10	63	73
Language Total	3	18	75	88	15	64	74
	5	18	70	83	10	57	63
Math Total	3	18	75	88	15	64	75
	5	18	77	90	10	68	81
Composite	3	18	76	89	15	61	70
	5	18	72	85	10	64	74

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.1	65	6.0	59
Vocabulary	3.9	55	6.0	57
Reading Comprehension	4.0	57	5.9	55
Spelling	4.8	74	6.2	60
Capitalization	4.5	68	6.3	61
Punctuation	4.5	69	5.9	54
Language Usage	4.4	64	6.3	60
Map Reading	3.9	56	6.0	58
Graphs and Tables	4.3	68	6.1	60
Reference Materials	3.9	57	6.0	57
Math Concepts	4.0	59	5.9	54
Math Problem Solving	3.9	57	5.9	55
NUMBER TAKING ALL SUBTESTS		65	66	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	44	58	65	35	52	54
	5	44	52	54	22	52	54
Language Total	3	43	68	81	35	62	72
	5	43	57	63	22	55	60
Math Total	3	44	67	79	35	60	68
	5	44	55-	60	22	51-	52
Composite	3	43	65	76	35	59	66
	5	43	56	62	22	54	57

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.2	68	6.1	62
Vocabulary	4.0	59	6.2	62
Reading Comprehension	4.1	60	5.8	52
Spelling	4.9	76	6.2	60
Capitalization	4.6	71	5.9	54
Punctuation	4.6	71	5.8	51
Language Usage	4.2	60	5.6	48
Map Reading	4.4	73	5.9	55
Graphs and Tables	4.6	76	6.3	65
Reference Materials	4.1	65	6.0	57
Math Concepts	4.1	63	6.7	75
Math Problem Solving	4.2	70	5.9	55
NUMBER TAKING ALL SUBTESTS		94	83	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	52	56	62	25	53	56
	5	52	52	54	31	49	49
Language Total	3	53	58	64	25	59	66
	5	53	53	56	31	50	50
Math Total	3	53	55	60	25	58	64
	5	53	63+	73	30	57	63
Composite	3	51	56	61	25	57	63
	5	51	58	64	30	54	57

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	7.0	82
Vocabulary	4.3	69	6.6	72
Reading Comprehension	4.4	68	6.7	73
Spelling	4.7	72	7.0	74
Capitalization	5.0	79	7.5	80
Punctuation	5.2	81	7.5	81
Language Usage	4.3	62	7.1	74
Map Reading	4.4	73	7.1	83
Graphs and Tables	4.6	76	7.3	84
Reference Materials	4.5	79	6.8	73
Math Concepts	4.4	73	7.5	90
Math Problem Solving	4.4	79	6.8	81
NUMBER TAKING ALL SUBTESTS		28	53	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	34	67	79	20	49	48
	5	34	66	78	19	60+	68
Language Total	3	34	70	83	19	56	62
	5	34	71	84	19	69+	82
Math Total	3	34	75	88	19	54	58
	5	34	76	89	19	73+	86
Composite	3	34	73	86	19	55	59
	5	34	72	85	19	67+	79

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	6.4	70
Vocabulary	4.4	72	6.4	67
Reading Comprehension	4.3	66	6.2	62
Spelling	4.7	72	6.6	67
Capitalization	5.1	81	7.2	75
Punctuation	5.4	84	6.9	72
Language Usage	4.7	70	6.7	67
Map Reading	4.4	73	6.2	63
Graphs and Tables	4.5	74	6.7	74
Reference Materials	4.4	76	6.5	68
Math Concepts	4.2	66	6.3	65
Math Problem Solving	4.1	66	6.0	59
NUMBER TAKING ALL SUBTESTS		70	65	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	50	67	79	30	61	70
	5	50	57-	63	15	54	57
Language Total	3	50	73	86	30	60	69
	5	50	65	76	15	60	69
Math Total	3	50	73	86	30	58	65
	5	50	58-	65	15	59	67
Composite	3	50	72	85	30	60	68
	5	50	62-	72	15	58	64

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.7	76
Vocabulary	4.4	72	6.4	67
Reading Comprehension	4.7	76	6.4	67
Spelling	5.1	79	6.9	72
Capitalization	5.2	82	7.1	74
Punctuation	5.3	83	7.0	73
Language Usage	5.0	76	6.9	71
Map Reading	4.8	83	6.5	71
Graphs and Tables	4.9	83	6.9	78
Reference Materials	4.6	81	6.7	71
Math Concepts	4.4	73	7.0	87
Math Problem Solving	4.5	82	6.2	65
NUMBER TAKING ALL SUBTESTS		97	95	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	69	57	63	37	52	54
	5	69	61	70	31	58+	65
Language Total	3	69	66	77	37	59	67
	5	69	65	76	31	66+	78
Math Total	3	69	60	68	37	55	60
	5	69	67+	79	31	64+	75
Composite	3	66	63	73	37	57	63
	5	66	66	78	29	65+	76

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.7	97	6.9	80
Vocabulary	5.9	98	6.6	72
Reading Comprehension	5.2	86	6.7	73
Spelling	5.8	90	7.0	74
Capitalization	6.5	98	7.4	78
Punctuation	6.5	97	7.3	78
Language Usage	5.7	88	7.0	72
Map Reading	5.9	96	6.9	79
Graphs and Tables	5.7	93	7.3	84
Reference Materials	5.4	94	6.9	75
Math Concepts	5.3	93	7.0	81
Math Problem Solving	5.6	97	6.9	83
NUMBER TAKING ALL SUBTESTS		29	48	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	40	67	79	11	60	68
	5	40	63	73			
Language Total	3	40	79	92	11	71	84
	5	40	70	83			
Math Total	3	40	83	94	11	75	88
	5	40	72-	85			
Composite	3	40	81	93	11	70	83
	5	40	69-	82			



SCHOOL MEAN SCORES; IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.1	62
Vocabulary	4.3	69	5.9	54
Reading Comprehension	4.7	76	6.1	60
Spelling	4.9	76	6.2	60
Capitalization	5.3	84	6.6	66
Punctuation	5.9	90	7.0	73
Language Usage	4.8	72	6.5	63
Map Reading	4.8	83	6.2	63
Graphs and Tables	5.0	84	6.3	65
Reference Materials	4.5	79	6.2	61
Math Concepts	4.6	79	5.8	52
Math Problem Solving	4.6	85	5.8	52
NUMBER TAKING ALL SUBTESTS		28	30	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	23	50	50	10	56	61
	5	23	53	55			
Language Total	3	23	58	64	10	63	73
	5	23	60	69			
Math Total	3	23	54	58	10	59	66
	5	23	52	54			
Composite	3	23	55	59	10	59	66
	5	23	56	61			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.0	88	6.9	80
Vocabulary	4.9	84	6.7	74
Reading Comprehension	5.0	83	6.6	71
Spelling	5.6	87	7.4	80
Capitalization	5.2	82	7.2	75
Punctuation	5.3	83	7.0	73
Language Usage	5.2	80	7.2	76
Map Reading	4.9	84	6.9	79
Graphs and Tables	5.2	88	7.2	83
Reference Materials	4.8	85	6.9	75
Math Concepts	4.8	84	7.0	81
Math Problem Solving	4.5	82	6.8	81
NUMBER TAKING ALL SUBTESTS		68	81	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	60	63	73	13	62	71
	5	60	63	73	21	59	67
Language Total	3	60	73	86	13	65	76
	5	60	69	82	20	66	78
Math Total	3	61	67	79	13	62	71
	5	61	73	86	21	65	76
Composite	3	60	69	82	13	65	76
	5	60	70	83	20	67	79

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	6.6	74
Vocabulary	4.4	72	6.5	70
Reading Comprehension	4.3	66	6.5	64
Spelling	4.9	76	6.8	71
Capitalization	4.9	77	6.8	69
Punctuation	5.2	81	7.1	75
Language Usage	4.6	68	7.0	72
Map Reading	4.5	76	6.5	71
Graphs and Tables	4.5	74	7.1	81
Reference Materials	4.3	72	6.6	70
Math Concepts	4.3	69	6.6	72
Math Problem Solving	4.3	75	6.5	75
NUMBER TAKING ALL SUBTESTS		50	63	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	52	63	73	10	48	46
	5	52	58	64	11	61+	70
Language Total	3	52	70	83	10	55	59
	5	52	65	76	11	66+	78
Math Total	3	52	65	76	10	52	54
	5	52	63	73	11	71+	84
Composite	3	52	68	81	10	51	51
	5	52	63	73	11	68+	80

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	3.3	38	5.9	56
Vocabulary	3.2	35	5.5	44
Reading Comprehension	3.0	29	5.5	44
Spelling	3.5	44	6.3	62
Capitalization	3.4	42	6.1	58
Punctuation	3.5	44	6.1	57
Language Usage	3.0	33	6.0	55
Map Reading	3.3	36	5.8	52
Graphs and Tables	3.1	32	5.9	55
Reference Materials	3.4	39	5.7	49
Math Concepts	3.3	34	5.8	52
Math Problem Solving	3.2	33	5.4	41
NUMBER TAKING ALL SUBTESTS		16	26	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	19	58	65	21	59	67
	5	19	58	65	10	28-	15
Language Total	3	19	63	73	21	66	78
	5	19	60	68			
Math Total	3	19	61	70	21	58	64
	5	19	58	64	10	32-	20
Composite	3	19	63	73	21	62	72
	5	19	59	66			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.4	70
Vocabulary	4.5	75	6.2	62
Reading Comprehension	4.7	76	6.2	62
Spelling	5.1	79	6.4	64
Capitalization	5.3	84	6.7	67
Punctuation	5.7	88	6.5	65
Language Usage	5.4	76	6.7	67
Map Reading	4.7	81	6.4	68
Graphs and Tables	5.0	84	6.5	69
Reference Materials	4.5	79	6.4	66
Math Concepts	4.6	79	6.5	70
Math Problem Solving	4.4	79	6.2	65
NUMBER TAKING ALL SUBTESTS		78	107	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978. (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	67	57	63	41	52	54
	5	67	55	60	40	60+	68
Language Total	3	65	64	74	41	61	70
	5	65	59	66	40	65	76
Math Total	3	67	61	70	41	58	65
	5	67	61	70	40	64	75
Composite	3	65	62	71	41	57	63
	5	65	59	67	40	64+	75

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.0	62	5.7	51
Vocabulary	3.9	55	5.6	47
Reading Comprehension	3.9	55	5.5	44
Spelling	4.6	70	6.1	58
Capitalization	4.2	62	5.7	50
Punctuation	4.3	65	5.9	54
Language Usage	4.2	60	5.9	53
Map Reading	4.0	60	5.9	55
Graphs and Tables	4.2	65	5.7	49
Reference Materials	4.0	61	6.0	57
Math Concepts	3.8	52	5.4	41
Math Problem Solving	3.8	53	5.9	55
NUMBER TAKING ALL SUBTESTS		59	53	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	45	50	50	30	38	28
	5	45	49	48			
Language Total	3	45	56	61	30	45	41
	5	45	55	60			
Math Total	3	44	50	50	30	45	41
	5	44	52	53			
Composite	3	44	54	57	30	42	36
	5	44	53	56			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.1	90	7.4	89
Vocabulary	4.8	82	7.1	82
Reading Comprehension	4.9	81	6.8	76
Spelling	5.5	86	7.7	85
Capitalization	6.1	95	8.4	92
Punctuation	5.8	89	8.1	89
Language Usage	5.3	81	7.9	87
Map Reading	4.9	84	7.5	88
Graphs and Tables	5.0	84	7.9	91
Reference Materials	4.9	87	7.4	84
Math Concepts	5.1	91	7.6	91
Math Problem Solving	5.1	93	7.2	88
NUMBER TAKING ALL SUBTESTS		28	-8	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	36	66	78			
	5	36	64	75	12	68	80
Language Total	3	36	77	90			
	5	36	80	92	12	78	91
Math Total	3	36	71	84			
	5	36	79*	91	12	81	93
Composite	3	36	74	87			
	5	36	76	89	12	78	91

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.2	68	6.7	76
Vocabulary	4.1	62	6.8	76
Reading Comprehension	4.4	68	6.4	67
Spelling	4.2	62	6.9	72
Capitalization	4.6	71	6.7	67
Punctuation	4.3	65	7.0	73
Language Usage	4.2	60	7.1	74
Map Reading	3.7	49	6.3	66
Graphs and Tables	4.6	76	6.4	67
Reference Materials	4.1	65	6.7	71
Math Concepts	3.7	49	6.8	77
Math Problem Solving	4.0	62	6.6	77
NUMBER TAKING ALL SUBTESTS		26	23	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	16	62	72	11	57	63
	5	16	62	71			
Language Total	3	16	60	69	11	58	64
	5	16	65+	76			
Math Total	3	16	66	77	11	66	78
	5	16	69	82			
Composite	3	16	64	75	11	62	72
	5	16	67	79			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	3.4	42	5.0	32
Vocabulary	3.4	41	5.0	33
Reading Comprehension	3.5	44	4.9	30
Spelling	3.5	44	5.3	41
Capitalization	3.3	39	5.2	39
Punctuation	3.7	49	5.2	39
Language Usage	3.4	42	5.2	40
Map Reading	3.4	39	5.0	31
Graphs and Tables	3.4	40	5.2	37
Reference Materials	3.5	43	5.4	41
Math Concepts	3.4	38	5.1	34
Math Problem Solving	3.2	33	5.1	34
NUMBER TAKING ALL SUBTESTS		60	68	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	50	44	38	28	42	36
	5	50	37	27	20	38	29
Language Total	3	50	48	47	28	43	37
	5	50	44	38	18	39	30
Math Total	3	50	40	31	28	37	27
	5	50	39	30	21	42	36
Composite	3	50	43	37	28	39	30
	5	50	39	30	18	36	25

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.2	64
Vocabulary	4.5	75	6.0	57
Reading Comprehension	4.5	71	6.1	60
Spelling	5.1	79	6.5	65
Capitalization	5.1	81	6.5	64
Punctuation	5.7	88	6.8	70
Language Usage	4.9	74	6.8	69
Map Reading	4.6	78	6.1	61
Graphs and Tables	4.9	83	6.8	76
Reference Materials	4.6	81	6.1	59
Math Concepts	4.6	79	6.0	57
Math Problem Solving	4.4	79	5.9	55
NUMBER TAKING ALL SUBTESTS		48	49	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	31	59	66	20	58	65
	5	31	55	60	18	56	61
Language Total	3	31	72	85	20	65	76
	5	31	64	74	18	56	62
Math Total	3	31	66	78	19	59	67
	5	31	54	58	18	57	63
Composite	3	30	69	82	19	63	73
	5	30	58	65	18	57	63

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76	6.7	76
Vocabulary	4.3	69	6.5	70
Reading Comprehension	4.3	66	6.5	69
Spelling	4.7	72	6.6	67
Capitalization	5.1	81	7.0	72
Punctuation	5.6	87	6.8	70
Language Usage	4.7	70	6.6	65
Map Reading	4.6	78	6.7	75
Graphs and Tables	4.9	83	6.9	78
Reference Materials	4.4	76	6.9	75
Math Concepts	4.3	69	6.7	75
Math Problem Solving	4.3	75	6.5	75
NUMBER TAKING ALL SUBTESTS		72	103	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	64	68	80	22	57	63
	5	64	64	74	40	54	57
Language Total	3	65	74	87	22	64	74
	5	65	65	76	40	60	68
Math Total	3	65	70	83	22	56	62
	5	65	68	81	39	60	69
Composite	3	63	73	86	22	59	66
	5	63	67	79	38	60	69

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	3.9	58	6.5	72
Vocabulary	3.8	52	6.4	67
Reading Comprehension	3.9	55	6.3	64
Spelling	4.1	59	6.8	71
Capitalization	4.3	64	6.9	71
Punctuation	4.1	60	7.3	78
Language Usage	3.9	54	6.6	65
Map Reading	3.8	53	6.1	61
Graphs and Tables	4.1	61	6.5	69
Reference Materials	3.7	49	6.6	70
Math Concepts	3.7	49	6.2	62
Math Problem Solving	3.6	46	6.3	69
NUMBER TAKING ALL SUBTESTS		35	24	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	16	66	78	11	47	45
	5	16	56	62			
Language Total	3	16	73	86	11	51	52
	5	16	65	76			
Math Total	3	16	59	67	11	46	42
	5	16	57	63			
Composite	3	16	67	79	11	47	45
	5	16	61	70			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.3	71	5.9	56
Vocabulary	4.1	62	5.6	47
Reading Comprehension	3.9	55	5.7	50
Spelling	4.6	70	6.4	64
Capitalization	5.2	82	6.2	59
Punctuation	5.7	88	6.4	63
Language Usage	4.5	66	5.8	51
Map Reading	4.0	60	5.9	55
Graphs and Tables	4.8	81	6.2	62
Reference Materials	4.3	72	5.7	49
Math Concepts	4.0	59	6.0	57
Math Problem Solving	4.2	70	5.9	55
NUMBER TAKING ALL SUBTESTS		34	32	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	20	54	57	19	50	50
	5	20	53	56	14	43	37
Language Total	3	20	66	78	19	62	72
	5	20	59	66	12	51-	52
Math Total	3	20	61	70	19	55	59
	5	20	57	63	12	50	50
Composite	3	20	63	73	18	61	70
	5	20	55	60	12	51-	51

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.5	76		
Vocabulary	3.8	52		
Reading Comprehension	4.1	60		
Spelling	4.9	76		
Capitalization	4.0	79		
Punctuation	5.3	83		
Language Usage	4.4	64		
Map Reading	4.7	81		
Graphs and Tables	4.9	83		
Reference Materials	4.2	69		
Math Concepts	4.3	69		
Math Problem Solving	4.4	79		
NUMBER TAKING ALL SUBTESTS		39		

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	7.5	90
Vocabulary	4.6	78	7.1	82
Reading Comprehension	4.7	76	7.3	85
Spelling	5.1	79	7.1	76
Capitalization	4.8	75	8.5	93
Punctuation	5.6	87	8.1	89
Language Usage	4.9	74	7.5	81
Map Reading	4.8	83	8.1	94
Graphs and Tables	5.3	89	7.7	89
Reference Materials	4.5	79	7.2	81
Math Concepts	5.0	89	7.9	94
Math Problem Solving	5.1	93	7.2	88
NUMBER TAKING ALL SUBTESTS		39	44	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	35	65	76	14	51	51
	5	35	70	83			
Language Total	3	35	71	84	14	62	72
	5	35	76+	89			
Math Total	3	35	78	91	14	62	72
	5	35	80+	92			
Composite	3	35	75	86	14	59	67
	5	35	77	90			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	**	**
Vocabulary	4.6	78	6.5	70
Reading Comprehension	4.5	71	**	**
Spelling	5.4	84	7.2	77
Capitalization	5.1	81	7.2	75
Punctuation	5.2	81	7.0	73
Language Usage	5.0	76	7.1	74
Map Reading	4.6	78	6.8	77
Graphs and Tables	4.9	83	6.6	72
Reference Materials	4.5	79	6.6	70
Math Concepts	4.4	73	6.1	60
Math Problem Solving	4.3	75	6.2	65
NUMBER TAKING ALL SUBTESTS		38	41	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	**	**	**	**	**	**
	5	**	**	**			
Language Total	3	33	69	82	16	61	70
	5	33	66	78			
Math Total	3	33	62	72	17	52	54
	5	33	59	66			
Composite	3	**	**	**	**	**	**
	5	**	**	**			

**Reading Comprehension and Composite results are not reported for Grade 5 because of an irregularity in the administration of the Reading Comprehension test in that grade.

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	3.7	52	6.1	62
Vocabulary	3.8	52	5.8	52
Reading Comprehension	3.7	49	5.9	55
Spelling	4.6	70	6.5	65
Capitalization	3.8	52	6.4	62
Punctuation	3.8	52	6.3	61
Language Usage	3.4	42	6.2	58
Map Reading	3.7	49	6.0	58
Graphs and Tables	3.9	55	6.2	62
Reference Materials	3.8	53	6.1	59
Math Concepts	3.7	49	5.9	54
Math Problem Solving	3.5	42	6.0	59
NUMBER TAKING ALL SUBTESTS		45	88	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	27	60	68	20	49	49
	5	27	58	65	62	49	49
Language Total	3	27	61	70	20	58	65
	5	27	57	63	62	57	63
Math Total	3	27	59	66	20	47	45
	5	27	60	68	62	52	54
Composite	3	27	61	70	20	51	51
	5	27	59	67	61	53	56

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.6	74
Vocabulary	4.6	78	6.5	70
Reading Comprehension	4.6	74	6.6	71
Spelling	4.9	76	6.4	64
Capitalization	4.6	71	6.6	66
Punctuation	5.1	80	6.6	67
Language Usage	4.9	74	6.9	71
Map Reading	4.6	78	6.9	79
Graphs and Tables	5.1	86	6.8	76
Reference Materials	4.6	81	6.8	73
Math Concepts	4.4	73	6.7	75
Math Problem Solving	4.3	75	6.4	72
NUMBER TAKING ALL SUBTESTS		61	66	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	49	62	72	22	52	54
	5	49	61	70	17	62+	72
Language Total	3	49	60	69	22	51	52
	5	49	59	67	17	65+	76
Math Total	3	49	65	76	22	53	55
	5	49	64	75	17	67+	79
Composite	3	49	63	73	22	52	53
	5	49	64	74	17	67+	79



NO

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.6	74
Vocabulary	4.5	75	6.4	67
Reading Comprehension	4.6	74	6.4	67
Spelling	5.0	78	6.6	67
Capitalization	5.0	79	7.0	72
Punctuation	4.9	77	6.9	72
Language Usage	5.1	78	7.0	72
Map Reading	4.6	78	6.7	75
Graphs and Tables	5.0	84	7.1	81
Reference Materials	4.4	76	6.5	68
Math Concepts	4.3	69	6.6	72
Math Problem Solving	4.3	75	6.3	69
NUMBER TAKING ALL SUBTESTS		67	71	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	57	57	63	21	53	56
	5	57	60	68	15	61+	70
Language Total	3	56	63	73	21	57	63
	5	56	64	75	15	66+	78
Math Total	3	57	62	72	21	56	61
	5	57	64	75	15	62	72
Composite	3	56	62	72	21	55	60
	5	56	64	75	15	65+	76

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.0	88	6.6	74
Vocabulary	4.9	84	6.4	67
Reading Comprehension	5.2	86	6.3	64
Spelling	5.7	89	6.9	72
Capitalization	5.8	91	6.9	71
Punctuation	5.8	89	6.9	72
Language Usage	5.1	78	6.6	65
Map Reading	4.6	78	6.6	73
Graphs and Tables	4.4	71	6.9	73
Reference Materials	4.4	76	6.3	64
Math Concepts	4.6	79	6.8	77
Math Problem Solving	4.7	87	6.5	75
NUMBER TAKING ALL SUBTESTS		24	53	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	42	62	71	16	58	65
	5	42	60	68	11	48	46
Language Total	3	42	69	82	16	67	79
	5	42	66	78	11	57	63
Math Total	3	42	67	79	16	58	65
	5	42	68	80	11	63	73
Composite	3	42	66	78	16	61	70
	5	42	66	77	11	55	59

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.9	80
Vocabulary	4.4	72	6.7	74
Reading Comprehension	4.5	71	6.5	69
Spelling	5.0	78	6.8	71
Capitalization	4.8	75	7.7	82
Punctuation	5.6	87	7.2	77
Language Usage	4.5	66	7.4	79
Map Reading	4.7	81	7.1	83
Graphs and Tables	4.6	76	7.1	81
Reference Materials	4.3	72	6.8	75
Math Concepts	4.1	63	6.8	77
Math Problem Solving	4.4	79	6.7	79
NUMBER TAKING ALL SUBTESTS		32		22

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	18	62	71	18	53	56
	5	18	59	67			
Language Total	3	18	69	82	18	63	73
	5	18	69	82			
Math Total	3	18	63	73	18	59	66
	5	18	66	77			
Composite	3	18	66	78	18	60	69
	5	18	66	78			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.3	71	6.4	70
Vocabulary	4.2	65	6.4	67
Reading Comprehension	4.2	63	6.3	64
Spelling	5.0	78	6.4	64
Capitalization	4.6	71	6.8	69
Punctuation	4.9	77	6.3	61
Language Usage	4.5	66	6.7	67
Map Reading	4.2	67	6.5	71
Graphs and Tables	4.3	68	6.6	72
Reference Materials	4.1	65	6.3	64
Math Concepts	4.0	59	6.3	65
Math Problem Solving	4.0	62	6.0	59
NUMBER TAKING ALL SUBTESTS		59	79	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	49	62	72	26	55	60
	5	49	64	75	30	49	48
Language Total	3	49	71	84	25	63	73
	5	49	64	75	30	53	56
Math Total	3	46	65	76	25	55	59
	5	46	65	76	30	49	48
Composite	3	45	69	82	25	60	68
	5	45	66	78	30	50	50

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE			5.7	51
Vocabulary			5.8	52
Reading Comprehension			5.7	50
Spelling			5.9	54
Capitalization			5.9	54
Punctuation			5.8	51
Language Usage			5.8	51
Map Reading			5.7	49
Graphs and Tables			5.9	55
Reference Materials			5.9	54
Math Concepts			5.5	44
Math Problem Solving			5.6	47

NUMBER TAKING ALL SUBTESTS

124

* Mean for the national norm group for the Composite score



SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.4	73	5.7	51
Vocabulary	4.3	69	5.5	44
Reading Comprehension	4.2	63	5.6	47
Spelling	5.2	81	6.2	60
Capitalization	4.9	77	5.8	52
Punctuation	5.1	80	5.8	51
Language Usage	4.6	68	5.5	46
Map Reading	4.7	81	5.7	49
Graphs and Tables	4.7	79	6.0	57
Reference Materials	4.4	76	5.8	52
Math Concepts	4.2	66	5.5	44
Math Problem Solving	4.1	66	5.4	41
NUMBER TAKING ALL SUBTESTS		31	30	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	17	54	58	21	57	63
	5	17	50	50	13	46	43
Language Total	3	17	57	63	21	60	69
	5	17	55	60	13	47	44
Math Total	3	17	47	44	21	43	37
	5	17	47	44	13	44	39
Composite	3	17	54	58	21	57	63
	5	17	52	53	13	45	41

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.3	71	6.0	59
Vocabulary	4.2	65	6.1	60
Reading Comprehension	4.3	66	5.9	55
Spelling	4.9	76	6.2	60
Capitalization	4.6	71	6.3	61
Punctuation	4.6	71	6.1	58
Language Usage	4.3	62	6.2	58
Map Reading	4.3	70	5.9	55
Graphs and Tables	4.5	74	5.9	55
Reference Materials	4.1	65	6.1	59
Math Concepts	4.0	59	6.1	60
Math Problem Solving	4.1	66	5.9	55
NUMBER TAKING ALL SUBTESTS		90	93	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	71	57	63	30	56	62
	5	71	53	56	22	49	48
Language Total	3	71	61	70	30	55	59
	5	71	57	63	22	51	52
Math Total	3	71	56	62	30	51	52
	5	71	58	64	22	49	48
Composite	3	71	60	69	30	56	62
	5	71	56	62	22	51	51

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.0	88	7.1	84
Vocabulary	5.0	86	6.8	76
Reading Comprehension	4.8	78	6.9	78
Spelling	5.4	84	7.3	79
Capitalization	5.6	88	7.4	78
Punctuation	5.8	89	7.4	80
Language Usage	5.2	80	7.4	79
Map Reading	4.9	84	7.1	83
Graphs and Tables	5.2	88	7.5	87
Reference Materials	4.7	83	7.1	79
Math Concepts	4.9	87	7.3	87
Math Problem Solving	4.6	85	6.9	83
NUMBER TAKING ALL SUBTESTS		75	83	

* Mean for the national norm group for the Composite score.

