DOCUMENT RESUME

ED 072 088 TM 002 328

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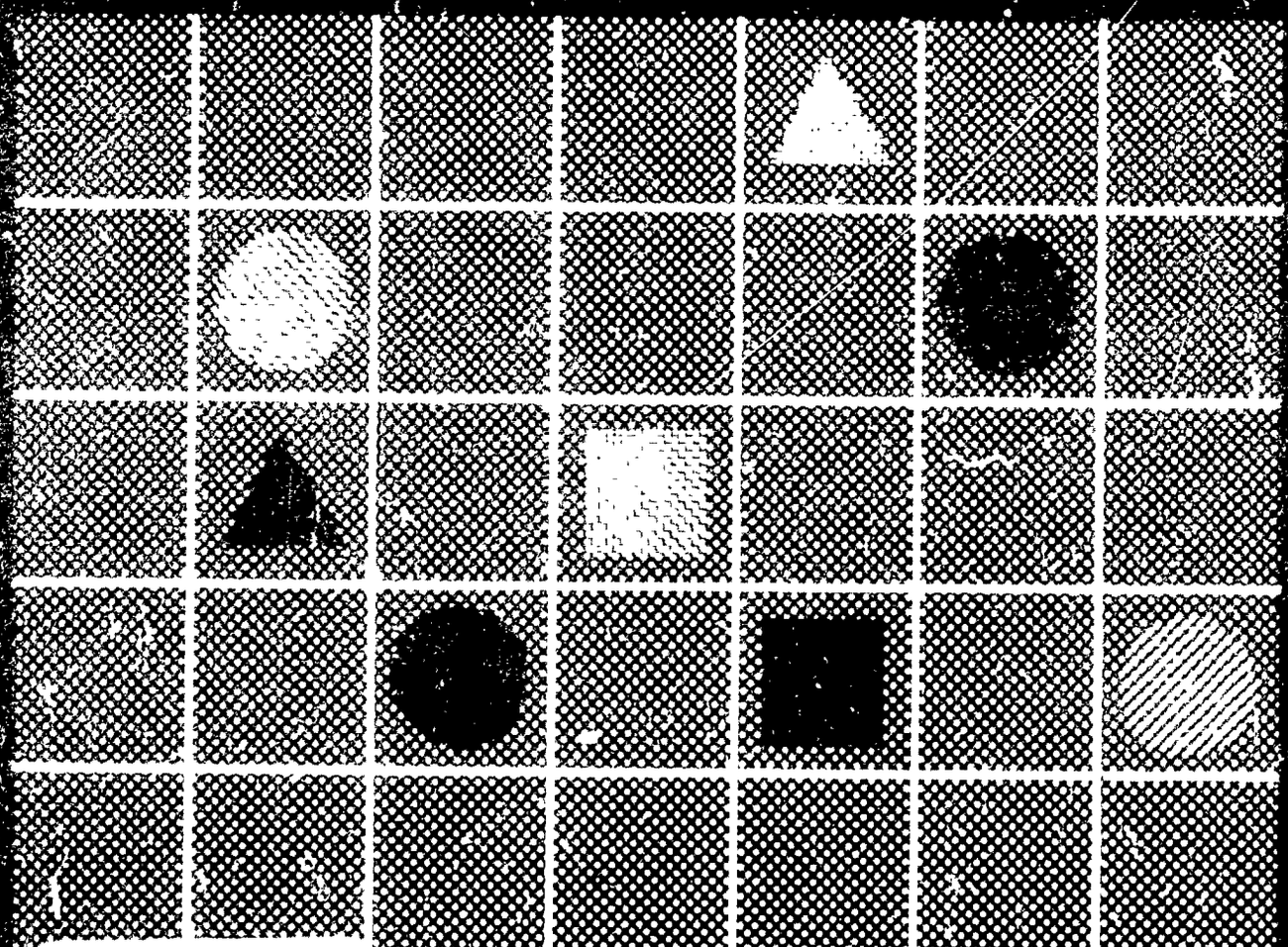
|---|---|
| AUTHOR | Donovan, David; And Others |
| TITLE | Distribution of Educational Performance and Related Factors in Michigan. The Sixth Report of the 1970-71 Michigan Educational Assessment Program. |
| INSTITUTION | Michigan State Dept. of Education, Lansing. Research, Evaluation, and Assessment Services. |
| SPONS AGENCY | Michigan State Board of Education, Lansing. |
| PUB DATE | Jun 72 |
| NOTE | 45p. |
| EDRS PRICE | MF-$0.65 HC-$3.29 |
| DESCRIPTORS | Academic Achievement; *Academic Performance; *Achievement Rating; Attitude Tests; Basic Skills; Comparative Analysis; Dropout Rate; Educational Finance; *Evaluation; Evaluation Criteria; Grade 4; Grade 7; Measurement Instruments; Minority Groups; Performance Factors; School Districts; Socioeconomic Influences; *Socioeconomic Status; *State Surveys; Statistical Data; Student Teacher Ratio; Tables (Data); Teacher Background; Teacher Salaries |
| IDENTIFIERS | *Michigan |

ABSTRACT

The sixth report of the Michigan Educational Assessment Program contains eight educational distribution profiles. Schools and districts were classified into upper, middle, and lower thirds on the basis of the average scores (in grades 4 and 7) in composite achievement and socioeconomic status, and their scores on all assessment measures were charted. The assessment measures were: (1) human resources--such as pupil/teacher ratio and percent of teachers with master's degree; (2) school financial resources--such as local revenue per pupil and State school aid per pupil; (3) student background; (4) school/student performance--attitude measures, basic skills measures, and dropout rate; and (5) school or district size. The purpose of this report was to find whether schools or districts that rank high, in the middle, or low on composite achievement or socioeconomic status have a similar rank on other assessment measures. It was found that this is generally true, but certain exceptions and limitations on interpretation are specified. An appendix contains definitions of the educational assessment measures. (For related documents, see TM 002 326-327, 329-330.)

# DISTRIBUTION OF EDUCATIONAL PERFORMANCE AND RELATED FACTORS

THE SIXTH REPORT OF THE 1970-71
MICHIGAN EDUCATIONAL ASSESSMENT PROGRAM





MICHIGAN DEPARTMENT OF EDUCATION JUNE 1972

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# DISTRIBUTION OF EDUCATIONAL PERFORMANCE AND RELATED FACTORS IN MICHIGAN

The sixth report of the 1970-71
Michigan Educational Assessment Program

Prepared by Research, Evaluation and Assessment Services

Michigan Department of Education

June, 1972

## FOREWORD

The Michigan Educational Assessment Program was initiated by the State Board of Education, supported by the Governor, and funded by the Legislature initially through enactment of Act 307 of the Public Acts of 1969, and subsequently under Act 38 of the Public Acts of 1970. This report, the sixth in the 1970-71 series, provides data which indicates the ways in which educational performance and certain factors related to performance are distributed in Michigan.

The State Board of Education has adopted a six-step process as a guide or model for improving Michigan education. The six steps are: the identification of common goals, the development of performance objectives, the assessment of educational needs, the analysis of delivery systems, the evaluation and testing of these systems or programs, and recommendations for educational improvement. This report presents information for the third step--the assessment of educational needs. Educational assessment provides general information on student needs which, along with other information gathered by local educators, will assist in identifying areas of need on the part of local schools and pupils. Analysis of the systems for delivering educational services and the specific evaluations of the areas so identified may then be initiated by local school officials in order to determine the extent to which changes in curricula and resource allocations are justified. Thus, the educational assessment program can contribute to the improvement of educational programs for Michigan children and youth.

Thanks are due to a large number of individuals and groups for making the Michigan Educational Assessment Program a reality and for continuing to work with it in its second year, 1970-71: to the State Board of Education for initially proposing it and continuing to support it, to the Governor and Legislature for actively supporting it, and to Michigan educators for assisting with it. The program was designed and administered by the Research, Evaluation, and Assessment Services Unit, Michigan Department of Education, with the assistance of Educational Testing Service of Princeton, New Jersey, and the counsel of several ad hoc advisory groups.

This report was prepared by Dr. David Donovan, Mr. Robert Huyser, Dr. Philip Kearney, Mrs. June Olsen, Dr. Daniel E. Schooley and Mr. Arthur Carstens. Questions or requests for additional information relative to this report should be directed to the educational assessment staff, telephone (517) 373-1830.

John W. Porter
Superintendent of
Public Instruction

TABLE OF CONTENTS

## INTRODUCTION

This sixth report of the 1970-71 Assessment Program contains a series of eight educational distribution profiles for Michigan as a whole.

The 1970-71 Michigan Educational Assessment Program was a large and complex undertaking. It gathered a great deal of data from approximately 320,000 students, 3,200 schools and more than 600 school districts across the State.

The results are complicated. The reader is cautioned not to go beyond the types of interpretation presented.

This report and the profiles it contains were prepared to provide answers to two important sets of questions:

1-a If a district ranks high, in the middle, or low on mean composite achievement, can we expect that it will have a similar rank on other assessment measures?

1-b If a school ranks high, in the middle, or low on mean composite achievement, can we expect that it will have a similar rank on other assessment measures?

2-a If a district ranks high, in the middle, or low on mean socioeconomic status, can we expect that it will have a similar rank on other assessment measures?

2-b If a school ranks high, in the middle, or low on mean socioeconomic status, can we expect that it will have a similar rank on other assessment measures?

In general and on the average, the answers found to both sets of questions were yes.

However, there are several exceptions, and some relationships are not as pronounced as others.

The first two of these questions were asked because of the importance of knowing whether certain measures--both student and school measures--bear a relationship to children's levels of basic skills achievement in Michigan's schools.

The latter two questions were asked because a great deal of research data indicates that students' background characteristics are related not only to their achievement level but also to the levels at which their schools are supported, and to the characteristics of the teachers employed in their schools.

SECTION I

## HIGHLIGHTS OF THE DISTRIBUTION OF EDUCATIONAL PERFORMANCE STATEWIDE AT THE DISTRICT AND SCHOOL LEVELS

This section presents the highlights of the distribution of educational performance and related factors indicated in the 1970-71 Michigan Educational Assessment Program.

Highlights are not comprehensive summaries. Readers interested in a complete description of the educational assessment data and methods used in compiling this report are invited to read Sections II, III, IV, V and VI.

READERS ARE CAUTIONED THAT THE FOLLOWING HIGHLIGHTS DO NOT IMPLY CAUSE AND EFFECT RELATIONSHIPS AMONG THE EDUCATIONAL MEASURES. They should also note that, in some cases, qualifiers have been omitted for greater ease of reading. Section II discusses in greater detail the limitations and cautions to be observed when interpreting the data in this report.

### Highlights From District Composite Achievement Profiles

The typical Michigan school district whose fourth grade students ranked in the upper third on composite achievement in the 1970-71 educational assessment has comparatively small class sizes and employs the most-educated and most-experienced teachers, paying them the highest average salaries. This typical district also ranks high on state equalized valuation per pupil and, on this tax base, raises more locally for its schools than do the other districts. State aid per pupil is correspondingly low, but the district still spends more than other districts for instructional expense and all operating expenses. The district has a low school dropout rate and low percentage of racial-ethnic minority students. The typical student in this typical district has a comparatively high socioeconomic status.

The typical district whose fourth graders ranked in the middle third on composite achievement has the largest class sizes of all three groups. Its teachers rank between the high and low thirds on education, experience and salaries, but are closer to the low group than the high. It ranks lowest of all three in most measures of school financial resources. Student dropout rate is above the state median for all districts, and percentage of racial-ethnic minority students is comparatively low, falling at nearly the same level as the upper third. The typical student in this district ranks above the median in socioeconomic status, falling between the upper and lower thirds on this measure.

The typical district whose fourth graders ranked in the lower third on composite achievement has class sizes near the median and the least-educated and least-experienced teachers, paying them the lowest average salaries. It ranks slightly above the middle third on most measures of financial resources. It has the highest school dropout rate of all three groups and the highest percentage of racial-ethnic minority students. The typical student has low socioeconomic status.

Similar highlights emerge from the seventh grade composite achievement profile at the district level. The middle third and lower third districts rank very close together on many of the various resource measures, both human and financial.

Highlights of District Socioeconomic Status Profiles

The typical school district whose fourth graders ranked in the upper third on socioeconomic status has a low ratio of pupils to teachers. Teachers do not have as many years of experience as those in the middle and lower groups, but a higher percentage of them have masters degrees. They receive the

highest average salaries. Financially, the district has comparatively high equalized valuation per student, raises the most money locally for schools and expends the most, per pupil, for instructional expense and total operating expense. It has a low dropout rate and low percentage of racial-ethnic minority students. Its typical student scores highest on composite achievement and particularly high on vocabulary (above the 75th percentile).

The typical district whose fourth grade students ranked in the middle third on socioeconomic status has the largest class sizes and most-experienced teachers of any group. Teacher salaries are slightly above the state-wide median but well below the average for the "high" districts. School dropout rate is slightly above the median.

The typical district whose fourth graders ranked in the lower third on socioeconomic status falls between the other two groups in class sizes and has more-experienced teachers than the upper third. It has fewer teachers with masters degrees and pays lower average teacher salaries than the other two groups. Its financial resources and educational expenditures are close to those of the middle group. Student dropout rate and percentage of racial-ethnic minority students are both relatively high. The typical student scores very near the median but below the other groups on composite achievement and vocabulary.

Similar highlights emerge from the seventh grade district socioeconomic status profiles All three groups show strong parallels between socioeconomic status and composite achievement. The middle and lower thirds rank very close together on most measures of school resources, both human and financial.

Highlights of School Profiles

The school profiles for both the fourth and seventh grades, based on both composite achievement and socioeconomic status, produce highlights similar to the district profiles. Schools ranking high on composite achievement also generally rank high on socioeconomic status, and vice versa. Comparisons of human resource measures, particularly between the middle and lower thirds, present a less clear picture.

SECTION II

## QUALIFYING INFORMATION

It is the purpose of this section to discuss qualifying information regarding the use of educational assessment data, including certain cautions that should be exercised in their interpretation.

The following qualifying information will be discussed: scope of educational assessment data and cautions to be exercised in interpretation.

### Scope of the Educational Assessment Data

#### Defining The Goals of Education

Michigan's schools as they presently function are meeting the needs of many individuals by providing instruction in the basic communication and computational skills of reading, writing, and arithmetic. However, Michigan's educational goals encompass more than the basic skills and school offerings commonly include at least five other areas, namely science, social science, fine arts, health and physical education, and occupational skills. The 1970-71 educational assessment effort, however, dealt only with the basic skills and therefore measured only the performance of children in vocabulary, reading, mechanics of written English, and mathematics.