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	54	76	89	12	71	84
	5	54	67	79	25	65	76
Language Total	3	54	85	95	12	74	87
	5	54	73	86	25	68	81
Math Total	3	57	81	93	12	74	87
	5	57	76	89	25	73	86
Composite	3	54	86	95	12	76	89
	5	54	74	87	25	70	83

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	6.5	72
Vocabulary	4.9	84	6.4	67
Reading Comprehension	4.9	81	6.5	69
Spelling	5.2	81	6.6	67
Capitalization	5.4	85	7.2	75
Punctuation	5.5	86	6.4	63
Language Usage	5.5	81	6.8	69
Map Reading	5.2	89	6.6	73
Graphs and Tables	5.2	88	6.8	76
Reference Materials	4.7	83	6.5	68
Math Concepts	4.5	69	6.4	67
Math Problem Solving	4.5	82	6.0	59
NUMBER TAKING ALL SUBTESTS		25	34	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	13	62	71	10	58	65
	5	13	63	73	21	58	65
Language Total	3	13	68	81	10	74	87
	5	13	66	78	21	60-	68
Math Total	3	13	64	75	10	71	84
	5	13	58	65-	21	58-	65
Composite	3	13	67	79	10	69	82
	5	13	65	76	21	61	70

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.0	88	6.6	74
Vocabulary	4.9	84	6.7	74
Reading Comprehension	4.9	81	6.5	69
Spelling	5.5	86	6.8	71
Capitalization	5.5	87	6.8	69
Punctuation	5.8	89	6.7	68
Language Usage	5.4	83	6.8	69
Map Reading	4.9	84	6.7	75
Graphs and Tables	5.2	88	6.9	78
Reference Materials	4.9	87	6.8	73
Math Concepts	4.6	79	6.6	72
Math Problem Solving	4.6	85	6.2	65
NUMBER TAKING ALL SUBTESTS		67	74	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	58	62	72	22	66	78
	5	58	61	70	16	59	66
Language Total	3	58	67	79	22	67	79
	5	58	64	74	16	62	71
Math Total	3	58	67	79	23	69	82
	5	58	63	73	16	60	68
Composite	3	58	67	79	22	70	83
	5	58	66	77	16	63	73

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score	Percentile Rank	Grade Equivalent Score	Percentile Rank
	(3.7)*	(52)*	(5.7)*	(51)*
COMPOSITE	4.5	76		
Vocabulary	4.2	65		
Reading Comprehension	4.4	68		
Spelling	4.8	74		
Capitalization	5.0	79		
Punctuation	5.5	86		
Language Usage	4.6	68		
Map Reading	4.3	70		
Graphs and Tables	4.5	74		
Reference Materials	4.5	79		
Math Concepts	4.2	66		
Math Problem Solving	4.2	70		

NUMBER TAKING ALL SUBTESTS		46		

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.3	67
Vocabulary	4.4	72	6.2	62
Reading Comprehension	4.6	74	6.2	62
Spelling	5.3	83	6.6	67
Capitalization	5.6	88	6.9	71
Punctuation	5.5	86	6.5	65
Language Usage	4.8	72	6.6	65
Map Reading	4.9	84	6.0	58
Graphs and Tables	4.9	83	6.1	60
Reference Materials	4.8	85	6.4	66
Math Concepts	4.4	73	6.3	65
Math Problem Solving	4.5	82	6.2	65
NUMBER TAKING ALL SUBTESTS		46		51

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	36	64	75	15	55	60
	5	36	61	70	15	46	43
Language Total	3	36	71	84	15	63	73
	5	36	67	79	15	50	50
Math Total	3	36	71	84	15	65	76
	5	36	65	76	15	50	50
Composite	3	36	69	82	15	63	73
	5	36	65	76	15	47	44

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.6	74
Vocabulary	4.3	69	6.4	67
Reading Comprehension	4.5	71	6.3	64
Spelling	5.2	81	6.8	71
Capitalization	5.1	81	7.0	72
Punctuation	5.8	89	7.0	73
Language Usage	4.9	74	6.8	69
Map Reading	4.4	73	6.5	71
Graphs and Tables	4.8	81	7.0	79
Reference Materials	4.5	79	6.8	73
Math Concepts	4.4	73	6.5	70
Math Problem Solving	4.6	85	6.4	72
NUMBER TAKING ALL SUBTESTS		55	83	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	64	65	76	28	61	70
	5	64	60	69	17	52	53
Language Total	3	64	76	89	28	69	82
	5	64	68	81	17	55	59
Math Total	3	64	71	84	28	64	75
	5	64	65	76	17	59	66
Composite	3	64	72	85	28	66	77
	5	64	66	78	17	57	63

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	3.9	58	5.9	56
Vocabulary	3.8	52	5.8	52
Reading Comprehension	3.6	47	5.6	47
Spelling	4.5	68	5.8	52
Capitalization	4.5	68	6.7	67
Punctuation	4.7	73	6.3	61
Language Usage	3.7	49	6.0	55
Map Reading	3.9	56	6.1	61
Graphs and Tables	4.1	61	6.2	62
Reference Materials	3.8	53	6.1	59
Math Concepts	3.7	49	5.7	49
Math Problem Solving	3.8	53	5.9	55
NUMBER TAKING ALL SUBTESTS	55		49	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	39	56	62	26	46	42
	5	39	49	48	10	46	43
Language Total	3	39	61	70	26	55	60
	5	39	57	63	10	54	57
Math Total	3	39	60	68	25	53	55
	5	39	55	59	10	42	36
Composite	3	39	59	67	25	52	54
	5	39	55	59	10	49	48

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.0	62		
Vocabulary	3.7	49		
Reading Comprehension	3.7	49		
Spelling	4.5	68		
Capitalization	4.5	68		
Punctuation	5.4	84		
Language Usage	4.2	60		
Map Reading	4.0	60		
Graphs and Tables	4.6	76		
Reference Materials	4.2	69		
Math Concepts	3.7	49		
Math Problem Solving	3.7	49		

NUMBER TAKING ALL SUBTESTS

41

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	7.0	82
Vocabulary	4.7	80	6.9	78
Reading Comprehension	4.8	78	6.9	78
Spelling	5.2	81	7.3	79
Capitalization	4.9	77	7.4	78
Punctuation	5.2	81	7.5	81
Language Usage	4.9	74	7.1	74
Map Reading	4.8	83	7.1	83
Graphs and Tables	4.8	81	7.0	79
Reference Materials	4.3	72	7.0	77
Math Concepts	4.4	73	7.1	83
Math Problem Solving	4.1	66	7.0	85
NUMBER TAKING ALL SUBTESTS		37	32	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	15	74	87	13	63	73
	5	15	70	83	17	62	71
Language Total	3	15	76	89	13	68	80
	5	15	73	86	17	67	79
Math Total	3	15	85	95	13	69	82
	5	15	76	89	17	70	83
Composite	3	15	80	92	13	68	80
	5	15	74	87	17	68	80

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.0	62	6.1	62
Vocabulary	4.0	59	6.0	57
Reading Comprehension	3.9	55	5.6	47
Spelling	4.2	62	6.6	67
Capitalization	4.3	64	7.0	72
Punctuation	4.5	69	6.4	63
Language Usage	4.0	56	6.2	58
Map Reading	3.9	56	6.2	63
Graphs and Tables	4.2	65	6.1	60
Reference Materials	3.9	57	5.9	54
Math Concepts	4.0	59	6.3	65
Math Problem Solving	3.8	53	6.1	62
NUMBER TAKING ALL SUBTESTS		39	47	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	27	55	60			
	5	27	50	50	19	43-	37
Language Total	3	27	66	78			
	5	27	65	76	19	53-	56
Math Total	3	28	59	66			
	5	28	62	71	19	53-	56
Composite	3	27	61	70			
	5	27	59	66	19	49-	49

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.8	78
Vocabulary	4.5	75	6.7	74
Reading Comprehension	4.5	71	6.4	67
Spelling	4.9	76	6.7	69
Capitalization	5.1	81	7.6	81
Punctuation	5.1	80	7.0	73
Language Usage	4.5	66	7.1	74
Map Reading	4.7	81	7.0	81
Graphs and Tables	4.8	81	7.2	83
Reference Materials	4.5	79	6.7	71
Math Concepts	4.4	75	7.3	87
Math Problem Solving	4.3	75	6.3	69
NUMBER TAKING ALL SUBTESTS		40	56	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	48	61	70	16	58	65
	5	48	59	67			
Language Total	3	48	70	83	16	61	70
	5	48	69	82			
Math Total	3	48	67	79	16	54	58
	5	48	71	84			
Composite	3	48	69	82	16	60	68
	5	48	68	81			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	6.6	74
Vocabulary	4.8	82	6.6	72
Reading Comprehension	4.9	81	6.3	64
Spelling	5.4	84	6.9	72
Capitalization	5.3	84	6.6	66
Punctuation	5.8	89	6.7	68
Language Usage	5.0	76	6.8	69
Map Reading	4.8	83	6.4	68
Graphs and Tables	5.3	89	6.8	76
Reference Materials	4.7	83	6.7	71
Math Concepts	4.7	82	6.6	72
Math Problem Solving	4.6	85	6.4	72
NUMBER TAKING ALL SUBTESTS		39	46	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	29	66	77	14	70	83
	5	29	60	68	18	55	59
Language Total	3	29	77	90	14	76	89
	5	29	66	77	18	57	63
Math Total	3	29	75	88	14	79	91
	5	29	67	79	18	62	71
Composite	3	29	73	86	14	76	89
	5	29	66	77	17	61	70

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.2	68	6.3	67
Vocabulary	4.1	62	6.3	65
Reading Comprehension	3.9	55	6.0	57
Spelling	5.0	78	6.4	64
Capitalization	4.8	75	6.7	67
Punctuation	4.8	75	6.5	65
Language Usage	4.4	64	6.3	60
Map Reading	4.3	70	6.3	66
Graphs and Tables	4.5	74	6.4	67
Reference Materials	4.2	69	6.2	61
Math Concepts	4.0	59	6.3	65
Math Problem Solving	3.9	57	6.1	62
NUMBER TAKING ALL SUBTESTS		73	93	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	68	55	60	25	48	46
	5	68	55	59	25	53	56
Language Total	3	67	65	76	26	51	51
	5	67	60	68	25	59+	66
Math Total	3	68	63	73	26	49	49
	5	68	59	67	25	57+	63
Composite	3	67	63	73	25	49	49
	5	67	59	67	25	56+	62

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.1	90	7.1	84
Vocabulary	5.1	88	6.8	76
Reading Comprehension	5.1	84	6.8	76
Spelling	5.5	86	7.1	76
Capitalization	5.5	87	7.3	77
Punctuation	5.7	88	7.3	78
Language Usage	5.3	81	7.2	76
Map Reading	5.3	90	7.3	86
Graphs and Tables	5.2	88	7.4	85
Reference Materials	4.7	83	6.9	75
Math Concepts	4.9	87	7.5	90
Math Problem Solving	4.7	87	7.1	87
NUMBER TAKING ALL SUBTESTS		40	71	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	36	72	85	17	62	72
	5	36	72	85	35	57	63
Language Total	3	36	75	88	17	63	73
	5	36	74	87	35	64	75
Math Total	3	36	85	95	17	72	85
	5	36	85	95	35	70	83
Composite	3	36	80	92	17	67	79
	5	36	79	91	35	64	75

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.7	81	6.4	70
Vocabulary	4.6	78	6.3	65
Reading Comprehension	4.6	74	6.2	62
Spelling	5.2	81	6.7	69
Capitalization	5.4	85	6.8	69
Punctuation	5.5	86	6.7	68
Language Usage	4.8	72	6.7	67
Map Reading	4.7	81	6.3	66
Graphs and Tables	4.9	83	6.5	69
Reference Materials	4.4	76	6.3	64
Math Concepts	4.3	69	6.3	65
Math Problem Solving	4.4	79	6.4	72
NUMBER TAKING ALL SUBTESTS		73	70	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	35	65	76	58	59	66
	5	35	62	71	35	52	54
Language Total	3	35	72	85	58	66	77
	5	35	67	79	35	57	63
Math Total	3	35	71	84	58	61	70
	5	35	68	80	35	54	58
Composite	3	35	71	84	58	63	73
	5	35	67	79	35	54	58

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE..	4.5	76	6.7	76
Vocabulary	4.5	75	6.5	70
Reading Comprehension	4.5	71	6.6	71
Spelling	4.8	74	6.7	69
Capitalization	4.9	77	6.9	71
Punctuation	5.3	83	6.8	70
Language Usage	4.6	68	6.7	67
Map Reading	4.4	73	6.7	75
Graphs and Tables	4.5	74	7.1	81
Reference Materials	4.3	72	6.8	73
Math Concepts	4.3	69	6.8	77
Math Problem Solving	4.1	66	6.6	77

NUMBER TAKING ALL SUBTESTS

79

106

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	3	69	62	72	26	62	71
Comprehension	5	69	64	75	37	58	64
Language Total	3	69	65	76	26	64	75
	5	69	66	78	37	57	63
Math Total	3	69	65	76	26	62	72
	5	69	71	84	37	61	70
Composite	3	69	65	76	26	64	74
	5	69	69	82	37	59	67

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.7	76
Vocabulary	4.4	72	6.6	72
Reading Comprehension	4.6	74	6.5	69
Spelling	5.1	79	6.8	71
Capitalization	4.9	77	7.1	74
Punctuation	4.8	75	6.9	72
Language Usage	4.8	72	6.5	63
Map Reading	4.3	70	6.7	75
Graphs and Tables	4.7	79	7.1	81
Reference Materials	4.5	79	6.7	71
Math Concepts	4.5	76	7.0	81
Math Problem Solving	4.4	79	6.4	72
NUMBER TAKING ALL SUBTESTS		34	59	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	42	60	69	17	56-	61
	5	42	62	71			
Language Total	3	42	66	77	17	58-	65
	5	42	66	77			
Math Total	3	42	65	76	17	59-	66
	5	42	70	83			
Composite	3	42	64	74	17	59-	67
	5	42	68	81			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	3.9	58	5.7	51
Vocabulary	3.9	55	5.6	47
Reading Comprehension	3.9	55	5.4	42
Spelling	4.6	70	5.9	54
Capitalization	4.5	68	6.0	55
Punctuation	4.2	62	5.7	49
Language Usage	3.8	52	5.6	48
Map Reading	3.9	56	5.9	55
Graphs and Tables	3.9	55	6.2	62
Reference Materials	3.8	53	6.0	57
Math Concepts	3.8	52	5.8	52
Math Problem Solving	3.5	49	5.8	52
NUMBER TAKING ALL SUBTESTS		58	51	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	28	53	56	18	41	34
	5	28	45	41	23	45	40
Language Total	3	28	58	65	18	50	50
	5	28	54	57	23	47	45
Math Total	3	28	60	69	18	42	35
	5	28	58	64	23	45	40
Composite	3	28	58	64	18	45	40
	5	28	53	56	23	46	42

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.4	73	6.3	67
Vocabulary	4.5	75	6.0	57
Reading Comprehension	4.1	60	6.0	57
Spelling	4.9	76	6.3	62
Capitalization	4.9	77	6.5	64
Punctuation	5.0	78	6.5	65
Language Usage	4.5	66	6.1	57
Map Reading	4.1	64	6.5	71
Graphs and Tables	4.5	74	6.7	74
Reference Materials	4.1	65	6.6	70
Math Concepts	4.2	66	6.6	72
Math Problem Solving	4.1	66	6.3	69
NUMBER TAKING ALL SUBTESTS		72	67	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	45	61	70	25	51	51
	5	45	58	65	22	46	43
Language Total	3	45	69	82	25	62	71
	5	45	62	72	22	48	46
Math Total	3	45	71	84	25	54	58
	5	45	68	80	22	55	59
Composite	3	45	68	81	25	54	58
	5	45	64	75	22	49	48

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.1	65		
Vocabulary	4.0	59		
Reading Comprehension	4.1	60		
Spelling	4.6	70		
Capitalization	4.2	62		
Punctuation	4.0	57		
Language Usage	4.0	56		
Map Reading	3.9	56		
Graphs and Tables	4.0	58		
Reference Materials	3.9	57		
Math Concepts	3.9	56		
Math Problem Solving	3.8	53		

NUMBER TAKING ALL SUBTESTS

104

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.6	79	6.4	70
Vocabulary	4.4	72	6.2	62
Reading Comprehension	4.6	74	6.4	67
Spelling	5.2	81	6.4	64
Capitalization	4.8	75	6.4	62
Punctuation	5.4	84	6.7	68
Language Usage	4.7	70	6.6	65
Map Reading	4.4	73	6.4	68
Graphs and Tables	4.7	79	6.5	69
Reference Materials	4.5	79	6.6	70
Math Concepts	4.3	69	6.1	60
Math Problem Solving	4.3	75	6.1	62
NUMBER TAKING ALL SUBTESTS		56	59	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year							
	Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean					
Reading Comprehension	3	39	61	70	5	39	62	71	20	55	60
Language Total	3	39	68	81	5	39	61	70	20	56	61
Math Total	3	38	63	73	5	38	57	63	20	57	63
Composite	3	38	65	76	5	38	61	70	20	57	63

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.0	62	5.8	54
Vocabulary	3.7	49	5.4	42
Reading Comprehension	3.8	52	5.7	50
Spelling	4.6	70	6.0	56
Capitalization	4.5	68	5.8	52
Punctuation	4.8	75	5.7	49
Language Usage	3.8	52	5.8	51
Map Reading	3.9	56	5.9	55
Graphs and Tables	4.2	65	6.0	57
Reference Materials	3.6	46	5.8	52
Math Concepts	3.8	52	6.1	60
Math Problem Solving	3.6	46	5.8	52
NUMBER TAKING ALL SUBTESTS		62	60	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	48	54	58	28	34	22
	5	48	51	51	13	43+	37
Language Total	3	47	56	62	28	47	45
	5	47	50	50	13	51	52
Math Total	3	47	54	57	28	49	48
	5	47	54	58	12	57+	63
Composite	3	45	54	57	26	42	35
	5	45	50	50	12	48+	46

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.4	73	5.8	54
Vocabulary	4.0	59	5.4	42
Reading Comprehension	4.3	66	5.6	47
Spelling	5.2	81	5.9	54
Capitalization	4.9	77	6.6	66
Punctuation	4.9	77	6.2	59
Language Usage	4.5	66	6.0	55
Map Reading	4.3	70	6.4	68
Graphs and Tables	4.7	79	6.1	60
Reference Materials	4.2	69	5.8	52
Math Concepts	4.2	66	5.6	46
Math Problem Solving	4.3	75	5.5	44
NUMBER TAKING ALL SUBTESTS		49	63	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	42	53	56	20	43	37
	5	42	51	52	22	43	37
Language Total	3	42	59	67	20	52	54
	5	42	56	62	22	54	57
Math Total	3	41	54	58	20	50	50
	5	41	50	50	22	46	43
Composite	3	41	55	59	20	47	44
	5	41	53	55	22	49	48

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.2	68	5.9	56
Vocabulary	4.1	62	5.7	49
Reading Comprehension	4.2	63	5.8	52
Spelling	4.7	72	6.2	60
Capitalization	4.9	77	6.6	66
Punctuation	4.9	77	6.3	61
Language Usage	4.2	60	6.1	57
Map Reading	4.3	70	5.8	52
Graphs and Tables	4.3	68	5.9	55
Reference Materials	4.0	61	6.3	64
Math Concepts	4.0	59	5.8	52
Math Problem Solving	3.9	57	5.8	52
NUMBER TAKING ALL SUBTESTS		70	74	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
	Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	3	44	58	49	54	57
Comprehension	5	44	54	30	45	41
Language Total	3	44	68	48	58	64
	5	44	61	30	51	51
Math Total	3	44	59	50	49	49
	5	44	56	30	47	45
Composite	3	43	61	48	53	56
	5	43	57	30	47	45

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.2	68	6.0	59
Vocabulary	4.3	69	6.0	57
Reading Comprehension	4.3	66	5.9	55
Spelling	4.5	68	6.1	58
Capitalization	4.0	57	6.4	62
Punctuation	4.1	60	6.0	56
Language Usage	4.4	64	6.1	57
Map Reading	4.2	67	6.0	58
Graphs and Tables	4.5	74	6.4	67
Reference Materials	4.0	61	6.1	59
Math Concepts	4.1	63	6.0	57
Math Problem Solving	4.2	70	5.9	55
NUMBER TAKING ALL SUBTESTS		65	91	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
	Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	3	51	58	34	54	58
Comprehension	5	51	57	40	50	50
Language Total	3	51	57	34	58	64
	5	51	60	40	55	59
Math Total	3	51	60	34	55	60
	5	51	60	40	53	56
Composite	3	51	62	34	57	63
	5	51	61	40	54	58

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.8	83	6.7	76
Vocabulary	4.6	78	6.7	74
Reading Comprehension	4.7	76	6.3	64
Spelling	5.4	84	7.2	77
Capitalization	5.1	81	7.7	82
Punctuation	5.7	88	7.4	80
Language Usage	5.1	78	6.8	69
Map Reading	4.7	81	7.0	81
Graphs and Tables	5.0	84	6.7	74
Reference Materials	4.6	81	6.9	75
Math Concepts	4.6	79	6.8	77
Math Problem Solving	4.5	82	6.3	69
NUMBER TAKING ALL SUBTESTS		62	78	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	61	61	70	20	64	75
	5	61	59	67	17	52	54
Language Total	3	61	69	82	20	67	79
	5	61	71	84	17	65	76
Math Total	3	61	69	82	20	70	83
	5	61	68	80	17	54	58
Composite	3	61	68	80	20	68	81
	5	61	68	81	17	59	67

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	3.9	58	5.8	54
Vocabulary	3.7	49	5.9	54
Reading Comprehension	3.7	49	5.6	47
Spelling	4.4	66	5.9	54
Capitalization	4.5	68	6.1	57
Punctuation	4.6	71	6.1	58
Language Usage	3.8	52	5.9	53
Map Reading	3.8	53	5.9	55
Graphs and Tables	4.0	58	5.9	55
Reference Materials	3.7	49	5.9	54
Math Concepts	3.7	49	5.7	49
Math Problem Solving	3.6	46	5.6	47
NUMBER TAKING ALL SUBTESTS		69	87	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	60	51	52	25	46	43
	5	60	47	44	27	52+	54
Language Total	3	60	53	56	25	57	63
	5	60	52	53	27	58	65
Math Total	3	60	53	56	25	46	43
	5	60	48	46	27	56+	61
Composite	3	60	54	57	25	51	51
	5	60	51	51	27	55	60

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (4.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.3	71	6.2	64
Vocabulary	4.1	62	5.9	54
Reading Comprehension	4.3	66	6.2	62
Spelling	4.7	72	6.2	60
Capitalization	5.0	79	6.5	64
Punctuation	4.8	75	6.0	56
Language Usage	4.4	64	6.1	97
Map Reading	4.4	73	6.1	61
Graphs and Tables	4.3	68	6.3	65
Reference Materials	4.3	72	6.3	64
Math Concepts	3.9	56	6.3	65
Math Problem Solving	4.0	62	6.4	72
NUMBER TAKING ALL SUBTESTS	38		44	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	36	63	73	23	56	61
	5	36	57	63			
Language Total	3	36	66	78	23	58	64
	5	36	58	65			
Math Total	3	36	63	73	23	55	59
	5	36	63	73			
Composite	3	36	65	76	23	56	61
	5	36	59	67			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.0	88	6.9	80
Vocabulary	5.0	86	6.8	76
Reading Comprehension	5.1	84	6.8	76
Spelling	5.3	83	6.9	72
Capitalization	5.2	82	7.4	78
Punctuation	5.2	81	6.9	72
Language Usage	5.1	78	7.4	79
Map Reading	5.1	87	7.1	83
Graphs and Tables	5.1	86	7.2	83
Reference Materials	4.8	85	6.8	73
Math Concepts	4.5	76	6.8	77
Math Problem Solving	4.4	79	6.7	79
NUMBER TAKING ALL SUBTESTS		50	54	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	43	67	79	10	64	75
	5	43	65	76	11	62	72
Language Total	3	42	69	82	10	71	84
	5	42	70	83	11	63	73
Math Total	3	43	66	77	10	67	79
	5	43	70	83	11	64	74
Composite	3	42	70	83	10	68	81
	5	42	71	84	11	65	76

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	6.6	74
Vocabulary	4.5	75	6.3	65
Reading Comprehension	4.6	74	6.3	64
Spelling	5.4	84	6.7	69
Capitalization	5.7	90	7.1	74
Punctuation	6.0	92	7.0	73
Language Usage	5.0	76	7.0	72
Map Reading	4.9	84	6.6	73
Graphs and Tables	5.2	88	6.7	74
Reference Materials	4.9	87	6.8	73
Math Concepts	4.5	76	7.0	81
Math Problem Solving	4.8	89	6.5	75
NUMBER TAKING ALL SUBTESTS		47	78	

* Mean for the national norm group for the Composite score.

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	58	63	73	20	53	56
	5	58	60	68			
Language Total	3	58	73	86	20	63	73
	5	58	67	79			
Math Total	3	58	71	84	20	63	73
	5	58	70	83			
Composite	3	58	70	83	20	59	67
	5	58	66	78			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.2	68	6.1	62
Vocabulary	4.1	62	5.9	54
Reading Comprehension	4.2	63	6.0	57
Spelling	4.4	66	6.3	62
Capitalization	4.9	77	6.8	69
Punctuation	4.9	77	6.6	67
Language Usage	4.2	60	6.3	60
Map Reading	4.2	67	5.9	55
Graphs and Tables	4.5	74	6.1	60
Reference Materials	4.1	65	6.0	57
Math Concepts	4.1	63	6.2	62
Math Problem Solving	3.9	57	5.8	52
NUMBER TAKING ALL SUBTESTS		78	76	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	46	57	63	23	54	58
	5	46	57	63	30	50	50
Language Total	3	46	63	73	24	54	58
	5	46	62	71	30	57	63
Math Total	3	46	66	77	24	56	61
	5	46	60	68	30	50	50
Composite	3	46	63	73	23	57	63
	5	46	59	67	30	51	51

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.0	88	6.6	74
Vocabulary	4.7	80	6.5	70
Reading Comprehension	4.9	81	6.3	64
Spelling	5.4	84	6.8	71
Capitalization	5.5	87	6.8	69
Punctuation	5.7	88	6.8	70
Language Usage	5.3	81	6.9	71
Map Reading	5.0	86	6.6	73
Graphs and Tables	5.0	84	7.0	79
Reference Materials	4.8	85	6.6	70
Math Concepts	4.7	82	6.4	67
Math Problem Solving	4.7	87	6.5	75
NUMBER TAKING ALL SUBTESTS		76	101	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	77	69	82	16	69	82
	5	77	60	69	31	53-	56
Language Total	3	76	75	88	16	73	86
	5	76	67	79	31	57-	63
Math Total	3	77	74	87	17	68	80
	5	72	66	77	31	56-	62
Composite	3	70	75	88	14	71	84
	5	70	67	79	29	57-	63

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	7.1	84
Vocabulary	4.8	82	6.9	78
Reading Comprehension	5.0	83	6.8	76
Spelling	5.4	84	7.2	77
Capitalization	5.5	87	7.9	85
Punctuation	5.4	84	7.5	81
Language Usage	5.3	81	7.5	81
Map Reading	4.9	84	6.9	79
Graphs and Tables	5.2	88	7.5	87
Reference Materials	4.8	85	6.9	75
Math Concepts	4.4	73	7.1	83
Math Problem Solving	4.4	79	6.7	79
NUMBER TAKING ALL SUBTESTS		57	69	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	48	69	76	18	77	90
	5	48	66	77	21	63	73
Language Total	3	48	68	80	18	70	83
	5	48	73+	86	21	74	87
Math Total	3	48	66	78	18	70	83
	5	48	72	85	21	69	82
Composite	3	46	68	81	18	75	88
	5	46	72	85	21	70	83

SCHOOL MEAN SCORES: IQWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	4.9	86	6.9	80
Vocabulary	4.6	78	6.7	74
Reading Comprehension	4.7	76	6.7	73
Spelling	5.3	83	7.4	80
Capitalization	5.5	87	7.6	81
Punctuation	5.8	89	7.2	77
Language Usage	5.1	78	7.3	77
Map Reading	5.0	86	6.7	75
Graphs and Tables	5.2	88	6.8	76
Reference Materials	4.8	85	7.1	79
Math Concepts	4.6	79	6.8	77
Math Problem Solving	4.7	87	6.5	75
NUMBER TAKING ALL SUBTESTS		71	58	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	41	62	72	17	67	79
	5	41	63	73			
Language Total	3	41	73	86	17	71	84
	5	41	72	85			
Math Total	3	41	67	79	17	71	84
	5	41	66	77			
Composite	3	41	71	84	17	71	84
	5	41	68	80			

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	3.8	55		
Vocabulary	3.6	47		
Reading Comprehension	3.7	49		
Spelling	4.4	66		
Capitalization	4.3	64		
Punctuation	4.1	60		
Language Usage	3.7	49		
Map Reading	3.7	49		
Graphs and Tables	3.8	52		
Reference Materials	3.6	46		
Math Concepts	3.5	42		
Math Problem Solving	3.4	39		
NUMBER TAKING ALL SUBTESTS		63		

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE			5.1	35
Vocabulary			4.9	31
Reading Comprehension			5.2	37
Spelling			5.2	39
Capitalization			5.2	39
Punctuation			5.5	45
Language Usage			5.2	40
Map Reading			5.0	31
Graphs and Tables			5.1	35
Reference Materials			5.4	41
Math Concepts			4.8	26
Math Problem Solving			5.1	34
NUMBER TAKING ALL SUBTESTS			80	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	34	47	45	17	51	51
	5	34	41	34	47	43	37
Language Total	3	34	57	63	17	62	72
	5	34	46	42	48	40-	32
Math Total	3	34	48	47	17	53	55
	5	34	37-	27	48	38-	28
Composite	3	34	49	49	17	54	58
	5	34	40	31	46	38-	29

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 3		Grade 5	
	Grade Equivalent Score (3.7)*	Percentile Rank (52)*	Grade Equivalent Score (5.7)*	Percentile Rank (51)*
COMPOSITE	5.1	90	7.1	84
Vocabulary	5.1	88	6.8	76
Reading Comprehension	5.2	86	6.9	78
Spelling	5.6	87	7.1	76
Capitalization	5.5	87	7.2	75
Punctuation	5.7	88	7.3	78
Language Usage	5.2	80	7.4	79
Map Reading	5.1	87	7.0	81
Graphs and Tables	5.2	88	7.5	87
Reference Materials	4.8	85	7.0	77
Math Concepts	4.8	84	7.2	85
Math Problem Solving	4.7	87	6.9	83
NUMBER TAKING ALL SUBTESTS		73	71	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 3) AND 1980 (GRADE 5): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	3	44	72	85	16	69	82
	5	44	69	82	27	64	74
Language Total	3	44	77	90	16	73	86
	5	44	74	87	27	62	72
Math Total	3	44	74	87	16	69	82
	5	44	73	86	27	72	85
Composite	3	44	76	89	16	72	85
	5	44	74	87	27	67	79

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.9	56	9.6	56
Vocabulary	7.8	51	9.5	52
Reading Comprehension	7.7	50	9.2	48
Spelling	7.9	53	9.3	49
Capitalization	8.1	56	9.7	53
Punctuation	7.7	50	9.7	54
Language Usage	7.7	50	9.6	53
Map Reading	8.8	70	10.1	66
Graphs and Tables	7.9	53	9.8	56
Reference Materials	8.0	56	9.7	56
Math Concepts	8.2	60	9.6	50
Math Problem Solving	7.8	52	9.5	53

NUMBER TAKING ALL SUBTESTS

202

178

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	136	55	59	77	48	47
	9	136	53	56	45	43	37
Language Total	7	135	57	63	77	50	50
	9	135	57	63	45	45	40
Math Total	7	135	59	67	77	53	56
	9	135	56	62	44	44	38
Composite	7	134	58	65	77	51	52
	9	134	58	64	44	44	39

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.0	58		
Vocabulary	7.8	51		
Reading Comprehension	7.8	52		
Spelling	7.8	51		
Capitalization	8.5	61		
Punctuation	8.4	61		
Language Usage	7.9	53		
Map Reading	8.1	59		
Graphs and Tables	8.0	56		
Reference Materials	8.1	58		
Math Concepts	8.2	60		
Math Problem Solving	7.8	52		
NUMBER TAKING ALL SUBTESTS		256		

* Mean for the national norm group for the Composite score

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SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.3	64	9.7	58
Vocabulary	8.2	60	9.7	57
Reading Comprehension	8.0	56	9.3	50
Spelling	8.2	58	9.5	52
Capitalization	8.4	60	10.4	62
Punctuation	8.2	58	10.0	59
Language Usage	8.1	55	9.7	54
Map Reading	8.8	70	9.8	61
Graphs and Tables	8.3	62	9.7	54
Reference Materials	8.3	61	9.6	55
Math Concepts	8.5	66	9.7	51
Math Problem Solving	8.1	59	9.6	55
NUMBER TAKING ALL SUBTESTS		230	250	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	192	53	56	50	49	48
	9	192	54	57	58	45	41
Language Total	7	191	56	62	50	51	51
	9	191	59	66	58	51	52
Math Total	7	190	58	65	50	49	49
	9	190	57	63	58	46	43
Composite	7	188	58	64	50	51	51
	9	188	58	64	58	48	46

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.4	46	8.9	43
Vocabulary	7.1	38	8.9	41
Reading Comprehension	7.0	37	8.6	39
Spelling	7.4	45	8.8	43
Capitalization	7.5	47	9.3	47
Punctuation	7.5	47	9.0	43
Language Usage	7.2	43	8.9	44
Map Reading	7.5	46	9.0	47
Graphs and Tables	7.5	45	9.0	42
Reference Materials	7.6	47	9.0	43
Math Concepts	7.6	47	8.9	39
Math Problem Solving	7.4	43	8.6	37
NUMBER TAKING ALL SUBTESTS		196	243	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	7	198	46	42	70	46	42
Comprehension	9	198	46	42	64	43	37
Language Total	7	199	48	47	72	40	32
	9	199	49	48	61	47	45
Math Total	7	195	48	46	68	43	37
	9	195	46	43	67	40	31
Composite	7	178	48	47	65	43	37
	9	178	49	48	59	44	38

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SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE			10.1	66
Vocabulary			10.2	67
Reading Comprehension			9.7	56
Spelling			9.9	58
Capitalization			10.1	58
Punctuation			10.1	61
Language Usage			10.2	61
Map Reading			10.0	64
Graphs and Tables			10.1	61
Reference Materials			9.8	58
Math Concepts			10.2	59
Math Problem Solving			9.6	55
NUMBER TAKING ALL SUBTESTS			316	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.4	46		
Vocabulary	7.3	41		
Reading Comprehension	7.3	43		
Spelling	7.1	41		
Capitalization	7.6	48		
Punctuation	7.2	42		
Language Usage	7.3	44		
Map Reading	8.0	55		
Graphs and Tables	7.6	47		
Reference Materials	7.5	46		
Math Concepts	7.4	43		
Math Problem Solving	7.2	40		
NUMBER TAKING ALL SUBTESTS		229		

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.7	72	10.3	70
Vocabulary	8.6	69	10.3	69
Reading Comprehension	8.4	63	10.0	62
Spelling	8.5	63	9.9	58
Capitalization	9.0	68	10.8	67
Punctuation	8.9	69	10.4	65
Language Usage	9.0	69	10.7	67
Map Reading	8.9	72	10.4	71
Graphs and Tables	8.9	74	10.5	67
Reference Materials	8.8	70	10.2	65
Math Concepts	8.8	71	10.7	68
Math Problem Solving	8.5	69	10.0	63
NUMBER TAKING ALL SUBTESTS		278	275	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	214	58	64	43	61	70
	9	214	59	66	60	59	66
Language Total	7	215	62	71	40	63	73
	9	215	63	73	61	60	69
Math Total	7	214	62	72	42	64	74
	9	214	63	73	60	60	69
Composite	7	205	63	73	39	64	75
	9	205	64	74	59	61	70

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE			9.2	48
Vocabulary			9.0	43
Reading Comprehension			9.0	45
Spelling			8.7	42
Capitalization			9.4	49
Punctuation			9.3	48
Language Usage			9.0	45
Map Reading			9.4	54
Graphs and Tables			9.3	47
Reference Materials			9.3	49
Math Concepts			9.3	45
Math Problem Solving			9.0	44
NUMBER TAKING ALL SUBTESTS			291	

* Mean for the national norm group for the Composite score

220

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.9	56	9.3	50
Vocabulary	7.9	54	9.4	50
Reading Comprehension	7.7	50	9.0	45
Spelling	7.9	53	9.0	45
Capitalization	8.3	59	9.4	49
Punctuation	7.8	51	9.1	45
Language Usage	7.9	53	9.3	49
Map Reading	8.3	60	9.3	52
Graphs and Tables	7.8	51	9.4	48
Reference Materials	7.8	51	9.3	49
Math Concepts	8.1	58	9.6	50
Math Problem Solving	7.6	47	9.1	46
NUMBER TAKING ALL SUBTESTS		139	169	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	140	50	50	44	40	31
	9	140	52	53	41	39	30
Language Total	7	133	53	56	43	37	27
	9	133	53	56	40	42	35
Math Total	7	137	54	57	44	41	34
	9	137	54	58	39	40	31
Composite	7	129	53	56	42	39	30
	9	129	55	59	35	40	32

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE			9.1	47
Vocabulary			9.2	47
Reading Comprehension			9.0	45
Spelling			8.8	43
Capitalization			9.1	44
Punctuation			8.8	41
Language Usage			9.2	48
Map Reading			9.2	50
Graphs and Tables			9.2	45
Reference Materials			9.2	47
Math Concepts			9.3	45
Math-Problem Solving			9.1	46
NUMBER TAKING ALL SUBTESTS			239	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.9	56		
Vocabulary	7.8	51		
Reading Comprehension	7.7	50		
Spelling	7.7	50		
Capitalization	8.4	60		
Punctuation	7.8	51		
Language Usage	7.8	51		
Map Reading	8.0	55		
Graphs and Tables	8.1	58		
Reference Materials	7.8	51		
Math Concepts	8.0	56		
Math Problem Solving	7.9	54		

NUMBER TAKING ALL SUBTESTS 318

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.7	72		
Vocabulary	8.5	67		
Reading Comprehension	8.4	63		
Spelling	8.6	64		
Capitalization	9.3	72		
Punctuation	9.1	72		
Language Usage	9.0	69		
Map Reading	9.0	74		
Graphs and Tables	8.7	70		
Reference Materials	8.7	69		
Math Concepts	9.0	75		
Math Problem Solving	8.3	64		

NUMBER TAKING ALL SUBTESTS	415			

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.6	50	9.2	48
Vocabulary	7.5	45	8.9	41
Reading Comprehension	7.2	41	8.8	42
Spelling	7.5	47	8.8	43
Capitalization	7.9	53	9.2	46
Punctuation	7.7	50	9.2	46
Language Usage	7.4	46	9.0	45
Map Reading	8.0	55	9.4	54
Graphs and Tables	7.6	47	9.2	45
Reference Materials	7.7	49	9.0	43
Math Concepts	7.8	51	9.2	44
Math Problem Solving	7.4	43	9.0	44
NUMBER TAKING ALL SUBTESTS		286	273	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	234	48	47	102	42	35
	9	234	50	50	76	38	29
Language Total	7	228	52	53	102	43	37
	9	228	51	52	61	45	40
Math Total	7	236	55	59	101	46	43
	9	236	50	50	71	40	32
Composite	7	211	53	55	92	45	40
	9	211	52	54	53	44	39

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.9	76	10.5	74
Vocabulary	8.7	71	10.3	69
Reading Comprehension	8.6	68	10.1	64
Spelling	8.7	66	10.1	61
Capitalization	9.5	75	10.9	68
Punctuation	9.3	75	10.6	68
Language Usage	8.7	64	10.5	65
Map Reading	9.1	76	10.6	75
Graphs and Tables	9.0	75	10.7	70
Reference Materials	9.0	74	10.4	68
Math Concepts	9.3	80	10.9	71
Math Problem Solving	8.7	74	10.2	67
NUMBER TAKING ALL SUBTESTS		258	257	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	224	58	64	29	56	62
	9	224	61	70	41	51	52
Language Total	7	221	64	74	27	61	70
	9	221	64	75	40	58	64
Math Total	7	221	69	82	27	66	77
	9	221	67	79	40	57	63
Composite	7	214	65	76	27	62	72
	9	214	67	79	38	58	64

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE			9.9	62
Vocabulary			10.1	65
Reading Comprehension			9.7	56
Spelling			9.7	59
Capitalization			9.8	54
Punctuation			9.9	58
Language Usage			10.0	58
Map Reading			9.9	63
Graphs and Tables			9.9	57
Reference Materials			9.7	56
Math Concepts			10.1	58
Math Problem Solving			9.4	51
NUMBER TAKING ALL SUBTESTS			80	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.1	60	9.5	54
Vocabulary	7.8	51	9.4	50
Reading Comprehension	7.6	48	9.1	47
Spelling	8.0	54	9.4	51
Capitalization	8.6	63	9.9	54
Punctuation	7.9	53	9.7	54
Language Usage	8.4	60	9.7	54
Map Reading	8.1	57	9.5	56
Graphs and Tables	8.1	58	9.5	50
Reference Materials	8.1	58	9.6	55
Math Concepts	8.4	64	9.5	49
Math Problem Solving	8.0	56	9.2	48
NUMBER TAKING ALL SUBTESTS		216	236	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	212	51	52	58	42	36
	9	212	51	52	64	46	43
Language Total	7	192	58	64	53	44	39
	9	192	58	64	62	46	42
Math Total	7	200	58	64	56	43	37
	9	200	54	58	59	46	42
Composite	7	171	56	62	50	42	36
	9	171	56	61	51	45	41

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.2	62	10.1	66
Vocabulary	8.2	60	10.4	71
Reading Comprehension	7.9	54	9.7	56
Spelling	8.4	61	9.9	58
Capitalization	8.8	66	10.5	63
Punctuation	8.0	54	10.3	64
Language Usage	8.0	54	9.9	57
Map Reading	8.1	57	10.2	68
Graphs and Tables	8.3	62	10.2	62
Reference Materials	8.4	63	10.1	63
Math Concepts	8.4	64	10.5	64
Math Problem Solving	8.1	59	9.9	61
NUMBER TAKING ALL SUBTESTS		165	202	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	159	56	62	52	48	46
	9	159	57	63	44	49	49
Language Total	7	159	61	70	52	53	55
	9	159	61	70	43	55	59
Math Total	7	159	60	69	52	50	50
	9	159	63	73	44	52	54
Composite	7	159	61	70	52	51	52
	9	159	63	73	43	54	58

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.5	68		
Vocabulary	8.3	62		
Reading Comprehension	8.2	59		
Spelling	8.3	59		
Capitalization	9.3	72		
Punctuation	8.8	67		
Language Usage	8.7	64		
Map Reading	8.7	68		
Graphs and Tables	8.6	68		
Reference Materials	8.5	65		
Math Concepts	8.9	73		
Math Problem Solving	8.1	59		
NUMBER TAKING ALL SUBTESTS		295		

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE			9.8	60
Vocabulary			9.8	59
Reading Comprehension			9.6	55
Spelling			9.6	54
Capitalization			10.2	59
Punctuation			10.0	59
Language Usage			9.7	54
Map Reading			10.0	64
Graphs and Tables			9.8	56
Reference Materials			9.7	56
Math Concepts			9.8	53
Math Problem Solving			9.5	53

NUMBER TAKING ALL SUBTESTS

273

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE			9.4	52
Vocabulary			9.3	49
Reading Comprehension			9.1	47
Spelling			8.9	44
Capitalization			9.1	44
Punctuation			9.2	46
Language Usage			9.1	47
Map Reading			9.6	57
Graphs and Tables			9.6	52
Reference Materials			9.5	53
Math Concepts			9.5	49
Math Problem Solving			9.0	44
NUMBER TAKING ALL SUBTESTS			280	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.3	64	9.3	62
Vocabulary	8.3	62	9.9	61
Reading Comprehension	8.2	59	9.6	55
Spelling	8.3	59	9.3	49
Capitalization	8.8	66	9.8	54
Punctuation	8.4	61	9.7	54
Language Usage	8.3	58	9.8	55
Map Reading	8.5	64	10.1	66
Graphs and Tables	8.4	64	10.0	59
Reference Materials	8.8	61	9.9	60
Math Concepts	8.6	68	10.0	56
Math Problem Solving	8.1	59	9.6	55
NUMBER TAKING ALL SUBTESTS		309	267	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	201	56	62	93	47	45
	9	201	58	65	82	49	48
Language Total	7	200	58	65	92	49	48
	9	200	57	63	80	47	45
Math Total	7	192	59	67	91	47	44
	9	192	59	66	79	50	50
Composite	7	183	60	69	88	50	50
	9	183	61	70	76	51	51

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.8	54		
Vocabulary	7.9	54		
Reading Comprehension	7.7	50		
Spelling	7.7	50		
Capitalization	8.1	56		
Punctuation	7.8	51		
Language Usage	7.9	53		
Map Reading	7.9	53		
Graphs and Tables	8.1	58		
Reference Materials	8.1	58		
Math Concepts	7.8	51		
Math Problem Solving	7.5	45		
NUMBER TAKING ALL SUBTESTS		207		

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.8	74	10.1	66
Vocabulary	8.6	69	10.0	63
Reading Comprehension	8.5	65	9.8	58
Spelling	8.6	64	9.8	57
Capitalization	9.3	72	10.3	61
Punctuation	9.1	72	10.3	64
Language Usage	9.0	69	10.2	61
Map Reading	9.1	76	10.3	70
Graphs and Tables	8.9	74	10.3	64
Reference Materials	8.8	70	10.1	63
Math Concepts	8.8	71	10.3	61
Math Problem Solving	8.5	69	10.1	65
NUMBER TAKING ALL SUBTESTS		195	243	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	176	60	69	59	53	55
	9	176	60	69	70	51	51
Language Total	7	175	64	75	59	55	60
	9	175	62	71	69	54	58
Math Total	7	175	65	76	59	55	59
	9	175	64	74	70	56	61
Composite	7	172	65	76	59	55	60
	9	172	64	74	68	54	58

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.0	58	9.5	54
Vocabulary	7.7	49	9.5	52
Reading Comprehension	7.7	50	9.2	48
Spelling	7.9	53	9.8	57
Capitalization	8.6	63	10.3	61
Punctuation	8.4	61	10.1	61
Language Usage	8.1	55	9.4	50
Map Reading	8.3	60	9.8	61
Graphs and Tables	8.1	58	9.5	50
Reference Materials	8.0	56	9.5	53
Math Concepts	8.3	62	9.4	47
Math Problem Solving	7.8	52	9.4	51
NUMBER TAKING ALL SUBTESTS		226	268	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	7	211	51	52	44	46	43
Comprehension	9	211	51	52	63	47	44
Language Total	7	209	55	60	43	46	42
	9	209	59	66	62	52	53
Math Total	7	211	56	62	44	45	40
	9	211	53	55	63	48	47
Composite	7	206	55	60	43	45	41
	9	206	55	60	61	49	48

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.6	50	8.9	43
Vocabulary	7.5	45	8.6	36
Reading Comprehension	7.4	45	8.5	37
Spelling	7.4	45	8.1	34
Capitalization	7.8	51	9.0	43
Punctuation	7.4	45	8.7	40
Language Usage	7.4	46	8.2	36
Map Reading	7.8	51	8.9	45
Graphs and Tables	7.5	45	8.7	37
Reference Materials	7.9	53	8.9	41
Math Concepts	7.9	53	8.9	39
Math Problem Solving	7.5	45	8.9	39
NUMBER TAKING ALL SUBTESTS		122	97	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	93	46	42	24	38	28
	9	93	44	39	22	42	36
Language Total	7	85	45	41	23	41	33
	9	85	44	38	22	41	33
Math Total	7	88	48	46	25	39	30
	9	88	45	41	19	45+	40
Composite	7	73	50	50	18	40	32
	9	73	48	47	17	46	42



SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	9.3	83	10.5	74
Vocabulary	9.1	78	10.5	73
Reading Comprehension	9.0	76	10.1	64
Spelling	9.0	71	10.1	61
Capitalization	9.5	75	10.7	66
Punctuation	9.4	76	10.6	68
Language Usage	9.6	78	10.8	69
Map Reading	9.6	85	10.5	73
Graphs and Tables	9.4	81	10.7	70
Reference Materials	9.2	77	10.4	68
Math Concepts	9.7	86	10.8	69
Math Problem Solving	9.3	84	10.6	76
NUMBER TAKING ALL SUBTESTS		292	324	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	258	62	72	54	59	66
	9	258	61	70	64	57	63
Language Total	7	256	64	75	54	60	69
	9	256	64	75	64	60	68
Math Total	7	256	67	79	54	62	72
	9	256	67	79	64	65	76
Composite	7	255	66	78	54	62	72
	9	255	66	78	63	62	72

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.5	48	8.6	38
Vocabulary	7.6	47	8.9	41
Reading Comprehension	7.1	39	8.3	34
Spelling	7.5	47	8.5	39
Capitalization	8.1	56	9.0	43
Punctuation	7.9	53	9.1	45
Language Usage	7.2	43	8.4	38
Map Reading	7.4	44	8.7	42
Graphs and Tables	7.5	45	8.5	34
Reference Materials	7.5	46	8.7	40
Math Concepts	7.6	47	8.7	32
Math Problem Solving	7.2	40	8.4	34
NUMBER TAKING ALL SUBTESTS		118	137	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	98	39	30	79	42	36
	9	98	43	37	43	38	28
Language Total	7	97	50	50	76	48	46
	9	97	48	47	41	40-	32
Math Total	7	93	44	39	78	46	43
	9	93	43	37	41	37	27
Composite	7	91	48	46	73	49	48
	9	91	47	44	41	37-	27

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.1	60		
Vocabulary	8.2	60		
Reading Comprehension	7.9	54		
Spelling	7.9	53		
Capitalization	8.0	54		
Punctuation	7.9	53		
Language Usage	8.0	54		
Map Reading	8.2	59		
Graphs and Tables	8.3	62		
Reference Materials	8.3	61		
Math Concepts	8.2	60		
Math Problem Solving	7.9	54		

NUMBER TAKING ALL SUBTESTS	284			

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.8	54	9.2	48
Vocabulary	7.9	54	9.0	43
Reading Comprehension	7.6	48	8.9	44
Spelling	7.5	47	9.0	45
Capitalization	7.7	50	9.2	46
Punctuation	7.7	50	9.3	48
Language Usage	7.7	50	9.1	47
Map Reading	7.7	50	9.2	50
Graphs and Tables	7.9	53	9.4	48
Reference Materials	7.9	53	9.3	49
Math Concepts	8.1	58	9.4	47
Math Problem Solving	7.7	49	9.0	44
NUMBER TAKING ALL SUBTESTS		367	369	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	274	48	47	119	45	40
	9	274	49	48	114	44	38
Language Total	7	270	52	53	114	46	43
	9	270	52	53	111	45	40
Math Total	7	269	53	55	118	48	46
	9	269	51	52	114	46	42
Composite	7	258	52	53	112	47	44
	9	258	52	53	101	46	43

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE			9.1	47
Vocabulary			9.1	45
Reading Comprehension			8.9	44
Spelling			8.8	43
Capitalization			9.2	46
Punctuation			9.2	46
Language Usage			9.0	45
Map Reading			9.1	49
Graphs and Tables			9.0	42
Reference Materials			9.1	45
Math Concepts			9.0	41
Math Problem Solving			8.7	39
NUMBER TAKING ALL SUBTESTS			175	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE			9.4	52
Vocabulary			9.5	52
Reading Comprehension			9.3	50
Spelling			9.0	45
Capitalization			9.2	46
Punctuation			9.2	46
Language Usage			9.0	45
Map Reading			9.6	57
Graphs and Tables			9.7	54
Reference Materials			9.3	49
Math Concepts			9.3	45
Math Problem Solving			9.2	48
NUMBER TAKING ALL SUBTESTS			343	

* Mean for the national norm group for the Composite score



SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.8	54	9.1	47
Vocabulary	7.7	49	9.0	43
Reading Comprehension	7.6	48	8.7	40
Spelling	7.4	45	8.9	44
Capitalization	7.8	51	9.1	44
Punctuation	7.9	53	9.2	46
Language Usage	7.6	48	8.9	44
Map Reading	7.7	50	9.1	49
Graphs and Tables	7.7	49	9.2	45
Reference Materials	7.9	53	9.2	47
Math Concepts	8.0	56	9.3	45
Math Problem Solving	7.6	47	8.9	42
NUMBER TAKING ALL SUBTESTS		231	261	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	189	50	50	66	44	38
	9	189	49	49	85	39	30
Language Total	7	187	51	51	64	43	37
	9	187	52	53	84	40	31
Math Total	7	186	53	56	63	45	40
	9	186	51	52	81	41	34
Composite	7	180	52	53	63	44	38
	9	180	52	54	76	41	33

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	7.2	42	8.2	31
Vocabulary	7.2	40	8.3	31
Reading Comprehension	7.0	37	7.9	28
Spelling	7.3	44	8.3	36
Capitalization	7.5	47	8.7	39
Punctuation	7.2	42	8.4	36
Language Usage	7.2	43	8.4	38
Map Reading	7.4	44	8.0	31
Graphs and Tables	7.4	43	8.4	33
Reference Materials	7.4	44	8.1	30
Math Concepts	7.3	41	8.3	31
Math Problem Solving	6.9	34	8.0	29
NUMBER TAKING ALL SUBJECTS		164	170	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	119	37	27	87	40	31
	9	119	41	34	51	32	19
Language Total	7	118	45	41	87	42	36
	9	118	46	43	51	36	25
Math Total	7	119	41	33	87	34	22
	9	119	41	33	51	29	16
Composite	7	118	40	32	87	38	28
	9	118	42	36	51	31	18

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.8	74	10.4	72
Vocabulary	8.6	69	10.2	67
Reading Comprehension	8.4	63	10.1	64
Spelling	8.6	64	10.2	63
Capitalization	9.3	72	11.1	71
Punctuation	9.0	70	10.9	72
Language Usage	8.9	67	10.6	66
Map Reading	9.0	74	10.5	73
Graphs and Tables	8.9	74	10.4	65
Reference Materials	8.8	70	10.3	67
Math Concepts	9.1	76	10.6	66
Math Problem Solving	8.8	76	10.1	65
NUMBER TAKING ALL SUBTESTS		181	236	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	177	61	70	29	54	58
	9	177	62	72	62	53	55
Language Total	7	184	70	83	29	62	72
	9	184	67	79	61	56	62
Math Total	7	180	67	79	30	57	63
	9	180	65	76	58	56	61
Composite	7	170	68	81	28	58	65
	9	170	67	79	57	55	59



SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.3	64		
Vocabulary	8.0	56		
Reading Comprehension	8.0	56		
Spelling	7.9	53		
Capitalization	8.8	66		
Punctuation	8.6	64		
Language Usage	8.2	57		
Map Reading	8.8	70		
Graphs and Tables	8.6	63		
Reference Materials	8.4	63		
Math Concepts	8.5	66		
Math Problem Solving	8.1	59		
NUMBER TAKING ALL SUBTESTS		200		

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	9.1	80	10.6	76
Vocabulary	9.1	78	10.7	77
Reading Comprehension	8.7	70	10.4	70
Spelling	8.9	70	10.2	63
Capitalization	9.6	76	11.0	70
Punctuation	9.6	79	10.7	70
Language Usage	9.7	79	10.8	69
Map Reading	9.3	80	10.6	75
Graphs and Tables	9.3	80	10.6	68
Reference Materials	9.1	75	10.7	73
Math Concepts	9.1	76	10.7	68
Math Problem Solving	8.6	72	10.4	72
NUMBER TAKING ALL SUBTESTS		174	189	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	7	135	62	72	81	57	63
Comprehension	9	135	65	76	58	58	65
Language Total	7	134	68	81	79	63	73
	9	134	68	81	58	60	69
Math Total	7	135	68	81	81	59	66
	9	135	68	80	58	60	68
Composite	7	131	68	81	79	61	70
	9	131	70	83	56	62	72

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.4	66	9.6	56
Vocabulary	8.2	60	9.7	57
Reading Comprehension	8.1	58	9.4	51
Spelling	8.4	61	9.4	51
Capitalization	8.6	63	10.2	59
Punctuation	8.4	61	10.1	61
Language Usage	8.4	60	9.6	53
Map Reading	8.8	70	9.8	61
Graphs and Tables	8.6	68	9.8	56
Reference Materials	8.6	67	9.7	56
Math Concepts	8.5	66	9.6	50
Math Problem Solving	8.2	62	9.3	50
NUMBER TAKING ALL SUBTESTS		286	325	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading	7	261	55	60	41	50	50
Comprehension	9	261	54	58	68	46	43
Language Total	7	260	57	63	41	48	47
	9	260	58	64	69	50	50
Math Total	7	259	56	62	41	52	53
	9	259	54	58	67	45	40
Composite	7	258	57	63	41	50	50
	9	258	57	63	67	48	46

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE	8.8	74	10.3	70
Vocabulary	8.6	69	10.3	69
Reading Comprehension	8.4	63	10.0	62
Spelling	8.8	68	10.0	60
Capitalization	9.5	75	10.7	66
Punctuation	9.3	75	10.7	70
Language Usage	9.0	69	10.4	63
Map Reading	9.0	74	10.6	75
Graphs and Tables	8.9	74	10.5	67
Reference Materials	8.9	72	10.4	68
Math Concepts	9.2	78	10.7	68
Math Problem Solving	8.7	74	10.2	67
NUMBER TAKING ALL SUBTESTS		319	317	

* Mean for the national norm group for the Composite score

LONGITUDINAL DATA 1978 (GRADE 7) AND 1980 (GRADE 9): IOWA TESTS OF BASIC SKILLS

	Grade	Students Tested in This School Both Years			Students Tested in This School Only One Year		
		Number Taking Test	NCE Mean	Percentile Rank of Mean	Number Taking Test	NCE Mean	Percentile Rank of Mean
Reading Comprehension	7	255	59	66	96	55	59
	9	255	60	68	56	51	52
Language Total	7	255	64	75	96	59	67
	9	255	63	73	54	59	66
Math Total	7	256	66	78	96	63	73
	9	256	66	77	56	55	60
Composite	7	254	64	75	96	61	70
	9	254	65	76	54	57	63

SCHOOL MEAN SCORES: IOWA TESTS OF BASIC SKILLS

	Grade 7		Grade 9	
	Grade Equivalent Score (7.6)*	Percentile Rank (50)*	Grade Equivalent Score (9.6)*	Percentile Rank (56)*
COMPOSITE			10.2	68
Vocabulary			10.3	69
Reading Comprehension			10.0	62
Spelling			9.9	58
Capitalization			10.4	62
Punctuation			10.2	62
Language Usage			10.3	62
Map Reading			10.2	68
Graphs and Tables			10.4	65
Reference Materials			10.3	67
Math Concepts			10.4	63
Math Problem Solving			10.1	65

NUMBER TAKING ALL SUBTESTS

402

* Mean for the national norm group for the Composite score

TEST RESULTS (1979-80): BETHESDA CHEVY CHASE HIGH SCHOOL 406 (AREA 1)

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	57	74
Social Studies	56	67
Mechanics of English	57	71
Science	56	72
Reading	57	73
Mathematics	59	81
Literature	57	71

NUMBER TAKING ALL SUBTESTS	370	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	49	43
Social Studies	47	34
Mechanics of English	49	43
Science	50	49
Reading	48	39
Mathematics	50	49
Literature	48	38

NUMBER TAKING ALL SUBTESTS	455	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	57	74
Social Studies	54	61
Mechanics of English	57	71
Science	57	74
Reading	56	70
Mathematics	59	81
Literature	55	65

NUMBER TAKING ALL SUBTESTS	507	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	52	55
Social Studies	50	46
Mechanics of English	52	55
Science	54	64
Reading	51	50
Mathematics	53	60
Literature	52	55

NUMBER TAKING ALL SUBTESTS	268	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	51	52
Social Studies	51	51
Mechanics of English	52	55
Science	50	49
Reading	50	47
Mathematics	52	57
Literature	51	50

NUMBER TAKING ALL SUBTESTS	235	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	53	59
Social Studies	51	51
Mechanics of English	52	55
Science	53	61
Reading	52	55
Mathematics	53	60
Literature	52	55

NUMBER TAKING ALL SUBTESTS	313	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	56	71
Social Studies	55	64
Mechanics of English	56	68
Science	56	72
Reading	56	70
Mathematics	57	74
Literature	55	65

NUMBER TAKING ALL SUBTESTS	347	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	53	59
Social Studies	52	54
Mechanics of English	52	55
Science	54	64
Reading	52	55
Mathematics	54	64
Literature	51	50

NUMBER TAKING ALL SUBTESTS	339	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	54	63
Social Studies	53	58
Mechanics of English	53	58
Science	54	64
Reading	53	60
Mathematics	56	71
Literature	53	57

NUMBER TAKING ALL SUBTESTS	330	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	52	55
Social Studies	50	46
Mechanics of English	52	55
Science	52	56
Reading	51	50
Mathematics	52	57
Literature	52	55

NUMBER TAKING ALL SUBTESTS	332	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score- (50)*	Percentile Rank (47)*
COMPOSITE	53	59
Social Studies	52	54
Mechanics of English	52	55
Science	53	61
Reading	52	55
Mathematics	54	64
Literature	52	55

NUMBER TAKING ALL SUBTESTS	350	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	52	55
Social Studies	51	51
Mechanics of English	52	55
Science	52	56
Reading	51	50
Mathematics	53	60
Literature	51	50

NUMBER TAKING ALL SUBTESTS	31	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	54	63
Social Studies	53	58
Mechanics of English	54	62
Science	55	69
Reading	53	60
Mathematics	56	71
Literature	54	61

NUMBER TAKING ALL SUBTESTS	422	

* Mean for the national norm group for the Composite score

TEST RESULTS (1979-80): POOLESVILLE JUNIOR-SENIOR HIGH SCHOOL 152 (AREA 5)

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	50	47
Social Studies	48	39
Mechanics of English	48	40
Science	52	56
Reading	49	43
Mathematics	50	49
Literature	50	46
NUMBER TAKING ALL SUBTESTS		107

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score	Percentile
	(50)*	Rank
		(47)*
COMPOSITE	54	63
Social Studies	51	51
Mechanics of English	53	58
Science	54	64
Reading	53	60
Mathematics	56	71
Literature	54	61

NUMBER TAKING ALL SUBTESTS	386
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* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	52	55
Social Studies	51	51
Mechanics of English	52	55
Science	52	56
Reading	51	50
Mathematics	53	60
Literature	52	55

NUMBER TAKING ALL SUBTESTS.	387
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* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	51	52
Social Studies	50	46
Mechanics of English	51	51
Science	51	52
Reading	51	50
Mathematics	52	57
Literature	50	46

NUMBER TAKING ALL SUBTESTS	299	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	55	67
Social Studies	53	58
Mechanics of English	56	68
Science	55	69
Reading	54	64
Mathematics	56	71
Literature	55	65
NUMBER TAKING ALL SUBTESTS		493

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	50	47
Social Studies	49	43
Mechanics of English	49	43
Science	50	49
Reading	49	43
Mathematics	51	53
Literature	49	42

NUMBER TAKING ALL SUBTESTS	372	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	59	82
Social Studies	59	77
Mechanics of English	58	75
Science	58	77
Reading	58	76
Mathematics	61	86
Literature	58	73

NUMBER TAKING ALL SUBTESTS	556	

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	58	77
Social Studies	56	67
Mechanics of English	59	78
Science	59	80
Reading	56	70
Mathematics	60	83
Literature	57	71
NUMBER TAKING ALL SUBTESTS		256

* Mean for the national norm group for the Composite score

SCHOOL MEAN SCORES: TESTS OF ACADEMIC PROGRESS

	Grade 11	
	Standard Score (50)*	Percentile Rank (47)*
COMPOSITE	57	74
Social Studies	55	64
Mechanics of English	57	71
Science	56	72
Reading	55	67
Mathematics	59	81
Literature	56	68

NUMBER TAKING ALL SUBTESTS	397	

* Mean for the national norm group for the Composite score

2.B. SCHOOL INTERQUARTILE RANGES

Introduction

The interquartile range provides an indication of how the middle 50 percent of the students in a group performed on a test. These could be said to be the typical students in that school. These data provide an indication of what types of programs might be appropriate for a given school. For example, if the entire range is above the 90th percentile rank, it is an indication the school should provide programs for large numbers of students with similar ability. If the range is wide, say from the 30th to the 80th percentile rank, the school has to be equipped to meet the needs of students of highly variable ability levels.

Data

The figures on the following pages indicate the national percentile rank for the student at each school's first quartile (Q1), median, and third quartile (Q3) on the ITBS or TAP Composite. The score at the left end of the bar is Q1, the score at the right end is Q3, and the one in the middle is the median. The Composite score is a general performance indicator and provides data on which to judge the dispersion of achievement in a given school. At the end of this section, the quartile graphs for the county are provided.

These can be used to see how a range for a specific school fits into the range for the entire county.

Schools are listed in alphabetical order for each grade. The first page for each grade follows:

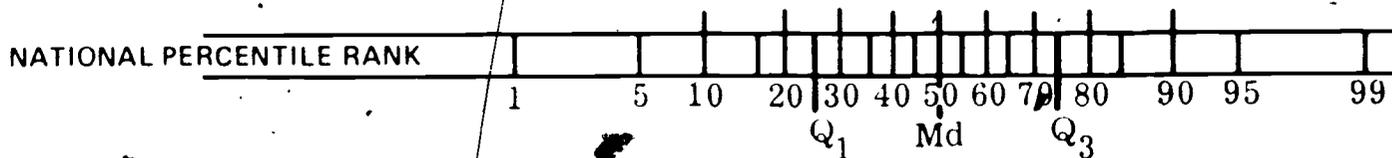
Grade 3 Composite	-	Page 268
Grade 5 Composite	-	Page 277
Grade 7 Composite	-	Page 285
Grade 9 Composite	-	Page 287
Grade 11 Composite	-	Page 290
County Graphs	-	Page 292

The national percentile rank scale at the top of each page is provided to show the characteristics of percentile ranks in a normal distribution. It should be noted that at the extremes of the distribution, percentile ranks are separated by more raw-score points than are the percentile ranks in the middle of the distribution. That is, an increase (or decrease) of ten percentile rank units at the extremes represents a greater change in raw-score points than does an increase (or decrease) of ten percentile rank units in the middle of the scale.

Analysis

No formal statistical analyses were performed. The data are descriptive.