#### Measuring School/Pupil Performance

It is difficult to build tests that are equally valid for children from varied cultural and economic backgrounds. Therefore, the reader should be aware that responses to any achievement battery yield only an approximate index to the skills of children.

Measuring Student Background

Socioeconomic status (SES) is a difficult concept to define--in fact no single definition of it will suit everyone. Additionally, once it has been defined, it is difficult to measure and index.

Students' socioeconomic status is often thought to be a function of three major factors: (1) family income; (2) parents' educational levels; and (3) parents' occupations. Additionally, such factors as (4) housing quality and crowdedness; (5) family structure and stability; and (6) population density, are thought to be indicators of SES.

Four methods (parent interviews, student estimates, educator estimates and census data) of estimating the social-economic backgrounds of students were considered for use in the educational assessment program. Students' estimates, anonymously collected, which were selected as the data source used in assessment, have been shown to provide valid estimates for groups of children and is a convenient and inexpensive method. The method may be limited in that some children--particularly young children--do not know important things about their families, including income and occupation. Twenty-seven questions designed to assess socioeconomic background were used in the 1970-71 Michigan educational assessment effort. Children's responses were anonymous in order to respect and preserve the private nature of the information; therefore, no information on the SES of individual children is available from the program. Hence, the socioeconomic status scores must be considered and interpreted as <u>estimates</u> of the social-economic background of <u>groups</u> of students.

## Measuring School Resources

The selection of school resource information for large-scale assessment efforts such as the 1970-71 Michigan Educational Assessment Program is limited by the availablility of data and the necessity to anticipate relationships between those factors and educational performance.

It is impossible to state with certainty which school-related factors have an impact on educational performance. It is also impossible to measure all aspects of educational programs. Therefore, there may be factors of an educational system crucial to learning which are not included in this educational assessment report. However, each measure included was selected because some evidence suggests that it may be related to educational performance.

It is presently impossible to obtain certain important measures on a school-by-school basis. For example, measures of the amount of educational finances expended on children are available only at the district level in Michigan at the present time.

## Number of Districts and Schools Included

At the time the 1970-71 Educational Assessment Program tests were given, there were 628 school districts in Michigan. Of these, 530 districts were organized to operate K-12 programs.

The number of districts whose assessment results are included on the profiles in this report varies from 558 to 577. The school dropout rate, reported by districts only, is an exception. Note that school dropout rate is not defined, hence not reported, for districts that do not operate a high school. Additionally, districts that had fewer than five pupils

at a grade level were excluded from the report for that grade level in order to maximize the reliability of the results. Finally, district and school results on individual measures of the assessment program were not available in some instances.

District and School Numbers

On the fourth grade district profiles, both those based on composite achievement and on socioeconomic status, the number of districts included ranges from 567 to 577. Dropout rates on the two profiles are reported for 504 and 507 districts.

On the seventh grade district profiles, the number of districts included ranges from 557 to 562. Dropout rates on the two profiles are reported for 502 and 506 districts.

On the fourth grade school profiles, the number of schools included ranges from 2,420 to 2,492. The profile based on socioeconomic status ranges from 2,420 to 2,427. That based on composite achievement ranges from 2,427 on the SES and attitude measures to 2,492 on the basic skills measures.

## Cautions to be Exercised in Interpretation

Interpretation of Percentile Ranks

Percentile ranks are used in this report in order to give the reader an idea of where each district stands in relation to other districts on each of the assessment measures. It must be understood that this method of reporting insures that on each measure some district will rank very low. However, a low percentile rank on a measure does not necessarily

imply that the district is inadequate. It does indicate that a certain group of school districts score higher than the one under consideration.

The reader is also cautioned against drawing conclusions about cause-and-effect relationships between factors reported in the educational assessment program. The educational distribution profiles display the levels at which districts or schools which were high, middle, or low on composite achievement--or socioeconomic status--scored on the remaining assessment measures. THE DISTRIBUTION TABLES ONLY SHOW LEVELS OF GROUPS OF DISTRICTS OR SCHOOLS AND DO NOT SHOW CAUSE-AND-EFFECT RELATIONSHIPS. For example, those districts at a high level on the measure of socio-economic status are also at a high level on K-12 instructional expense per pupil. However, this does not prove that the high level of socio-economic status is the reason these districts were also at a high level on the measure of K-12 instructional expense per pupil, even though high socioeconomic status is likely one of the principal reasons for high K-12 instructional expense per pupil. These data, therefore, should not be interpreted to either accept or reject the possibility that cause-and-effect relationships exist. This report in the assessment series further explores the question of relationships among assessment measures; however it is extremely difficult to establish cause-and-effect from the kinds of relationships shown in educational research.

Inverse Relationships

The reader's attention is also called to several inverse relationships caused by the manner in which the assessment measures are computed. These inversions appear in the measures of pupil/professional instructional staff

ratio; pupil/teacher ratio, state school aid per pupil, and school dropout rate. Low ratios of students to instructional staff and teachers generally are believed to be desirable. Yet districts and schools with low ratios on these two measures rank low in the percentile distributions. Similarly, districts and schools with low dropout rates--generally considered desirable--also rank low on this measure. Districts that have the highest state equalized valuation per pupil receive the least state aid per pupil. There is a high relationship between state equalized valuation and composite achievement. Therefore, an inverse relationship between state school aid and composite achievement is to be expected.

SECTION III

## PROFILE CONSTRUCTION AND INTERPRETATION

It is the purpose of this section to explain the construction of the educational distribution profiles. There are two general types of profiles included in this report. One type consists of profiles based on district or school composite achievement levels. The other type consists of profiles based on district or school socioeconomic status levels. The example used in the following discussion is based on district composite achievement scores. The same procedures were used in constructing distribution profiles based on district socioeconomic status levels, and in constructing the distribution profiles based on school achievement and socioeconomic status.

### Profile Construction

Profiles designed to show the distribution of educational measures for groups of districts at different composite achievement levels were constructed as follows:

1. A percentile distribution was prepared for each of the educational assessment measures. Percentile distributions are useful in showing where a score lies in relation to other scores. A score which is at the 50th percentile is at the median or middle of the distribution; a score at the 75th percentile is above 75 per cent--or three quarters--of the scores in the distribution.

2. The State's districts were ranked in order according to the mean or average of the composite achievement scores of all pupils tested, and this ranking was divided into three equal parts. Thus, "upper," "middle," and "lower" thirds

TABLE 1.

MEAN SCORE, STANDARD DEVIATION, RANGE OF MEAN SCORES AND NUMBER OF DISTRICTS AND SCHOOLS FOR EACH THIRD BASED ON COMPOSITE ACHIEVEMENT

| Level | Upper Third | Middle Third | Lower Third |
|---|---|---|---|
| DISTRICT, GRADE 4 | | | |
| Mean | 53.7 | 51.0 | 48.3 |
| Standard Deviation | 1.6 | 0.5 | 1.7 |
| Range of Mean Scores | 52.0-60.4 | 50.1-51.9 | 41.1-50.0 |
| Number of Districts | 200 | 178 | 199 |
| DISTRICT, GRADE 7 | | | |
| Mean | 53.5 | 50.9 | 48.4 |
| Standard Deviation | 1.7 | 0.5 | 1.7 |
| Range of Mean Scores | 51.8-60.6 | 50.1-51.7 | 41.1-50.0 |
| Number of Districts | 199 | 176 | 187 |
| SCHOOL, GRADE 4 | | | |
| Mean | 54.4 | 50.8 | 45.9 |
| Standard Deviation | 1.8 | 0.8 | 3.0 |
| Range of Mean Scores | 52.3-62.1 | 49.4-52.2 | 36.8-49.3 |
| Number of Schools | 833 | 823 | 836 |
| SCHOOL, GRADE 7 | | | |
| Mean | 53.7 | 50.7 | 46.3 |
| Standard Deviation | 1.7 | 0.6 | 3.2 |
| Range of Mean Scores | 51.8-60.6 | 49.7-51.7 | 37.5-49.6 |
| Number of Schools | 301 | 283 | 296 |

TABLE 2.

MEAN SCORE, STANDARD DEVIATION, RANGE OF MEAN SCORES AND NUMBER OF DISTRICTS AND SCHOOLS FOR EACH THIRD BASED ON SOCIOECONOMIC STATUS

| Level | Upper Third | Middle Third | Lower Third |
|---|---|---|---|
| DISTRICT, GRADE 4 | | | |
| Mean | 52.5 | 49.5 | 46.8 |
| Standard Deviation | 2.0 | 0.6 | 1.6 |
| Range of Mean Scores | 50.5-61.4 | 48.6-50.4 | 41.3-48.5 |
| Number of Districts | 195 | 188 | 191 |
| DISTRICT, GRADE 7 | | | |
| Mean | 52.9 | 50.1 | 47.3 |
| Standard Deviation | 2.0 | 0.6 | 1.9 |
| Range of Mean Scores | 51.2-61.8 | 49.1-51.1 | 34.6-49.0 |
| Number of Districts | 185 | 182 | 192 |
| SCHOOL, GRADE 4 | | | |
| Mean | 54.6 | 49.8 | 45.3 |
| Standard Deviation | 2.9 | 0.9 | 2.5 |
| Range of Mean Scores | 51.4-64.3 | 48.3-51.3 | 35.5-48.2 |
| Number of Schools | 829 | 794 | 804 |
| SCHOOL, GRADE 7 | | | |
| Mean | 53.5 | 50.0 | 45.8 |
| Standard Deviation | 2.4 | 0.7 | 2.8 |
| Range of Mean Scores | 51.3-62.4 | 48.8-51.2 | 34.6-48.7 |
| Number of Schools | 283 | 280 | 286 |

were formed on the basis of district composite achievement levels.

3. The mean district score on composite achievement was computed for each third. Thus, there was a mean score for the "upper" third, a mean score for the "middle" third, and a mean score for the "lower" third. Table 1 shows the mean score of districts and schools for each third on composite achievement. In addition this table shows the standard deviation, range of mean scores and number of districts and schools for each third. Table 2 presents the same information for districts and schools on socio-economic status.

4. Averages were computed on the remaining 24 educational assessment measures for the upper, middle and lower thirds. (All but one of these measures--number of students in each school--appear on the district profiles.) Assessment measures used in the district profiles are shown in Example 1. It should be noted that for all school profiles, an average score on 16 assessment measures was computed for the upper, middle, and lower thirds. Information for the remaining measures was not available at the school level.

5. In order to graphically portray these scores they were placed onto the percentile distributions constructed in step one (above).

Example

EXAMPLE 1 is an exact copy of the educational distribution profiles that were constructed using fourth grade district and seventh grade district data. It illustrates specifically how the composite achievement profiles were constructed and, in general, how all profiles were constructed. The fourth grade profile was prepared as follows:

1. A percentile distribution was prepared for each of the educational

assessment measures, using fourth grade data. These percentile distributions show that the median district in the State had a pupil/professional staff ratio of 21.6, state equalized valuation of $12,712 per resident pupil, a score of 50.1 on attitude toward school, 51.0 on composite achievement, and so on. The numbers are shown in Example 1.

2. The State's school districts were ranked in order according to their scores on fourth grade composite achievement and this ranking was divided into equal thirds. Thus, there were upper, middle, and lower thirds according to fourth grade composite achievement. Then, the average district score on composite achievement was computed for each third. The average score on composite achievement was 53.7 for the upper third, 51.0 for the middle third, and 48.3 for the lower third.

3. The average scores on the remaining educational assessment measures were computed for the upper, middle, and lower thirds. The average district socioeconomic status level was 51.0 for the upper third, 49.8 for the middle third, and 48.1 for the lower third. The average district score on importance of school achievement was 49.2 for the upper third, 49.3 for the middle third, and 49.1 for the lower third. The remaining measures were computed in the same way,

4. In order to graphically portray these averages, they were placed onto the percentile distribution shown in Example 1. Averages for the upper third districts were indicated by triangles (Δ), those for the middle third districts by circles (O), and those for the lower third districts by squares (□). The average for the upper third districts on composite achievement, which was computed as 53.7, is indicated by a small triangle located between the scores 53.5 and 54.2 on the percentile distribution. This average fell at

about the 87th percentile in the state-wide distribution of district average scores. Likewise, the average socioeconomic status level of the upper third districts, which was computed at 51.0 was at about the 73rd percentile; and the score on importance of school achievement for the upper third, which was computed at 49.2, was at about the 47th percentile. The averages for the middle third and lower third groups of districts were located in the same way.

5. Finally, the averages for the upper third districts were connected by lines of dots (●●●●), those of middle third districts by dashed lines (– – –), and those of lower third districts by lines of ovals (⬬⬬).

These lines (Example 1) indicate a generally affirmative answer to the question:

> "If a district ranks high, in the middle, or low on mean composite achievement, can we expect that it will have a similar rank on other assessment measures?"

It is acknowledged that exceptions in the example weaken the generality of an affirmative answer. Some exceptions occur, for example, in state equalized valuation per pupil, local revenue per pupil and total operating expense per pupil. In each of these, the middle third scored below the lower third. It is notable, too, that the middle and lower thirds are equal in instructional expense per pupil.

In addition, the upper third districts ranked below both other groups on pupil/professional instructional staff ratio, pupil/teacher ratio, state school aid per pupil, and school dropout rate. All four of these are inverse relationships, as explained in Section II, and not actually exceptions.

The seventh grade profile in Example 1 was constructed in the same way.

The profiles designed to show the distribution of educational assessment measures in terms of socioeconomic status were constructed in the same manner. The only difference is that the districts or schools were first ranked and divided into high, middle, and low thirds on the basis of socioeconomic status, instead of composite achievement, and then the average scores in the upper, middle and lower thirds were computed.