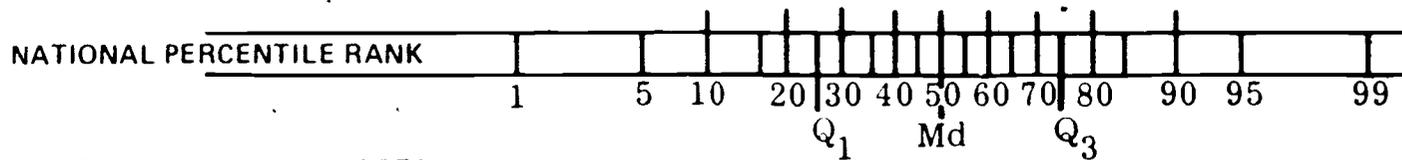
**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 3 COMPOSITE, 1980**



SCHOOL NAME	AREA	Q1	Md	Q3
ARCOLA ELEMENTARY	2	46	62	81
ASHBURTON ELEMENTARY	1	76	88	97
AYRLAWN ELEMENTARY	1	71	83	97
BANNOCKBURN ELEMENTARY	1	73	88	95
LUCY BARNSLEY ELEMENTARY	4	58	81	91
BEL PRE ELEMENTARY	2	30	58	81
BELLS MILL ELEMENTARY	3	76	88	96
BELMONT ELEMENTARY	4	68	83	91
BETHESDA ELEMENTARY	1	73	90	95
BEVERLY FARMS ELEMENTARY	3	68	90	96
BRADLEY ELEMENTARY	1	81	93	98
BROAD ACRES ELEMENTARY	2	17	38	52
BROOKHAVEN ELEMENTARY	4	58	76	91
BROOKMONT ELEMENTARY	1	83	90	96
BROOKVIEW ELEMENTARY	2	26	55	83

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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 3 COMPOSITE, 1980 (Continued)**

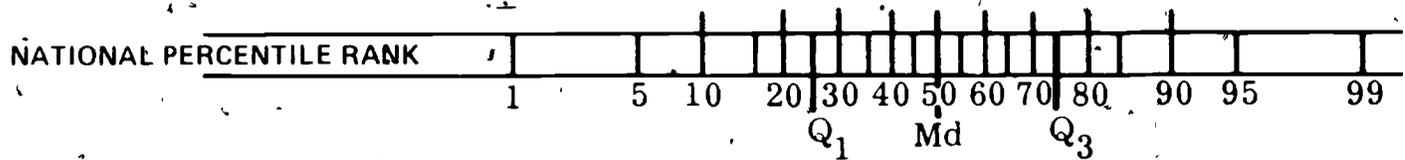


SCHOOL NAME	AREA	Q ₁	Md	Q ₃
BROWN STATION ELEMENTARY	5	52	73	83
BURNING TREE ELEMENTARY	1	79	93	98
BURTONSVILLE ELEMENTARY	4	46	81	90
CANDLEWOOD ELEMENTARY	4	58	81	94
CANNON ROAD ELEMENTARY	2	49	79	94
CARDEROCK SPRINGS ELEMENTARY	1	73	94	98
CASHELL ELEMENTARY	4	42	73	86
CEDAR GROVE ELEMENTARY	5	62	83	93
CHEVY CHASE ELEMENTARY	1	65	86	95
CLARKSBURG ELEMENTARY	5	38	68	83
CLOVERLY ELEMENTARY	4	58	81	91
COLD SPRING ELEMENTARY	3	71	86	94
COLLEGE GARDENS ELEMENTARY	3	65	83	93
CONGRESSIONAL ELEMENTARY	3	52	68	88
CONNECTICUT PARK ELEMENTARY	4	52	73	90

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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 3-COMPOSITE, 1980 (Continued)**



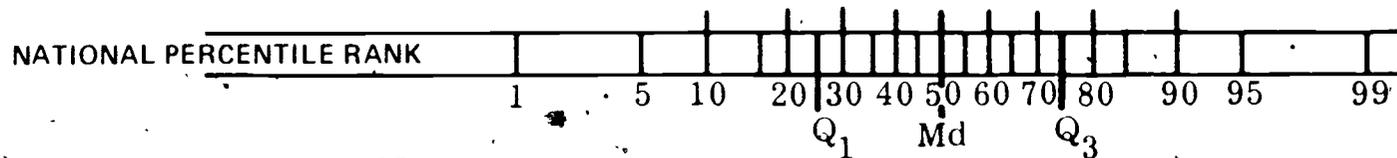
SCHOOL NAME	AREA	Q ₁	Md	Q ₃
CRESTHAVEN ELEMENTARY	2	62	83	91
DAMASCUS ELEMENTARY	5	65	83	94
DARNESTOWN ELEMENTARY	5	73	83	96
DIAMOND ELEMENTARY	5	71	88	94
DUFIEF ELEMENTARY	3	65	83	91
EAST SILVER SPRING ELEMENTARY	2	38	65	88
ENGLISH MANOR ELEMENTARY	4	62	79	88
FAIRLAND ELEMENTARY	4	68	81	93
FALLSMEAD ELEMENTARY	3	73	86	95
FARMLAND ELEMENTARY	3	90	94	98
FIELDS ROAD ELEMENTARY	5	42	68	88
FLOWER VALLEY ELEMENTARY	4	71	83	88
FOREST GROVE ELEMENTARY	2	81	88	94
FOREST KNOLLS ELEMENTARY	2	55	79	91
FOUR CORNERS ELEMENTARY	2	30	73	86

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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST-QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 3 COMPOSITE, 1980 (Continued)**

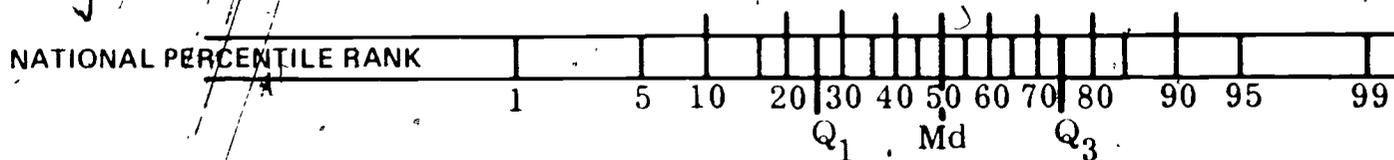


SCHOOL NAME	AREA			
FOX CHAPEL ELEMENTARY	5	62	83	90
GAITHERSBURG ELEMENTARY	5	30	62	83
GALWAY ELEMENTARY	4	62	81	91
GARRETT PARK ELEMENTARY	3	38	73	86
GEORGETOWN HILL ELEMENTARY	3	68	88	95
GEORGIAN FOREST ELEMENTARY	2	62	83	91
GERMANTOWN ELEMENTARY	5	58	81	88
GLEN HAVEN ELEMENTARY	2	52	71	88
GLENALLAN ELEMENTARY	2	46	76	90
GREENWOOD ELEMENTARY	4	58	76	90
GROSVENOR ELEMENTARY	1	71	76	91
HARMONY HILLS ELEMENTARY	4	42	62	81
HIGHLAND ELEMENTARY	1	46	68	88
HIGHLAND VIEW ELEMENTARY	2	46	73	93
HUNGERFORD PARK ELEMENTARY	3	52	79	91

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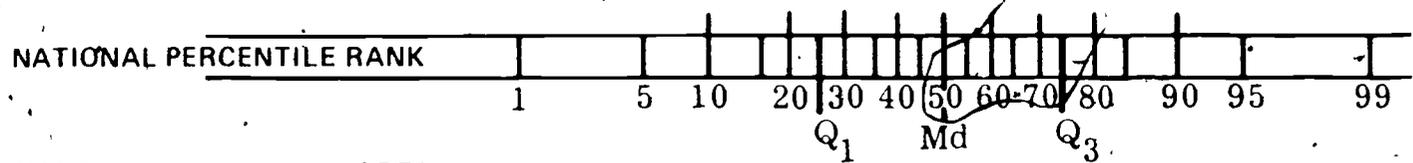
**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 3 COMPOSITE, 1980 (Continued)**



SCHOOL NAME	AREA	Q ₁	Md	Q ₃
JACKSON ROAD ELEMENTARY	2	68	88	95
KEMP MILL ELEMENTARY	2	95	98	98
KENSINGTON ELEMENTARY	1	68	83	93
LAKE NORMANDY ELEMENTARY	3	79	88	96
LAKWOOD ELEMENTARY	3	58	79	86
LARCHMONT ELEMENTARY	1	10	22	58
LAYTONSVILLE ELEMENTARY	5	68	83	94
LONE OAK ELEMENTARY	3	42	62	79
LUXMANOR ELEMENTARY	3	71	91	97
LYNNBROOK ELEMENTARY	1	26	71	91
MARYVALE ELEMENTARY	3	7	38	58
MEADOW HALL ELEMENTARY	3	68	83	93
MILL CREEK TOWNE ELEMENTARY	4	62	79	90
MONOCACY ELEMENTARY	5	26	58	88
MONTROSE ELEMENTARY	3	52	71	83

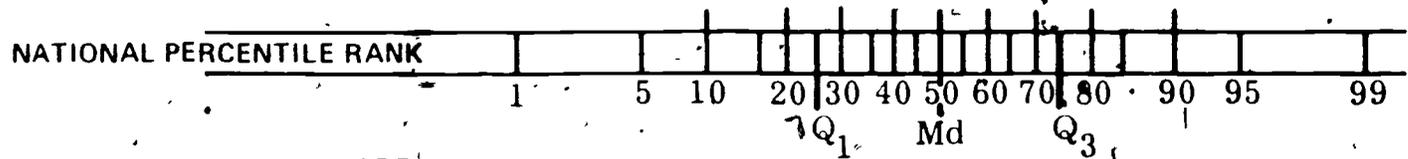
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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 3 COMPOSITE, 1980 (Continued)**



SCHOOL NAME	AREA	Q ₁	Md	Q ₃
NEW HAMPSHIRE ESTATES ELEMENTARY	2	58	73	90
NORTH CHEVY CHASE ELEMENTARY	1	73	90	95
NORTH LAKE ELEMENTARY	4	71	79	88
OAK VIEW ELEMENTARY	2	26	46	76
OAKLAND TERRACE ELEMENTARY	1	62	81	93
OLNEY ELEMENTARY	4	65	81	93
WILLIAM TYLER PAGE ELEMENTARY	4	71	86	94
PARKWOOD ELEMENTARY	1	62	81	91
PINE CREST ELEMENTARY	2	52	68	88
PLEASANT VIEW ELEMENTARY	1	68	76	88
POOLESVILLE ELEMENTARY	5	49	76	90
POTOMAC ELEMENTARY	3	76	90	98
RADNOR ELEMENTARY	1	76	93	96
RITCHIE PARK ELEMENTARY	3	76	90	96
ROCK CREEK FOREST ELEMENTARY	1	55	76	90

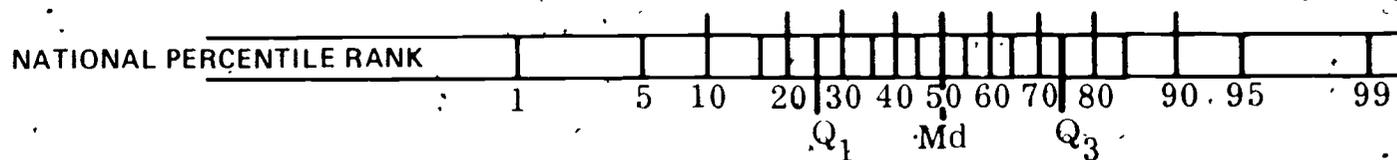
**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 3 COMPOSITE, 1980 (Continued)**



SCHOOL NAME	AREA	Q1	Md	Q3
ROCK CREEK PALISADES ELEMENTARY	1	68	86	95
ROCK CREEK VALLEY ELEMENTARY	4	65	81	93
ROCKING HORSE ROAD ELEMENTARY	4	34	62	83
ROLLING TERRACE ELEMENTARY	2	46	65	76
ROLLINGWOOD ELEMENTARY	1	62	86	93
ROSEMONT ELEMENTARY	5	34	62	81
SADDLEBROOK ELEMENTARY	2	55	86	93
SEVEN LOCKS ELEMENTARY	3	71	90	97
SHERWOOD ELEMENTARY	4	46	71	88
SOMERSET ELEMENTARY	1	73	93	97
SOUTH LAKE ELEMENTARY	5	68	83	93
STEDWICK ELEMENTARY	5	58	79	91
STONEGATE ELEMENTARY	2	65	81	93
STRATHMORE ELEMENTARY	2	26	65	79
SUMMIT HALL ELEMENTARY	5	49	76	90

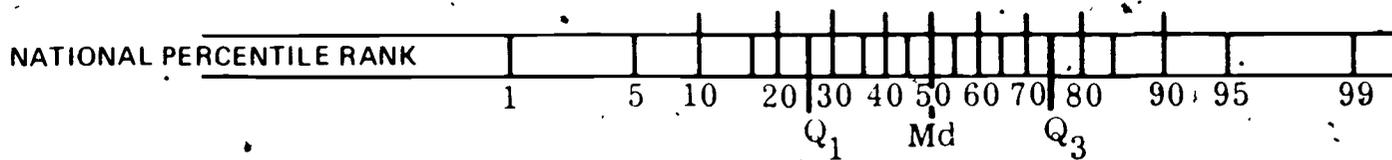
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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 3 COMPOSITE, 1980 (Continued)**



SCHOOL NAME	AREA	Q ₁	Md	Q ₃
TAKOMA PARK ELEMENTARY	2	34	62	88
TRAVILAH ELEMENTARY	3	65	83	91
TWINBROOK ELEMENTARY	3	38	55	81
VIERS MILL ELEMENTARY	4	58	76	90
WASHINGTON GROVE ELEMENTARY	5	49	71	83
WATKINS MILL ELEMENTARY	5	46	71	88
WAYSIDE ELEMENTARY	3	71	86	94
WELLER ROAD ELEMENTARY	4	30	58	81
WEST ROCKVILLE ELEMENTARY	3	46	71	91
WESTBROOK ELEMENTARY	1	76	90	96
WESTOVER ELEMENTARY	2	65	90	96
WHEATON WOODS ELEMENTARY	4	52	71	86
WHETSTONE ELEMENTARY	5	73	90	95
WOOD ACRES ELEMENTARY	1	76	91	95
WOODFIELD ELEMENTARY	5	71	86	96

**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 5 COMPOSITE, 1980 (Continued)**

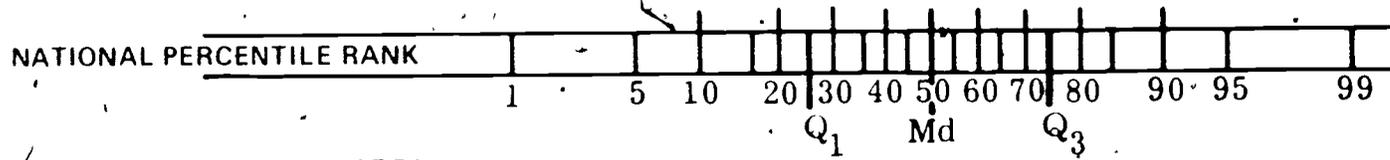


SCHOOL NAME	AREA	Q1	Md	Q3
BROWN STATION ELEMENTARY	5	70	86	95
BURNING TREE ELEMENTARY	1	82	92	97
BURTONSVILLE ELEMENTARY	4	41	54	70
CANDLEWOOD ELEMENTARY	4	51	76	95
CANNON ROAD ELEMENTARY	2	54	72	88
CARDEROCK SPRINGS ELEMENTARY	1	67	84	94
CASHELL ELEMENTARY	4	51	78	86
CEDAR GROVE ELEMENTARY	5	56	78	89
CHEVY CHASE ELEMENTARY	1	51	82	94
CLARKSBURG ELEMENTARY	5	32	51	72
CLOVERLY ELEMENTARY	4	49	72	88
COLD SPRING ELEMENTARY	3	64	82	92
COLLEGE GARDENS ELEMENTARY	3	54	74	88
CONGRESSIONAL ELEMENTARY	3	35	56	80
CONNECTICUT PARK ELEMENTARY	4	27	51	76

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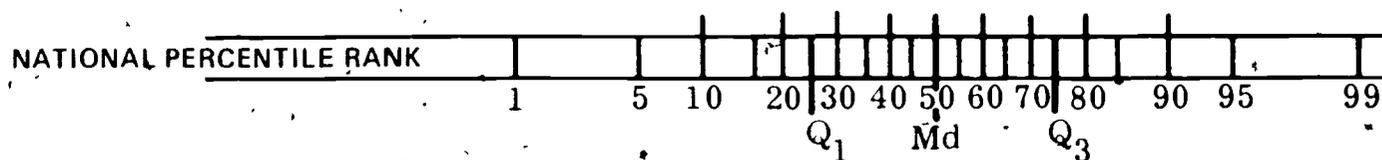
**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 5 COMPOSITE, 1980 (Continued)**



SCHOOL NAME	AREA	Q1	Md	Q3
GAITHERSBURG ELEMENTARY	5	17	46	80
GALWAY ELEMENTARY	4		56	80
GARRETT PARK ELEMENTARY	3		54	76
GEORGETOWN HILL ELEMENTARY	3		62	80
GEORGIAN FOREST ELEMENTARY	2		54	78
GERMANTOWN ELEMENTARY	5		49	72
GLEN HAVEN ELEMENTARY	2		44	74
GLENALLAN ELEMENTARY	2		44	67
GREENWOOD ELEMENTARY	4		62	76
GROSVENOR ELEMENTARY	1		62	84
HARMONY HILLS ELEMENTARY	4	38	54	82
HIGHLAND ELEMENTARY	1	35	56	78
HIGHLAND VIEW ELEMENTARY	2		72	82
HUNGERFORD PARK ELEMENTARY	3	41	78	90
JACKSON ROAD ELEMENTARY	2		56	76

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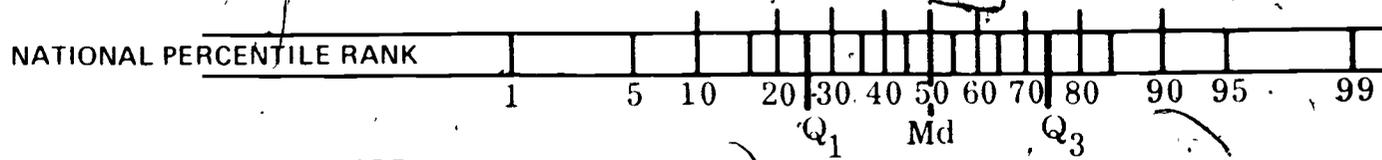
**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 5 COMPOSITE, 1980 (Continued)**



SCHOOL NAME	AREA	Q1	Md	Q3
KEMP MILL ELEMENTARY	2	67	82	90
KENSINGTON ELEMENTARY	1	32	54	86
LAKE NORMANDY ELEMENTARY	3	64	82	92
LAKEWOOD ELEMENTARY	3	54	80	92
LARCHMONT ELEMENTARY	1	32	56	82
LAYTONSVILLE ELEMENTARY	5	41	74	88
LONE OAK ELEMENTARY	3	27	46	78
LUXMANOR ELEMENTARY	3	76	92	95
LYNNBROOK ELEMENTARY	1	64	76	89
MARYVALE ELEMENTARY	3	8	22	64
MEADOW HALL ELEMENTARY	3	51	67	82
MILL CREEK TOWNE ELEMENTARY	4	54	78	93
MONOCACY ELEMENTARY	5	49	70	84
MONTROSE ELEMENTARY	3	29	59	76
NORTH CHEVY CHASE ELEMENTARY	4	80	90	97

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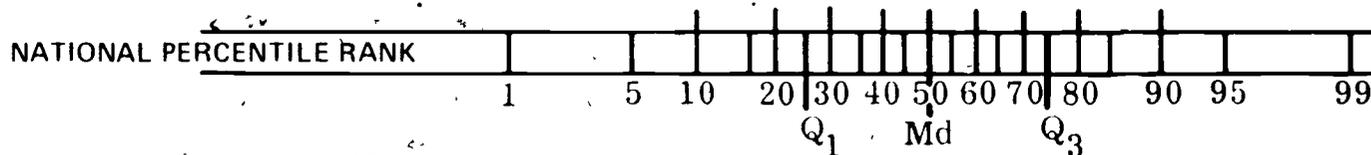
**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 5 COMPOSITE, 1980 (Continued)**



SCHOOL NAME	AREA	Q1	Md	Q3
NORTH LAKE ELEMENTARY	4	51	70	86
OAK VIEW ELEMENTARY	2	32	62	80
OAKLAND TERRACE ELEMENTARY	1	56	78	88
OLNEY ELEMENTARY	4	51	76	90
WILLIAM TYLER PAGE ELEMENTARY	4	54	78	89
PARKWOOD ELEMENTARY	1	62	84	93
PINE CREST ELEMENTARY	2	49	70	88
PINEY BRANCH ELEMENTARY	2	22	54	76
PLEASANT VIEW ELEMENTARY	1	22	46	70
POOLESVILLE ELEMENTARY	5	41	62	78
POTOMAC ELEMENTARY	3	72	84	96
RADNOR ELEMENTARY	1	56	72	84
RITCHIE PARK ELEMENTARY	3	59	74	89
ROCK CREEK PALISADES ELEMENTARY	1	46	62	89
ROCK CREEK VALLEY ELEMENTARY	4	49	76	92

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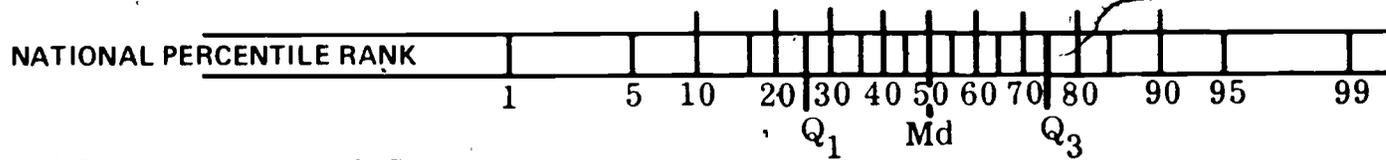
**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 5 COMPOSITE, 1980 (Continued)**



SCHOOL NAME	AREA	Q1	Md	Q3
ROCKING HORSE ROAD ELEMENTARY	4	32	54	80
ROLLINGWOOD ELEMENTARY	1		72	84
ROSEMONT ELEMENTARY	5	22	64	86
SADDLEBROOK ELEMENTARY	2		62	80
SEVEN LOCKS ELEMENTARY	3		54	74
SHERWOOD ELEMENTARY	4	14	70	84
SOMERSET ELEMENTARY	1		72	86
SOUTH LAKE ELEMENTARY	5	49	70	86
STEDWICK ELEMENTARY	5		59	82
STONEGATE ELEMENTARY	2		59	80
STRATHMORE ELEMENTARY	2	41	49	74
SUMMIT HALL ELEMENTARY	5	46	70	88
TRAVILAH ELEMENTARY	3	46	72	89
TWINBROOK ELEMENTARY	3	30	51	72
VIERS MILL ELEMENTARY	4	30	54	74

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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 5 COMPOSITE, 1980 (Continued)**



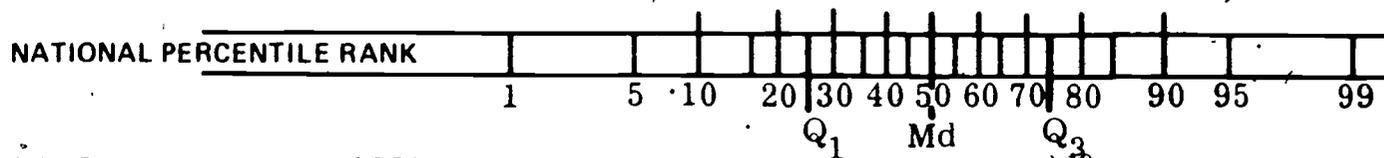
SCHOOL NAME	AREA	Q ₁	Md	Q ₃
WASHINGTON GROVE ELEMENTARY	5	38	56	76
WATKINS MILL ELEMENTARY	5	38	59	82
WAYSIDE ELEMENTARY	3	56	80	92
WELLER ROAD ELEMENTARY	4	30	54	76
WEST ROCKVILLE ELEMENTARY	3	27	62	86
WESTBROOK ELEMENTARY	1	64	80	93
WESTOVER ELEMENTARY	2	51	76	90
WHEATON WOODS ELEMENTARY	4	46	62	76
WHETSTONE ELEMENTARY	5	59	76	89
WOOD ACRES ELEMENTARY	1	74	86	93
WOODFIELD ELEMENTARY	5	62	80	92
WOODSIDE ELEMENTARY	2	8	27	56
WYNGATE ELEMENTARY	1	70	86	93

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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 7 COMPOSITE, 1980**



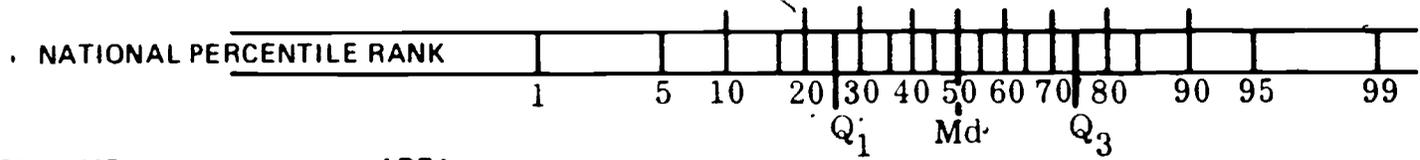
SCHOOL NAME	AREA	Q ₁	Md	Q ₃
ARGYLE JUNIOR HIGH	2	30	60	81
JOHN T. BAKER JUNIOR HIGH	5	36	62	80
BENJAMIN BANNEKER JUNIOR HIGH	4	44	64	83
COL. JOSEPH BELT JUNIOR HIGH	4	22	46	64
EDWIN W. BROOME MIDDLE SCHOOL	3	30	44	62
CABIN JOHN JUNIOR HIGH	3	56	76	89
EASTERN JUNIOR HIGH	2	34	54	80
WILLIAM H. FARQUHAR MIDDLE SCHOOL	4	32	56	76
ROBERT FROST JUNIOR HIGH	3	54	76	89
GAITHERSBURG JUNIOR HIGH	5	24	52	72
HERBERT HOOVER JUNIOR HIGH	3	58	80	90
FRANCIS SCOTT KEY JUNIOR HIGH	2	38	62	83
COL. E. BROOKE LEE JUNIOR HIGH	2	44	64	81
LELAND JUNIOR HIGH	1	48	72	87
MONTGOMERY VILLAGE JUNIOR HIGH	5	42	68	86

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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 7 COMPOSITE, 1980 (Continued)**

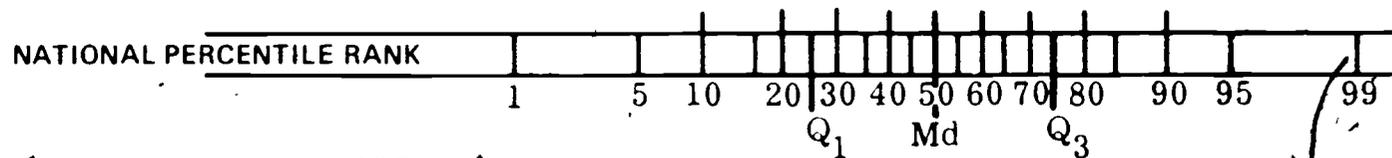


SCHOOL NAME	AREA	Q ₁	Md	Q ₃
NEWPORT MIDDLE SCHOOL	1	36	54	76
NORTH BETHESDA JUNIOR HIGH	1	56	74	89
PARKLAND JUNIOR HIGH	4	40	58	76
POOLESVILLE HIGH	5	32	50	68
THOMAS W. PYLE JUNIOR HIGH	1	70	86	94
RANDOLPH JUNIOR HIGH	4	28	50	68
REDLAND MIDDLE SCHOOL	4	40	62	83
RIDGEVIEW JUNIOR HIGH	5	28	56	81
SLIGO JUNIOR HIGH	2	30	54	76
TAKOMA PARK JUNIOR HIGH	2	22	40	64
TILDEN JUNIOR HIGH	3	62	76	87
JULIUS WEST MIDDLE SCHOOL	3	44	66	81
WESTERN JUNIOR HIGH	1	64	80	91
WHITE OAK JUNIOR HIGH	2	48	70	84
EARLE B. WOOD JUNIOR HIGH	4	58	78	89

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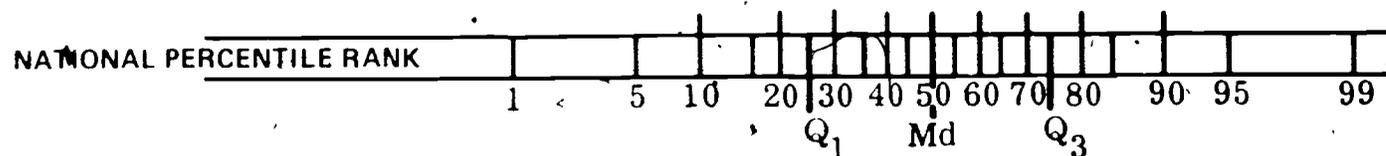
**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 9 COMPOSITE, 1980**



SCHOOL NAME	AREA	Q ₁	Md	Q ₃
ARGYLE JUNIOR HIGH	2	38	58	78
BENJAMIN BANNEKER JUNIOR HIGH	4	41	62	79
COL. JOSEPH BELT JUNIOR HIGH	4	26	47	68
BETHESDA-CHEVY CHASE HIGH	1	48	72	90
CABIN JOHN JUNIOR HIGH	3	54	76	89
DAMASCUS HIGH	5	31	52	72
EASTERN JUNIOR HIGH	2	33	54	74
ALBERT EINSTEIN HIGH	1	31	47	66
GAITHERSBURG JUNIOR HIGH	5	27	54	76
HERBERT HOOVER JUNIOR HIGH	3	56	78	90
WALTER JOHNSON HIGH	1	39	62	90
FRANCIS SCOTT KEY JUNIOR HIGH	2	33	58	78
COL. E. BROOKE LEE JUNIOR HIGH	2	50	70	90
COL. ZADOK MAGRUDER HIGH	4	43	62	85
RICHARD MONTGOMERY HIGH	3	33	56	76

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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 9 COMPOSITE, 1980 (Continued)**



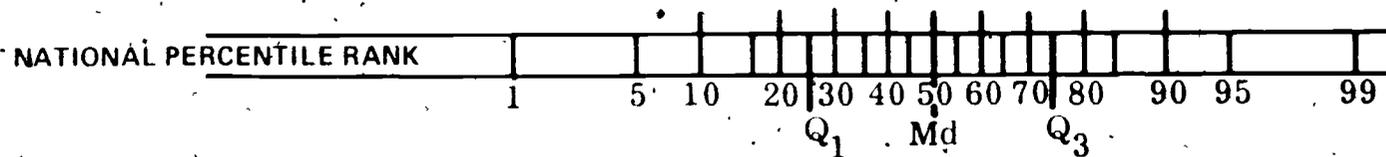
SCHOOL NAME	AREA	Q ₁	Md	Q ₃
MONTGOMERY VILLAGE JUNIOR HIGH	5	43	66	83
NORTH BETHESDA JUNIOR HIGH	1	47	70	87
PARKLAND JUNIOR HIGH	4	38	56	74
POOLESVILLE HIGH	5	19	50	68
MAS W. PYLE JUNIOR HIGH	1	60	76	91
RANDOLPH JUNIOR HIGH	4	21	38	58
RIDGEVIEW JUNIOR HIGH	5	28	52	74
ROCKVILLE HIGH	3	33	47	68
SHERWOOD HIGH	4	36	56	76
SLIGO JUNIOR HIGH	2	26	48	70
TAKOMA PARK JUNIOR HIGH	2	12	30	52
TILDEN JUNIOR HIGH	3	58	74	91
WESTERN JUNIOR HIGH	1	60	81	91
WHITE OAK JUNIOR HIGH	2	41	60	78
EARLE B. WOOD JUNIOR HIGH	4	52	76	89

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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 11 COMPOSITE, 1980**



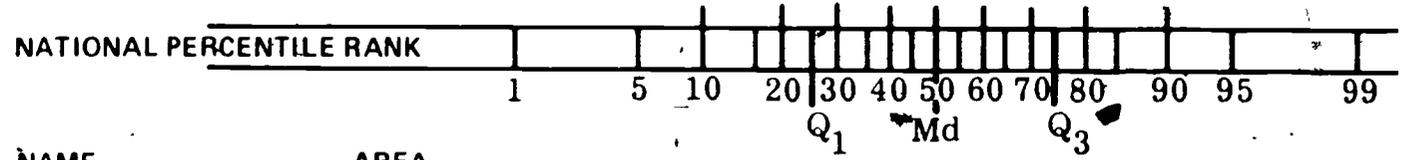
SCHOOL NAME	AREA	Q ₁	Md	Q ₃
BETHESDA-CHEVY CHASE HIGH	1	52	77	93
MONTGOMERY BLAIR HIGH	2	18	43	71
WINSTON CHURCHILL HIGH	3	55	77	91
DAMASCUS HIGH	5	31	55	82
ALBERT EINSTEIN HIGH	1	31	47	77
GAITHERSBURG HIGH	5	36	63	84
WALTER JOHNSON HIGH	1	47	74	91
JOHN F. KENNEDY HIGH	2	31	59	82
COL. ZADOK MAGRUDER HIGH	4	39	59	84
RICHARD MONTGOMERY HIGH	3	29	52	82
NORTHWOOD HIGH	2	29	59	82
PAINT BRANCH HIGH	4	31	55	77
ROBERT E. PEARY HIGH	4	39	63	87
POOLESVILLE HIGH	5	21	52	74
ROCKVILLE HIGH	3	39	59	87

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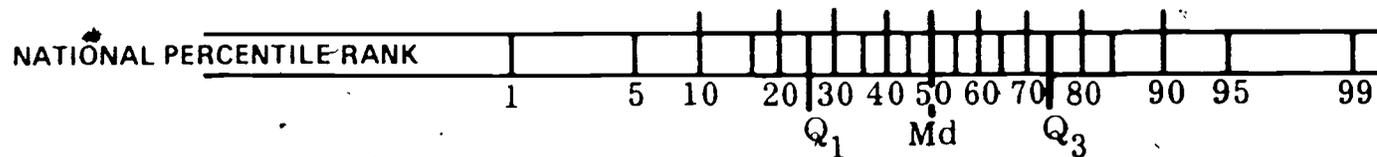
**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
GRADE 11 COMPOSITE, 1980 (Continued)**



SCHOOL NAME	AREA	Q1	Md	Q3
SENECA VALLEY HIGH	5	31	59	82
SHERWOOD HIGH	4	29	52	71
SPRINGBROOK HIGH	2	43	67	87
WHEATON HIGH	4	21	43	71
WALT WHITMAN HIGH	1	63	82	94
CHARLES W. WOODWARD HIGH	3	59	82	94
THOMAS S. WOOTTON HIGH	3	55	74	91

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**NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT THE COUNTY'S
FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) —
COMPOSITE**



SCHOOL NAME	AREA	Q1	Md	Q3
GRADE 3 COUNTY (ITBS)		58	79	93
GRADE 5 COUNTY (ITBS)		49	74	89
GRADE 7 COUNTY (ITBS)		42	66	84
GRADE 9 COUNTY (ITBS)		39	62	81
GRADE 11 COUNTY (TAP)		36	63	87

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2.C. MARYLAND FUNCTIONAL READING TEST

The Maryland Functional Reading Test (MFRT) is part of the Maryland State minimum competency testing program. The MFRT is designed to measure how well students have attained the minimal literacy skills, determined by the Maryland State Department of Education (MSDE), necessary for a high school diploma. Starting with the graduating class of 1982, the MFRT will be a graduation requirement. To pass this test a student must answer at least 80 percent of the questions on the test correctly.

Data

The percentage of students achieving the 80 percent competency score for each school is reported for each category of the MFRT and for the total test. These data are reported for Grade 7 in Table 2.C.1. Schools are listed alphabetically.

Results from the Grade 9 administration of the MFRT are not reported because the test that was mandated by MSDE was later declared invalid by MSDE.

Analysis

No formal analysis has been performed. The data are descriptive.

TABLE 2.C.1

 TIONAL READING TEST RESULTS
 OBER 1979 ADMINISTRATION IN GRADE 7

School Name	Area	Number of Students Tested	Percentage of Students Scoring at Least 80 Percent				Total Test
			Locating References	Understanding Forms	Gaining Information	Following Directions	
Argyle Junior	2	208	90.4	83.7	81.3	93.8	90.9
Baker Junior	5	257	87.2	82.5	81.3	91.1	86.4
Banneker Junior	4	236	95.3	90.7	89.0	96.6	94.1
Belt Junior	4	221	83.3	76.5	77.4	86.0	79.6
Broome Middle	3	238	85.3	82.4	79.4	90.3	85.3
Cabin John Junior	3	284	95.8	92.3	87.0	97.5	94.7
Eastern Junior	2	143	89.5	87.4	83.2	94.4	89.5
Farquhar Middle	4	318	85.5	85.8	80.5	93.7	85.8
Frost Junior	3	413	93.7	88.6	88.4	95.6	92.7
Gaithersburg Junior	5	325	84.0	80.3	76.3	90.5	82.2
Hoover Junior	3	265	95.8	87.9	89.8	93.6	91.7
Key Junior	2	242	91.3	89.7	86.4	95.5	90.9
Lee Junior	2	174	91.4	87.9	83.9	93.7	90.8
Leland Junior	1	302	91.1	88.4	84.8	93.7	89.4
Montgomery Village Junior	5	310	89.0	87.7	85.8	93.9	89.0
Newport Middle	1	214	91.1	93.0	86.0	94.4	92.5
North Bethesda Junior	1	188	96.3	93.6	92.6	97.9	94.7
Parkland Junior	4	227	90.3	88.1	85.0	93.8	89.0
Poolesville High	5	125	90.4	89.6	80.8	95.2	91.2
Pyle Junior	1	305	96.7	94.8	94.8	98.4	97.0
Randolph Junior	4	126	86.5	82.5	81.7	91.3	88.1
Redland Middle	4	283	90.8	84.8	81.3	92.2	87.6
Ridgeview Junior	5	415	88.2	82.9	80.5	91.3	86.0
Sligo Junior High	2	262	87.0	80.5	81.7	91.6	85.9
Takoma Park Junior	2	162	86.4	82.7	73.5	90.1	84.0
Tilden Junior	3	177	97.7	92.7	93.8	98.9	97.2
Julius West Middle	3	214	91.1	85.0	84.1	94.9	91.6
Western Junior	1	182	98.4	91.2	92.9	98.9	96.7
White Oak Junior	2	292	90.1	87.0	86.0	92.1	88.7
Wood Junior	4	318	97.8	97.5	96.5	99.7	98.7

2.D. COLLEGE BOARD RESULTS

Introduction

The College Entrance Examination Board (CEEB) tests are examinations generally taken by college bound senior high school students. The Scholastic Aptitude Tests (SAT), the most-widely taken tests in this group, were administered to approximately 68 percent of the 1980 MCPS graduating class. The CEEB Achievement Tests were taken by less than 25 percent of this class. The percentages taking these tests varied across schools.

It is often claimed that the results from College Board tests provide a measure of how well county students are prepared for college. Scores on these tests are data used by colleges to help make admissions decisions. For these reasons performance on these tests may be a more accurate indicator of the skills of college bound students than the Tests of Academic Progress (TAP) administered in Grade 11. Because of the importance of the CEEB results to individual students, the students are likely to be better motivated than when taking the TAP.

Data

School mean scores on the SAT Verbal and Math Tests are presented for 1979 and 1980 in Table 2.D.1. The number tested is also presented. No summary results have been provided for Poolesville High School because of the small number of students tested. The College Board does not report SAT results for groups of less than 50.

School mean scores for several College Board achievement tests are reported in Table 2.D.2 for 1980. The number tested is also reported and this is considerably smaller than the number for the SAT. Results are not reported for any groups of less than 25 students. Thus it is possible that schools which do not have data for a test did have some students take the test.

It is especially important to note the number of students tested when reviewing these data. The small number tested in many schools means the results may not be representative of performance in the total school. Results for small groups could be well above the average that would have resulted had many more of the students in the school taken the tests. This is because these tests are generally taken by high achieving, college bound students. The percentages of students taking the SAT and at least one achievement test in each school are listed in Table 2.D.3.

The results reported for the SAT and achievement tests are for graduating seniors the last time they took the test. That is, if they took the test in Grade 11 and not in Grade 12, their eleventh grade score would be included in these results. If they took the test in the twelfth grade, only the twelfth grade score would be included.

Analysis

No formal statistical analyses were performed.

TABLE 2.D.1

SCHOOL RESULTS ON THE
SCHOLASTIC APTITUDE TESTS (SAT)*

School Name	Verbal				Math			
	1979		1980		1979		1980	
	Number	Mean	Number	Mean	Number	Mean	Number	Mean
B-CC	360	474	388	481	360	505	389	515
Montgomery Blair	297	429	261	411	297	468	261	454
Churchill	497	460	582	472	498	510	583	526
Damascus	135	448	115	436	135	489	115	491
Einstein	179	433	185	423	179	505	185	473
Gaithersburg	203	462	243	456	203	506	243	496
Walter Johnson	321	467	312	476	321	503	312	514
Kennedy	219	442	255	444	219	488	255	501
Magruder	267	456	307	460	267	506	307	519
R. Montgomery	183	454	182	437	183	486	182	487
Northwood	254	445	257	434	254	490	257	480
Paint Branch	279	426	242	437	279	475	242	480
Peary	348	439	296	446	348	491	296	496
Rockville	177	438	145	454	177	485	145	511
Seneca Valley	229	459	286	454	229	500	286	492
Sherwood	195	417	216	417	195	465	216	455
Springbrook	418	462	425	451	418	501	425	502
Wheaton	211	418	176	415	211	480	176	475
Walt Whitman	562	502	630	502	558	536	628	543
Woodward	284	464	277	460	284	512	277	512
Wootton	356	475	364	464	356	520	364	517
County		456		456		500		503
National		427		424		467		466

*Results are not reported for Poolesville because fewer than 50 students took the test. However, the Poolesville scores are included in the county average.

TABLE 2.D.2

SCHOOL MEAN SCORES ON THE COLLEGE BOARD ACHIEVEMENT TESTS, 1980

School Name	American History		Biology		Chemistry		English		French		Literature		Math I		Math II		Spanish		Average*	
	Number	Mean	Number	Mean	Number	Mean	Number	Mean	Number	Mean	Number	Mean	Number	Mean	Number	Mean	Number	Mean	Number	Mean
B-CC	27	580			37	616	179	574	55	630			107	545	49	664	34	505	183	572
Montgomery Blair							48	564											53	568
Churchill	25	496			70	608	214	555	48	539	27	536	149	581	63	699	55	533	225	565
Gaithersburg							52	574					28	567	27	676			55	575
Walter Johnson			30	582	26	658	102	565					64	564	30	689			106	582
Kennedy							67	563					48	598					71	576
Magruder							66	564					52	590	29	691			72	577
R. Montgomery							33	582											33	596
Northwood							38	627											39	598
Paint Branch							36	550					25	545					37	554
Pearcy							49	549					28	596	32	668			52	579
Rockville							33	555											33	563
Seneca Valley							76	545					48	535	33	675			80	555
Sherwood							40	492					33	559					41	514
Springbrook							89	560					52	583	40	717			91	585
Walt Whitman	58	515	119	583	61	633	392	545	87	582	70	567	240	544	127	683	47	522	407	562
Woodward							101	569					57	566	37	710			103	584
Wootton			28	599			125	540					78	565	44	692			127	564
Count.		525		583		615		556		563		566		561		685		517		569
National		501		551		573		518		550		514		536		653		524		532

*This is the average for all tests administered, not just those shown in this table. Any test which was taken by fewer than 25 students is not reported here, but was included in the average. Results were not reported by the College Board for groups of less than 25 students.

TABLE 2.D.3

PERCENTAGE OF STUDENTS TAKING
COLLEGE BOARD EXAMS, BY SCHOOL

School Name	Class of 1979		Class of 1980		
	Sept. 30 Enrollment	Percentage of Enrollment Taking SAT	Sept. 30 Enrollment	Percentage of Enrollment Taking SAT	Percentage of Enrollment Taking At Least One Achieve- ment Test
B-CC	424	85	437	89	42
Montgomery Blair	524	57	489	53	11
Churchill	583	85	651	89	35
Damascus	280	48	237	49	*
Einstein	361	50	329	56	*
Gaithersburg	413	49	402	60	14
Walter Johnson	390	82	391	80	27
Kennedy	343	64	370	69	19
Magruder	439	61	448	69	16
R. Montgomery	378	48	359	51	9
Northwood	479	53	443	58	9
Paint Branch	394	71	359	67	10
Peary	526	66	489	61	11
Rockville	325	54	307	47	11
Seneca Valley	440	52	489	58	16
Sherwood	310	63	316	68	13
Springbrook	579	72	565	75	16
Wheaton	506	42	418	42	*
Walt Whitman	626	90	686	92	59
Woodward	361	79	338	82	30
Wootton	437	81	430	85	30

*No results reported by the College Board because fewer than 25 students were tested.

2.E. COGNITIVE ABILITIES TEST MEAN SCORES

The Cognitive Abilities Test (CAT) was administered with the ITBS. These tests should be regarded as tests of general achievement.

Data

The mean standard age score (SAS) is reported for each school on each subtest. These mean scores are computed using the SAS to be consistent with past years. Also reported is the percentile rank (PR) that corresponds to the reported mean score. These PR's are based on student norms.

The results are presented by school in alphabetical order by grade. The pages where each grade starts follow:

Grades 3 and/or 5 - Page 300

Grades 7 and/or 9 - Page 314

Analysis

No formal analysis has been performed. The data are descriptive.

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
ARCOLA ELEMENTARY*				
Verbal	101	52	103	57
Quantitative	112	77	110	73
Nonverbal	108	69	109	71
ASHBURTON ELEMENTARY				
Verbal	118	87	113	79
Quantitative	122	92	114	81
Nonverbal	115	83	115	83
AYRLAWN ELEMENTARY				
Verbal	116	84	117	86
Quantitative	123	92	114	81
Nonverbal	119	88	115	83
BANNOCKBURN ELEMENTARY				
Verbal	118	87	117	86
Quantitative	124	93	115	83
Nonverbal	120	89	116	84
LUCY BARNESLEY ELEMENTARY				
Verbal	114	81	114	81
Quantitative	117	86	116	84
Nonverbal	114	81	115	83
BEL PRE ELEMENTARY				
Verbal	105	62	106	65
Quantitative	106	65	108	69
Nonverbal	109	71	109	71
BELLS MILL ELEMENTARY				
Verbal	118	87	116	84
Quantitative	118	87	115	83
Nonverbal	117	86	115	83
BELMONT ELEMENTARY				
Verbal	116	84	113	79
Quantitative	120	89	111	75
Nonverbal	114	81	114	81
BETHESDA ELEMENTARY				
Verbal	118	87	120	89
Quantitative	121	91	120	89
Nonverbal	115	83	118	87

**Mean for national norm group.

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
BEVERLY FARMS ELEMENTARY				
Verbal	118	87	117	86
Quantitative	121	91	117	86
Nonverbal	112	77	117	86
BRADLEY ELEMENTARY				
Verbal	118	87	118	87
Quantitative	122	92	116	84
Nonverbal	115	83	116	84
BROAD ACRES ELEMENTARY				
Verbal	96	40	98	45
Quantitative	98	45	100	40
Nonverbal	102	55	106	65
BROOKHAVEN ELEMENTARY				
Verbal	109	71	113	79
Quantitative	113	79	113	79
Nonverbal	108	69	110	73
BROOKMONT ELEMENTARY				
Verbal	123	92	121	91
Quantitative	125	94	118	87
Nonverbal	120	89	117	86
BROOKVIEW ELEMENTARY				
Verbal	104	60	99	48
Quantitative	107	67	100	50
Nonverbal	104	60	103	57
BROWN STATION ELEMENTARY				
Verbal	110	73	112	77
Quantitative	110	73	112	77
Nonverbal	108	69	111	75
BURNING TREE ELEMENTARY				
Verbal	119	88	121	91
Quantitative	121	91	121	91
Nonverbal	116	84	119	88
BURTONSVILLE ELEMENTARY				
Verbal	109	71	104	60
Quantitative	113	79	106	65
Nonverbal	108	69	113	79

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
CANDLEWOOD ELEMENTARY				
Verbal	113	79	113	79
Quantitative	117	86	113	79
Nonverbal	111	75	112	77
CANNON ROAD ELEMENTARY				
Verbal	115	83	113	79
Quantitative	115	83	110	73
Nonverbal	113	79	110	73
CARDEROCK SPRINGS ELEMENTARY				
Verbal	121	91	116	84
Quantitative	125	94	121	91
Nonverbal	119	88	117	86
CASHELL ELEMENTARY				
Verbal	111	75	110	73
Quantitative	110	73	108	69
Nonverbal	105	62	108	69
CEDAR GROVE ELEMENTARY				
Verbal	117	86	114	81
Quantitative	122	92	115	83
Nonverbal	120	89	116	84
CHEVY CHASE ELEMENTARY				
Verbal	120	89	116	84
Quantitative	114	81	113	79
Nonverbal	110	73	113	79
CLARKSBURG ELEMENTARY				
Verbal	105	62	105	62
Quantitative	107	67	103	57
Nonverbal	105	62	109	71
CLOVERLY ELEMENTARY				
Verbal	110	73	112	77
Quantitative	115	83	112	77
Nonverbal	113	79	114	81
COLD SPRING ELEMENTARY				
Verbal	117	86	117	86
Quantitative	120	89	117	86
Nonverbal	114	81	115	83

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
COLLEGE GARDENS ELEMENTARY				
Verbal	112	77	114	81
Quantitative	117	86	113	79
Nonverbal	115	83	113	79
CONGRESSIONAL ELEMENTARY				
Verbal	105	62	104	60
Quantitative	112	77	110	73
Nonverbal	110	73	112	77
CONNECTICUT PARK ELEMENTARY				
Verbal	113	79	105	62
Quantitative	115	83	107	67
Nonverbal	112	77	109	71
CRESTHAVEN ELEMENTARY				
Verbal	115	83	115	83
Quantitative	118	87	113	79
Nonverbal	113	79	114	81
DAMASCUS ELEMENTARY				
Verbal	112	77	106	65
Quantitative	115	83	107	67
Nonverbal	113	79	110	73
DARNESTOWN ELEMENTARY				
Verbal	116	84	118	87
Quantitative	121	91	120	89
Nonverbal	115	83	114	81
DIAMOND ELEMENTARY				
Verbal	114	81	116	84
Quantitative	117	86	115	83
Nonverbal	114	81	116	84
DUFIEF ELEMENTARY				
Verbal	114	81	115	83
Quantitative	119	88	115	83
Nonverbal	113	79	115	83
EAST SILVER SPRING ELEMENTARY				
Verbal	103	57		
Quantitative	106	65		
Nonverbal	108	69		

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
ENGLISH MANOR ELEMENTARY				
Verbal	111	75	110	73
Quantitative	121	91	110	73
Nonverbal	114	81	111	75
FAIRLAND ELEMENTARY				
Verbal	114	81	113	79
Quantitative	116	84	111	75
Nonverbal	109	71	113	79
FALLSMEAD ELEMENTARY				
Verbal	117	86	115	83
Quantitative	120	89	114	81
Nonverbal	116	84	115	83
FARMLAND ELEMENTARY				
Verbal	116	84	119	88
Quantitative	121	91	121	91
Nonverbal	119	88	119	88
FIELDS ROAD ELEMENTARY				
Verbal	108	69	102	55
Quantitative	111	75	99	48
Nonverbal	110	73	103	57
FLOWER VALLEY ELEMENTARY				
Verbal	113	79	113	79
Quantitative	117	86	115	83
Nonverbal	114	81	112	77
FOREST GROVE ELEMENTARY				
Verbal	109	71	113	79
Quantitative	116	84	114	81
Nonverbal	111	75	117	86
FOREST KNOLLS ELEMENTARY				
Verbal	115	83	113	79
Quantitative	118	87	113	79
Nonverbal	112	77	113	79
FOUR CORNERS ELEMENTARY				
Verbal	108	69	115	83
Quantitative	112	77	113	79
Nonverbal	110	73	116	84

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
FOX CHAPEL, ELEMENTARY				
Verbal	110	73	106	65
Quantitative	112	77	102	55
Nonverbal	110	73	105	62
GAITHERSBURG ELEMENTARY				
Verbal	107	67	104	60
Quantitative	109	71	104	60
Nonverbal	105	62	106	65
GALWAY ELEMENTARY				
Verbal	116	84	113	79
Quantitative	114	81	112	77
Nonverbal	106	65	113	79
GARRETT PARK ELEMENTARY				
Verbal	111	75	115	83
Quantitative	115	83	114	81
Nonverbal	111	75	114	81
GEORGETOWN HILL ELEMENTARY				
Verbal	115	83	116	84
Quantitative	118	87	121	91
Nonverbal	116	84	117	86
GEORGIAN FOREST ELEMENTARY				
Verbal	114	81	111	75
Quantitative	119	88	112	77
Nonverbal	116	84	115	83
GERMANTOWN ELEMENTARY				
Verbal	107	67	110	73
Quantitative	112	77	106	65
Nonverbal	104	60	110	73
GLEN HAVEN ELEMENTARY				
Verbal	108	69	112	77
Quantitative	108	69	109	71
Nonverbal	107	67	110	73
GLENALLAN ELEMENTARY				
Verbal	107	67	110	73
Quantitative	112	77	109	71
Nonverbal	110	73	111	75

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
GREENWOOD ELEMENTARY				
Verbal	110	73	114	81
Quantitative	113	79	113	79
Nonverbal	111	75	114	81
GROSVENOR ELEMENTARY				
Verbal	115	83	116	84
Quantitative	119	88	117	86
Nonverbal	118	87	117	86
HARMONY HILLS ELEMENTARY				
Verbal	106	65	108	69
Quantitative	113	79	107	67
Nonverbal	106	65	109	71
HIGHLAND ELEMENTARY				
Verbal	106	65	105	62
Quantitative	108	69	107	67
Nonverbal	105	62	107	67
HIGHLAND VIEW ELEMENTARY				
Verbal	108	69	114	81
Quantitative	110	73	113	79
Nonverbal	108	69	115	83
HUNGERFORD PARK ELEMENTARY				
Verbal	109	71	112	77
Quantitative	111	75	110	73
Nonverbal	108	69	111	75
JACKSON ROAD ELEMENTARY				
Verbal	113	79	112	77
Quantitative	117	86	110	73
Nonverbal	112	77	113	79
KEMP MILL ELEMENTARY				
Verbal	110	73	114	81
Quantitative	113	79	115	83
Nonverbal	115	83	115	83
KENSINGTON ELEMENTARY				
Verbal	112	77	109	71
Quantitative	116	84	107	67
Nonverbal	118	87	114	81

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
LAKE NORMANDY ELEMENTARY				
Verbal	121	91	120	89
Quantitative	121	91	120	89
Nonverbal	114	81	117	86
LAKESWOOD ELEMENTARY				
Verbal	110	73	112	77
Quantitative	113	79	112	77
Nonverbal	112	77	114	81
LARCHMONT ELEMENTARY				
Verbal	94	35	106	65
Quantitative	93	33	105	62
Nonverbal	94	35	107	67
LAYTONSVILLE ELEMENTARY				
Verbal	115	83	110	73
Quantitative	118	87	112	77
Nonverbal	117	86	111	75
LONE OAK ELEMENTARY				
Verbal	107	67	105	62
Quantitative	108	69	102	55
Nonverbal	108	69	110	73
LUXMANOR ELEMENTARY				
Verbal	119	88	122	92
Quantitative	127	95	122	92
Nonverbal	119	88	118	87
LYNNBROOK ELEMENTARY				
Verbal	109	71	114	81
Quantitative	105	62	117	86
Nonverbal	98	45	113	79
MARYVALE ELEMENTARY				
Verbal	95	38	97	43
Quantitative	99	48	98	45
Nonverbal	102	55	101	52
MEADOW HALL ELEMENTARY				
Verbal	112	77	108	69
Quantitative	114	81	106	65
Nonverbal	114	81	110	73

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
MILL CREEK TOWNE ELEMENTARY				
Verbal	110	73	113	79
Quantitative	114	81	116	84
Nonverbal	113	79	117	86
MONOCACY ELEMENTARY				
Verbal	102	55	109	71
Quantitative	103	57	109	71
Nonverbal	104	60	111	75
MONTROSE ELEMENTARY				
Verbal	103	57	105	62
Quantitative	106	65	100	50
Nonverbal	107	67	108	69
NEW HAMPSHIRE ESTATES ELEMENTARY				
Verbal	108	69		
Quantitative	111	75		
Nonverbal	108	69		
NORTH CHEVY CHASE ELEMENTARY				
Verbal	115	83	119	88
Quantitative	124	93	117	86
Nonverbal	117	86	115	83
NORTH LAKE ELEMENTARY				
Verbal	117	86	115	83
Quantitative	118	87	112	77
Nonverbal	116	84	115	83
OAK VIEW ELEMENTARY				
Verbal	105	62	105	62
Quantitative	105	62	105	62
Nonverbal	106	65	110	73
OAKLAND TERRACE ELEMENTARY				
Verbal	114	81	114	81
Quantitative	116	84	114	81
Nonverbal	114	81	113	79
OLNEY ELEMENTARY				
Verbal	113	79	110	73
Quantitative	116	84	110	73
Nonverbal	112	77	111	75



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SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
WILLIAM TYLER PAGE ELEMENTARY				
Verbal	118	87	113	79
Quantitative	117	86	112	77
Nonverbal	117	86	111	75
PARKWOOD ELEMENTARY				
Verbal	111	75	114	81
Quantitative	112	77	118	87
Nonverbal	110	73	119	88
PINE CREST ELEMENTARY				
Verbal	110	73	112	77
Quantitative	109	71	109	71
Nonverbal	107	67	112	77
PINEY BRANCH ELEMENTARY				
Verbal			105	62
Quantitative			102	55
Nonverbal			106	65
PLEASANT VIEW ELEMENTARY				
Verbal	116	84	103	57
Quantitative	117	86	101	52
Nonverbal	110	73	104	60
POOLESVILLE ELEMENTARY				
Verbal	109	71	107	67
Quantitative	112	77	106	65
Nonverbal	108	69	109	71
POTOMAC ELEMENTARY				
Verbal	118	87	116	84
Quantitative	122	92	117	86
Nonverbal	113	79	114	81
RADNOR ELEMENTARY				
Verbal	122	92	113	79
Quantitative	121	91	110	73
Nonverbal	119	88	115	83
RITCHIE PARK ELEMENTARY				
Verbal	121	91	116	84
Quantitative	120	89	113	79
Nonverbal	114	81	116	84

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
ROCK CREEK FOREST ELEMENTARY				
Verbal	111	75		
Quantitative	114	81		
Nonverbal	115	83		
ROCK CREEK PALISADES ELEMENTARY				
Verbal	115	83	110	73
Quantitative	119	88	108	69
Nonverbal	114	81	114	81
ROCK CREEK VALLEY ELEMENTARY				
Verbal	114	81	114	81
Quantitative	119	88	115	83
Nonverbal	115	83	115	83
ROCKING HORSE ROAD ELEMENTARY				
Verbal	105	62	106	65
Quantitative	107	67	104	60
Nonverbal	105	62	108	69
ROLLING TERRACE ELEMENTARY				
Verbal	101	52		
Quantitative	104	60		
Nonverbal	107	67		
ROLLINGWOOD ELEMENTARY				
Verbal	118	87	117	86
Quantitative	118	87	118	87
Nonverbal	114	81	117	86
ROSEMONT ELEMENTARY				
Verbal	104	60	104	60
Quantitative	106	65	105	62
Nonverbal	106	65	103	57
SADDLEBROOK ELEMENTARY				
Verbal	116	84	113	79
Quantitative	119	88	116	84
Nonverbal	114	81	113	79
SEVEN LOCKS ELEMENTARY				
Verbal	121	91	113	79
Quantitative	126	95	114	81
Nonverbal	116	84	111	75

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
SHERWOOD ELEMENTARY				
Verbal	110	73	110	73
Quantitative	108	69	112	77
Nonverbal	107	67	110	73
SOMERSET ELEMENTARY				
Verbal	128	96	116	84
Quantitative	129	97	121	91
Nonverbal	120	89	116	84
SOUTH LAKE ELEMENTARY				
Verbal	113	79	110	73
Quantitative	116	84	111	75
Nonverbal	109	71	111	75
STEDWICK ELEMENTARY				
Verbal	114	81	113	79
Quantitative	116	84	115	83
Nonverbal	115	83	116	84
STONEGATE ELEMENTARY				
Verbal	115	83	113	79
Quantitative	121	91	112	77
Nonverbal	111	75	110	73
STRATHMORE ELEMENTARY				
Verbal	107	67	105	62
Quantitative	109	71	110	73
Nonverbal	104	60	108	69
SUMMIT HALL ELEMENTARY				
Verbal	106	65	109	71
Quantitative	111	75	109	71
Nonverbal	107	67	114	81
TAKOMA PARK ELEMENTARY				
Verbal	108	69		
Quantitative	108	69		
Nonverbal	108	69		
TRAVILAH ELEMENTARY				
Verbal	115	83	111	75
Quantitative	118	87	110	73
Nonverbal	111	75	112	77

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
TWINBROOK ELEMENTARY				
Verbal	105	62	108	69
Quantitative	106	65	107	67
Nonverbal	106	65	111	75
VIERS MILL ELEMENTARY				
Verbal	110	73	103	57
Quantitative	114	81	103	57
Nonverbal	112	77	109	71
WASHINGTON GROVE ELEMENTARY				
Verbal	108	69	105	62
Quantitative	111	75	107	67
Nonverbal	110	73	110	73
WATKINS MILL ELEMENTARY				
Verbal	110	73	106	65
Quantitative	113	79	106	65
Nonverbal	111	75	107	67
WAYSIDE ELEMENTARY				
Verbal	116	84	114	81
Quantitative	118	87	115	83
Nonverbal	117	86	110	73
WELLER ROAD ELEMENTARY				
Verbal	103	57	105	62
Quantitative	104	60	104	60
Nonverbal	103	57	108	69
WEST ROCKVILLE ELEMENTARY				
Verbal	109	71	107	67
Quantitative	109	71	109	71
Nonverbal	113	79	107	67
WESTBROOK ELEMENTARY				
Verbal	121	91	116	84
Quantitative	117	86	117	86
Nonverbal	117	86	117	86
WESTOVER ELEMENTARY				
Verbal	116	84	113	79
Quantitative	122	92	111	75
Nonverbal	116	84	109	71

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 3		Grade 5	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
WHEATON WOODS ELEMENTARY				
Verbal	107	67	109	71
Quantitative	109	71	108	69
Nonverbal	108	69	110	73
WHETSTONE ELEMENTARY				
Verbal	118	87	113	79
Quantitative	121	91	112	77
Nonverbal	112	77	115	83
WOOD ACRES ELEMENTARY				
Verbal	119	88	118	87
Quantitative	122	92	118	87
Nonverbal	117	86	118	87
WOODFIELD ELEMENTARY				
Verbal	115	83	113	79
Quantitative	116	84	112	77
Nonverbal	113	79	112	77
WOODLIN ELEMENTARY				
Verbal	104	60		
Quantitative	103	57		
Nonverbal	103	57		
WOODSIDE ELEMENTARY				
Verbal			96	40
Quantitative			96	40
Nonverbal			99	48
WYNGATE ELEMENTARY				
Verbal	123	92	118	87
Quantitative	124	93	118	87
Nonverbal	119	88	117	86

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST

	Grade 7		Grade 9	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
ARGYLE JUNIOR HIGH SCHOOL				
Verbal	106	65	107	67
Quantitative	108	69	110	73
Nonverbal	109	71	112	77
JOHN T. BAKER JUNIOR HIGH SCHOOL				
Verbal	105	62		
Quantitative	109	71		
Nonverbal	110	73		
BENJAMIN BANNEKER JUNIOR HIGH SCHOOL				
Verbal	110	73	108	69
Quantitative	107	67	111	75
Nonverbal	112	77	112	77
COL. JOSEPH BELT JUNIOR HIGH SCHOOL				
Verbal	101	52	102	55
Quantitative	106	65	105	62
Nonverbal	107	67	109	71
BETHESDA-CHEVY CHASE HIGH SCHOOL				
Verbal			113	79
Quantitative			115	83
Nonverbal			114	81
EDWIN W. BROOME MIDDLE SCHOOL				
Verbal	101	52		
Quantitative	103	57		
Nonverbal	109	71		
CABIN JOHN JUNIOR HIGH SCHOOL				
Verbal	112	77	113	79
Quantitative	115	83	120	89
Nonverbal	113	79	119	88
DAMASCUS HIGH SCHOOL				
Verbal			104	60
Quantitative			107	67
Nonverbal			109	71
EASTERN JUNIOR HIGH SCHOOL				
Verbal	107	67	106	65
Quantitative	106	65	108	69
Nonverbal	108	69	109	71

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SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 7		Grade 9	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
ALBERT EINSTEIN HIGH SCHOOL				
Verbal			104	60
Quantitative			107	67
Nonverbal			108	69
WILLIAM H. FARQUHAR MIDDLE SCHOOL				
Verbal	105	62		
Quantitative	109	71		
Nonverbal	108	69		
ROBERT FROST JUNIOR HIGH SCHOOL				
Verbal	111	75		
Quantitative	114	81		
Nonverbal	113	79		
GAITHERSBURG JUNIOR HIGH SCHOOL				
Verbal	102	55	102	55
Quantitative	104	60	108	69
Nonverbal	108	69	110	73
HERBERT HOOVER JUNIOR HIGH SCHOOL				
Verbal	114	81	114	81
Quantitative	120	89	121	91
Nonverbal	116	84	120	89
WALTER JOHNSON HIGH SCHOOL				
Verbal			113	79
Quantitative			112	77
Nonverbal			117	86
FRANCIS SCOTT KEY JUNIOR HIGH SCHOOL				
Verbal	106	65	107	67
Quantitative	109	71	110	73
Nonverbal	110	73	112	77
COL. E. BROOKE LEE JUNIOR HIGH SCHOOL				
Verbal	108	69	111	75
Quantitative	112	77	115	83
Nonverbal	108	69	115	83
LELAND JUNIOR HIGH SCHOOL				
Verbal	110	73		
Quantitative	113	79		
Nonverbal	113	79		

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 7		Grade 9	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
COL. ZADOK MAGRUDER HIGH SCHOOL				
Verbal			110	73
Quantitative			112	77
Nonverbal			112	77
RICHARD MONTGOMERY HIGH SCHOOL				
Verbal			105	62
Quantitative			107	67
Nonverbal			111	75
MONTGOMERY VILLAGE JUNIOR HIGH SCHOOL				
Verbal	110	73	110	73
Quantitative	110	73	112	77
Nonverbal	112	77	114	81
NEWPORT MIDDLE SCHOOL				
Verbal	106	65		
Quantitative	104	60		
Nonverbal	110	73		
NORTH BETHESDA JUNIOR HIGH SCHOOL				
Verbal	112	77	112	77
Quantitative	114	81	117	86
Nonverbal	115	83	117	86
PARKLAND JUNIOR HIGH SCHOOL				
Verbal	105	62	105	62
Quantitative	109	71	109	71
Nonverbal	111	75	111	75
POOLESVILLE JUNIOR-SENIOR HIGH SCHOOL				
Verbal	102	55	101	52
Quantitative	104	60	103	57
Nonverbal	105	62	107	67
THOMAS W. PYLE JUNIOR HIGH SCHOOL				
Verbal	117	86	115	83
Quantitative	124	93	121	91
Nonverbal	118	87	119	88
RANDOLPH JUNIOR HIGH SCHOOL				
Verbal	101	52	100	50
Quantitative	102	55	102	55
Nonverbal	105	62	107	67