Example 1 Average Scores on Assessment Measures for Michigan School Districts

## GRADE 4

| | SCHOOL RESOURCES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HUMAN RESOURCES | | | | | | | SCHOOL FINANCIAL RESOURCES | | | | |
| PERCENTILE DISTRIBUTION | (1) PUPIL/PROF INSTRUCTIONAL STAFF RATIO | (2) PUPIL TEACHER RATIO | (3) PERCENT TEACHERS WITH 5 OR MORE YEARS EXPERIENCE | (4) AVERAGE YEARS TEACHING EXPERIENCE | (5) PERCENT TEACHERS WITH MASTERS DEGREE | (6) PERCENT TEACHERS EARNING $11,000 OR MORE | (7) AVERAGE SALARY OF TEACHERS (1969-70) | (8) STATE EQUALIZED VALUATION PER RESIDENT PUPIL (1969-70) | (9) LOCAL REVENUE PER PUPIL (1969-70) | (10) STATE SCHOOL AID PER PUPIL (1969-70) | (11) K-12 INSTRUCTIONAL EXPENSE PER PUPIL (1969-70) | (12) TOTAL CURRENT OPERATING EXPENSE PER PUPIL (1969-70) |
| 95 | 25.8 | 28.0 | 77 | 14 | 43 | 58 | 10863 | 30530 | 753 | 445 | 606 | 893 |
| 90 | 24.6 | 27.0 | 72 | 13 | 36 | 52 | 10359 | 23715 | 588 | 426 | 573 | 805 |
| 85 | 23.9 | 26.6 | 69 | 12 | 33 | 48 | 10031 | 21145 | 498 | 413 | 541 | 762 |
| 80 | 23.5 | 26.1 | 67 | 12 | 30 | 44 | 9832 | 18880 | 467 | 401 | 515 | 722 |
| 75 | 23.1 | 25.7 | 64 | 11 | 27 | 40 | 9660 | 17137 | 430 | 391 | 496 | 699 |
| 70 | 22.7 | 25.3 | 62 | 11 | 25 | 37 | 9510 | 16072 | 406 | 379 | 483 | 677 |
| 65 | 22.4 | 25.0 | 61 | 10 | 23 | 34 | 9358 | 14874 | 385 | 367 | 471 | 656 |
| 60 | 22.1 | 24.7 | 59 | 10 | 22 | 30 | 9251 | 14180 | 362 | 356 | 462 | 645 |
| 55 | 21.9 | 24.4 | 57 | 10 | 20 | 27 | 9148 | 13267 | 342 | 344 | 454 | 635 |
| 50 | 21.6 | 24.1 | 56 | 9 | 19 | 24 | 9040 | 12712 | 329 | 335 | 444 | 629 |
| 45 | 21.3 | 23.9 | 54 | 9 | 18 | 19 | 8932 | 12282 | 311 | 328 | 437 | 620 |
| 40 | 21.1 | 23.6 | 52 | 9 | 17 | 15 | 8800 | 11498 | 292 | 318 | 431 | 609 |
| 35 | 20.7 | 23.2 | 50 | 8 | 15 | 11 | 8708 | 11114 | 282 | 311 | 424 | 599 |
| 30 | 20.4 | 22.9 | 48 | 8 | 14 | 9 | 8572 | 10516 | 264 | 303 | 417 | 588 |
| 25 | 20.1 | 22.5 | 45 | 7 | 13 | 7 | 8408 | 9930 | 250 | 293 | 409 | 580 |
| 20 | 19.6 | 22.1 | 43 | 7 | 11 | 3 | 8265 | 9235 | 238 | 277 | 402 | 570 |
| 15 | 19.1 | 21.5 | 41 | 7 | 8 | 0 | 8109 | 8743 | 222 | 258 | 390 | 557 |
| 10 | 18.5 | 20.7 | 38 | 6 | 6 | 0 | 7836 | 7994 | 206 | 228 | 376 | 539 |
| 5 | 17.3 | 19.3 | 32 | 5 | 0 | 0 | 7057 | 7062 | 173 | 174 | 327 | 508 |

## GRADE 7

| | SCHOOL RESOURCES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HUMAN RESOURCES | | | | | | | SCHOOL FINANCIAL RESOURCES | | | | |
| PERCENTILE DISTRIBUTION | (1) PUPIL/PROF INSTRUCTIONAL STAFF RATIO | (2) PUPIL TEACHER RATIO | (3) PERCENT TEACHERS WITH 5 OR MORE YEARS EXPERIENCE | (4) AVERAGE YEARS TEACHING EXPERIENCE | (5) PERCENT TEACHERS WITH MASTERS DEGREE | (6) PERCENT TEACHERS EARNING $11,000 OR MORE | (7) AVERAGE SALARY OF TEACHERS (1969-70) | (8) STATE EQUALIZED VALUATION PER RESIDENT PUPIL (1969-70) | (9) LOCAL REVENUE PER PUPIL (1969-70) | (10) STATE SCHOOL AID PER PUPIL (1969-70) | (11) K-12 INSTRUCTIONAL EXPENSE PER PUPIL (1969-70) | (12) TOTAL CURRENT OPERATING EXPENSE PER PUPIL (1969-70) |
| 95 | 25.3 | 27.8 | 76 | 14 | 43 | 58 | 10872 | 30080 | 702 | 414 | 606 | 892 |
| 90 | 24.4 | 27.0 | 71 | 13 | 37 | 53 | 10377 | 23580 | 582 | 426 | 573 | 804 |
| 85 | 23.9 | 26.5 | 69 | 12 | 33 | 48 | 10038 | 21170 | 498 | 413 | 542 | 763 |
| 80 | 23.3 | 26.1 | 66 | 11 | 30 | 44 | 9844 | 18930 | 468 | 402 | 516 | 723 |
| 75 | 23.0 | 25.7 | 64 | 11 | 27 | 40 | 9670 | 17225 | 432 | 391 | 497 | 700 |
| 70 | 22.7 | 25.3 | 62 | 11 | 25 | 37 | 9524 | 16156 | 408 | 380 | 483 | 679 |
| 65 | 22.3 | 25.0 | 60 | 10 | 24 | 34 | 9369 | 14987 | 386 | 367 | 474 | 659 |
| 60 | 22.1 | 24.7 | 59 | 10 | 22 | 31 | 9263 | 14258 | 365 | 357 | 463 | 647 |
| 55 | 21.9 | 24.3 | 57 | 10 | 21 | 28 | 9160 | 13303 | 344 | 345 | 455 | 637 |
| 50 | 21.6 | 24.1 | 55 | 9 | 19 | 25 | 9057 | 12775 | 330 | 330 | 446 | 630 |
| 45 | 21.3 | 23.9 | 54 | 9 | 18 | 21 | 8956 | 12339 | 312 | 328 | 438 | 623 |
| 40 | 21.1 | 23.6 | 52 | 9 | 17 | 15 | 8825 | 11570 | 292 | 318 | 433 | 613 |
| 35 | 20.7 | 23.2 | 50 | 8 | 16 | 12 | 8727 | 11139 | 284 | 311 | 426 | 602 |
| 30 | 20.4 | 22.9 | 48 | 8 | 14 | 10 | 8600 | 10525 | 266 | 303 | 419 | 591 |
| 25 | 20.0 | 22.5 | 46 | 7 | 13 | 8 | 8456 | 9954 | 252 | 293 | 412 | 582 |
| 20 | 19.6 | 22.1 | 43 | 7 | 12 | 5 | 8294 | 9268 | 240 | 278 | 404 | 573 |
| 15 | 19.1 | 21.5 | 41 | 7 | 9 | 0 | 8159 | 8772 | 225 | 260 | 394 | 563 |
| 10 | 18.6 | 20.7 | 39 | 6 | 7 | 0 | 7941 | 8044 | 208 | 232 | 383 | 548 |
| 5 | 17.3 | 19.3 | 33 | 5 | 0 | 0 | 7315 | 7153 | 174 | 178 | 360 | 525 |

Classified into Upper, Middle or Lower Thirds on COMPOSITE ACHIEVEMENT

| STUDENT BACKGROUND | | SCHOOL/STUDENT PERFORMANCE | | | | | | | | | SCHOOL OR DISTRICT SIZE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ATTITUDE MEASURES (DISTRICT MEANS) | | | BASIC SKILLS MEASURES (DISTRICT MEANS) | | | | | DROPOUT RATE | | |
| (13) PERCENT OF RACIAL-ETHNIC MINORITY STUDENTS | (14) STUDENTS ESTIMATE OF SOCIOECONOMIC STATUS (DISTRICT MEANS) | (15) IMPORTANCE OF SCHOOL ACHIEVEMENT | (16) SELF PERCEPTION | (17) ATTITUDE TOWARD SCHOOL | (18) VOCABULARY | (19) READING | (20) MECHANICS OF WRITTEN ENGLISH | (21) MATHEMATICS | (22) BASIC SKILLS COMPOSITE ACHIEVEMENT | (23) SCHOOL DROPOUT RATE (1968-69) | (25) DISTRICT STATE AID MEMBERSHIP | |
| 22 | 54.3 | 52.1 | 52.5 | 53 5 | 55.6 | 55.4 | 56.0 | 56.4 | 55.7 | 10.2 | 11982 | 95 |
| 10 | 52.9 | 51.4 | 51.7 | 52.5 | 54.1 | 54.2 | 54.1 | 54.4 | 54.2 | 8 4 | 7090 | 90 |
| 7 | 52.2 | 51.0 | 51.2 | 51.9 | 53.3 | 53.7 | 53.4 | 53.8 | 53.5 | 7.5 | 5347 | 85 |
| 5 | 51.6 | 50.7 | 50.9 | 51.5 | 52.7 | 53.1 | 52.8 | 53.2 | 52.9 | 7.0 | 4191 | 80 |
| 4 | 51.2 | 50.5 | 50.7 | 1.3 | 52.2 | 52.8 | 52.4 | 52.8 | 52.6 | 6.6 | 3490 | 75 |
| 3 | 50.7 | 50.3 | 50.5 | 51.0 | 51.8 | 52.5 | 52.0 | 52.4 | 52.2 | 6.3 | 2958 | 70 |
| 2 | 50.4 | 50.0 | 50.3 | 50.8 | 51.4 | 52.2 | 51.6 | 52.0 | 51.9 | 5.9 | 2511 | 65 |
| 2 | 50.2 | 49.9 | 50.0 | 50.6 | 51.2 | 51.9 | 51.3 | 51.7 | 51.6 | 5.6 | 2215 | 60 |
| 2 | 49.8 | 49.6 | 49.8 | 50.3 | 50.8 | 51.6 | 51.1 | 51.4 | 51.3 | 5.2 | 2006 | 55 |
| 1 | 49.6 | 49.4 | 49.7 | 50.1 | 50.5 | 51.3 | 50.8 | 51.1 | 51.0 | 4.9 | 1843 | 50 |
| 1 | 49.3 | 49.1 | 49.5 | 49.9 | 50 3 | 51.0 | 50.4 | 50.7 | 50.8 | 4.4 | 1597 | 45 |
| 1 | 49.0 | 48.9 | 49.4 | 49.7 | 49.9 | 50.7 | 50.1 | 50.4 | 50.5 | 4.2 | 1408 | 40 |
| 1 | 48.6 | 48 7 | 49.1 | 49.5 | 49.7 | 50.3 | 49.7 | 50.1 | 50.1 | 3.8 | 1211 | 35 |
| 1 | 48 3 | 48.5 | 48.9 | 49.2 | 49.5 | 49.9 | 49.4 | 49.7 | 49.8 | 3.5 | 1071 | 30 |
| 1 | 48.0 | 48.2 | 48.7 | 49.0 | 49.2 | 49.7 | 49.1 | 49.3 | 49.5 | 3.2 | 840 | 25 |
| 0 | 47 6 | 47.9 | 48.3 | 48.6 | 48.8 | 49.1 | 48.8 | 48.8 | 49.1 | 2.8 | 677 | 20 |
| 0 | 47 1 | 47.4 | 48.0 | 48.1 | 48.1 | 48.5 | 48.2 | 48.4 | 48.5 | 2.4 | 510 | 15 |
| 0 | 46.4 | 46.6 | 47.5 | 47.6 | 47.1 | 47.7 | 47.4 | 47.6 | 47.8 | 2.0 | 292 | 10 |
| 0 | 45.0 | 45.5 | 46.7 | 46.5 | 46.4 | 46.6 | 46.3 | 46.3 | 46.7 | 1.3 | 138 | 5 |

PERCENTILE DISTRIBUTION

| STUDENT BACKGROUND | | SCHOOL/STUDENT PERFORMANCE | | | | | | | | | SCHOOL OR DISTRICT SIZE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ATTITUDE MEASURES (DISTRICT MEANS) | | | BASIC SKILLS MEASURES (DISTRICT MEANS) | | | | | DROPOUT RATE | | |
| (13) PERCENT OF RACIAL-ETHNIC MINORITY STUDENTS | (14) STUDENTS' ESTIMATE OF SOCIOECONOMIC STATUS (DISTRICT MEANS) | (15) IMPORTANCE OF SCHOOL ACHIEVEMENT | (16) SELF PERCEPTION | (17) ATTITUDE TOWARD SCHOOL | (18) VOCABULARY | (19) READING | (20) MECHANICS OF WRITTEN ENGLISH | (21) MATHEMATICS | (22) BASIC SKILLS COMPOSITE ACHIEVEMENT | (23) SCHOOL DROPOUT RATE (1968-69) | (25) DISTRICT STATE AID MEMBERSHIP | |
| 21 | 54.8 | 52.6 | 52.5 | 54.0 | 54.8 | 54.7 | 54.9 | 55.9 | 54.9 | 10.2 | 12020 | 95 |
| 10 | 53.1 | 51.6 | 51.6 | 53.0 | 53.8 | 53.8 | 53.9 | 54.5 | 54.1 | 8.4 | 7265 | 90 |
| 7 | 52.4 | 51.1 | 51.3 | 52.5 | 53.1 | 53.3 | 53.2 | 53.9 | 53.3 | 7.5 | 5417 | 85 |
| 5 | 52.0 | 50.8 | 50.9 | 52.1 | 52.5 | 52.8 | 52.6 | 53.3 | 52.7 | 7.0 | 4361 | 80 |
| 4 | 51.6 | 50.5 | 50.7 | 51.7 | 52.1 | 52.4 | 52.1 | 52.8 | 52.4 | 6.6 | 3521 | 75 |
| 3 | 51.4 | 50.3 | 50.5 | 51.4 | 51.6 | 52.1 | 51.8 | 52.4 | 52.0 | 6.3 | 3095 | 70 |
| 2 | 51.1 | 50.1 | 50.2 | 51.0 | 51.4 | 51.7 | 51.5 | 52.1 | 51.8 | 5.9 | 2592 | 65 |
| 2 | 50.7 | 49.8 | 50.0 | 50.7 | 51.1 | 51.4 | 51.3 | 51.8 | 51.5 | 5.6 | 2293 | 60 |
| 2 | 50 3 | 49.7 | 49.8 | 50.5 | 50.7 | 51.2 | 50.9 | 51.5 | 51.3 | 5.2 | 2054 | 55 |
| 1 | 50.1 | 49.4 | 49.6 | 50.3 | 50.5 | 51.0 | 50.9 | 51.2 | 51.0 | 4.9 | 1888 | 50 |
| 1 | 49.8 | 49.2 | 49.4 | 50.0 | 50.3 | 50.8 | 50.3 | 51.0 | 50.8 | 4.5 | 1660 | 45 |
| 1 | 49.5 | 49.0 | 49.2 | 49.8 | 50.0 | 50.6 | 50.0 | 50.7 | 50.4 | 4.2 | 1452 | 40 |
| 1 | 49.1 | 48.8 | 48.9 | 49.5 | 49.8 | 50.2 | 49.7 | 0.4 | 50.1 | 3.8 | 1259 | 35 |
| 1 | 48.8 | 48.6 | 48.7 | 49.3 | 49.4 | 49.9 | 49.4 | 50.1 | 49.8 | 3.5 | 1128 | 30 |
| 1 | 48.5 | 48.3 | 48.4 | 49.0 | 49.0 | 49.5 | 49.0 | 49.8 | 49.5 | 3.2 | 910 | 25 |
| 0 | 48.1 | 48.0 | 48.0 | 48.8 | 48.7 | 49.2 | 48.7 | 49.2 | 49.2 | 2.8 | 749 | 20 |
| 0 | 47.7 | 47.6 | 47.8 | 48.4 | 48.2 | 48.8 | 48.2 | 48.6 | 48.8 | 2.4 | 567 | 15 |
| 0 | 47.0 | 47.1 | 47.2 | 47.8 | 47.5 | 48.3 | 47.6 | 48.0 | 48.2 | 2.0 | 365 | 10 |
| 0 | 45.7 | 46.3 | 46.3 | 46.9 | 46.2 | 47.0 | 46.4 | 46.5 | 47.0 | 1.3 | 182 | 5 |

PERCENTILE DISTRIBUTION

SECTION IV

## EDUCATIONAL DISTRIBUTION PROFILES BASED ON COMPOSITE ACHIEVEMENT SCORES

This section presents state-wide distribution profiles which are based on average district or school composite achievement levels. These profiles suggest answers to the first set of questions (1-a, 1-b) listed in the introduction to this report. District profiles are presented first, followed by school profiles. Written summaries are provided for all profiles.