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 7		Grade 9	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
REDLAND MIDDLE SCHOOL				
Verbal	108	69		
Quantitative	108	69		
Nonverbal	110	73		
RIDGEVIEW JUNIOR HIGH SCHOOL				
Verbal	106	65	104	60
Quantitative	106	65	107	67
Nonverbal	109	71	111	75
ROCKVILLE HIGH SCHOOL				
Verbal			103	57
Quantitative			104	60
Nonverbal			110	73
SHERWOOD HIGH SCHOOL				
Verbal			106	65
Quantitative			108	69
Nonverbal			110	73
SLIGO JUNIOR HIGH SCHOOL				
Verbal	104	60	103	57
Quantitative	105	62	106	65
Nonverbal	108	69	110	73
TAKOMA PARK JUNIOR HIGH SCHOOL				
Verbal	100	50	96	40
Quantitative	101	52	99	48
Nonverbal	105	62	105	62
TILDEN JUNIOR HIGH SCHOOL				
Verbal	112	77	112	77
Quantitative	117	86	118	87
Nonverbal	115	83	117	86
JULIUS WEST MIDDLE SCHOOL				
Verbal	109	71		
Quantitative	112	77		
Nonverbal	114	81		
WESTERN JUNIOR HIGH SCHOOL				
Verbal	116	84	116	84
Quantitative	116	84	119	88
Nonverbal	116	84	118	87

SCHOOL MEAN SCORES: COGNITIVE ABILITIES TEST (Continued)

	Grade 7		Grade 9	
	Standard Age Score (100)**	Percentile Rank (50)**	Standard Age Score (100)**	Percentile Rank (50)**
WHITE OAK JUNIOR HIGH SCHOOL				
Verbal	110	73	107	67
Quantitative	112	77	111	75
Nonverbal	112	77	112	77
EARLE B. WOOD JUNIOR HIGH SCHOOL				
Verbal	113	79	114	81
Quantitative	117	86	119	88
Nonverbal	115	83	118	87
THOMAS S. WOOTTON HIGH SCHOOL				
Verbal			113	79
Quantitative			118	87
Nonverbal			117	86

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RAW DATA USED IN THE REPORT

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TABLE A1

IOWA TESTS OF BASIC SKILLS RESULTS
BY RACIAL/ETHNIC GROUPS FOR 1977 TO 1980, GRADE 3(Scores reported are Percentile Ranks (PR)
for each Normal Curve Equivalent (NCE) mean)

SUBTEST		WHITE		BLACK		HISPANIC		ASIAN	
		PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	1980	80	68	52	51	63	57	83	70
	1979	80	68	50	50	69	60	82	69
	1978	78	66	48	49	63	57	83	70
	1977	77	66	44	47	67	59	80	68
VOCABULARY	1980	75	64	51	51	53	52	71	62
	1979	75	64	48	49	61	56	70	61
	1978	73	63	46	48	57	54	73	63
	1977	73	63	44	47	60	55	68	60
READING	1980	73	63	46	48	51	51	69	60
	1979	73	63	43	46	60	55	70	61
	1978	71	62	43	46	55	53	72	62
	1977	70	61	40	45	61	56	69	60
SPELLING	1980	79	67	67	59	69	60	86	73
	1979	78	67	63	57	74	64	86	73
	1978	76	65	61	56	68	60	85	72
	1977	76	65	57	53	70	60	85	72
CAPITALIZATION	1980	81	68	63	57	73	63	87	74
	1979	80	68	54	55	75	65	86	73
	1978	80	68	60	55	73	63	87	74
	1977	79	67	54	52	74	65	86	72
PUNCTUATION	1980	83	71	62	56	73	63	90	77
	1979	84	71	62	56	74	67	89	76
	1978	83	70	61	56	71	64	91	78
	1977	81	68	54	52	77	65	87	74
USAGE	1980	72	62	51	48	53	51	70	61
	1979	72	62	47	48	61	56	68	60
	1978	71	62	49	49	60	55	70	61
	1977	71	62	45	47	62	56	69	60
MAP READING	1980	76	65	47	48	66	59	79	67
	1979	76	65	45	47	63	57	78	66
	1978	74	64	44	47	60	55	76	65
	1977	75	64	42	46	64	58	76	65
GRAPHS AND TABLES	1980	80	68	54	62	69	60	82	69
	1979	79	67	51	51	70	61	79	70
	1978	77	66	50	50	65	58	79	67
	1977	76	65	48	49	70	61	81	68
REFERENCE MATERIALS	1980	74	64	50	50	60	55	81	68
	1979	73	63	47	48	63	57	79	67
	1978	73	63	47	48	61	56	79	67
	1977	71	62	43	46	63	57	78	66
MATH CONCEPTS	1980	73	63	47	48	55	53	78	66
	1979	74	64	47	48	65	58	79	67
	1978	72	62	43	46	58	54	78	66
	1977	72	62	42	46	63	57	78	66
MATH PROBLEMS	1980	76	65	46	48	61	56	82	69
	1979	76	65	48	48	71	62	83	70
	1978	76	65	46	49	64	58	84	71
	1977	75	64	46	48	68	60	83	70

TABLE 42

IOWA TESTS OF BASIC SKILLS RESULTS
BY RACIAL/ETHNIC GROUPS FOR 1977 TO 1980, GRADE 5

(Scores reported are Percentile Ranks (PR)
for each Normal Curve Equivalent (NCE) mean)

SUBTEST		WHITE		BLACK		HISPANIC		ASIAN	
		PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	1980	76	65	39	44	53	52	77	66
	1979	74	64	38	43	63	57	78	66
	1978	73	63	35	42	51	51	77	66
	1977	71	60	30	39	54	52	77	66
VOCABULARY	1980	71	62	38	44	50	50	66	59
	1979	70	61	37	43	59	55	64	58
	1978	68	60	36	42	47	48	65	58
	1977	67	59	30	39	53	52	64	58
READING	1980	68	60	36	42	48	49	66	59
	1979	67	59	35	42	55	53	67	59
	1978	66	59	33	41	45	47	67	59
	1977	63	57	28	38	47	48	69	60
SPELLING	1980	70	61	51	51	55	53	81	68
	1979	69	60	48	49	61	56	82	69
	1978	66	59	45	47	52	51	78	66
	1977	63	57	38	44	53	52	78	66
CAPITALIZATION	1980	74	64	48	49	57	54	79	67
	1979	72	62	47	48	66	59	79	67
	1978	70	61	43	46	53	52	79	67
	1977	69	60	39	44	58	54	78	66
PUNCTUATION	1980	72	62	47	48	58	54	79	67
	1979	69	60	44	47	63	57	79	67
	1978	69	60	40	45	57	54	78	66
	1977	66	59	37	43	55	53	78	66
USAGE	1980	72	62	43	46	53	52	66	59
	1979	71	62	41	45	58	54	66	59
	1978	70	61	39	44	52	51	66	59
	1977	69	60	35	42	53	52	67	59
MAP READING	1980	73	63	39	44	54	52	78	66
	1979	72	62	39	44	63	57	78	66
	1978	72	62	38	44	53	52	77	66
	1977	71	62	35	42	62	56	78	66
GRAPHS AND TABLES	1980	77	66	45	47	61	56	82	69
	1979	76	65	41	45	66	59	81	68
	1978	75	64	42	46	54	52	79	67
	1977	73	63	39	44	56	53	79	67
REFERENCE MATERIALS	1980	72	62	42	46	54	52	76	65
	1979	70	61	42	46	63	57	76	65
	1978	70	61	41	45	53	52	75	64
	1977	66	59	35	42	55	53	76	65
MATH CONCEPTS	1980	76	65	40	45	52	51	82	69
	1979	75	64	39	44	64	58	84	71
	1978	76	65	39	44	55	53	84	71
	1977	73	63	35	42	60	55	85	72
MATH PROBLEMS	1980	72	62	38	44	52	51	80	68
	1979	74	61	37	43	61	55	79	67
	1978	70	61	36	42	52	51	79	67
	1977	68	60	32	40	55	53	80	68

TABLE A3

IOWA TESTS OF BASIC SKILLS RESULTS
BY RACIAL/ETHNIC GROUPS FOR 1977 TO 1980, GRADE 7

(Scores reported are Percentile Ranks (PR)
for each Normal Curve Equivalent (NCE) mean)

SUBTEST		WHITE		BLACK		HISPANIC		ASIAN	
		PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	1980	68	60	33	41	50	50	74	64
	1979	64	58	28	38	45	47	75	64
	1978	63	57	26	36	51	51	73	63
	1977	63	57	22	34	49	49	76	65
VOCABULARY	1980	63	57	35	42	48	49	61	56
	1979	61	56	29	38	41	45	63	57
	1978	62	56	28	38	47	48	63	57
	1977	61	56	25	36	45	47	67	59
READING	1980	61	56	31	40	43	46	60	55
	1979	57	54	27	37	40	45	63	57
	1978	57	54	25	36	45	47	62	56
	1977	57	54	22	34	43	46	64	58
SPELLING	1980	59	55	39	44	50	50	74	64
	1979	58	54	35	42	45	47	74	64
	1978	56	53	32	40	50	50	75	64
	1977	56	53	31	40	50	50	74	64
CAPITALIZATION	1980	67	59	41	45	55	53	76	65
	1979	65	58	37	43	52	51	75	64
	1978	63	57	34	41	55	53	73	63
	1977	63	57	31	40	52	51	76	65
PUNCTUATION	1980	65	58	37	43	52	51	76	65
	1979	63	57	34	41	50	50	76	65
	1978	62	56	32	40	54	52	74	64
	1977	61	56	29	38	50	50	76	65
USAGE	1980	63	57	37	43	50	50	61	56
	1979	62	56	33	41	45	47	66	59
	1978	61	56	30	39	50	50	60	55
	1977	61	56	28	38	46	48	64	58
MAP READING	1980	70	61	39	44	55	53	79	67
	1979	67	59	34	41	54	52	77	66
	1978	67	59	32	40	58	54	78	66
	1977	68	59	29	38	58	54	81	68
GRAPHS AND TABLES	1980	67	59	36	42	48	49	72	62
	1979	64	58	32	40	49	49	73	63
	1978	63	57	29	38	47	48	70	61
	1977	63	57	27	37	46	48	74	64
REFERENCE MATERIALS	1980	65	58	37	43	51	51	75	64
	1979	62	56	34	41	48	49	76	65
	1978	61	56	32	40	52	51	71	62
	1977	60	56	28	38	49	49	74	64
MATH CONCEPTS	1980	68	60	35	42	53	52	82	69
	1979	66	59	31	40	50	50	81	68
	1978	65	58	28	38	55	53	81	68
	1977	65	58	25	36	50	50	83	70
MATH PROBLEMS	1980	63	57	31	40	47	48	74	64
	1979	61	56	28	38	45	47	75	64
	1978	60	55	27	37	48	49	73	63
	1977	59	55	24	35	46	48	74	64

TABLE A4

IOWA TESTS OF BASIC SKILLS RESULTS
BY RACIAL/ETHNIC GROUPS FOR 1977 TO 1980, GRADE 9

(Scores reported are Percentile Ranks (PR)
for each Normal Curve Equivalent (NCE) mean)

SUBTEST		WHITE		BLACK		HISPANIC		ASIAN	
		PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	1980	64	58	28	38	50	50	69	60
	1979	64	58	24	35	47	48	70	61
	1978	64	58	24	35	45	47	72	62
	1977	64	58	24	35	47	48	72	62
VOCABULARY	1980	63	57	30	39	47	48	58	54
	1979	63	57	27	37	44	47	59	55
	1978	64	58	27	37	46	48	65	58
	1977	63	57	27	37	45	47	63	57
READING	1980	59	55	27	37	45	47	57	54
	1979	59	55	24	35	42	46	58	54
	1978	59	55	25	36	40	45	61	56
	1977	59	55	24	35	42	46	59	55
SPELLING	1980	56	53	35	42	50	50	70	61
	1979	57	54	33	41	49	49	71	62
	1978	56	53	31	40	47	48	73	62
	1977	56	53	31	40	49	49	72	62
CAPITALIZATION	1980	61	56	34	41	52	51	70	61
	1979	62	56	32	40	46	48	72	62
	1978	61	56	31	40	49	48	72	62
	1977	60	55	30	39	50	50	71	62
PUNCTUATION	1980	63	57	34	41	54	52	72	62
	1979	62	56	31	40	50	50	73	63
	1978	60	55	33	41	51	51	73	63
	1977	60	55	29	38	50	50	73	63
USAGE	1980	60	55	31	40	50	50	61	56
	1979	59	55	30	39	47	48	61	56
	1978	59	55	29	38	48	49	64	58
	1977	59	55	30	39	50	50	63	57
MAP READING	1980	68	60	31	40	56	53	73	63
	1979	69	60	27	37	55	53	73	63
	1978	68	60	28	38	52	51	73	63
	1977	68	60	28	38	52	51	75	64
GRAPHS AND TABLES	1980	62	56	31	40	47	48	63	57
	1979	62	56	27	37	46	48	65	58
	1978	62	56	29	38	42	46	66	59
	1977	61	56	29	38	45	47	68	60
REFERENCE MATERIALS	1980	63	57	31	40	50	50	68	60
	1979	62	56	28	38	48	49	69	60
	1978	61	56	28	38	44	47	70	61
	1977	61	56	27	37	46	48	67	59
MATH CONCEPTS	1980	58	54	27	37	48	49	71	62
	1979	58	54	24	35	46	48	73	63
	1978	59	55	23	34	43	46	74	64
	1977	60	55	24	35	45	47	76	65
MATH PROBLEMS	1980	60	55	28	38	46	48	71	62
	1979	58	54	24	35	43	46	71	62
	1978	58	54	25	36	38	44	70	61
	1977	60	55	22	34	39	44	70	61

TABLE A5

TESTS OF ACADEMIC PROGRESS RESULTS
BY RACIAL/ETHNIC GROUPS FOR 1977 TO 1980, GRADE 11

(Scores reported are Percentile Ranks (PR)
for each Normal Curve Equivalent (NCE) mean)

SUBTEST		WHITE		BLACK		HISPANIC		ASIAN	
		PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	1980	68	60	28	38	46	48	73	63
	1979	66	59	27	37	49	48	72	62
	1978	65	58	27	37	45	47	71	62
	1977	67	59	25	34	44	47	72	62
SOCIAL STUDIES	1980	59	55	24	35	37	43	59	55
	1979	58	54	22	34	43	46	57	54
	1978	58	54	24	35	39	44	57	54
	1977	60	55	22	34	38	44	58	54
COMPOSITION	1980	64	58	30	39	45	47	70	61
	1979	63	57	30	39	50	50	69	60
	1978	62	56	30	39	44	47	65	58
	1977	63	57	27	36	44	47	64	58
SCIENCE	1980	68	60	35	42	49	49	75	64
	1979	67	59	31	40	51	51	69	60
	1978	65	58	35	42	48	49	76	63
	1977	66	59	30	38	45	47	64	58
READING	1980	63	57	28	38	44	47	65	58
	1979	63	57	27	37	49	49	64	58
	1978	62	56	27	37	48	49	63	57
	1977	63	57	26	36	46	48	63	57
MATHEMATICS	1980	70	61	34	41	53	52	85	72
	1979	70	61	32	40	58	54	85	72
	1978	68	60	30	39	49	49	86	73
	1977	69	60	30	38	50	50	83	70
LITERATURE	1980	62	56	30	39	44	47	62	56
	1979	60	55	28	38	44	47	60	55
	1978	60	55	30	39	44	47	57	54
	1977	62	56	28	38	41	45	58	54

TABLE A6

COGNITIVE ABILITIES TEST RESULTS
BY RACIAL/ETHNIC GROUPS FOR 1977 TO 1980, GRADES 5, 7, AND 9

Values reported are Standard Age Scores (SAS), Percentile Ranks (PR) and Normal Curve Equivalents (NCE) for the student with the mean score.*

		WHITE			BLACK			HISPANIC			ASIAN		
		SAS	PR	NCE	SAS	PR	NCE	SAS	PR	NCE	SAS	PR	NCE
GRADE 5													
VERBAL	1980	113	74	67	103	56	53	104	59	55	113	74	67
	1979	113	74	67	101	53	52	107	66	59	113	74	67
	1978	113	74	67	101	52	51	105	63	57	114	80	68
	1977	113	74	67	100	50	50	106	64	58	112	77	66
QUANTITATIVE	1980	115	83	71	97	57	54	107	72	62	121	89	77
	1979	115	83	71	97	54	52	112	76	65	120	89	76
	1978	115	83	71	97	54	52	109	71	62	120	89	76
	1977	115	83	71	97	52	51	110	73	63	119	88	75
NONVERBAL	1980	112	76	65	101	53	52	109	70	61	117	86	73
	1979	112	76	65	101	51	51	111	74	64	117	85	72
	1978	112	76	65	100	50	50	108	69	60	117	85	72
	1977	112	76	65	99	48	49	109	71	62	117	85	72
GRADE 7													
VERBAL	1980	113	74	67	100	55	50	102	54	52	112	76	65
	1979	113	74	67	99	50	55	106	64	58	111	75	64
	1978	113	74	65	100	49	49	103	54	54	112	76	65
	1977	112	74	65	97	42	46	104	58	54	112	76	65
QUANTITATIVE	1980	113	78	66	99	47	48	104	54	55	117	85	72
	1979	113	78	66	99	47	48	108	64	60	117	85	72
	1978	113	78	66	98	46	48	105	61	56	117	85	72
	1977	112	76	65	96	41	45	105	63	57	117	86	73
NONVERBAL	1980	113	74	67	101	53	52	109	70	61	117	86	73
	1979	114	80	68	102	54	52	111	74	64	117	86	73
	1978	114	80	68	101	52	51	109	71	62	118	87	74
	1977	113	74	67	100	49	49	109	71	62	118	87	74
GRADE 9													
VERBAL	1980	110	73	63	97	43	46	100	50	50	109	70	61
	1979	109	71	62	95	37	43	100	49	49	110	72	62
	1978	109	70	61	94	36	42	101	53	52	110	72	62
	1977	109	70	61	92	31	40	98	48	49	110	73	63
QUANTITATIVE	1980	112	76	65	98	44	47	103	57	54	117	86	73
	1979	111	74	64	96	39	44	102	55	53	117	86	73
	1978	110	73	63	95	37	43	105	63	57	117	86	73
	1977	110	73	63	93	32	40	103	57	54	118	87	74
NONVERBAL	1980	113	78	66	101	51	51	107	66	59	117	86	73
	1979	112	76	65	100	49	49	107	67	59	117	86	73
	1978	112	76	65	99	47	48	108	68	60	117	85	72
	1977	112	76	65	97	42	46	108	68	60	118	87	74
VERBAL	1980	110	73	63	95	37	43	101	51	51	106	64	58
	1979	110	73	63	94	35	42	100	50	50	107	66	59
	1978	110	72	62	94	34	41	100	49	49	108	68	60
	1977	110	72	62	94	34	41	101	51	51	110	72	62
QUANTITATIVE	1980	113	78	66	98	44	47	107	66	59	118	87	74
	1979	112	77	66	96	39	44	105	64	58	118	87	74
	1978	112	77	66	95	38	44	104	60	55	118	87	74
	1977	113	78	66	96	40	45	105	62	56	119	88	75
NONVERBAL	1980	114	81	68	101	53	52	111	75	64	120	89	76
	1979	114	81	68	100	45	49	109	70	61	119	88	75
	1978	114	80	68	99	47	48	110	72	62	118	87	74
	1977	114	80	68	99	47	48	108	69	60	119	88	75

*Mean was computed for the Normal Curve Equivalent (NCE) scores.

TABLE A7

NUMBER AND PERCENTAGE OF ENROLLED ASIAN STUDENTS TESTED
FROM 1977 TO 1980

Grade	1977			1978		
	9/30/76 Enrollment	Number With Composite Score	Percentage Tested	9/30/77 Enrollment	Number With Composite Score	Percentage Tested
3	274	230	84	315	282	90
5	278	232	83	331	291	88
7	290	217	75	302	238	79
9	264	199	75	309	250	81
11	267	192	72	296	215	73
Total	1,373	1,070	78	1,553	1,276	82
Grade	1979			1980		
	9/30/78 Enrollment	Number With Composite Score	Percentage Tested	9/30/79 Enrollment	Number With Composite Score	Percentage Tested
3	359	313	87	430	383	89
5	310	278	90	385	365	95
7	308	261	85	381	329	86
9	321	275	86	350	297	85
11	306	239	78	320	264	83
Total	1,604	1,366	85	1,866	1,638	88

TABLE A8

NUMBER AND PERCENTAGE OF ENROLLED BLACK STUDENTS TESTED
FROM 1977 TO 1980

Grade	1977			1978		
	9/30/76 Enrollment	Number With Composite Score	Percentage Tested	9/30/77 Enrollment	Number With Composite Score	Percentage Tested
3	795	749	94	802	751	94
5	791	758	96	800	779	97
7	912	815	89	813	762	94
9	820	722	88	853	732	86
11	807	585	72	801	613	77
Total	4,125	3,629	88	4,069	3,637	89

Grade	1979			1980		
	9/30/78 Enrollment	Number With Composite Score	Percentage Tested	9/30/79 Enrollment	Number With Composite Score	Percentage Tested
3	813	779	96	801	750	94
5	838	815	97	834	806	97
7	816	772	95	854	778	91
9	903	806	89	898	739	82
11	845	620	73	874	662	76
Total	4,215	3,792	90	4,261	3,735	88

TABLE A9

NUMBER AND PERCENTAGE OF ENROLLED HISPANIC STUDENTS TESTED FROM 1977 TO 1980

Grade	1977			1978		
	9/30/76 Enrollment	Number With Composite Score	Percentage Tested	9/30/77 Enrollment	Number With Composite Score	Percentage Tested
3	263	180	68	229	185	81
5	250	187	75	242	203	84
7	289	236	82	258	200	78
9	299	220	74	304	219	72
11	296	191	65	279	190	68
Total	1,397	1,014	73	1,312	997	76

Grade	1979			1980		
	9/30/78 Enrollment	Number With Composite Score	Percentage Tested	9/30/79 Enrollment	Number With Composite Score	Percentage Tested
3	256	201	79	252	202	80
5	234	185	79	225	198	88
7	233	194	83	258	221	86
9	314	253	81	285	220	77
11	297	187	63	280	206	74
Total	1,334	1,020	76	1,300	1,047	81

TABLE A10

NUMBER AND PERCENTAGE OF ENROLLED WHITE STUDENTS TESTED
FROM 1977 TO 1980

Grade	1977			1978		
	9/30/76 Enrollment	Number With Composite Score	Percentage Tested	9/30/77 Enrollment	Number With Composite Score	Percentage Tested
3	6,417	6,184	96	6,542	6,374	97
5	6,736	6,568	98	6,439	6,261	97
7	7,884	7,374	94	7,145	6,678	93
9	8,472	7,650	90	8,141	7,328	90
11	8,647	7,232	84	8,412	7,146	85
Total	38,156	35,008	92	36,679	33,787	92
Grade	1979			1980		
	9/30/78 Enrollment	Number With Composite Score	Percentage Tested	9/30/79 Enrollment	Number With Composite Score	Percentage Tested
3	6,014	5,859	97	5,406	5,259	97
5	6,160	5,977	97	6,227	6,087	98
7	6,697	6,263	94	6,096	5,818	95
9	7,854	7,115	91	7,230	6,418	89
11	8,296	6,751	81	7,839	6,684	85
Total	35,021	31,965	91	32,798	30,266	92

TABLE All

IOWA TESTS OF BASIC SKILLS RESULTS BY SEX, 1978-1980
GRADES 3 AND 5(Scores reported are the Percentile Rank (PR)
for each Normal Curve Equivalent (NCE) mean)

SUBTEST		GRADE 3				GRADE 5			
		FEMALE		MALE		FEMALE		MALE	
		PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	1980	79	67	76	65	73	63	71	62
	1979	79	67	74	64	71	62	70	61
	1978	77	66	73	63	71	62	67	59
VOCABULARY	1980	73	63	71	62	67	59	67	59
	1979	73	63	71	62	65	58	66	59
	1978	71	62	70	61	65	58	63	57
READING	1980	71	62	67	59	65	58	63	57
	1979	72	62	66	59	63	57	63	57
	1978	70	61	66	59	64	58	60	55
SPELLING	1980	82	69	74	64	73	63	63	57
	1979	81	68	73	63	71	62	61	56
	1978	79	67	71	61	70	61	58	54
CAPITALIZATION	1980	83	70	76	65	74	64	68	60
	1979	82	69	75	64	73	63	66	59
	1978	82	69	73	63	72	62	63	57
PUNCTUATION	1980	85	72	78	66	74	64	63	57
	1979	85	72	78	66	72	62	61	56
	1978	84	71	76	65	72	62	59	55
SCIENCE	1980	72	62	66	59	72	62	65	58
	1979	73	63	65	58	71	62	63	57
	1978	73	63	65	58	70	61	62	56
MAP READING	1980	71	62	75	64	68	60	72	62
	1979	71	62	73	63	66	59	71	62
	1978	70	61	73	63	67	59	70	61
GRAPHS AND TABLES	1980	78	66	76	65	72	62	76	65
	1979	79	67	75	64	70	61	74	64
	1978	76	65	73	63	70	61	73	63
REFERENCE MATERIALS	1980	75	64	69	60	71	62	65	58
	1979	76	65	66	59	70	61	64	58
	1978	74	64	66	59	70	61	62	56
MATH CONCEPTS	1980	70	61	71	62	70	61	73	63
	1979	71	62	72	62	70	61	73	63
	1978	69	60	70	61	71	62	73	63
MATH PROBLEMS	1980	73	63	72	62	68	60	69	60
	1979	75	64	74	63	66	59	67	59
	1978	74	64	72	62	71	59	65	58

TABLE A12

IOWA TESTS OF BASIC SKILLS RESULTS BY SEX, 1978-1980
GRADES 7 AND 9(Scores reported are the Percentile Rank (PR)
for each Normal Curve Equivalent (NCE) mean)

SUBTEST		GRADE 7				GRADE 9			
		FEMALE		MALE		FEMALE		MALE	
		PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	1980	65	58	63	57	62	56	60	55
	1979	63	57	58	54	60	55	60	55
	1978	62	56	58	54	62	56	60	55
VOCABULARY	1980	60	55	60	55	60	55	60	55
	1979	57	54	57	54	58	54	54	55
	1978	58	54	57	54	61	56	61	56
READING	1980	57	54	56	53	55	53	54	52
	1979	55	53	52	51	55	53	49	52
	1978	55	53	52	51	56	53	47	52
SPELLING	1980	63	57	51	51	61	56	49	49
	1979	63	57	49	49	62	56	53	49
	1978	61	55	48	49	61	56	52	48
CAPITALIZATION	1980	69	60	59	55	63	57	52	51
	1979	68	60	56	53	63	57	53	52
	1978	65	58	54	52	63	57	52	51
PUNCTUATION	1980	69	60	56	53	65	58	54	52
	1979	67	59	53	52	63	57	50	52
	1978	65	58	52	51	63	57	50	51
USAGE	1980	65	58	55	53	63	57	51	51
	1979	64	58	51	51	61	56	69	50
	1978	63	57	51	51	62	56	68	50
MAP READING	1980	64	58	69	60	60	55	69	60
	1979	62	56	66	59	60	55	61	60
	1978	61	56	67	59	60	55	60	60
GRAPHS AND TABLES	1980	63	57	63	57	56	53	61	56
	1979	61	56	61	56	55	53	56	56
	1978	60	55	60	55	56	53	55	55
REFERENCE MATERIALS	1980	65	58	59	55	62	56	57	54
	1979	63	57	55	53	61	56	57	53
	1978	62	56	54	52	61	56	57	53
MATH CONCEPTS	1980	63	57	66	59	53	52	58	54
	1979	62	56	63	57	52	51	56	54
	1978	61	56	63	57	53	52	57	54
MATH PROBLEMS	1980	59	55	61	56	54	52	59	55
	1979	56	53	58	54	52	51	60	53
	1978	55	53	58	54	52	51	60	54

TABLE A13

TESTS OF ACADEMIC PROGRESS RESULTS BY SEX, 1978-1980
GRADE 11(Scores reported are the Percentile Rank (PR)
for each Normal Curve Equivalent (NCE) mean)

SUBTEST		FEMALE		MALE	
		PR	NCE	PR	NCE
COMPOSITE	1980	63	57	65	58
	1979	62	56	63	57
	1978	63	57	62	56
SOCIAL STUDIES	1980	50	50	60	55
	1979	50	50	58	54
	1978	51	51	58	54
COMPOSITION	1980	68	60	54	52
	1979	67	59	53	52
	1978	66	59	51	51
SCIENCE	1980	60	55	70	61
	1979	60	55	69	60
	1978	59	55	67	59
READING	1980	59	55	60	55
	1979	59	55	59	55
	1978	60	55	57	54
MATHEMATICS	1980	64	58	71	62
	1979	63	57	71	62
	1978	63	57	68	60
LITERATURE	1980	60	55	56	53
	1979	60	55	54	52
	1978	60	55	53	52

TABLE A14

COGNITIVE ABILITIES TEST RESULTS BY SEX, 1978-1980
GRADES 3, 5, 7, AND 9

(Scores reported are Standard Age Scores (SAS), Percentile Ranks (PR) and Normal Curve Equivalent (NCE) for the student with the mean score.)*

SUBTEST		GRADE 3						GRADE 5					
		FEMALE			MALE			FEMALE			MALE		
		SAS	PR	NCE	SAS	PR	NCE	SAS	PR	NCE	SAS	PR	NCE
VERBAL	1980	113	79	67	111	74	64	113	78	66	110	73	63
	1979	113	79	67	110	73	63	112	76	65	110	73	63
	1978	113	79	67	110	73	63	113	78	66	110	72	62
QUANTITATIVE	1980	114	81	68	115	82	69	111	74	64	112	76	65
	1979	115	82	69	114	81	68	111	74	64	112	76	65
	1978	115	82	69	114	81	68	111	75	64	111	75	64
NONVERBAL	1980	112	76	65	111	75	64	113	78	66	112	77	66
	1979	112	76	65	111	74	64	113	79	67	112	77	66
	1978	112	76	65	110	73	63	113	79	67	112	76	65
SUBTEST		GRADE 7						GRADE 9					
		FEMALE			MALE			FEMALE			MALE		
		SAS	PR	NCE	SAS	PR	NCE	SAS	PR	NCE	SAS	PR	NCE
VERBAL	1980	109	70	61	107	66	59	109	71	62	107	66	59
	1979	109	70	61	106	64	58	109	70	61	107	66	59
	1978	108	69	60	105	63	57	109	70	61	107	65	58
QUANTITATIVE	1980	110	73	63	110	73	63	111	74	64	112	76	65
	1979	109	71	62	109	70	61	110	73	63	111	75	64
	1978	109	70	61	109	70	61	110	73	63	111	75	64
NONVERBAL	1980	112	76	65	111	74	64	113	79	67	113	79	67
	1979	112	76	65	110	73	63	113	78	66	113	79	67
	1978	111	74	64	110	73	63	113	78	66	112	77	66

*Mean was computed for the Normal Curve Equivalent (NCE) scores.

TABLE A15

COMPARISON OF TEST SCORES OF MALES AND FEMALES WITHIN RACIAL/ETHNIC GROUPS, 1980
GRADE 3(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean.)

IOWA TESTS OF BASIC SKILLS	WHITE (N=2685)*				BLACK (N=351)				ASIAN (N=190)				HISPANIC (N=112)			
	MALE		FEMALE		MALE		FEMALE		MALE		FEMALE		MALE		FEMALE	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	78	66	82	69	50	50	54	52	82	69	84	71	65	58	61	56
VOCABULARY	74	64	76	65	51	51	51	51	70	61	72	62	53	52	53	52
READING COMPREHENSION	70	61	75	64	45	47	48	49	66	59	71	62	51	51	50	50
SPELLING	75	64	83	70	62	56	72	62	84	71	89	76	69	60	69	60
CAPITALIZATION	77	66	84	71	60	55	66	59	85	72	89	76	70	61	74	64
PUNCTUATION	80	68	86	73	56	53	66	59	87	74	92	80	73	63	74	64
LANGUAGE USAGE	69	60	76	65	47	48	52	51	67	59	73	63	51	51	56	53
MAP READING	77	66	74	64	49	49	45	47	81	68	77	66	70	61	62	56
GRAPHS AND TABLES	79	67	81	68	51	51	57	54	82	69	83	70	71	62	65	58
REFERENCE MATERIALS	70	61	78	66	47	48	54	52	79	67	83	70	62	56	57	54
MATH CONCEPTS	73	63	73	63	48	49	46	48	77	66	79	67	59	55	50	50
MATH PROBLEM SOLVING	74	64	77	66	46	48	48	48	81	68	83	70	65	58	56	53

COGNITIVE ABILITIES TEST																
VERBAL	76	65	83	70	53	52	58	54	76	65	83	70	61	56	56	53
QUANTITATIVE	83	70	83	70	57	54	57	54	90	77	90	77	75	64	66	59
NONVERBAL	76	65	79	67	50	50	55	53	85	72	87	74	73	63	65	58

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A16

COMPARISON OF TEST SCORES OF MALES AND FEMALES WITHIN RACIAL/ETHNIC GROUPS, 1980
GRADE 5(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean.)