### District Profiles

This section presents state-wide educational distribution profiles intended to answer the question: "If a district ranks high, in the middle, or low on mean composite achievement, can we expect that it will have a similar rank on other assessment measures?"

#### Fourth Grade Summary

The fourth grade composite achievement profile indicates:

(1) Averages for the group of districts that ranked in the upper third on composite achievement were highest on 16 out of the 23 other educational assessment measures. Four of the remaining seven were also in the expected direction, namely, pupil/professional instructional staff ratio, pupil/teacher ratio, state school aid per pupil, and school dropout rate. On these measures the upper third ranked below both the middle and lower thirds. This was expected since all four measures are inverse relationships as explained previously (see Section II). The upper third ranked below the middle third on importance of school achievement. The other exceptions were

in percentage of racial-ethnic minority students, and district state aid membership. On both of these, the upper third districts ranked below the other two groups.

(2) Those districts that scored in the middle third on composite achievement scored between the upper and lower thirds on 17 of the 23 other educational assessment measures.

(3) Those districts that scored in the lower third on composite achievement also scored lowest on 14 of the remaining 23 measures. On two additional measures, state school aid per pupil and school dropout rate, they scored highest, as expected.

Seventh Grade Summary

The seventh grade composite achievement profile indicates:

(1) Averages for the group of districts that ranked in the upper third on composite achievement also were highest on 17 out of the 23 other educational assessment measures, and lowest as expected on four of the remaining six, namely, pupil/professional instructional staff ratio, pupil/teacher ratio, state aid, and dropout rate. They ranked below the middle and lower thirds on percentage of racial-ethnic minority students, and in the middle on district state aid membership.

(2) The group of districts that ranked in the middle third on composite achievement had averages between the upper and lower thirds on 20 of the 23 other measures. It was at the same level as the lowest third on pupil/professional instructional staff ratio.

(3) The group of districts that ranked in the lower third on composite achievement had averages also in the lower third on 16 of the 23 other measures, and, as expected, had high averages on pupil/instructional staff ratio, pupil/teacher ratio, state aid, and dropout rate.

## School Profiles

This section presents educational distribution profiles intended to answer the question: "If a school ranks high, in the middle, or low on mean composite achievement, can we expect that it will have a similar rank on other achievement measures?" This section presents state-wide school profiles for the fourth and seventh grades.

### Fourth Grade Summary

The fourth grade composite achievement profile indicates:

(1) The group of schools that ranked in the upper third on composite achievement had the highest average scores on nine of the 15 other educational assessment measures. As expected, the upper third placed lowest on pupil/professional instructional staff ratio and pupil/teacher ratio. The upper third placed in the middle on percent of teachers earning $11,000 or more, and on importance of school achievement. They placed below both other groups in percentage of racial-ethnic minority students and in the number of students in school.

(2) Those schools that scored in the middle third on composite achievement scored between the upper and lower thirds on 10 of the other 15 measures.

(3) Those schools that scored in the lower third on composite achievement

scored lowest on eight of the 15 other measures. They ranked at the same level as the upper third on percent of teachers earning $11,000 or more.

Seventh Grade Summary

The seventh grade composite achievement profile indicates:

(1) The group of schools that scored in the upper third on composite achievement scored highest on all but four other measures. They placed lowest in pupil/professional instructional staff ratio and pupil/teacher ratio as expected. They also ranked lowest on percentage of racial-ethnic minority students, and number of students in school.

(2) Those schools that scored in the middle third on composite achievement also scored in the middle third in 13 of the other 15 measures.

(3) Those schools that scored in the lower third on composite achievement also scored in the lower third on nine of the other 15 assessment measures.

# AVERAGE SCORES ON ASSESSMENT MEASURES FOR MICHIGAN

## COMPOSITE

### GRADE 4

| PERCENTILE DISTRIBUTION | (1) PUPIL PROF INSTRUCTIONAL STAFF RATIO | (2) PUPIL TEACHER RATIO | (3) PERCENT TEACHERS WITH 5 OR MORE YEARS EXPERIENCE | (4) AVERAGE YEARS TEACHING EXPERIENCE | (5) PERCENT TEACHERS WITH MASTERS DEGREE | (6) PERCENT TEACHERS EARNING $11,000 OR MORE | (7) AVERAGE SALARY OF TEACHERS (1969–70) | (8) STATE EQUALIZED VALUATION PER RESIDENT PUPIL (1969–70) | (9) LOCAL REVENUE PER PUPIL (1969–70) | (10) STATE SCHOOL AID PER PUPIL (1969–70) | (11) K–12 INSTRUCTIONAL EXPENSE PER PUPIL (1969–70) | (12) TOTAL CURRENT OPERATING EXPENSE PER PUPIL (1969–70) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 25.8 | 28.0 | 77 | 14 | 43 | 58 | 10863 | 30530 | 753 | 445 | 606 | 893 |
| 90 | 24.6 | 27.0 | 72 | 13 | 36 | 52 | 10359 | 23715 | 588 | 426 | 573 | 805 |
| 85 | 23.9 | 26.6 | 69 | 12 | 33 | 48 | 10031 | 21145 | 498 | 413 | 541 | 762 |
| 80 | 23.5 | 26.1 | 67 | 12 | 30 | 44 | 9832 | 18880 | 467 | 401 | 515 | 722 |
| 75 | 23.1 | 25.7 | 64 | 11 | 27 | 40 | 9600 | 17137 | 430 | 391 | 496 | 699 |
| 70 | 22.7 | 25.3 | 62 | 11 | 25 | 37 | 9510 | 16073 | 406 | 379 | 483 | 677 |
| 65 | 22.4 | 25.0 | 61 | 10 | 24 | 34 | 9358 | 14874 | 385 | 367 | 471 | 656 |
| 60 | 22.1 | 24.7 | 59 | 10 | 22 | 30 | 9251 | 14180 | 362 | 356 | 462 | 645 |
| 55 | 21.9 | 24.4 | 57 | 10 | 20 | 27 | 9148 | 13267 | 342 | 344 | 454 | 635 |
| 50 | 21.6 | 24.1 | 56 | 9 | 19 | 24 | 9040 | 12712 | 329 | 335 | 444 | 629 |
| 45 | 21.3 | 23.9 | 54 | 9 | 18 | 19 | 8932 | 12282 | 311 | 328 | 437 | 620 |
| 40 | 21.1 | 23.6 | 52 | 9 | 17 | 15 | 8800 | 11498 | 292 | 318 | 431 | 609 |
| 35 | 20.7 | 23.2 | 50 | 8 | 15 | 11 | 8708 | 11114 | 282 | 311 | 424 | 599 |
| 30 | 20.4 | 22.9 | 48 | 8 | 14 | 9 | 8572 | 10516 | 264 | 303 | 417 | 588 |
| 25 | 20.1 | 22.5 | 45 | 7 | 13 | 7 | 8408 | 9930 | 250 | 293 | 409 | 580 |
| 20 | 19.6 | 22.1 | 43 | 7 | 11 | 3 | 8265 | 9235 | 238 | 277 | 402 | 570 |
| 15 | 19.1 | 21.5 | 41 | 7 | 8 | 0 | 8109 | 8743 | 222 | 258 | 390 | 557 |
| 10 | 18.5 | 20.7 | 38 | 6 | 6 | 0 | 7836 | 7994 | 206 | 228 | 376 | 539 |
| 5 | 17.3 | 19.3 | 32 | 5 | 0 | 0 | 7057 | 7062 | 173 | 174 | 327 | 508 |

### GRADE 7

| PERCENTILE DISTRIBUTION | (1) PUPIL/PROF. INSTRUCTIONAL STAFF RATIO | (2) PUPIL TEACHER RATIO | (3) PERCENT TEACHERS WITH 5 OR MORE YEARS EXPERIENCE | (4) AVERAGE YEARS TEACHING EXPERIENCE | (5) PERCENT TEACHERS WITH MASTERS DEGREE | (6) PERCENT TEACHERS EARNING $11 000 OR MORE | (7) AVERAGE SALARY OF TEACHERS (1969–70) | (8) STATE EQUALIZED VALUATION PER RESIDENT PUPIL (1969–70) | (9) LOCAL REVENUE PER PUPIL (1969–70) | (10) STATE SCHOOL AID PER PUPIL (1969–70) | (11) K–12 INSTRUCTIONAL EXPENSE PER PUPIL (1969–70) | (12) TOTAL CURRENT OPERATING EXPENSE PER PUPIL (1969–70) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 25.3 | 27.8 | 76 | 14 | 43 | 58 | 10872 | 30080 | 702 | 444 | 606 | 892 |
| 90 | 24.4 | 27.0 | 71 | 13 | 37 | 53 | 10377 | 23580 | 582 | 426 | 573 | 804 |
| 85 | 23.9 | 26.5 | 69 | 12 | 33 | 48 | 10038 | 21170 | 498 | 413 | 542 | 763 |
| 80 | 23.3 | 26.1 | 66 | 11 | 30 | 44 | 9844 | 18930 | 468 | 402 | 516 | 723 |
| 75 | 23.0 | 25.7 | 64 | 11 | 27 | 40 | 9670 | 17225 | 432 | 391 | 497 | 700 |
| 70 | 22.7 | 25.3 | 62 | 11 | 25 | 37 | 9524 | 16156 | 408 | 380 | 483 | 679 |
| 65 | 22.3 | 25.0 | 60 | 10 | 24 | 34 | 9369 | 14987 | 386 | 367 | 476 | 659 |
| 60 | 22.1 | 24.7 | 59 | 10 | 22 | 31 | 9263 | 14255 | 365 | 357 | 463 | 647 |
| 55 | 21.9 | 24.3 | 57 | 10 | 21 | 28 | 9160 | 13303 | 344 | 345 | 455 | 637 |
| 50 | 21.6 | 24.1 | 55 | 9 | 19 | 25 | 9057 | 12775 | 330 | 330 | 446 | 630 |
| 45 | 21.3 | 23.9 | 54 | 9 | 18 | 21 | 8956 | 12339 | 312 | 328 | 438 | 623 |
| 40 | 21.1 | 23.6 | 52 | 9 | 17 | 15 | 8875 | 11570 | 292 | 318 | 433 | 613 |
| 35 | 20.7 | 23.2 | 50 | 8 | 16 | 12 | 8727 | 11139 | 284 | 311 | 426 | 602 |
| 30 | 20.4 | 22.9 | 48 | 8 | 14 | 10 | 8600 | 10525 | 266 | 303 | 419 | 591 |
| 25 | 20.0 | 22.5 | 46 | 7 | 13 | 8 | 8456 | 9954 | 252 | 293 | 412 | 582 |
| 20 | 19.6 | 22.1 | 43 | 7 | 12 | 5 | 8294 | 9268 | 240 | 278 | 404 | 573 |
| 15 | 19.1 | 21.5 | 41 | 7 | 9 | 0 | 8155 | 8772 | 225 | 260 | 394 | 563 |
| 10 | 18.6 | 20.7 | 39 | 6 | 7 | 0 | 7941 | 8044 | 208 | 242 | 383 | 548 |
| 5 | 17.3 | 19.3 | 33 | 5 | 0 | 0 | 7315 | 7153 | 174 | 178 | 360 | 525 |

# DISTRICTS CLASSIFIED INTO UPPER, MIDDLE, OR LOWER THIRDS ON ACHIEVEMENT

| STUDENT BACKGROUND | | SCHOOL/STUDENT PERFORMANCE | | | | | | | | OROPOUT RATE | SCHOOL OR DISTRICT SIZE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ATTITUDE MEASURES (DISTRICT MEANS) | | | BASIC SKILLS MEASURES (DISTRICT MEANS) | | | | | | | |
| (13) PERCENT OF RACIAL-ETHNIC MINORITY STUDENTS | (14) STUDENTS' ESTIMATE OF SOCIOECONOMIC STATUS (DISTRICT MEANS) | (15) IMPORTANCE OF SCHOOL ACHIEVEMENT | (16) SELF PERCEPTION | (17) ATTITUDE TOWARD SCHOOL | (18) VOCABULARY | (19) READING | (20) MECHANICS OF WRITTEN ENGLISH | (21) MATHEMATICS | (22) BASIC SKILLS COMPOSITE ACHIEVEMENT | (23) SCHOOL DROPOUT RATE (1968-69) | (25) DISTRICT STATE AID MEMBERSHIP | |
| 22 | 54.3 | 52.1 | 52.5 | 53.5 | 55.6 | 55.4 | 56.0 | 56.4 | 55.7 | 10.2 | 11982 | 95 |
| 10 | 52.9 | 51.4 | 51.7 | 52.5 | 54.1 | 54.2 | 54.1 | 54.4 | 54.2 | 8.4 | 7090 | 90 |
| 7 | 52.2 | 51.0 | 51.2 | 51.9 | 53.3 | 53.7 | 53.4 | 53.8 | 53.5 | 7.5 | 5347 | 85 |
| 5 | 51.6 | 50.7 | 50.9 | 51.5 | 52.7 | 53.1 | 52.8 | 53.2 | 52.9 | 7.0 | 4391 | 80 |
| 4 | 51.2 | 50.5 | 50.7 | 51.3 | 52.2 | 52.8 | 52.4 | 52.8 | 52.6 | 6.6 | 3490 | 75 |
| 3 | 50.7 | 50.3 | 50.5 | 51.0 | 51.8 | 52.5 | 52.0 | 52.4 | 52.2 | 6.3 | 2958 | 70 |
| 2 | 50.4 | 50.0 | 50.3 | 50.8 | 51.4 | 52.2 | 51.6 | 52.0 | 51.9 | 5.9 | 2511 | 65 |
| 2 | 50.2 | 49.9 | 50.0 | 50.6 | 51.2 | 51.9 | 51.3 | 51.7 | 51.6 | 5.6 | 2215 | 60 |
| 2 | 49.8 | 49.6 | 49.8 | 50.3 | 50.8 | 51.6 | 51.1 | 51.4 | 51.3 | 5.2 | 2006 | 55 |
| 1 | 49.6 | 49.4 | 49.7 | 50.1 | 50.5 | 51.3 | 50.8 | 51.1 | 51.0 | 4.9 | 1843 | 50 |
| 1 | 49.3 | 49.1 | 49.5 | 49.9 | 50.3 | 51.0 | 50.4 | 50.7 | 50.8 | 4.4 | 1597 | 45 |
| 1 | 49.0 | 48.9 | 49.4 | 49.7 | 49.9 | 50.7 | 50.1 | 50.4 | 50.5 | 4.2 | 1408 | 40 |
| 1 | 48.6 | 48.7 | 49.1 | 49.5 | 49.7 | 50.3 | 49.7 | 50.1 | 50.1 | 3.8 | 1211 | 35 |
| 1 | 48.3 | 48.5 | 48.9 | 49.2 | 49.5 | 49.9 | 49.4 | 49.7 | 49.8 | 3.5 | 1071 | 30 |
| 1 | 48.0 | 48.2 | 48.7 | 49.0 | 49.2 | 49.7 | 49.1 | 49.3 | 49.5 | 3.2 | 840 | 25 |
| 0 | 47.6 | 47.9 | 48.3 | 48.6 | 48.8 | 49.1 | 48.8 | 48.8 | 49.1 | 2.8 | 677 | 20 |
| 0 | 47.1 | 47.4 | 48.0 | 48.1 | 48.1 | 48.5 | 48.2 | 48.4 | 48.5 | 2.4 | 510 | 15 |
| 0 | 46.4 | 46.6 | 47.5 | 47.6 | 47.1 | 47.7 | 47.4 | 47.6 | 47.8 | 2.0 | 292 | 10 |
| 0 | 45.0 | 45.5 | 46.7 | 46.5 | 46.4 | 46.6 | 46.3 | 46.3 | 46.7 | 1.3 | 138 | 5 |

PERCENTILE DISTRIBUTION

| STUDENT BACKGROUND | | SCHOOL/STUDENT PERFORMANCE | | | | | | | | OROPOUT RATE | SCHOOL OR DISTRICT SIZE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ATTITUDE MEASURES (DISTRICT MEANS) | | | BASIC SKILLS MEASURES (DISTRICT MEANS) | | | | | | | |
| (13) PERCENT OF RACIAL-ETHNIC MINORITY STUDENTS | (14) STUDENTS' ESTIMATE OF SOCIOECONOMIC STATUS (DISTRICT MEANS) | (15) IMPORTANCE OF SCHOOL ACHIEVEMENT | (16) SELF PERCEPTION | (17) ATTITUDE TOWARD SCHOOL | (18) VOCABULARY | (19) READING | (20) MECHANICS OF WRITTEN ENGLISH | (21) MATHEMATICS | (22) BASIC SKILLS COMPOSITE ACHIEVEMENT | (23) SCHOOL DROPOUT RATE (1968-69) | (25) DISTRICT STATE AI MEMBERSHIP | |
| 21 | 54.8 | 52.6 | 52.5 | 54.0 | 54.8 | 54.7 | 54.9 | 55.9 | 54.9 | 10.2 | 12020 | 95 |
| 10 | 53.1 | 51.6 | 51.6 | 53.0 | 53.8 | 53.8 | 53.9 | 54.5 | 54.1 | 8.4 | 7265 | 90 |
| 7 | 52.4 | 51.1 | 51.3 | 52.5 | 53.1 | 53.3 | 53.2 | 53.9 | 53.3 | 7.5 | 5417 | 85 |
| 5 | 52.0 | 50.8 | 50.9 | 52.1 | 52.5 | 52.8 | 52.6 | 53.3 | 52.7 | 7.0 | 4361 | 80 |
| 4 | 51.6 | 50.5 | 50.7 | 51.7 | 52.1 | 52.4 | 52.1 | 52.8 | 52.4 | 6.6 | 3521 | 75 |
| 3 | 51.4 | 50.3 | 50.5 | 51.4 | 51.6 | 52.1 | 51.8 | 52.4 | 52.0 | 6.3 | 3095 | 70 |
| 2 | 51.1 | 50.1 | 50.2 | 51.0 | 51.4 | 51.7 | 51.5 | 52.1 | 51.8 | 5.9 | 2582 | 65 |
| 2 | 50.7 | 49.8 | 50.0 | 50.7 | 51.1 | 51.4 | 51.3 | 51.8 | 51.5 | 5.6 | 2293 | 60 |
| 2 | 50.3 | 49.7 | 49.8 | 50.5 | 50.8 | 51.2 | 50.9 | 51.5 | 51.3 | 5.2 | 2054 | 55 |
| 1 | 50.1 | 49.4 | 49.6 | 50.1 | 50.5 | 51.0 | 50.6 | 51.2 | 51.0 | 4.9 | 1888 | 50 |
| | 49.8 | 49.2 | 49.4 | 50.0 | 50.3 | 50.8 | 50.5 | 51.0 | 50.8 | 4.5 | 1660 | 45 |
| 1 | 49.5 | 49.0 | 49.2 | 49.8 | 50.0 | 50.6 | 50.0 | 50.7 | 50.4 | 4.2 | 1452 | 40 |
| 1 | 49.1 | 48.8 | 48.9 | 49.5 | 49.8 | 50.2 | 49.7 | 50.4 | 50.1 | 3.8 | 1259 | 35 |
| 1 | 48.8 | 48.6 | 48.7 | 49.3 | 49.4 | 49.9 | 49.4 | 50.1 | 49.8 | 3.5 | 1128 | 30 |
| 1 | 48.5 | 48.3 | 48.4 | 49.0 | 49.0 | 49.5 | 49.0 | 49.8 | 49.5 | 3.2 | 910 | 25 |
| 0 | 48.1 | 48.0 | 48.0 | 48.8 | 48.7 | 49.2 | 48.7 | 49.2 | 49.2 | 2.8 | 749 | 20 |
| 0 | 47.7 | 47.6 | 47.8 | 48.4 | 48.2 | 48.8 | 48.2 | 48.6 | 48.8 | 2.4 | 567 | 15 |
| 0 | 47.0 | 47.1 | 47.2 | 47.8 | 47.5 | 48.3 | 47.6 | 48.0 | 48.2 | 2.0 | 365 | 10 |
| 0 | 45.7 | 46.3 | 46.5 | 46.9 | 46.2 | 47.0 | 46.4 | 46.5 | 47.0 | 1.3 | 182 | 5 |

PERCENTILE DISTRIBUTION

# AVERAGE SCORES ON ASSESSMENT MEASURES FOR MICHIGAN SCHOOLS CLASSIFIED INTO UPPER, MIDDLE, OR LOWER THIRDS ON

## COMPOSITE ACHIEVEMENT

### GRADE 4

| PERCENTILE DISTRIBUTION | SCHOOL RESOURCES: HUMAN RESOURCES (1) PUPIL PROF. INSTRUC-TIONAL STAFF RATIO | (2) PUPIL TEACHER RATIO | (3) PERCENT TEACHERS WITH 5 OR MORE YEARS EXPERIENCE | (5) PERCENT TEACHERS WITH MASTERS DEGREE | (6) PERCENT TEACHERS EARNING $11 000 OR MORE | STUDENT BACKGROUND (13) PERCENT RACIAL-ETHNIC MINORITY STUDENTS | (14) STUDENTS' ESTIMATE OF SOCIO ECONOMIC STATUS (SCHOOL MEANS) | SCHOOL STUDENT PERFORMANCE: ATTITUDE MEASURES (SCHOOL MEANS) (15) IMPORTANCE OF SCHOOL ACHIEVE-MENT | (16) SELF PERCEPTION | (17) ATTITUDE TOWARD SCHOOL | BASIC SKILLS MEASURES (SCHOOL MEANS) (18) VOCAB-ULARY | (19) READING | (20) MECHANICS OF WRITTEN ENGLISH | (21) MATHE-MATICS | (22) BASIC SKILLS COMPOSITE ACHIEVE-MENT | SCHOOL OR DISTRICT SIZE (24) NUMBER OF STUDENTS IN SCHOOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 28.8 | 31.3 | 92 | 50 | 79 | 95 | 58.0 | 53.8 | 53.8 | 53.9 | 56.9 | 56.1 | 56.4 | 56.9 | 56.4 | 713 |
| 90 | 27.7 | 30.1 | 85 | 41 | 71 | 42 | 55.5 | 52.8 | 52.9 | 53.1 | 55.3 | 55.0 | 55.2 | 55.4 | 55.0 | 604 |
| 85 | 26.8 | 29.4 | 80 | 37 | 65 | 18 | 54.1 | 52.3 | 52.2 | 52.5 | 54.3 | 54.2 | 54.3 | 54.5 | 54.2 | 541 |
| 80 | 26.3 | 28.8 | 76 | 33 | 60 | 10 | 53.1 | 51.9 | 51.8 | 52.0 | 53.5 | 53.6 | 53.6 | 53.9 | 53.6 | 502 |
| 75 | 25.6 | 28.3 | 73 | 31 | 57 | 7 | 52.4 | 51.5 | 51.4 | 51.6 | 52.9 | 53.1 | 53.0 | 53.3 | 53.1 | 471 |
| 70 | 25.1 | 27.8 | 70 | 28 | 53 | 4 | 51.7 | 51.2 | 51.1 | 51.3 | 52.2 | 52.7 | 52.5 | 52.7 | 52.6 | 443 |
| 65 | 24.7 | 27.3 | 67 | 25 | 50 | 3 | 51.3 | 50.9 | 50.8 | 51.0 | 51.8 | 52.2 | 52.0 | 52.2 | 52.1 | 419 |
| 60 | 24.2 | 26.9 | 64 | 23 | 46 | 3 | 50.7 | 50.6 | 50.4 | 50.8 | 51.3 | 51.8 | 51.5 | 51.8 | 51.7 | 393 |
| 55 | 23.8 | 26.5 | 62 | 21 | 43 | 2 | 50.3 | 50.2 | 50.1 | 50.4 | 50.9 | 51.4 | 51.1 | 51.3 | 51.3 | 370 |
| 50 | 23.3 | 26.1 | 60 | 19 | 40 | 2 | 49.9 | 49.9 | 49.9 | 50.1 | 50.5 | 51.0 | 50.6 | 50.9 | 50.8 | 348 |
| 45 | 22.8 | 25.8 | 57 | 17 | 36 | 1 | 49.4 | 49.7 | 49.7 | 49.8 | 50.0 | 50.6 | 50.1 | 50.4 | 50.4 | 329 |
| 40 | 22.4 | 25.3 | 55 | 15 | 33 | 1 | 48.9 | 49.3 | 49.4 | 49.5 | 49.6 | 50.1 | 49.7 | 50.0 | 49.9 | 310 |
| 35 | 21.9 | 24.9 | 52 | 14 | 29 | 1 | 48.4 | 49.1 | 49.2 | 49.1 | 49.2 | 49.6 | 49.2 | 49.5 | 49.5 | 287 |
| 30 | 21.3 | 24.4 | 50 | 12 | 25 | 1 | 48.0 | 48.8 | 48.8 | 48.8 | 48.7 | 49.0 | 48.7 | 48.8 | 48.9 | 264 |
| 25 | 20.8 | 23.8 | 46 | 10 | 19 | 1 | 47.3 | 48.3 | 48.5 | 48.5 | 48.0 | 48.3 | 48.1 | 48.1 | 48.4 | 239 |
| 20 | 20.1 | 23.0 | 43 | 7 | 14 | 0 | 46.5 | 47.9 | 48.1 | 48.0 | 47.2 | 47.5 | 47.3 | 47.3 | 47.6 | 210 |
| 15 | 19.4 | 22.3 | 38 | 5 | 8 | 0 | 45.6 | 47.5 | 47.7 | 47.5 | 46.1 | 46.2 | 46.1 | 46.0 | 46.3 | 176 |
| 10 | 18.4 | 21.4 | 34 | 0 | 0 | 0 | 44.3 | 46.7 | 47.2 | 47.0 | 44.5 | 44.6 | 44.4 | 44.2 | 44.5 | 149 |
| 5 | 16.7 | 20.0 | 28 | 0 | 0 | 0 | 42.6 | 45.5 | 46.3 | 46.0 | 42.6 | 42.0 | 42.3 | 41.7 | 42.2 | 105 |