IOWA TESTS OF BASIC SKILLS	WHITE				BLACK				ASIAN				HISPANIC			
	(N=3015)*		(N=3072)		(N=383)		(N=423)		(N=187)		(N=178)		(N=110)		(N=88)	
	MALE PR	FEMALE NCE														
COMPOSITE	75	64	76	65	37	43	42	46	74	64	81	68	50	50	56	53
VOCABULARY	71	62	70	61	39	44	38	44	63	57	69	60	50	50	51	51
READING COMPREHENSION	67	59	69	60	32	40	38	44	62	56	71	62	44	47	51	51
SPELLING	65	58	75	64	44	47	57	54	76	65	84	71	49	49	63	57
CAPITALIZATION	71	62	77	66	43	46	51	51	75	64	82	69	53	52	62	56
PUNCTUATION	67	59	76	65	39	44	53	52	74	64	84	71	53	52	63	57
LANGUAGE USAGE	69	60	75	64	39	44	47	48	59	55	73	63	50	50	57	54
MAP-READING	76	65	71	62	39	44	39	44	79	67	76	65	51	51	57	54
GRAPHS AND TABLES	80	68	75	64	46	48	44	47	80	68	82	69	63	57	60	55
REFERENCE MATERIALS	69	60	74	64	38	44	46	48	73	63	79	67	50	50	59	55
MATH CONCEPTS	78	66	73	63	39	44	41	45	80	68	83	70	51	51	54	52
MATH PROBLEM SOLVING	72	62	71	62	39	44	38	44	79	67	81	68	53	52	50	50

COGNITIVE ABILITIES TEST																
VERBAL	77	66	81	68	47	48	53	52	73	63	81	68	52	51	57	54
QUANTITATIVE	79	67	77	66	46	48	47	48	85	72	85	72	58	54	60	55
NONVERBAL	79	67	80	68	51	51	55	53	85	72	87	74	67	59	73	63

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A17

COMPARISON OF TEST SCORES OF MALES AND FEMALES WITHIN RACIAL/ETHNIC GROUPS, 1980
GRADE 7(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NOE) mean.)

IOWA TESTS OF BASIC SKILLS	WHITE (N=2930)*				BLACK (N=391)				ASIAN (N=158)				HISPANIC (N=112)			
	MALE		FEMALE		MALE		FEMALE		MALE		FEMALE		MALE		FEMALE	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	66	59	69	60	31	40	36	42	74	64	73	63	51	51	50	50
VOCABULARY	64	58	63	57	35	42	35	42	62	56	61	56	50	50	45	47
READING COMPREHENSION	60	55	62	56	30	39	33	41	59	55	61	56	43	46	43	46
SPELLING	53	52	65	58	33	41	46	48	70	61	78	66	47	48	53	52
CAPITALIZATION	62	56	72	62	36	42	48	49	74	64	78	66	51	51	59	55
PUNCTUATION	59	55	71	62	32	40	42	46	73	63	79	67	49	49	57	54
LANGUAGE USAGE	58	54	69	60	33	41	41	45	55	53	66	59	47	48	53	52
MAP READING	72	62	68	60	41	45	37	43	82	69	74	64	60	55	50	50
GRAPHS AND TABLES	67	59	67	59	36	42	36	42	75	64	70	61	50	50	45	47
REFERENCE MATERIALS	62	56	69	60	34	41	42	46	75	64	75	64	51	51	52	51
MATH/CONCEPTS	70	61	67	59	35	42	35	42	84	71	79	67	55	53	51	51
MATH PROBLEM SOLVING	64	58	62	56	30	39	33	41	76	65	73	63	49	49	45	47

COGNITIVE ABILITIES TEST																
VERBAL	70	61	75	64	42	46	45	47	71	62	70	61	50	50	48	49
QUANTITATIVE	76	65	76	65	42	46	46	48	88	75	85	72	58	54	56	53
NONVERBAL	76	65	79	67	51	51	52	51	86	73	87	74	64	58	69	60

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A18

COMPARISON OF TEST SCORES OF MALES AND FEMALES WITHIN RACIAL/ETHNIC GROUPS, 1980
GRADE 9(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean.)

IOWA TESTS OF	WHITE (N=3095)* (N=3323)				BLACK (N=371) (N=368)				ASIAN (N=165) (N=132)				HISPANIC (N=107) (N=113)			
	MALE		FEMALE		MALE		FEMALE		MALE		FEMALE		MALE		FEMALE	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
BASIC SKILLS																
COMPOSITE	64	58	65	58	26	36	30	39	69	60	68	60	50	50	50	50
VOCABULARY	64	58	63	57	30	39	30	39	58	54	59	55	48	49	47	48
READING COMPREHENSION	58	54	59	55	25	36	28	38	57	54	58	54	48	49	42	46
SPELLING	50	50	63	57	27	37	43	46	66	59	75	64	45	47	54	52
CAPITALIZATION	55	53	66	59	28	38	40	45	67	59	73	63	48	49	56	53
PUNCTUATION	57	54	68	60	28	38	40	45	68	60	76	65	50	50	59	55
LANGUAGE USAGE	54	52	65	58	27	37	37	43	56	53	66	59	47	48	54	52
MAP READING	73	63	63	57	33	41	29	38	76	65	70	61	62	56	50	50
GRAPHS AND TABLES	64	58	59	55	31	40	31	40	67	59	60	55	50	50	44	47
REFERENCE MATERIALS	61	56	64	58	27	37	36	42	67	59	69	60	50	50	50	50
MATH CONCEPTS	61	56	56	53	27	37	27	37	74	64	68	60	50	50	46	48
MATH PROBLEM SOLVING	63	57	57	54	29	38	27	37	75	64	65	58	47	48	44	47
COGNITIVE ABILITIES TEST																
VERBAL	70	61	75	64	34	41	40	45	62	56	68	60	50	50	52	51
QUANTITATIVE	79	67	77	66	43	46	45	47	88	75	86	73	66	59	66	59
NONVERBAL	81	68	81	68	53	52	53	52	89	76	89	76	76	65	74	64

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A19

COMPARISON OF TEST SCORES OF MALES AND FEMALES WITHIN RACIAL/ETHNIC GROUPS, 1980
GRADE 11(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean.)

IOWA TESTS OF BASIC SKILLS	WHITE (N=3347)* (N=3337)				BLACK (N=314) (N=348)				ASIAN (N=126) (N=138)				HISPANIC (N=92) (N=114)			
	MALE		FEMALE		MALE		FEMALE		MALE		FEMALE		MALE		FEMALE	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	69	60	66	59	27	37	29	38	75	64	71	62	46	48	46	48
SOCIAL STUDIES	63	57	54	52	24	35	22	34	65	58	53	52	41	45	34	41
COMPOSITION (ENGLISH)	58	54	71	62	24	35	37	43	66	59	73	63	40	45	50	50
SCIENCE	72	62	63	57	37	43	32	40	79	67	70	61	52	51	45	47
READING	63	57	63	57	27	37	29	38	67	59	63	57	44	47	44	47
MATHEMATICS	73	63	67	59	34	41	33	41	85	72	84	71	56	53	51	51
LITERATURE	59	55	63	57	28	38	31	40	62	56	62	56	40	45	47	48

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A20

1980 GRADE 5 STUDENTS TESTED IN MCPS IN MORE THAN ONE
TEST ADMINISTRATION - TOTAL COUNTY

(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean.)

IOWA TESTS OF BASIC SKILLS	1980 Grade 5 (N=6069)*		1978 Grade 3 (N=6069).	
	PR	NCE	PR.	NCE*
COMPOSITE	73	63	77	66
VOCABULARY	68	60	73	63
READING COMPOSITION	65	58	70	61
SPELLING	70	61	75	64
CAPITALIZATION	73	63	80	68
PUNCTUATION	71	62	76	65
LANGUAGE USAGE	70	61	71	62
MAP READING	71	62	73	63
GRAPHS AND TABLES	76	65	76	65
REFERENCE MATERIALS	70	61	72	62
MATH CONCEPTS	73	63	71	62
MATH PROBLEM SOLVING	70	61	75	64
<u>COGNITIVE ABILITIES TEST</u>				
VERBAL	77	66	79	67
QUANTITATIVE	76	65	83	70
NONVERBAL	79	67	76	65

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A21

1980 GRADE 5 STUDENTS TESTED IN MCPS IN MORE THAN ONE
TEST ADMINISTRATION - BLACK

(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean.)

IOWA TESTS OF BASIC SKILLS	1980 Grade 5 (N=567)*		1978 Grade 5 (N=567)	
	PR	NCE	PR	NCE
COMPOSITE	43	46	50	50
VOCABULARY	41	45	47	48
READING COMPOSITION	38	44	44	47
SPELLING	52	51	62	56
CAPITALIZATION	51	51	62	56
PUNCTUATION	50	50	56	53
LANGUAGE USAGE	45	47	51	51
MAP READING	42	46	44	47
GRAPHS AND TABLES	47	48	52	51
REFERENCE MATERIALS	45	47	48	49
MATH CONCEPTS	44	47	45	47
MATH PROBLEM SOLVING	41	45	49	49
<hr/>				
<u>COGNITIVE ABILITIES TEST</u>				
VERBAL	53	52	55	53
QUANTITATIVE	50	50	57	54
NONVERBAL	56	53	51	51

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A22

1980 GRADE 5 STUDENTS TESTED IN MCPS IN MORE THAN ONE
TEST ADMINISTRATION - ASIAN(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean.)

IOWA TESTS OF BASIC SKILLS	1980 Grade 5 (N=239)*		1978 Grade 5 (N=239)	
	PR	NCE	PR	NCE
COMPOSITE	83	70	83	70
VOCA BULARY	72	62	73	63
READING COMPOSITION	73	63	73	63
SPELLING	84	71	84	71
CAPITALIZATION	83	70	88	75
PUNCTUATION	83	70	86	73
LANGUAGE USAGE	72	62	70	61
MAP READING	82	69	76	65
GRAPHS AND TABLES	84	71	80	68
REFERENCE MATERIALS	81	68	79	67
MATH CONCEPTS	84	71	78	66
MATH PROBLEM SOLVING	82	69	84	71
<hr/>				
COGNITIVE ABILITIES TEST				
VERBAL	83	70	82	69
QUANTITATIVE	87	74	89	76
NONVERBAL	88	75	85	72

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A23

1980 GRADE 5 STUDENTS TESTED IN MCPS IN MORE THAN ONE
TEST ADMINISTRATION - HISPANIC

(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean.)

IOWA TESTS OF BASIC SKILLS	1980 Grade 5 (N=125)*		1978 Grade 3 (N=125)	
	PR	NCE	PR	NCE
COMPOSITE	61	56	64	58
VOCABULARY	57	54	57	54
READING COMPOSITION	55	53	57	54
SPELLING	61	56	68	60
CAPITALIZATION	65	58	76	65
PUNCTUATION	63	57	71	62
LANGUAGE USAGE	60	55	61	56
MAP READING	61	56	63	57
GRAPHS AND TABLES	67	59	67	59
REFERENCE MATERIALS	59	55	64	56
MATH CONCEPTS	58	54	59	55
MATH PROBLEM SOLVING	55	53	60	59
COGNITIVE ABILITIES TEST				
VERBAL	63	57	63	57
QUANTITATIVE	64	58	73	63
NONVERBAL	74	64	70	61

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A24

1980 GRADE 5 STUDENTS TESTED IN MCPS IN MORE THAN ONE
TEST ADMINISTRATION - WHITE(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean.)

IOWA TESTS OF BASIC SKILLS	1980 Grade 5 (N=5117)*		1978 Grade 3 (N=5117)	
	PR	NCE	PR	NCE
COMPOSITE	76	65	80	68
VOCABULARY	71	62	75	64
READING COMPOSITION	68	60	73	63
SPELLING	70	61	76	65
CAPITALIZATION	75	64	82	69
PUNCTUATION	73	63	78	66
LANGUAGE USAGE	73	63	73	63
MAP READING	73	63	76	65
GRAPHS AND TABLES	78	66	79	67
REFERENCE MATERIALS	72	62	74	64
MATH CONCEPTS	76	65	73	63
MATH PROBLEM SOLVING	73	63	77	66
COGNITIVE ABILITIES TEST				
VERBAL	80	68	82	69
QUANTITATIVE	79	67	84	71
NONVERBAL	80	68	79	67

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

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TABLE A25

1980 GRADE 7 STUDENTS TESTED IN MCPS IN MORE THAN
ONE TEST ADMINISTRATION--TOTAL COUNTY(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 7 (N=4994)*		1978 Gr. 5 (N=4994)		1976 Gr. 3 (N=4994)		1980 Gr. 7 (N=878)		1978 Gr. 5 (N=878)		1978 Gr. 5 (N=957)		1976 Gr. 3 (N=957)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	67	59	72	62	74	64	63	57	66	59	65	58	68	60
VOCABULARY	63	57	66	59	70	61	58	54	61	56	62	56	65	58
READING COMPREHENSION	59	55	64	58	67	59	56	53	60	55	60	55	61	56
SPELLING	60	55	66	59	72	62	56	53	61	56	60	55	66	59
CAPITALIZATION	68	60	71	62	76	65	62	56	61	56	65	58	71	62
PUNCTUATION	65	58	67	59	71	62	61	56	60	55	60	55	66	59
LANGUAGE USAGE	63	57	69	60	68	60	58	54	63	57	63	57	63	57
MAP READING	69	60	71	62	71	62	66	59	64	58	66	59	66	59
GRAPHS/TABLES	65	58	74	64	73	63	63	57	69	60	69	60	68	60
REFERENCE MATERIALS	65	58	69	60	67	59	62	56	63	57	62	56	61	56
MATH CONCEPTS	67	59	74	64	70	61	64	58	71	62	67	59	63	57
MATH PROBLEM SOLVING	63	57	68	60	73	63	58	54	63	57	62	56	68	60

COGNITIVE ABILITIES TEST														
VERBAL	72	62	77	66	76	65	67	59	70	61	72	62	71	62
QUANTITATIVE	76	65	77	66	82	69	71	62	72	62	70	61	76	65
NONVERBAL	78	66	79	67	76	65	75	64	74	64	74	64	70	61

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A27

1980 GRADE 7 STUDENTS TESTED IN MCPS IN MORE THAN
ONE TEST ADMINISTRATION--HISPANIC

(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 7 (N=108)*		1978 Gr. 5 (N=108)		1976 Gr. 3 (N=108)		1980 Gr. 7 (N=37)		1978 Gr. 5 (N=37)		1978 Gr. 5 (N=31)		1976 Gr. 3 (N=31)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	58	54	60	55	60	55	44	47	41	45	53	52	60	55
VOCABULARY	55	53	55	53	56	53	37	43	33	41	45	47	52	51
READING COMPREHENSION	50	50	52	51	52	51	37	43	34	41	46	48	51	51
SPELLING	57	54	62	56	66	59	36	42	37	43	54	52	61	56
CAPITALIZATION	64	58	63	57	67	59	45	47	43	46	47	48	63	57
PUNCTUATION	60	55	63	57	67	59	48	49	44	47	60	55	63	57
LANGUAGE USAGE	57	54	59	55	57	54	46	48	42	46	56	53	58	54
MAP READING	59	55	61	56	61	56	54	52	43	46	53	52	60	55
GRAPHS/TABLES	55	53	60	55	64	58	44	47	45	47	55	53	59	55
REFERENCE MATERIALS	59	55	62	56	58	54	47	48	43	46	59	55	55	53
MATH CONCEPTS	58	54	63	57	56	53	50	50	51	51	54	52	49	49
MATH PROBLEM SOLVING	55	53	59	55	63	57	40	45	43	46	55	53	61	56

COGNITIVE ABILITIES TEST														
VERBAL	61	56	66	59	62	56	43	46	44	47	66	59	63	57
QUANTITATIVE	64	58	65	58	72	62	56	53	53	52	65	58	72	62
NONVERBAL	71	62	73	63	65	58	70	61	68	60	75	64	70	61

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A27

1980 GRADE 7 STUDENTS TESTED IN MCPS IN MORE THAN
ONE TEST ADMINISTRATION--HISPANIC

(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF	1980 Gr. 7 (N=108)*		1978 Gr. 5 (N=108)		1976 Gr. 3 (N=108)		1980 Gr. 7 (N=37)		1978 Gr. 5 (N=37)		1978 Gr. 5 (N=31)		1976 Gr. 3 (N=31)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
BASIC SKILLS														
COMPOSITE	58	54	60	55	60	55	44	47	41	45	53	52	60	55
VOCABULARY	55	53	55	53	56	53	37	43	33	41	45	47	52	51
READING COMPREHENSION	50	50	52	51	52	51	37	43	34	41	48	48	51	51
SPELLING	57	54	62	56	66	59	36	42	37	43	54	52	61	56
CAPITALIZATION	64	58	63	57	67	59	45	47	43	46	47	48	63	57
PUNCTUATION	60	55	63	57	67	59	48	49	44	47	60	55	63	57
LANGUAGE USAGE	57	54	59	55	57	54	46	48	42	46	56	53	58	54
MAP READING	59	55	61	56	61	56	54	52	43	46	53	52	60	55
GRAPHS/TABLES	55	53	60	55	64	58	44	47	45	47	55	53	59	55
REFERENCE MATERIALS	59	55	62	56	58	54	47	48	43	46	59	55	55	53
MATH CONCEPTS	58	54	63	57	56	53	50	50	51	51	54	52	49	49
MATH PROBLEM SOLVING	55	53	59	55	63	57	40	45	43	46	55	53	61	56
COGNITIVE ABILITIES TEST														
VERBAL	61	56	66	59	62	56	43	46	44	47	66	59	63	57
QUANTITATIVE	64	58	65	58	72	62	56	53	53	52	65	58	72	62
NONVERBAL	71	62	73	63	65	58	70	61	68	60	75	64	70	61

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A28

1980 GRADE 7 STUDENTS TESTED IN MCPS IN MORE THAN
ONE TEST ADMINISTRATION--BLACK(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF	1980 Gr. 7 (N=447)*		1978 Gr. 5 (N=447)		1976 Gr. 3 (N=447)		1980 Gr. 7 (N=126)		1978 Gr. 5 (N=126)		1978 Gr. 5 (N=86)		1976 Gr. 3 (N=86)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
BASIC SKILLS														
COMPOSITE	37	43	41	45	45	47	31	40	34	41	31	40	37	43
VOCABULARY	37	43	38	44	45	47	33	41	37	43	31	40	40	45
READING COMPREHENSION	33	41	37	43	38	44	30	39	29	38	30	39	36	42
SPELLING	41	45	49	49	59	55	39	44	44	47	39	44	45	47
CAPITALIZATION	47	48	49	49	58	54	39	44	37	43	45	47	50	50
PUNCTUATION	40	45	44	47	50	50	37	43	37	43	35	42	43	46
LANGUAGE USAGE	39	44	43	46	46	48	34	41	37	43	39	44	43	46
MAP READING	42	46	42	46	42	46	37	43	37	43	36	42	37	43
GRAPHS/TABLES	37	43	45	47	47	48	34	41	39	44	42	46	39	44
REFERENCE MATERIALS	41	45	45	47	42	46	37	43	38	44	37	43	37	43
MATH CONCEPTS	37	43	43	46	42	46	36	42	39	44	37	43	34	41
MATH PROBLEM SOLVING	33	41	38	44	46	48	30	39	35	42	35	42	43	46
COGNITIVE ABILITIES TEST														
VERBAL	47	48	53	52	52	51	42	46	44	47	45	47	47	48
QUANTITATIVE	48	49	50	50	57	54	44	47	43	46	43	46	51	51
NONVERBAL	58	54	59	55	51	51	51	51	44	47	47	48	44	47

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A29

1980 GRADE 7 STUDENTS TESTED IN MCPS IN MORE THAN
ONE TEST ADMINISTRATION--WHITE

(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 7 (N=4255)*		1978 Gr. 5 (N=4255)		1976 Gr. 3 (N=4255)		1980 Gr. 7 (N=649)		1978 Gr. 5 (N=649)		1978 Gr. 5 (N=805)		1976 Gr. 3 (N=805)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	70	61	75	64	76	65	69	60	73	63	69	60	70	61
VOCABULARY	64	58	69	60	73	63	65	58	68	60	64	58	68	60
READING COMPREHENSION	62	56	67	59	70	61	63	57	69	60	63	57	63	57
SPELLING	61	56	68	60	73	63	59	55	64	58	61	56	68	60
CAPITALIZATION	69	60	73	63	77	66	65	58	66	59	67	59	72	62
PUNCTUATION	67	59	69	60	73	63	64	58	64	58	62	56	68	60
LANGUAGE USAGE	64	58	71	62	70	61	63	57	70	61	65	58	65	58
MAP READING	71	62	74	64	73	63	71	62	70	61	69	60	69	60
GRAPHS/TABLES	69	60	76	65	75	64	69	60	74	64	71	62	70	61
REFERENCE MATERIALS	67	59	71	62	70	61	66	59	68	60	63	57	63	57
MATH CONCEPTS	70	61	77	66	72	62	70	61	77	66	69	60	66	59
MATH PROBLEM SOLVING	65	58	71	62	75	64	63	57	69	60	63	57	70	61

COGNITIVE ABILITIES TEST														
VERBAL	74	64	80	68	79	67	73	63	77	66	74	64	73	63
QUANTITATIVE	78	66	79	67	84	71	75	64	76	65	73	63	77	66
NONVERBAL	79	67	82	69	78	66	78	66	79	67	76	65	72	62

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A30

1980 GRADE 9 STUDENTS TESTED IN MCPS IN MORE THAN
ONE TEST ADMINISTRATION--TOTAL COUNTY.(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 9 (N=5346)*		1978 Gr. 7 (N=5346)		1976 Gr. 5 (N=5346)		1980 Gr. 9 (N=778)		1978 Gr. 7 (N=778)		1978 Gr. 7 (N=953)		1976 Gr. 5 (N=953)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	64	58	64	58	69	60	59	55	56	53	54	52	59	55
VOCABULARY	63	57	61	56	64	58	58	54	53	52	53	52	57	54
READING COMPREHENSION	57	54	56	53	61	56	53	52	50	50	50	50	53	52
SPELLING	56	53	57	54	63	57	52	51	52	51	49	49	54	52
CAPITALIZATION	62	56	63	57	64	58	55	53	54	52	53	52	56	53
PUNCTUATION	63	57	63	57	62	56	57	54	54	52	51	51	52	51
LANGUAGE USAGE	59	55	61	56	65	58	57	54	55	53	51	51	57	54
MAP READING	69	60	67	59	66	59	62	56	58	54	58	54	59	55
GRAPHS/TABLES	62	56	63	57	70	61	56	53	54	52	54	52	62	56
REFERENCE MATERIALS	63	57	62	56	64	58	57	54	53	52	51	51	56	53
MATH CONCEPTS	58	54	65	58	70	61	53	52	59	55	54	52	61	56
MATH PROBLEM SOLVING	59	55	60	55	65	58	54	52	53	52	50	50	57	54

COGNITIVE ABILITIES TEST														
VERBAL	73	63	70	61	74	64	64	58	61	56	62	56	66	59
QUANTITATIVE	79	67	74	64	76	65	72	62	65	58	64	58	69	60
NONVERBAL	82	69	76	65	77	66	76	65	70	61	69	60	70	61

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A31

1980 GRADE 9 STUDENTS TESTED IN MCPS IN MORE THAN
ONE TEST ADMINISTRATION--ASIAN(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 9 (N=159)*		1978 Gr. 7 (N=159)		1976 Gr. 5 (N=159)		1980 Gr. 9 (N=44)		1978 Gr. 7 (N=44)		1978 Gr. 7 (N=15)		1976 Gr. 5 (N=15)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	79	67	77	66	79	67	67	59	63	57	71	62	72	62
VOCABULARY	72	62	67	59	67	59	60	55	51	51	75	64	66	59
READING COMPREHENSION	70	61	66	59	68	60	55	53	46	48	57	54	66	59
SPELLING	80	68	81	68	79	67	73	63	68	60	79	67	77	66
CAPITALIZATION	79	67	79	67	76	65	72	62	64	58	67	59	55	53
PUNCTUATION	80	68	79	67	76	65	70	61	65	58	76	65	72	62
LANGUAGE USAGE	69	60	64	58	66	59	64	58	50	50	64	58	63	57
MAP READING	82	69	82	69	78	66	72	62	70	61	68	60	67	59
GRAPHS/TABLES	71	62	75	64	79	67	61	56	63	57	56	53	65	58
REFERENCE MATERIALS	69	67	76	65	76	65	66	59	61	56	63	57	63	57
MATH CONCEPTS	77	66	83	70	84	71	72	62	77	66	70	61	66	59
MATH PROBLEM SOLVING	77	66	76	65	79	67	66	59	66	59	60	55	64	58

COGNITIVE ABILITIES TEST														
VERBAL	81	68	77	66	78	66	70	61	64	58	69	60	68	60
QUANTITATIVE	91	79	88	75	87	74	88	75	82	69	79	67	74	64
NONVERBAL	92	80	88	75	86	73	90	77	82	69	79	67	82	69

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A32

1980 GRADE 9 STUDENTS TESTED IN MCPS IN MORE THAN
ONE TEST ADMINISTRATION--BLACK

(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF	1980 Gr. 9 (N=424)*		1978 Gr. 7 (N=424)		1976 Gr. 5 (N=424)		1980 Gr. 9 (N=113)		1978 Gr. 7 (N=113)		1978 Gr. 7 (N=98)		1976 Gr. 5 (N=98)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
BASIC SKILLS														
COMPOSITE	32	40	30	39	32	40	30	39	24	35	24	35	27	37
VOCABULARY	33	41	32	40	34	41	30	39	24	35	27	37	29	38
READING COMPREHENSION	30	39	27	37	29	38	27	37	22	34	26	36	26	36
SPELLING	37	43	37	43	41	45	32	40	30	39	29	38	32	40
CAPITALIZATION	39	44	40	45	38	44	30	39	29	38	31	40	30	39
PUNCTUATION	37	43	37	43	36	42	31	40	28	38	27	37	27	37
LANGUAGE USAGE	34	41	34	41	37	43	33	41	30	39	28	38	30	39
MAP READING	37	43	38	44	37	43	30	39	27	37	29	38	28	38
GRAPHS/TABLES	34	41	34	41	39	44	31	40	24	35	30	39	36	42
REFERENCE MATERIALS	35	42	37	43	37	43	30	39	27	37	28	38	31	40
MATH CONCEPTS	30	39	32	40	35	42	26	36	27	37	26	36	27	37
MATH PROBLEM SOLVING	31	40	30	39	35	42	29	38	27	37	24	35	30	39
COGNITIVE ABILITIES TEST														
VERBAL	43	46	42	46	46	48	33	41	32	40	33	41	38	44
QUANTITATIVE	49	49	44	47	48	49	42	46	32	40	36	42	37	43
NONVERBAL	59	55	53	52	52	51	52	51	43	46	42	46	44	47

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A33

1980 GRADE 9 STUDENTS TESTED IN MCPS IN MORE THAN
ONE TEST ADMINISTRATION--HISPANIC(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 9 (N=109)*		1978 Gr. 7 (N=109)		1976 Gr. 5 (N=109)		1980 Gr. 9 (N=38)		1978 Gr. 7 (N=38)		1978 Gr. 7 (N=26)		1976 Gr. 5 (N=26)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	59	55	56	53	58	54	46	48	42	46	52	51	50	50
VOCABULARY	56	53	50	50	52	51	38	44	38	44	52	51	54	52
READING COMPREHENSION	50	50	48	49	48	49	45	47	37	43	50	50	46	48
SPELLING	56	53	54	52	58	54	47	48	39	44	56	53	55	53
CAPITALIZATION	60	55	63	57	59	55	52	51	49	49	45	47	45	47
PUNCTUATION	63	57	59	55	59	55	51	51	44	47	52	51	37	43
LANGUAGE USAGE	55	53	54	52	51	51	50	50	45	47	48	49	50	50
MAP READING	64	58	63	57	60	55	51	51	48	49	58	54	53	52
GRAPHS/TABLES	54	52	50	50	60	55	42	46	38	44	46	48	52	51
REFERENCE MATERIALS	57	54	58	54	56	53	47	48	42	46	50	50	47	48
MATH CONCEPTS	53	52	60	55	62	56	42	46	48	49	49	49	54	52
MATH PROBLEM SOLVING	50	50	50	50	58	54	42	46	40	45	46	48	49	49

COGNITIVE ABILITIES TEST														
VERBAL	64	58	60	55	62	56	45	47	39	44	58	54	63	57
QUANTITATIVE	75	64	67	59	68	60	60	55	54	52	60	55	63	57
NONVERBAL	83	70	73	63	75	64	70	61	60	55	65	58	68	60

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A34

1980 GRADE 9 STUDENTS TESTED IN MCPS IN MORE THAN
ONE TEST ADMINISTRATION--WHITE(Scores reported are Percentile Ranks (PR) for each
Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF	1980 Gr. 9 (N=4645)*		1978 Gr. 7 (N=4645)		1976 Gr. 5 (N=4645)		1980 Gr. 9 (N=581)		1978 Gr. 7 (N=581)		1978 Gr. 7 (N=808)		1976 Gr. 5 (N=808)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
BASIC SKILLS														
COMPOSITE	67	59	67	59	71	62	64	58	63	57	58	54	63	57
VOCABULARY	64	58	63	57	67	59	64	58	62	56	57	54	61	56
READING COMPREHENSION	60	55	59	55	63	57	59	55	59	55	53	52	57	54
SPELLING	58	54	58	54	64	58	55	53	57	54	50	50	57	54
CAPITALIZATION	63	57	65	58	66	59	60	55	59	55	56	53	60	55
PUNCTUATION	64	58	64	58	63	57	62	56	60	55	54	52	56	53
LANGUAGE USAGE	61	56	63	57	68	60	61	56	62	56	54	52	61	56
MAP READING	71	62	70	61	69	60	68	60	64	58	62	56	63	57
GRAPHS/TABLES	63	57	65	58	72	62	63	57	62	56	57	54	65	58
REFERENCE MATERIALS	64	58	63	57	67	59	63	57	59	55	54	52	60	55
MATH CONCEPTS	60	55	68	60	73	63	58	54	64	58	58	54	66	59
MATH PROBLEM SOLVING	62	56	62	56	68	60	60	55	59	55	53	52	61	56
COGNITIVE ABILITIES TEST														
VERBAL	75	64	72	62	65	65	71	62	68	60	64	58	70	61
QUANTITATIVE	80	68	76	65	79	67	76	65	70	61	67	59	72	62
NONVERBAL	83	70	78	66	79	67	80	68	75	64	71	62	73	63

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A35

STUDENTS TESTED IN MCPS IN ONE YEAR ONLY--TOTAL COUNTY

(Scores reported are Percentile Ranks (PR) for each Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 5 (N=1353)*		1978 Gr. 3 (N=1509)		1980 Gr. 7 (N=1023)		1978 Gr. 5 (N=459)		1976 Gr. 3 (N=1356)		1980 Gr. 9 (N=1112)		1978 Gr. 7 (N=370)		1976 Gr. 5 (N=1427)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	64	58	65	58	54	52	54	52	64	58	50	50	42	46	61	56
VOCABULARY	62	56	62	56	52	51	53	52	62	56	51	51	43	46	59	55
READING COMPREHENSION	57	54	60	55	49	49	50	50	59	55	45	47	39	44	54	52
SPELLING	64	58	66	59	51	51	51	51	64	58	48	49	40	45	56	53
CAPITALIZATION	63	57	70	61	52	51	50	50	68	60	47	48	39	44	56	53
PUNCTUATION	62	56	67	59	53	52	51	51	63	57	50	50	42	46	54	52
LANGUAGE USAGE	62	56	61	56	53	52	56	53	60	55	49	49	43	46	59	55
MAP READING	63	57	63	57	58	54	58	54	64	58	48	49	46	48	61	56
GRAPHS/TABLES	68	60	67	59	54	52	60	55	65	58	49	49	45	47	63	57
REFERENCE MATERIALS	63	57	61	56	51	51	53	52	59	55	48	49	41	45	58	54
MATH CONCEPTS	67	59	60	55	57	54	59	55	61	56	47	48	46	48	63	57
MATH PROBLEM SOLVING	63	57	64	58	52	51	55	53	64	58	47	48	41	45	59	55

COGNITIVE ABILITIES TEST																
VERBAL	68	60	67	59	56	53	61	56	68	60	54	52	44	47	67	59
QUANTITATIVE	68	60	72	62	62	56	61	56	75	64	63	57	50	50	70	61
NONVERBAL	72	62	69	60	65	58	67	59	70	61	67	59	56	53	71	62

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A36

STUDENTS TESTED IN MCPS IN ONE YEAR ONLY--ASIAN

(Scores reported are Percentile Ranks (PR) for each Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 5 (N=126)*		1978 Gr. 3 (N=50)		1980 Gr. 7 (N=89)		1978 Gr. 5 (N=14)		1976 Gr. 3 (N=30)		1980 Gr. 9 (N=81)		1978 Gr. 7 (N=18)		1976 Gr. 5 (N=36)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	67	59	79	67	63	57	56	53	76	65	45	47	45	47	76	65
VOCABULARY	53	52	66	59	43	46	40	45	63	57	30	39	34	41	63	57
READING COMPREHENSION	53	52	64	58	44	47	36	42	70	61	36	42	38	44	67	59
SPELLING	73	63	82	69	66	59	58	54	79	67	50	50	39	44	80	68
CAPITALIZATION	70	61	86	73	66	59	56	53	82	69	51	51	43	46	74	64
PUNCTUATION	71	62	84	71	69	60	55	53	78	66	56	53	46	48	79	67
LANGUAGE USAGE	54	52	70	61	52	51	45	47	64	58	44	47	39	44	64	58
MAP READING	70	61	73	63	72	62	67	59	69	60	56	53	52	51	76	65
GRAPHS/TABLES	74	64	80	68	66	59	64	58	74	64	50	50	52	51	80	68
REFERENCE MATERIALS	67	59	78	66	66	59	59	55	79	67	46	48	49	49	76	65
MATH CONCEPTS	75	64	82	69	78	66	75	64	78	66	60	55	63	57	82	69
MATH PROBLEM SOLVING	76	65	83	70	73	63	67	59	82	69	61	56	54	52	75	64

COGNITIVE ABILITIES TEST																
VERBAL	62	56	74	64	51	51	35	42	79	67	30	39	38	44	72	62
QUANTITATIVE	82	69	89	76	82	69	65	58	92	80	79	67	70	61	89	76
NONVERBAL	83	70	87	74	83	70	73	63	83	70	81	68	73	63	88	75

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A37

STUDENTS TESTED IN MCPS IN ONE YEAR ONLY--BLACK.