### GRADE 7

| PERCENTILE DISTRIBUTION | SCHOOL RESOURCES: HUMAN RESOURCES (1) PUPIL-PROF. INSTRUC-TIONAL STAFF RATIO | (2) PUPIL/ TEACHER RATIO | (3) PERCENT TEACHERS WITH 5 OR MORE YEARS EXPERIENCE | (5) PERCENT TEACHERS WITH MASTERS DEGREE | (6) PERCENT TEACHERS EARNING $11 000 OR MORE | STUDENT BACKGROUND (13) PERCENT RACIAL-ETHNIC MINORITY STUDENTS | (14) STUDENTS' ESTIMATE OF SOCIO ECONOMIC STATUS (SCHOOL MEANS) | SCHOOL/STUDENT PERFORMANCE: ATTITUDE MEASURES (SCHOOL MEANS) (15) IMPORTANCE OF SCHOOL ACHIEVE-MENT | (16) SELF PERCEPTION | (17) ATTITUDE TOWARD SCHOOL | BASIC SKILLS MEASURES (SCHOOL MEANS) (18) VOCAB-ULARY | (19) READING | (20) MECHANICS OF WRITTEN ENGLISH | (21) MATHE-MATICS | (22) BASIC SKILLS COMPOSITE ACHIEVE-MENT | SCHOOL OR DISTRICT SIZE (24) NUMBER OF STUDENTS IN SCHOOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 27.7 | 30.6 | 84 | 53 | 71 | 89 | 55.8 | 53.0 | 52.8 | 53.9 | 55.2 | 55.2 | 55.4 | 56.3 | 55.3 | 1346 |
| 90 | 25.9 | 28.8 | 75 | 45 | 62 | 38 | 53.8 | 52.2 | 52.0 | 52.9 | 54.0 | 54.2 | 54.3 | 54.7 | 54.3 | 1163 |
| 85 | 25.1 | 27.5 | 71 | 40 | 57 | 19 | 52.8 | 51.8 | 51.5 | 52.4 | 53.3 | 53.5 | 53.4 | 54.0 | 53.6 | 1032 |
| 80 | 24.0 | 26.7 | 68 | 38 | 53 | 14 | 52.2 | 51.3 | 51.2 | 51.9 | 52.6 | 52.9 | 52.8 | 53.2 | 52.8 | 943 |
| 75 | 23.3 | 26.1 | 65 | 35 | 49 | 7 | 51.8 | 51.0 | 50.9 | 51.5 | 52.2 | 52.4 | 52.2 | 52.7 | 52.4 | 868 |
| 70 | 22.8 | 25.5 | 63 | 33 | 46 | 5 | 51.5 | 50.7 | 50.6 | 51.2 | 51.8 | 52.1 | 51.8 | 52.3 | 52.0 | 806 |
| 65 | 22.2 | 25.0 | 60 | 31 | 42 | 3 | 51.1 | 50.5 | 50.4 | 50.9 | 51.4 | 51.7 | 51.5 | 51.9 | 51.7 | 737 |
| 60 | 21.7 | 24.5 | 58 | 28 | 38 | 2 | 50.8 | 50.3 | 50.2 | 50.6 | 51.1 | 51.4 | 51.1 | 51.6 | 51.4 | 677 |
| 55 | 21.2 | 24.0 | 56 | 26 | 35 | 2 | 50.4 | 50.1 | 49.9 | 50.2 | 50.8 | 51.1 | 50.8 | 51.3 | 51.1 | 631 |
| 50 | 20.9 | 23.6 | 54 | 25 | 32 | 2 | 50.1 | 49.8 | 49.7 | 50.1 | 50.5 | 50.9 | 50.6 | 50.9 | 50.8 | 592 |
| 45 | 20.5 | 23.2 | 51 | 23 | 28 | 1 | 49.7 | 49.6 | 49.5 | 49.9 | 50.1 | 50.6 | 50.1 | 50.5 | 50.4 | 560 |
| 40 | 20.1 | 22.9 | 50 | 21 | 25 | 1 | 49.3 | 49.3 | 49.2 | 49.6 | 49.8 | 50.2 | 49.8 | 50.2 | 50.1 | 506 |
| 35 | 19.8 | 22.5 | 47 | 19 | 20 | 1 | 48.9 | 49.1 | 48.9 | 49.4 | 49.3 | 49.9 | 49.4 | 49.9 | 49.7 | 457 |
| 30 | 19.5 | 22.2 | 44 | 17 | 16 | 1 | 48.3 | 48.8 | 48.7 | 49.1 | 48.9 | 49.4 | 49.0 | 49.2 | 49.3 | 410 |
| 25 | 18.9 | 21.7 | 41 | 15 | 13 | 1 | 47.9 | 48.6 | 48.5 | 48.8 | 48.3 | 48.9 | 48.3 | 48.7 | 49.0 | 370 |
| 20 | 18.4 | 21.0 | 38 | 13 | 8 | 0 | 47.3 | 48.2 | 48.1 | 48.5 | 47.7 | 48.4 | 47.7 | 47.8 | 48.1 | 321 |
| 15 | 17.8 | 20.5 | 35 | 10 | 0 | 0 | 46.4 | 47.8 | 47.8 | 48.2 | 46.5 | 47.2 | 46.9 | 46.5 | 47.1 | 278 |
| 10 | 17.0 | 19.5 | 31 | 6 | 0 | 0 | 45.0 | 47.3 | 47.3 | 47.6 | 44.4 | 45.3 | 45.2 | 43.8 | 44.9 | 218 |
| 5 | 15.8 | 18.0 | 25 | 0 | 0 | 0 | 42.7 | 46.4 | 46.3 | 46.9 | 41.5 | 42.5 | 42.5 | 40.5 | 42.1 | 140 |

SECTION V

## EDUCATIONAL DISTRIBUTION PROFILES BASED ON SOCIOECONOMIC STATUS SCORES

This section presents state-wide educational profiles which are based on average district or school socioeconomic status levels. These profiles suggest the answers to the second set of questions (2-a, 2-b) listed in the introduction to this report. District profiles are presented first, then school profiles. Written summaries are provided for all profiles.

### District Profiles

This part presents educational distribution profiles intended to answer the question: "If a district ranks high, in the middle, or low on mean socioeconomic status, can we expect that it will have a similar rank on other assessment measures?"

#### Fourth Grade Summary

The fourth grade socioeconomic status profile indicates:

(1) Averages for the group of districts that scored in the upper third on socioeconomic status also were highest on 15 of the 23 other measures. There were exceptions, as expected, in pupil/professional instructional staff ratio, pupil/teacher ratio, state school aid per pupil, and school dropout rate. In all of these the highest group ranked below the other two groups. It also ranked lowest in average years teaching experience, and percentage of racial-ethnic minority students. It ranked in the middle on percentage of teachers with five or more years experience; ranked below the low group and at the same level as the middle group on attitude toward school; and at the same level as the low group on district state aid member-

ship. These exceptions, of course, influenced the ranking of the middle and low groups.

(2) The group of districts that scored in the middle on socioeconomic status scored between the upper and low thirds on 13 of the 23 other educational assessment measures.

(3) Those districts that scored lowest on socioeconomic status also scored lowest on 11 of the 23 other measures.

Seventh Grade Summary

The seventh grade socioeconomic status profile indicates:

(1) Averages for the group of districts that ranked in the upper third on socioeconomic status also ranked in the upper third on 15 of the 23 other educational assessment measures. As expected, they ranked below both other groups on pupil/professional instructional staff ratio, pupil/teacher ratio, state school aid, and school dropout rate. They were also lowest on average years of teaching experience and percentage of racial-ethnic minority students. They ranked in the middle on district state aid membership. On attitude toward school, they were below the lower third and on the same level with the middle third.

(2) The group of districts that ranked between the upper and lower thirds on socioeconomic status also ranked in the middle on 15 of the 23 other assessment measures. As stated, it ranked at the same level as the high group on attitude toward school.

(3) The group of districts that ranked in the lower third on socioeconomic status had averages in the lower third also on 10 of the 23 other measures.

As expected, it has the highest averages on pupil/professional instructional staff ratio, pupil/teacher ratio, state aid, and dropout rate.

## School Profiles

This part presents educational distribution profiles intended to answer the question: "If a school ranks high, in the middle, or low on mean socioeconomic status, can we expect that it will have a similar rank on other assessment measures?"

### Fourth Grade Summary

(1) The group of schools that ranked in the upper third on socioeconomic status also had the highest average scores on nine of the 15 other assessment measures. As expected, the upper third placed lowest on pupil/professional instructional staff ratio and pupil/teacher ratio. This group also ranked lowest on percent racial-ethnic minority students, and in the middle on number of students in school. It ranked at the same level as the lower third on percent teachers with five or more years experience and on importance of school achievement.

(2) The group of schools that ranked in the middle third on socioeconomic status also ranked between the upper and lower thirds on nine of the other 15 assessment measures.

(3) The group of schools that scored in the lower third on socioeconomic status also ranked lowest on seven of the other 15 educational assessment measures.

# AVERAGE SCORES ON ASSESSMENT MEASURES FOR MICHIGAN

## SOCIOECONOMIC

## GRADE 4

| PERCENTILE DISTRIBUTION | SCHOOL RESOURCES: HUMAN RESOURCES (1) PUPIL PROF INSTRUCTIONAL STAFF RATIO | (2) PUPIL TEACHER RATIO | (3) PERCENT TEACHERS WITH 5 OR MORE YEARS EXPERIENCE | (4) AVERAGE YEARS TEACHING EXPERIENCE | (5) PERCENT TEACHERS WITH MASTERS DEGREE | (6) PERCENT TEACHERS EARNING $11 000 OR MORE | (7) AVERAGE SALARY OF TEACHERS (1969–70) | SCHOOL FINANCIAL RESOURCES: (8) STATE EQUALIZED VALUATION PER RESIDENT PUPIL (1969–70) | (9) LOCAL REVENUE PER PUPIL (1969–70) | (10) STATE SCHOOL AID PER PUPIL (1969–70) | (11) K–12 INSTRUCTIONAL EXPENSE PER PUPIL (1969–70) | (12) TOTAL CURRENT OPERATING EXPENSE PER PUPIL (1969–70) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 25.8 | 28.0 | 77 | 14 | 43 | 58 | 10865 | 30560 | 753 | 445 | 606 | 893 |
| 90 | 24.6 | 27.0 | 72 | 13 | 37 | 52 | 10363 | 23730 | 589 | 426 | 573 | 806 |
| 85 | 23.9 | 26.6 | 69 | 12 | 33 | 48 | 10034 | 21190 | 499 | 413 | 541 | 764 |
| 80 | 23.5 | 26.1 | 67 | 12 | 30 | 44 | 9831 | 18860 | 468 | 401 | 516 | 723 |
| 75 | 23.1 | 25.7 | 64 | 11 | 27 | 40 | 9654 | 17125 | 430 | 391 | 496 | 699 |
| 70 | 22.7 | 25.3 | 62 | 11 | 25 | 37 | 9505 | 16070 | 406 | 379 | 483 | 677 |
| 65 | 22.4 | 25.0 | 61 | 10 | 23 | 34 | 9354 | 14875 | 385 | 367 | 471 | 656 |
| 60 | 22.1 | 24.7 | 59 | 10 | 22 | 30 | 9248 | 14195 | 362 | 356 | 461 | 645 |
| 55 | 21.9 | 24.4 | 57 | 10 | 20 | 27 | 9144 | 13271 | 342 | 344 | 453 | 635 |
| 50 | 21.6 | 24.1 | 56 | 9 | 19 | 24 | 9035 | 12725 | 328 | 335 | 444 | 628 |
| 45 | 21.3 | 23.9 | 54 | 9 | 18 | 19 | 8926 | 12265 | 310 | 327 | 437 | 619 |
| 40 | 21.1 | 23.6 | 52 | 9 | 17 | 15 | 8795 | 11495 | 292 | 318 | 431 | 608 |
| 35 | 20.7 | 23.2 | 50 | 8 | 15 | 11 | 8705 | 11113 | 282 | 311 | 424 | 599 |
| 30 | 20.4 | 22.9 | 48 | 8 | 14 | 9 | 8569 | 10503 | 264 | 303 | 417 | 588 |
| 25 | 20.1 | 22.5 | 45 | 7 | 13 | 7 | 8405 | 9920 | 250 | 293 | 409 | 579 |
| 20 | 19.6 | 22.1 | 43 | 7 | 11 | 3 | 8262 | 9224 | 238 | 277 | 402 | 570 |
| 15 | 19.1 | 21.5 | 41 | 7 | 8 | 0 | 8106 | 8735 | 222 | 258 | 390 | 557 |
| 10 | 18.5 | 20.7 | 38 | 6 | 6 | 0 | 7833 | 7988 | 206 | 228 | 376 | 539 |
| 5 | 17.3 | 19.3 | 32 | 5 | 0 | 0 | 7055 | 7057 | 173 | 173 | 326 | 508 |

## GRADE 7

| PERCENTILE DISTRIBUTION | SCHOOL RESOURCES: HUMAN RESOURCES (1) PUPIL/PROF INSTRUCTIONAL STAFF RATIO | (2) PUPIL TEACHER RATIO | (3) PERCENT TEACHERS WITH 5 OR MORE YEARS EXPERIENCE | (4) AVERAGE YEARS TEACHING EXPERIENCE | (5) PERCENT TEACHERS WITH MASTERS DEGREE | (6) PERCENT TEACHERS EARNING $11,000 OR MORE | (7) AVERAGE SALARY OF TEACHERS (1969–70) | SCHOOL FINANCIAL RESOURCES: (8) STATE EQUALIZED VALUATION PER RESIDENT PUPIL (1969–70) | (9) LOCAL REVENUE PER PUPIL (1969–70) | (10) STATE SCHOOL AID PER PUPIL (1969–70) | (11) K–12 INSTRUCTIONAL EXPENSE PER PUPIL (1969–70) | (12) TOTAL CURRENT OPERATING EXPENSE PER PUPIL (1969–70) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 25.4 | 27.8 | 76 | 14 | 43 | 58 | 10874 | 30310 | 748 | 445 | 606 | 892 |
| 90 | 24.5 | 27.0 | 71 | 13 | 37 | 53 | 10384 | 23610 | 588 | 427 | 574 | 804 |
| 85 | 23.9 | 26.3 | 69 | 12 | 33 | 48 | 10041 | 21215 | 499 | 413 | 542 | 764 |
| 80 | 23.3 | 26.0 | 67 | 11 | 30 | 44 | 9846 | 18910 | 469 | 403 | 516 | 725 |
| 75 | 23.0 | 25.7 | 64 | 11 | 27 | 40 | 9666 | 17212 | 431 | 391 | 497 | 700 |
| 70 | 22.7 | 25.3 | 62 | 11 | 25 | 37 | 9519 | 16152 | 408 | 379 | 483 | 679 |
| 65 | 22.3 | 25.0 | 60 | 10 | 24 | 34 | 9365 | 14990 | 386 | 367 | 473 | 658 |
| 60 | 22.1 | 24.7 | 59 | 10 | 22 | 30 | 9261 | 14260 | 365 | 356 | 462 | 646 |
| 55 | 21.8 | 24.3 | 57 | 10 | 21 | 27 | 9157 | 13315 | 343 | 344 | 454 | 636 |
| 50 | 21.6 | 24.1 | 56 | 9 | 19 | 25 | 9052 | 12787 | 329 | 335 | 445 | 629 |
| 45 | 21.3 | 23.9 | 54 | 9 | 18 | 21 | 8950 | 12336 | 312 | 327 | 437 | 622 |
| 40 | 21.1 | 23.6 | 52 | 9 | 17 | 15 | 8819 | 11590 | 292 | 318 | 433 | 612 |
| 35 | 20.7 | 23.2 | 50 | 8 | 16 | 12 | 8720 | 11152 | 283 | 311 | 425 | 601 |
| 30 | 20.4 | 22.9 | 48 | 8 | 14 | 10 | 8592 | 10513 | 265 | 303 | 419 | 590 |
| 25 | 20.0 | 22.5 | 46 | 8 | 13 | 8 | 8442 | 9942 | 251 | 293 | 411 | 582 |
| 20 | 19.6 | 22.0 | 43 | 7 | 12 | 5 | 8287 | 9256 | 239 | 277 | 404 | 573 |
| 15 | 19.1 | 21.4 | 41 | 7 | 9 | 0 | 8146 | 8764 | 224 | 259 | 393 | 562 |
| 10 | 18.5 | 20.6 | 39 | 6 | 6 | 0 | 7925 | 8038 | 208 | 231 | 382 | 547 |
| 5 | 17.3 | 19.2 | 33 | 5 | 0 | 0 | 7313 | 7149 | 173 | 177 | 358 | 524 |