(Scores reported are Percentile Ranks (PR) for each Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 5 (N=231)*		1978 Gr. 3 (N=178)		1980 Gr. 7 (N=166)		1978 Gr. 5 (N=71)		1976 Gr. 3 (N=136)		1980 Gr. 9 (N=167)		1978 Gr. 7 (N=56)		1976 Gr. 5 (N=133)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	32	40	41	45	29	38	20	32	27	37	20	32	14	27	29	38
VOCABULARY	34	41	41	45	33	41	24	35	28	38	25	36	20	32	34	41
READING COMPREHENSION	29	38	40	45	28	38	21	33	25	36	20	32	18	31	30	39
SPELLING	49	49	56	53	37	43	27	37	43	46	29	38	24	35	37	43
CAPITALIZATION	37	43	55	53	33	41	21	33	38	44	25	36	18	31	31	40
PUNCTUATION	40	45	50	50	30	39	24	35	36	42	27	37	24	35	30	39
LANGUAGE USAGE	39	44	42	46	34	41	27	37	34	41	26	36	24	35	37	43
MAP READING	34	41	42	46	34	41	28	38	28	38	19	32	22	34	34	41
GRAPHS/TABLES	41	45	43	46	32	40	34	41	37	43	25	36	18	31	36	42
REFERENCE MATERIALS	36	42	43	46	30	39	26	36	31	40	24	35	19	32	30	39
MATH CONCEPTS	33	41	37	43	30	39	24	35	27	37	23	34	18	31	27	37
MATH PROBLEM SOLVING	33	41	39	44	30	39	27	37	32	40	22	34	15	28	31	40

COGNITIVE ABILITIES TEST																
VERBAL	42	46	46	48	37	43	30	39	37	43	27	37	19	32	41	45
QUANTITATIVE	39	44	46	48	37	43	29	38	46	48	34	41	20	32	37	43
NONVERBAL	46	48	47	48	39	44	40	45	40	45	38	44	24	35	42	46

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A38

STUDENTS TESTED IN MCPS IN ONE YEAR ONLY--HISPANIC

(Scores reported are Percentile Ranks (PR) for each Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 5 (N=71)*		1978 Gr. 3 (N=56)		1980 Gr. 7 (N=71)		1978 Gr. 5 (N=18)		1976 Gr. 3 (N=37)		1980 Gr. 9 (N=59)		1978 Gr. 7 (N=15)		1976 Gr. 5 (N=35)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	39	44	59	55	42	46	31	40	47	48	41	45	58	54	48	49
VOCABULARY	39	44	53	52	43	46	34	41	44	47	41	45	55	53	48	49
READING COMPREHENSION	33	41	50	50	37	43	27	37	41	45	39	44	47	48	43	46
SPELLING	46	48	61	56	47	48	35	42	52	51	40	45	50	50	45	47
CAPITALIZATION	42	46	63	57	48	49	32	40	62	56	39	44	52	51	42	46
PUNCTUATION	49	49	68	60	44	47	34	41	51	51	44	47	58	57	50	50
LANGUAGE USAGE	41	45	55	53	43	46	35	42	47	48	43	46	40	45	51	51
MAP READING	43	46	57	54	49	49	35	42	49	49	49	49	58	54	51	51
GRAPHS/TABLES	50	50	65	58	38	44	45	47	53	52	38	44	54	52	52	51
REFERENCE MATERIALS	45	47	60	55	44	47	28	38	45	47	42	46	52	51	50	50
MATH CONCEPTS	44	47	55	53	49	49	35	42	48	49	45	47	65	58	50	50
MATH PROBLEM SOLVING	48	49	58	54	37	43	34	41	43	46	40	45	56	53	54	52

COGNITIVE ABILITIES TEST																
VERBAL	40	45	61	56	36	42	28	38	43	46	34	41	41	45	49	49
QUANTATIVE	50	50	68	60	46	48	40	45	39	55	59	55	72	62	62	56
NONVERBAL	60	55	67	59	57	54	60	55	61	56	65	58	69	60	63	57

*This is the number of students with Composite scores. The number with any subtest score may be slightly higher.

TABLE A39

STUDENTS TESTED IN MCPS IN ONE YEAR ONLY--WHITE

(Scores reported are Percentile Ranks (PR) for each Normal Curve Equivalent (NCE) mean)

IOWA TESTS OF BASIC SKILLS	1980 Gr. 5 (N=923)*		1978 Gr. 3 (N=1223)		1980 Gr. 7 (N=696)		1978 Gr. 5 (N=354)		1976 Gr. 3 (N=1148)		1980 Gr. 9 (N=804)		1978 Gr. 7 (N=281)		1976 Gr. 5 (N=1219)	
	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE
COMPOSITE	73	63	68	60	61	56	63	57	70	61	58	54	48	49	63	57
VOCABULARY	70	61	65	58	59	55	62	56	66	59	60	55	48	49	62	56
READING COMPREHENSION	66	59	63	57	56	53	57	54	63	57	52	51	44	47	57	54
SPELLING	68	60	67	59	53	52	57	54	67	59	52	51	43	46	58	54
CAPITALIZATION	69	60	72	62	56	53	57	54	71	62	51	51	43	46	59	55
PUNCTUATION	67	59	68	60	57	54	58	54	66	59	56	53	45	47	56	53
LANGUAGE USAGE	70	61	63	57	59	55	63	57	63	57	55	53	48	49	62	56
MAP READING	71	62	66	59	63	57	64	58	70	61	53	52	50	50	63	57
GRAPHS/TABLES	75	64	70	61	61	56	66	59	68	60	54	52	50	50	66	59
REFERENCE MATERIALS	70	61	63	57	56	53	60	55	63	57	53	52	45	47	60	55
MATH CONCEPTS	75	64	63	57	62	56	66	59	64	58	51	51	50	50	67	59
MATH PROBLEM SOLVING	69	60	67	59	56	53	62	56	68	60	51	51	46	48	62	56

COGNITIVE ABILITIES TEST																
VERBAL	76	65	70	61	63	57	70	61	71	62	63	57	50	50	70	61
QUANTATIVE	73	63	75	64	65	58	68	60	78	66	68	60	55	53	72	62
NONVERBAL	76	65	70	61	70	61	72	62	73	63	70	61	62	56	73	63

*This is the number of students with composite scores. The number with any subtest score may be slightly higher.

APPENDIX B
TECHNICAL TESTING TERMS

APPENDIX B - TECHNICAL TESTING TERMS

The following terms are defined, their uses are stated, and precautions about their interpretation are provided. The terms are listed in alphabetical order.

CRITERION-REFERENCED-TEST (CRT)

Definition

A test based on specific learning objectives (or teaching objectives), usually within a narrow range of subject matter or skills. The tests are designed to measure the knowledge or skills the student has attained. The Maryland Functional Reading Test (MFRT) is an example of a CRT.

Use

CRTs provide information about the extent to which the student has attained the learning objective(s).

Precaution(s)

1. CRTs are often designed so a student can answer all or almost all of the questions correctly or incorrectly depending on the extent to which the student has attained the skills being measured. They are not designed to yield information about different levels of achievement and, therefore, cannot usually be used to rank students on specific skills.
2. To be useful measures of specific skills, CRTs must have a sufficient number of questions measuring each particular skill included on the test. Although what is "sufficient" is not a fixed number, there should, in most cases, be at least five questions which measure a skill. A test purporting to be a CRT which has fewer than five questions per skill should be viewed with skepticism.

GRADE EQUIVALENT SCORES (GE)

Definition

The grade equivalent of a given raw score on any test estimates the grade level at which the typical pupil achieves this raw score. The digit(s) to the left of the decimal point represent the grade; the

digit to the right of the decimal point represents the month within the grade according to the following table:

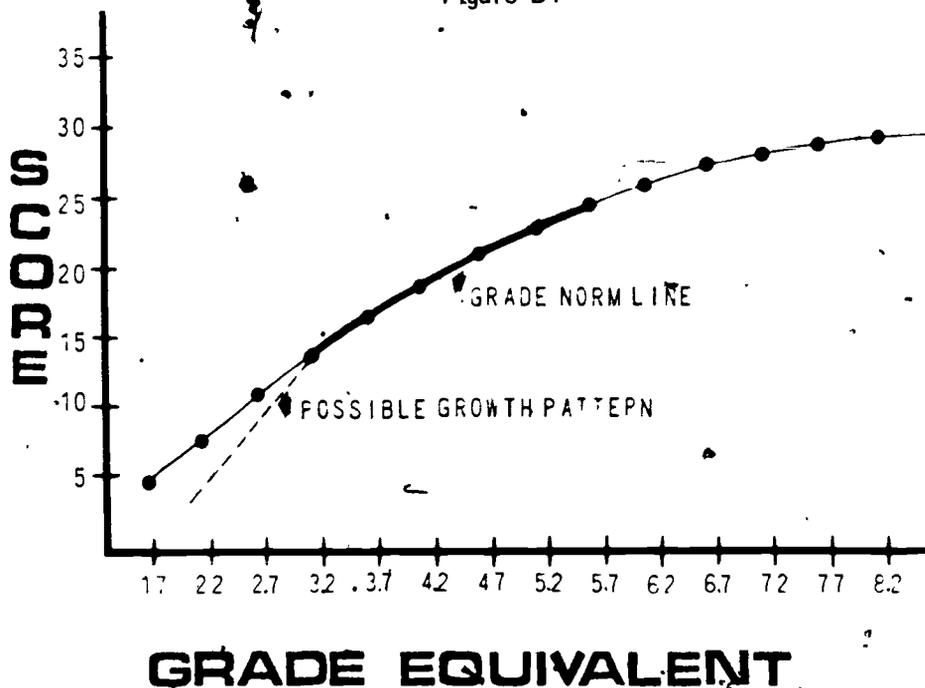
Number	Month
0	September
1	October
2	November
3	December
4	January
5	February
6	March
7	April
8	May
9	June-August

An example of how a test publisher might derive grade equivalents can be useful in understanding GE. The example presented below represents the best methodology currently in use. Many tests are normed with fewer samples.

If the publisher is norming a fourth grade test, he will test a representative sample in Grades 3, 4, and 5. In each grade, the sample, or two comparable samples, will be tested in the fall (November) and the spring (April). Thus, the grade levels being tested as 3.2, 3.7, 4.2, 4.7, 5.2, and 5.7. (Often publishers test only once a year.)

The average raw test score for the students in each group is computed and plotted on a graph similar to the one below. The mean scores are indicated by "." on the graph. All other grade-and-month values are estimated by interpolation between the means and extrapolation beyond the means. The GEs beyond the grade range of students in the norming sample should be regarded as no better than rough estimates.

Figure B1



Use

GEs provide a familiar referent for test scores.

Precautions

1. The grade equivalent score does not indicate the grade level of work that a student can perform. It simply estimates the grade level of the typical student in the norming sample achieving a given raw score. For example, suppose a fourth grade student has a score with a grade equivalent of 5.4 on a fourth grade test. This does not mean that a fourth grade student can do work which is done in January in the fifth grade. It simply estimates that this student did as well on a fourth grade test as the typical student in January of the fifth grade. However, remember that if the norming sample for the fourth grade test did not include any fifth grade students, this estimate is very tentative.
2. Grade equivalent scores should not be added and subtracted because they are not an equal distance apart at all points. They are developed under an assumption that learning occurs equally during the school year. In fact, students tend to learn more at different times in the year. From a strict statistical point of view, this lack of equal score intervals means that mean GE scores should not be computed. However, if the GE scores are converted to Normal Curve Equivalent scores which do have this equal interval quality, the mean score computed from the converted scores is generally very close to that computed from the GEs, especially if the grade equivalents represent a wide range of possible scores.
3. The attempt to build a scale based on the assumption of equal learning cited in Number 2 above results in differential GE gains for raw score changes. What occurs is that a one raw score point change may cause a one-month change in GE at one place in the norm table and a five-month gain elsewhere. The largest changes in GE generally happen in the extremes of score distribution.

An example of the unequal GE differences between raw scores is shown below. These scores are taken from the ITBS seventh grade spelling test.

Grade	Test	Raw Score	Grade Equivalent	Difference in Grade Equiv.
7	Spelling	7	3.5	
7		8	4.0	.5
7		9	4.4	.4
7	Spelling	25	8.4	
7		26	8.5	.1
7		27	8.7	.2

4. Grade equivalents generally have a wider range at higher grade levels. This leads to the situation that a student who has the same PR in Grades 3 and 5 will probably be further above (or below) the median in GE terms in Grade 5. This means that if he/she has a high PR in both grades the gain in GE terms will be more than two years. If he/she has a low PR, the gain will be less than two GEs. Therefore, if a constant expected GE gain were established for all students it would be too high for some and too low for others. The example below from ITBS norms demonstrates this problem.

PR	Grade 3	Grade 5	Grade Equivalent Change
90	5.1	7.5	2.4
50	3.6	5.6	2.0
10	2.6	4.1	1.5

6. Because a grade equivalent score represents the performance of a typical student at a given grade level, approximately half of the students in a nationwide sample would be expected to score below grade level.
7. Grade equivalents should not be compared across subject areas as they have different meanings. For example, mathematics is more grade related than reading; and, therefore, the GEs are generally less spread out for math than reading.
7. Grade equivalents should not be compared across different tests because they may have different meanings due to different norming samples.

INTERQUARTILE RANGE

Definition

Quartiles are scores (points in a distribution) that divide a score distribution into quarters. Twenty-five percent of the scores are at or below the first quartile (Q1), 50 percent are at or below the second quartile (Q2, which is also the median), and 75 percent are at or below the third quartile (Q3). The interquartile range includes the band of scores that lies between Q1 and Q3, or the middle 50 percent of the scores.

Use

By eliminating the effect of the lowest and highest quarters of the distribution, the interquartile range provides a measure of how the typical students in a group performed.

Precaution(s)

Eliminating the extreme scores may be removing important information such as the location of pockets of students needing compensatory or gifted programs. If the median is close to either quartile, it could indicate a large number of students at that end of the distribution who might require such services.

MEAN

Definition

The sum of the scores divided by the number of scores.

Use

The mean is used as a measure of the performance of the "typical" student in a group.

Precaution

1. In a small group, the mean can be overly influenced by a few extreme scores. Thus, if a few scores in a distribution are very low but most are quite high, the mean will be depressed by the low scores more than the median. In groups where there are a few extremely low scores, the mean will, therefore, be lower than the median. Therefore, it is often useful to compare the mean with the median.
2. Use of the mean provides no information about the spread of scores.

MEDIAN

Definition

The score that divides a test score distribution in half. Half of the scores are above the median, half are below. It is the score that has a percentile rank of 50.

Use

The median is used as a measure of the performance of the "typical" student in a group.

Precaution(s)

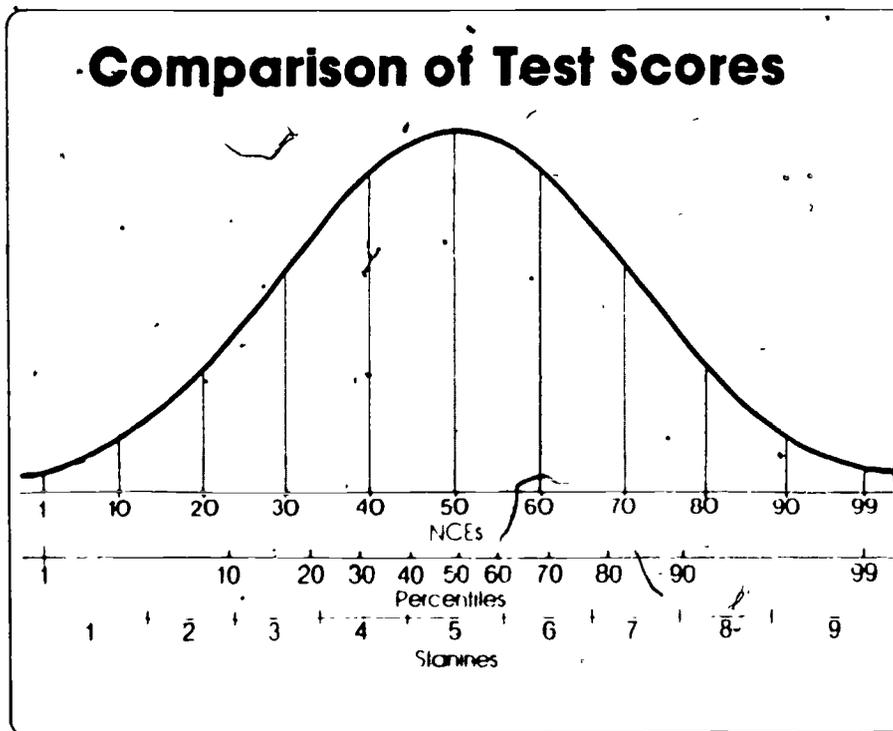
1. See Precaution 1 for mean.
2. Use of the median provides no information about the spread of scores.

NORMAL CURVE

Definition

A normal curve is a distribution of scores or values which, in graphic form, is bell-shaped as shown in Figure 4.2. In a normal curve distribution, the mean and the median are at the same point. The majority of the scores are clustered around the mean/median. Sixty-eight percent of the scores are within one standard deviation of the mean/median, and 95 percent are within two standard deviations. Scores which are more than three standard deviations from the mean/median are rather rare, occurring less than 1 percent of the time.

Figure B2



Uses

Because of its well-documented statistical properties, the normal curve distribution is often used in reporting test scores as an aid in interpreting scores of groups or individuals.

Precautions

The normal curve distribution is a statistical or mathematical ideal. It is not a graphic description of what a particular distribution should be; distributions which do not conform to the normal curve are not "abnormal." Many variables can affect the distribution of a particular set of scores: test content, difficulty of the test items, suitability of the test for the group to which it is administered.

NORMAL CURVE EQUIVALENT SCORES (NCE)

Definition

NCEs divide the normal distribution into 99 segments, units, or scores (Figure 4.2). Scores range from 1-99, with a mean/median of 50. NCEs can be related to percentile ranks as shown in the comparative scales in Figure 4.2.

Uses

1. NCEs can be subjected to arithmetic operations. Therefore, mean NCEs can be computed, and differences in NCEs can be compared at all points in the score distribution.¹
2. NCEs can be used in analyses of group data (for reasons above). In addition, NCEs are scaled to reveal small changes, something which stanine scores will not do consistently because of the large score range at each stanine point.

Precaution(s)

1. Use of NCEs for evaluating individualized performance is to be done with caution. A change of five NCE units on a test score is within the error range for individuals on most standardized tests. However, since NCEs give a false sense of precision--and hence of security--the careless test user could consider such a change meaningful.
2. NCEs are difficult to interpret when presented alone. After an analysis has been performed on the basis of NCEs, results are often converted to some more readily understandable scale like percentile ranks.

¹In a strict statistical sense, it is probably incorrect to subject any test scores to arithmetic operations. However, NCEs, standard scores with an underlying normal distribution, raw scores, and stanines come closer than any other score scales to having equal-interval properties which permit arithmetic operations.

NORM-REFERENCED TEST (NRT)

Definition

A test designed to rank students according to the number of test items answered correctly (i.e., according to raw score). Ranking is usually also done in relation to the performance of a norming sample. The Iowa Tests of Basic Skills is an example of an NRT.

Use

Norm-referenced tests provide information about which students know the most about the content included on the test.

Precaution(s)

1. A good NRT is designed to enable between 40-70 percent of the examinees to answer any given item correctly. Many items are therefore too difficult for a majority of examinees to get right. This means that most NRTs are not very good tests of what an individual student knows (as opposed to criterion-referenced tests). Rather, they are measures of who knows the most about the test content.
2. NRTs often include only one or two questions which measure achievement of a given skill or objective. Information about student performance on a particular objective is, therefore, usually not very reliable.

NORMS

Definition

Statistics that describe the test performance of specified groups, such as students in a given grade, age range, type of community, etc.

Use

Norms provide a way of relating raw scores to a more meaningful score scale, such as percentile ranks, stanines, grade equivalents, or a standard score, so that it can be determined how a student performed relative to a "representative" sample of students similar in some way.

Precaution(s)

1. Norming samples cannot be perfectly representative of a large group of students. For most major standardized tests, publishers use sophisticated sampling procedures to determine the norming sample. However, there will always be a small error factor. This means that caution must be used when comparing the scores from two different tests or even from two levels of the same test because the levels may not have used the same group of students. The following is an example of what might happen because of this. If the students in the norming sample for Test A are brighter than

those in the sample for Test B, the norms for the two tests will not be equivalent. A student, who then takes both tests will be likely to attain a lower percentile rank on Test A because he/she is being compared to a brighter group of students on a test which has "more difficult" norms.

2. Test publishers often provide norms for different times of the year such as fall, winter, and spring. However, they may not have used a norming sample at all of these times, which means that some of the norms are estimates. A test manual should be consulted to determine when a given test was normed. Estimated norms for any other time of year should be viewed with caution.
3. Test norms are not necessarily derived every year, and therefore some norms may be several years old. However, it is common practice to compare current student performance on a given test with the performance of the national norming sample. Caution must therefore be exercised in interpreting the meaning of an individual's status. For example, a student who took a test in 1978 and who achieved a percentile rank of 60 probably did not score higher than 60 percent of the students taking the test in 1978. Rather, the individual scored higher than 60 percent of the students in the norming sample who took the test in the past, for example in 1970.
4. The above considerations may weaken the usefulness of older norms. If changes have occurred in curricula, current students may be better prepared in some skills or subjects than were students in the norming sample, less well prepared, or simply differently prepared. Thus, comparisons of percentile ranks across years may be clouded by changing curricula.
5. Norms are derived so that half of the representative group is expected to be below average. This means that half of the group will be below grade level, below a percentile rank of 50, and below the mean. Therefore, it is extremely difficult to have all of the students in any large group perform above the average.

PERCENTILE RANK (PR)

Definition

The percentage of students in the norming sample who scored at or below a given score. For example, if a raw score of 30 has a percentile rank of 78, then 78 percent of the students in the norming sample scored at or below 30 items correct.

Use

PRs provide easily interpretable information about how a given student's performance on a test compares to the performance of students in the norming sample.

Precaution(s)

1. PRs should not be added or subtracted because they are not an equal distance apart at all points. For example, Figure 3.2 clearly shows that an increase of 10 points between percentile ranks 45 and 55 is not the same distance as an increase of 10 points between percentile ranks 85 and 95. A person would have to show a larger amount of improvement to achieve the second increase.
2. On a test of fewer than 100 questions, it is not possible for every whole number of the percentile rank scale to have an associated raw score. Therefore, in such circumstances, a one-point increase in raw score can cause an increase of several percentile rank units. What might appear to be substantial increase on the percentile rank scale is really only an increase of one additional question correct. This caveat applies to virtually all tests in standardized batteries.
3. Percentile ranks should not be confused with percentage of correct answers (raw scores). They have completely different meanings.

RAW SCORE

Definition

The number of questions or test items answered correctly.

Use

Raw scores can be used to report the number of questions answered correctly.

Precaution(s)

1. A raw score has no meaning other than the number of items answered correctly. It provides no interpretative information.
2. Raw scores can be quite misleading when reported by themselves because the meaning of raw scores differs from test to test. For example, if one 50-item test is easy and one 50-item test is difficult, a raw score of 30 on the difficult test might represent better performance than a raw score of 45 on the easier test.
3. Subjecting raw scores to arithmetic operations (ie., addition, etc.) is a questionable procedure. Generally raw scores do not have the equal interval property required for these operations. This is because the same raw score can be obtained by different students who get different combinations of items correct. These items will most likely vary in their level of difficulty. Thus, identical raw scores will possibly represent differential levels of achievement.

RELIABILITY

Definition

Reliability refers to the extent to which a test is consistent in what it measures. There are three major types of reliability, all expressed as a coefficient ranging from 0 (complete lack of consistency) to 1 (perfect consistency).

1. Internal consistency is the degree to which all the questions on a test measure the same thing. For example, a mathematics test that measures only addition of fractions will probably have a higher internal consistency coefficient than one that measures several different mathematical operations. This would be especially important for achievement tests that measure specific skills.
2. Stability is the degree to which a person will achieve the same score on a test that is taken twice within a time period of anything from a few days to a year or two. This is important in an instrument which measures a trait like natural ability which is not expected to change over time.
3. Equivalence is the degree to which a person will achieve the same score on two forms of the same test. This is important for any test in which two forms are to be used interchangeably.

Use

Reliability is a measure of the quality of a test.

Precaution(s)

The type of reliability appropriate for a given testing situation should be used.

SIGN TEST

Definition

A test of statistical significance which is based on the number of increases (+) and decreases (-) in a set of comparisons. If the pattern of pluses and minuses deviates substantially from an even split, the pattern is considered significant.

Use

To determine if a pattern of increases and decreases deviates from an even split enough to indicate a significant trend.

Precaution

1. The sign test indicates only if the overall trend of increases and decreases is significant. It does not provide any information as to whether individual increases or decreases are significant.

2. The size of a difference is irrelevant. For example, this test does not differentiate between an increase of 1 point or 30 points. They both simply count as a plus.

STANDARD DEVIATION (SD)

Definition

A measure of the dispersion in a set of scores. The closer the scores cluster around the mean, the smaller the SD will be.

Use

As a measure of the spread in a set of scores, the SD can be used to assist in determining the degree of importance of score differences. For example, a difference of 2 points would probably not have much meaning if the SD were 20 but could be quite important if the SD were 0.5.

Precaution(s)

None

STANDARD ERROR OF MEASUREMENT (SEM)

Definition

The SEM is an estimate of the magnitude of error in a test score. Possible causes of error in scores include lucky or unlucky guesses, a student's not feeling well or failing to follow directions, the fact that test questions may be only a sample of those that could be asked, sloppiness, laziness, etc.

Use

1. The SEM provides a way of determining the possible fluctuation in test scores which would be obtained if an individual were to take the same test a number of times. It indicates how far a particular obtained score might deviate from the individual's "true" score (the score the individual would obtain if there were no error in the test). It is usually assumed that the scores obtained from repeated testing would conform to the normal curve distribution. Therefore, in practice, it is assumed that there is a probability of 68:100 that the "true" score is within one SEM of the obtained score and that there is a probability of 95:100 that the obtained score is within two SEMs of the obtained score.
2. The SEM can be used in significance testing to provide a way of determining whether differences in test scores or group mean scores are statistically significant (that they vary more than can be reasonably attributed to testing error).

Precaution(s)

None

STANINE

Definition

A stanine is one of the scores of a nine-point division of the normal distribution. Stanine scores range from 1 to 9 with a mean and median of 5. As shown in Figure 3.2, each stanine has a range of corresponding percentile ranks or raw scores.

Use

1. Stanines can be subjected to arithmetic operations (addition, etc.). Therefore, the mean of distributions can be computed, and differences in stanine scores can be compared at all points in the distribution except in some cases, at the extreme stanine scores of 1 and 9.
2. Stanines do not give a false sense of accuracy of a given score because each stanine covers a range of raw scores. The stanine scale is therefore useful for reporting individuals' scores. Differences in stanines are more likely to represent change beyond that which can be attributed to error than are other kinds of scores.

Precaution(s)

As can be seen in Figure 3.2, interpretation of differences in stanine scores is clouded by the range within a given stanine. For example, if an individual's score increases from the top of the Stanine-3 range to the bottom of the Stanine-5 range, it represents less improvement than an increase from the bottom of the Stanine-3 range to the top of the Stanine-4 range. However, on cursory examination it would seem as if the first increase were the greater.

STATISTICAL SIGNIFICANCE TEST

Definition

A significance test is a statistical procedure used to determine if two (or more) groups differ on a trait more than could normally be expected if testing error or sampling error were assumed to be the cause of the difference.

Use

Under highly controlled conditions (as in experiments, etc.), tests of statistical significance are used to test hypotheses. When variables cannot be controlled (as in the countywide testing program), the results from such a test are open to question.

Precaution(s)

1. Results of significance tests are reported as probability statements. If the reported probability is less than .01, the chance is less than 1:100 that the difference between groups can be attributed to testing error. If the probability is .001, the chance is less than 1:1000 that the difference can be attributed to testing error. However, there is always some chance (1:1000, etc.) that the difference was caused by error.
2. When a large number of tests of significance are performed, some differences will turn out to be statistically significant by chance alone. That is, since there is always some chance that a difference can be caused by error (1:20, 1:100, 1:1000, etc.), a certain number of significant differences can be expected to occur because of error. There is no way to determine if a particular statistically significant difference was or was not caused by error. Again, only a probability can be determined.
3. When tests of significance are used to evaluate the difference of means, the larger the group the smaller the difference in means needs to be for statistical significance. The smaller the group the larger the difference must be. For example, a difference of only 1-2 months on the grade equivalent scale, or a fraction of a raw-score point, ~~can~~ be statistically significant for groups of several thousand students. In contrast, a difference of as much as six months may be required for significance with a group of one hundred students. Because many of the comparisons in this report involve very large groups, no significant tests of differences and means were performed. While small differences would have been statistically significant, they would not have been educationally meaningful.

VALIDITY

Definition

The extent to which a test does the job for which it is used. There are three major types of validity that a test may possess.

1. Content validity is most important for achievement tests. This requires a test to contain questions that adequately reflect the content the test is supposed to measure.
2. Criterion-related validity is most important for placement tests, college admissions tests, or tests on which employment decisions are based. Performance on the test must be highly correlated with performance in the program, success in college, or success on the job for which the test is a screening instrument.
3. Construct validity is most important in psychological instruments. Tests of ability are examples of such instruments. Construct validity requires that the test adequately discriminate between people who do or do not have a particular trait.

Use

Validity is a measure or concept that helps one evaluate the quality of a test.

Precaution(s)

The type of validity appropriate for a given testing situation should be used.