# )ISTRICTS CLASSIFIED INTO UPPER, MIDDLE, OR LOWER THIRDS ON ;TATUS

| STUDENT BACKGROUND | | SCHOOL/STUDENT PERFORMANCE | | | | | | | | | SCHOOL OR DISTRICT SIZE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ATTITUDE MEASURES (DISTRICT MEANS) | | | BASIC SKILLS MEASURES (DISTRICT MEANS) | | | | | DROPOUT RATE | | |
| (13) PERCENT OF RACIAL-ETHNIC MINORITY STUDENTS | (14) STUDENTS' ESTIMATE OF SOCIOECONOMIC STATUS (DISTRICT MEANS) | (15) IMPORTANCE OF SCHOOL ACHIEVEMENT | (16) SELF PERCEPTION | (17) ATTITUDE TOWARD SCHOOL | (18) VOCABULARY | (19) READING | (20) MECHANICS OF WRITTEN ENGLISH | (21) MATHEMATICS | (22) BASIC SKILLS COMPOSITE ACHIEVEMENT | (23) SCHOOL DROPOUT RATE (1968-69) | (25) DISTRICT STATE AID MEMBERSHIP | |
| 22 | 54.3 | 52.1 | 52.5 | 53.5 | 55.6 | 55.4 | 56.0 | 56 4 | 55.7 | 10 2 | 11990 | 95 |
| 10 | 52.9 | 51 4 | 51.7 | 52 5 | 54 1 | 54 2 | 54.1 | 54.4 | 54 2 | 8.4 | 7105 | 90 |
| 7 | 52.2 | 51.0 | 51.2 | 51.9 | 53.3 | 53.7 | 53.4 | 53.8 | 53.5 | 7.5 | 5370 | 85 |
| 5 | 51.6 | 50.7 | 50.9 | 51.5 | 52.7 | 53.1 | 52.8 | 53.2 | 52.9 | 7.0 | 4327 | 80 |
| 4 | 51.2 | 50.5 | 50.7 | 51.3 | 52.2 | 52.8 | 52.4 | 52.8 | 52.6 | 6.6 | 3685 | 75 |
| 3 | 50.7 | 50.3 | 50 5 | 51.0 | 51.8 | 52.5 | 52.0 | 52.4 | 52 2 | 6.2 | 2948 | 70 |
| 2 | 50.4 | 50.0 | 50.3 | 50.8 | 51.4 | 52.2 | 51.6 | 52.1 | 51.9 | 5.9 | 2501 | 65 |
| 2 | 50.2 | 49.9 | 50.0 | 50.6 | 51.2 | 51.9 | 51.2 | 51.7 | 51.6 | 5.6 | 2193 | 60 |
| 2 | 49.8 | 49.6 | 49 8 | 50.3 | 50.8 | 51.5 | 51.1 | 51.4 | 51.3 | 5.2 | 1994 | 55 |
| 1 | 49.6 | 49.4 | 49.7 | 50.1 | 50.5 | 51.3 | 50.8 | 51.1 | 51 0 | 4.9 | 1832 | 50 |
| 1 | 49.3 | 49.1 | 49.5 | 49.9 | 50.3 | 51.0 | 50.4 | 50.7 | 50.8 | 4.5 | 1586 | 45 |
| 1 | 49.0 | 48.9 | 49.4 | 49.7 | 49.9 | 50.7 | 50.1 | 50.4 | 50 5 | 4.2 | 1403 | 40 |
| 1 | 48.6 | 48.7 | 49.1 | 49.5 | 49.7 | 50.3 | 49.7 | 50.1 | 50 1 | 3.8 | 1206 | 35 |
| 1 | 48.3 | 48.5 | 48.8 | 49.2 | 49.5 | 49.9 | 49.4 | 49.7 | 49.8 | 3 5 | 1066 | 30 |
| 1 | 48 0 | 48.2 | 48.7 | 49.0 | 49.3 | 49.6 | 49.0 | 49.3 | 49.5 | 3.2 | 836 | 25 |
| 0 | 47.6 | 47.9 | 48.3 | 48.6 | 48 8 | 49.1 | 48.7 | 48.8 | 49.1 | 2.8 | 674 | 20 |
| 0 | 47.1 | 47.4 | 48.0 | 48.1 | 48.1 | 48.5 | 48.2 | 48.4 | 48.5 | 2.4 | 507 | 15 |
| 0 | 46.4 | 46.6 | 47.5 | 47.6 | 47 1 | 47.7 | 47.4 | 47.6 | 47.8 | 2.0 | 290 | 10 |
| 0 | 45.0 | 45.5 | 46.7 | 46.5 | 46.4 | 46.6 | 46.3 | 46 3 | 46.7 | 1.3 | 137 | 5 |

PERCENTILE DISTRIBUTION

| STUDENT BACKGROUND | | SCHOOL/STUDENT PERFORMANCE | | | | | | | | | SCHOOL OR DISTRICT SIZE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ATTITUDE MEASURES (DISTRICT MEANS) | | | BASIC SKILLS MEASURES (DISTRICT MEANS) | | | | | DROPOUT RATE | | |
| (13) PERCENT OF RACIAL-ETHNIC MINORITY STUDENTS | (14) STUDENTS' ESTIMATE OF SOCIOECONOMIC STATUS (DISTRICT MEANS) | (15) IMPORTANCE OF SCHOOL ACHIEVEMENT | (16) SELF PERCEPTION | (17) ATTITUDE TOWARD SCHOOL | (18) VOCABULARY | (19) READING | (20) MECHANICS OF WRITTEN ENGLISH | (21) MATHEMATICS | (22) BASIC SKILLS COMPOSITE ACHIEVEMENT | (23) SCHOOL DROPOUT RATE (1968-69) | (25) DISTRICT STATE AID MEMBERSHIP | |
| 22 | 54.8 | 52.6 | 52.5 | 54.0 | 54.8 | 54.8 | 55.0 | 56.1 | 54.9 | 10.2 | 12227 | 95 |
| 10 | 53.1 | 51.6 | 51.6 | 53.0 | 53.8 | 53.8 | 54.1 | 54.6 | 54.1 | 8.4 | 7280 | 90 |
| 7 | 52.4 | 51.1 | 51.3 | 52.5 | 53.1 | 53.3 | 53.2 | 54.0 | 53.3 | 7.5 | 5429 | 85 |
| 5 | 52.0 | 50.8 | 50.9 | 52.1 | 52.5 | 52.8 | 52.6 | 53.3 | 52.7 | 7.0 | 4357 | 80 |
| 4 | 51.6 | 50.6 | 50.7 | 51.7 | 52.1 | 52.4 | 52.2 | 52.8 | 52.3 | 6.6 | 3519 | 75 |
| 3 | 51.4 | 50.3 | 50.5 | 51.4 | 51.6 | 52.1 | 51.8 | 52.4 | 52.0 | 6.2 | 3050 | 70 |
| 2 | 51.1 | 50.1 | 50.2 | 51.0 | 51.4 | 51.7 | 51.5 | 52.0 | 51 8 | 5.9 | 2564 | 65 |
| 2 | 50.7 | 49.8 | 50.0 | 50.7 | 51.1 | 51.4 | 51.2 | 51.8 | 51 5 | 5.6 | 2278 | 60 |
| 2 | 50.3 | 49.7 | 49.8 | 50.5 | 50.8 | 51.2 | 50.9 | 51.5 | 51.2 | 5.2 | 2043 | 55 |
| 1 | 50.1 | 49.5 | 49.6 | 50.3 | 50.5 | 51.0 | 50.6 | 51.2 | 51.0 | 4.9 | 1884 | 50 |
| 1 | 49.8 | 49.2 | 49.4 | 50.0 | 50.3 | 50.8 | 50.3 | 51.0 | 50.8 | 4.5 | 1643 | 45 |
| 1 | 49.5 | 49.0 | 49.2 | 49.8 | 50.0 | 50.6 | 50.0 | 50.7 | 50.4 | 4.2 | 1439 | 40 |
| 1 | 49.1 | 48.8 | 48.9 | 49.5 | 49.8 | 50.2 | 49.7 | 50.4 | 50.1 | 3.8 | 1248 | 35 |
| 1 | 48.8 | 48.6 | 48.7 | 49.3 | 49.4 | 49.9 | 49.4 | 50 1 | 49.8 | 3.5 | 1118 | 30 |
| 1 | 48 5 | 48.3 | 48.4 | 49.0 | 49.0 | 49.5 | 49.0 | 49.8 | 49.5 | 3.2 | 893 | 25 |
| 0 | 48.1 | 48.0 | 48.0 | 48.8 | 48.6 | 49.2 | 48.7 | 49.2 | 49.2 | 2.8 | 738 | 20 |
| 0 | 47.7 | 47.6 | 47.7 | 48.3 | 48.1 | 48.8 | 48.2 | 48.6 | 48.8 | 2.4 | 561 | 15 |
| 0 | 47.0 | 47.1 | 47.2 | 47.8 | 47.3 | 48.3 | 47.5 | 48.0 | 48.1 | 2.0 | 358 | 10 |
| 0 | 45.7 | 46.3 | 46.2 | 46.9 | 46.1 | 46.9 | 46.4 | 46.5 | 47.0 | 1.3 | 175 | 5 |

PERCENTILE DISTRIBUTION

# AVERAGE SCORES ON ASSESSMENT MEASURES FOR MICHIGAN SCHOOLS CLASSIFIED INTO UPPER, MIDDLE, OR LOWER THIRDS ON

## SOCIOECONOMIC STATUS

### GRADE 4

| PERCENTILE DISTRIBUTION | SCHOOL RESOURCES: HUMAN RESOURCES (1) PUPIL PROF. INSTRUCTIONAL STAFF RATIO | (2) PUPIL TEACHER RATIO | (3) PERCENT TEACHERS WITH 5 OR MORE YEARS EXPERIENCE | (5) PERCENT TEACHERS WITH MASTERS DEGREE | (6) PERCENT TEACHERS EARNING $11 000 OR MORE | STUDENT BACKGROUND (13) PERCENT RACIAL-ETHNIC MINORITY STUDENTS | (14) STUDENTS' ESTIMATE OF SOCIO ECONOMIC STATUS (SCHOOL MEANS) | SCHOOL/STUDENT PERFORMANCE: ATTITUDE MEASURES (SCHOOL MEANS) (15) IMPORTANCE OF SCHOOL ACHIEVEMENT | (16) SELF PERCEPTION | (17) ATTITUDE TOWARD SCHOOL | BASIC SKILLS MEASURES (SCHOOL MEANS) (18) VOCABULARY | (19) READING | (20) MECHANICS OF WRITTEN ENGLISH | (21) MATHEMATICS | (22) BASIC SKILLS COMPOSITE ACHIEVEMENT | SCHOOL OR DISTRICT SIZE (24) NUMBER OF STUDENTS IN SCHOOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 28.8 | 31.3 | 92 | 50 | 79 | 91 | 58.0 | 53.8 | 53.8 | 53.9 | 56.9 | 56.2 | 56.4 | 57.0 | 56.4 | 702 |
| 90 | 27.7 | 30.1 | 85 | 41 | 71 | 32 | 55.5 | 52.8 | 52.9 | 53.1 | 55.4 | 55.1 | 55.2 | 55.5 | 55.0 | 595 |
| 85 | 26.8 | 29.4 | 80 | 37 | 65 | 16 | 54.1 | 52.3 | 52.2 | 52.5 | 54.4 | 54.3 | 54.3 | 54.5 | 54.3 | 536 |
| 80 | 26.2 | 28.8 | 76 | 33 | 60 | 9 | 53.1 | 51.9 | 51.8 | 52.0 | 53.6 | 53.7 | 53.7 | 53.9 | 53.6 | 497 |
| 75 | 25.6 | 28.3 | 73 | 30 | 56 | 6 | 52.4 | 51.5 | 51.4 | 51.6 | 53.0 | 53.2 | 53.1 | 53.4 | 53.1 | 465 |
| 70 | 25.1 | 27.8 | 70 | 28 | 53 | 4 | 51.7 | 51.2 | 51.1 | 51.3 | 52.3 | 52.7 | 52.5 | 52.8 | 52.6 | 439 |
| 65 | 24.6 | 27.3 | 67 | 25 | 50 | 3 | 51.3 | 50.9 | 50.8 | 51.0 | 51.8 | 52.3 | 52.1 | 52.3 | 52.2 | 414 |
| 60 | 24.2 | 26.9 | 64 | 23 | 46 | 3 | 50.7 | 50.6 | 50.4 | 50.8 | 51.4 | 51.9 | 51.6 | 51.9 | 51.8 | 388 |
| 55 | 23.8 | 26.5 | 62 | 21 | 43 | 2 | 50.3 | 50.2 | 50.1 | 50.4 | 51.0 | 51.5 | 51.1 | 51.4 | 51.4 | 366 |
| 50 | 23.3 | 26.1 | 60 | 18 | 39 | 2 | 49.9 | 49.9 | 49.9 | 50.1 | 50.6 | 51.1 | 50.7 | 50.9 | 50.9 | 345 |
| 45 | 22.8 | 25.7 | 57 | 17 | 36 | 1 | 49.4 | 49.2 | 49.7 | 49.8 | 50.1 | 50.6 | 50.2 | 50.5 | 50.5 | 326 |
| 40 | 22.4 | 25.3 | 55 | 15 | 32 | 1 | 48.9 | 49.0 | 49.4 | 49.5 | 49.7 | 50.2 | 49.8 | 50.1 | 50.0 | 307 |
| 35 | 21.9 | 24.9 | 52 | 13 | 28 | 1 | 48.4 | 49.1 | 49.2 | 49.1 | 49.2 | 49.6 | 49.3 | 49.6 | 49.6 | 285 |
| 30 | 21.4 | 24.4 | 50 | 11 | 23 | 1 | 48.0 | 48.9 | 48.8 | 48.8 | 48.8 | 49.1 | 48.8 | 48.9 | 49.1 | 262 |
| 25 | 20.8 | 23.8 | 46 | 9 | 18 | 1 | 47.3 | 48.3 | 48.5 | 48.5 | 48.2 | 48.5 | 48.2 | 48.3 | 48.5 | 236 |
| 20 | 20.2 | 23.1 | 43 | 7 | 14 | 0 | 46.5 | 47.9 | 48.1 | 48.0 | 47.5 | 47.7 | 47.5 | 47.6 | 47.9 | 208 |
| 15 | 19.5 | 22.3 | 38 | 4 | 8 | 0 | 45.6 | 47.5 | 47.7 | 47.5 | 46.5 | 46.6 | 46.5 | 46.4 | 46.6 | 174 |
| 10 | 18.4 | 21.4 | 34 | 0 | 0 | 0 | 44.3 | 46.7 | 47.2 | 47.0 | 45.0 | 45.1 | 44.8 | 44.9 | 45.1 | 147 |
| 5 | 16.8 | 20.0 | 28 | 0 | 0 | 0 | 42.6 | 45.5 | 46.3 | 46.0 | 43.0 | 42.5 | 42.7 | 42.4 | 42.9 | 104 |

### GRADE 7

| PERCENTILE DISTRIBUTION | SCHOOL RESOURCES: HUMAN RESOURCES (1) PUPIL PROF. INSTRUCTIONAL STAFF RATIO | (2) PUPIL TEACHER RATIO | (3) PERCENT TEACHERS WITH 5 OR MORE YEARS EXPERIENCE | (5) PERCENT TEACHERS WITH MASTERS DEGREE | (6) PERCENT TEACHERS EARNING $11,000 OR MORE | STUDENT BACKGROUND (13) PERCENT RACIAL-ETHNIC MINORITY STUDENTS | (14) STUDENTS' ESTIMATE OF SOCIO ECONOMIC STATUS (SCHOOL MEANS) | SCHOOL/STUDENT PERFORMANCE: ATTITUDE MEASURES (SCHOOL MEANS) (15) IMPORTANCE OF SCHOOL ACHIEVEMENT | (16) SELF PERCEPTION | (17) ATTITUDE TOWARD SCHOOL | BASIC SKILLS MEASURES (SCHOOL MEANS) (18) VOCABULARY | (19) READING | (20) MECHANICS OF WRITTEN ENGLISH | (21) MATHEMATICS | (22) BASIC SKILLS COMPOSITE ACHIEVEMENT | SCHOOL OR DISTRICT SIZE (24) NUMBER OF STUDENTS IN SCHOOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 27.7 | 30.6 | 84 | 53 | 71 | 76 | 55.8 | 53.0 | 52.8 | 53.9 | 55.3 | 55.3 | 55.4 | 56.4 | 55.4 | 1344 |
| 90 | 25.9 | 28.6 | 76 | 45 | 62 | 26 | 53.8 | 52.3 | 52.0 | 52.9 | 54.1 | 54.2 | 54.4 | 54.7 | 54.4 | 1153 |
| 85 | 25.0 | 27.5 | 71 | 40 | 57 | 15 | 52.8 | 51.8 | 51.5 | 52.4 | 53.3 | 53.5 | 53.4 | 54.1 | 53.6 | 1029 |
| 80 | 23.9 | 26.7 | 68 | 38 | 53 | 9 | 52.2 | 51.3 | 51.2 | 51.9 | 52.6 | 53.0 | 52.8 | 53.3 | 52.9 | 941 |
| 75 | 23.3 | 26.0 | 65 | 35 | 48 | 6 | 51.8 | 51.0 | 50.9 | 51.5 | 52.3 | 52.5 | 52.3 | 52.8 | 52.5 | 867 |
| 70 | 22.7 | 25.4 | 63 | 32 | 45 | 4 | 51.5 | 50.7 | 50.6 | 51.2 | 51.9 | 52.2 | 51.9 | 52.4 | 52.1 | 805 |
| 65 | 22.1 | 24.9 | 61 | 31 | 41 | 3 | 51.1 | 50.5 | 50.4 | 50.9 | 51.5 | 51.8 | 51.5 | 52.0 | 51.8 | 731 |
| 60 | 21.7 | 24.4 | 58 | 28 | 38 | 2 | 50.8 | 50.3 | 50.2 | 50.6 | 51.2 | 51.4 | 51.2 | 51.7 | 51.4 | 675 |
| 55 | 21.2 | 24.0 | 56 | 26 | 34 | 2 | 50.4 | 50.1 | 49.9 | 50.4 | 50.8 | 51.2 | 50.8 | 51.4 | 51.2 | 628 |
| 50 | 20.8 | 23.6 | 53 | 25 | 31 | 2 | 50.1 | 49.8 | 49.7 | 50.1 | 50.5 | 50.9 | 50.5 | 51.0 | 50.9 | 590 |
| 45 | 20.4 | 23.1 | 51 | 22 | 27 | 1 | 49.7 | 49.6 | 49.5 | 49.9 | 50.2 | 50.7 | 50.1 | 50.7 | 50.6 | 538 |
| 40 | 20.1 | 22.8 | 50 | 21 | 24 | 1 | 49.3 | 49.3 | 49.2 | 49.6 | 49.9 | 50.3 | 49.9 | 50.3 | 50.2 | 502 |
| 35 | 19.7 | 22.5 | 47 | 19 | 20 | 1 | 48.9 | 49.1 | 48.9 | 49.4 | 49.5 | 50.0 | 49.5 | 50.0 | 49.9 | 456 |
| 30 | 19.4 | 22.1 | 44 | 17 | 16 | 1 | 48.3 | 48.8 | 48.7 | 49.1 | 49.0 | 49.6 | 49.2 | 49.4 | 49.5 | 407 |
| 25 | 18.9 | 21.6 | 41 | 15 | 12 | 0 | 47.9 | 48.6 | 48.5 | 48.8 | 48.5 | 49.1 | 48.7 | 48.9 | 49.1 | 366 |
| 20 | 18.4 | 21.0 | 38 | 12 | 7 | 0 | 47.1 | 48.2 | 48.1 | 48.5 | 48.0 | 48.6 | 47.9 | 48.2 | 48.5 | 317 |
| 15 | 17.8 | 20.4 | 35 | 10 | 0 | 0 | 46.3 | 47.8 | 47.8 | 48.2 | 47.1 | 47.7 | 47.3 | 47.4 | 47.7 | 272 |
| 10 | 17.0 | 19.5 | 31 | 6 | 0 | 0 | 45.0 | 47.3 | 47.3 | 47.6 | 45.4 | 46.3 | 45.8 | 45.4 | 46.0 | 214 |
| 5 | 15.8 | 18.0 | 25 | 0 | 0 | 0 | 42.7 | 46.4 | 46.3 | 46.9 | 42.7 | 43.8 | 43.4 | 42.0 | 43.1 | 135 |

SECTION VI

## SUMMARY

This section briefly summarizes the data presented in Sections IV and V. The section should only be read after examining and understanding the limits and cautions discussed in Section II.

### Composite Achievement

1-a If a district ranks high, in the middle, or low on mean composite achievement, can we expect that it will have a similar rank on other assessment measures?

1-b If a school ranks high, in the middle, or low on mean composite achievement, can we expect that it will have a similar rank on other assessment measures?

In general, the answer was yes to both of these questions. Furthermore, the answer was generally yes at both the fourth and seventh grade levels and for both the district level and school level data.

Those districts and schools that scored in the upper third on a ranking of the State's districts and schools on composite achievement showed a clear tendency to score relatively high on other measures also. Those districts and schools that scored in the middle and lower thirds on composite achievement generally scored in the middle and lower thirds, respectively, on the other assessment measures. However, it should be noted that the picture was less clear for these thirds than for the upper third.

It is notable that, regardless of exceptions in other educational measures, when composite achievement is high, socioeconomic status also is high. When composite achievement is low, socioeconomic status also is low. Rankings on other measures, particularly those on school resources, both human and financial, presented a much less distinct pattern.

Socioeconomic Status

2-a If a district ranks high, in the middle, or low on mean socioeconomic status, can we expect that it will have a similar rank on other assessment measures?

2-b If a school ranks high, in the middle, or low on mean sociceconomic status, can we expect that it will have a similar rank on other assessment measures?

In general, the answer ' yes to both of these questions. Furthermore, the answer was generally yes at both the fourth and seventh grade levels and for both the district level and school level data. Those districts and schools that scored in the upper third on a ranking of the State's districts and schools on socioeconomic status showed a clear tendency to score relatively high on the other measures also. Those districts and schools that scored in the middle and lower thirds, respectively, on socioeconomic status generally scored in the middle and lower thirds on the other assessment measures.

Those districts and schools ranking high on socioeconomic status also ranked high on composite achievement. Those ranking low on socioeconomic status also ranked low on composite achievement. The association between socioeconomic status and some other measures, however, is clouded by several exceptions, particularly in the middle and lower thirds.

## APPENDIX

## DEFINITIONS OF THE EDUCATIONAL ASSESSMENT MEASURES

For the reader's convenience, the twenty-five measures reported in the Michigan Educational Assessment Program are defined below. Those measures which are newly added since the 1969-70 assessment program are indicated by an asterisk (*).

### I. SCHOOL RESOURCES

#### A. Human Resources

Seven human resource measures were included in the 1970-71 educational assessment program: (1) *pupil-professional instructional staff ratio;* (2) *pupil-teacher ratio;* (3) *percent of teachers with five or more years experience;* (4) *average years teaching experience (1969-70);* (5) *percent of teachers with Masters degree;* (6) *percent of teachers earning $11,000 or more;* (7) *average salary of teachers (1969-70).* Each measure is described below.

**1. Pupil-Professional Instructional Staff Ratio***

The information to compute this measure was taken from the "Fourth Friday Report". The total number of pupils was obtained by counting all pupils enrolled in grades one through twelve *except* special education pupils. Pupils who attended the school for a portion of the day and attended a nonpublic school for the remainder of the day, were included on a full time equivalency basis. For example, a pupil who attended the school for one-fourth of each day and attended a nonpublic school for the other three-fourths of each day was counted as 1/4 pupil. The total number of professional instructional staff was obtained by adding the number of elementary and secondary staff (expressed as full time equivalency) in the following categories; principals, assistant principals, other administrators (excluding district-wide administrative staff), consultants and supervisors, classroom teachers, librarians, audio-visual staff, guidance personnel and school counselors, psychological staff, radio and television instructional staff, teachers of the homebound, and other instructional staff. In order to obtain the pupil-professional instructional staff ratio, the total number of pupils was divided by the total number of professional instructional staff.

**2. Pupil-Teacher Ratio**

The information to compute this measure was taken from the "Fourth Friday Report". The total number of pupils was obtained by counting all pupils enrolled in grades one through twelve *except* special education pupils. Pupils who attended the school for a portion of the day and attended a nonpublic school for the remainder of the day, were included on a full time equivalency basis. The total number of teachers was obtained by adding the number of elementary and secondary classroom teachers. *Kindergarten teachers, special education teachers, and non-classroom teachers were not included in the total.* In order to obtain the *pupil-teacher ratio,* the total number of pupils was divided by the total number of teachers.

**3. Percent of Teachers with Five or More Years Experience***

The information to compute this measure was taken from the "Fourth Friday Report". It was obtained by dividing the number of classroom teachers (full-time and part-time) with five years or more teaching experience, by the total number of classroom teachers (full-time and part-time). The resultant value was multiplied by 100 to convert to a percent figure.

**4. Average Years Teaching Experience (1969-70)**

The information to compute this measure was taken from records provided by the local district and filed with the Michigan Department of Education. The information was based on the 1969-70 academic year. Excluded from the calculation of average years teaching experience were individuals who were employed to work exclusively in the areas of administration, special education, adult education, guidance and counseling, and nursery work. All other professional personnel employed by the district were included in calculating average years of teaching experience. It was obtained by dividing the total years of teaching experience by the total number of teachers (full-time and part-time).

**5. Percent of Teachers with Masters Degree**

The information to compute this measure was taken from the "Fourth Friday Report". It was obtained by dividing the number of classroom teachers (full-time and part-time) who had completed all of the requirements for a Masters degree by the total number of classroom teachers (full-time and part-time). The resultant value was multiplied by 100 to convert to a percent figure.

**6. Percent of Teachers Earning $11,000 or More***

The information to compute this measure was taken from the "Fourth Friday Report". Teachers

were considered to earn $11,000 or more if their contractual salary for the academic year (excluding summer) was at least $11,000. *Supplementary money paid for responsibilities such as coaching was not included as part of the contractual salary.* Part-time teachers were considered to earn at least $11,000 if their full-time salary would equal at least $11,000. This measure was obtained by dividing the number of classroom teachers (full-time and part-time) who earned at least $11,000 by the total number of classroom teachers (full-time and part-time). The result was multiplied by 100 to convert to a percent figure.

### 7. Average Salary of Teachers (1969-70)

The information necessary to compute this measure was taken from records provided by the local districts and filed with the Michigan Department of Education. In order to compute the average salary of teachers, two values were necessary: (1) total salaries paid to teachers and (2) number of teachers. The value for total salaries paid to teachers was taken from financial information reported for the fiscal year which ended June 30, 1970. Included in the total were salaries paid to elementary teachers and salaries paid to secondary teachers (full-time and part-time); *salaries paid to special education teachers were not included.* The number of teachers was based on information reported as of September 26, 1969 (the fourth Friday of the 1969-70 academic year). It is a count of elementary and secondary teachers employed as of that date.

The average salary paid to elementary and secondary teachers was computed by dividing the total salaries by the number of teachers. Since each of these two figures is taken from a different report prepared at a different time of the year, *the resultant average salary must be considered as an estimate.* It could be in error if the number of teaching positions actually paid for during the academic year differed from the number of teachers reported as of the fourth Friday after Labor Day.

## B. School Financial Resources

Five school financial resources were included in the 1970-71 educational assessment program: (1) *state equalized valuation per resident pupil;* (2) *local revenue per pupil;* (3) *state school aid per pupil,* (4) *K-12 instructional expense per pupil;* and (5) *total current operating expense per pupil.* These measures are available at the district level only and are based on 1969-70 data. Each measure is described in detail below.

### 8. State Equalized Valuation per Resident Pupil (1969-70)

The information to compute this measure was taken from records filed with the Michigan Department of Education. The total state equalized valuation (SEV) is equal to approximately 50 percent of the fair cash value of the real and personal property in the district. It is calculated as of May 22, 1969 (the fourth Monday in May) and applied to the 1969-70 academic year. In order to obtain a per pupil value for SEV, the total SEV was divided by resident membership. Resident membership includes all pupils residing in the district who attended public school in that district or in any other district; resident membership excludes pupils who attend school in the district but reside in another district, as well as excluding pupils who attend private or parochial schools.

### 9. Local Revenue per Pupil (1969-70)

The information to compute this measure was taken from records provided by the local districts and filed with the Michigan Department of Education. The financial information was reported for the fiscal year which ended June 30, 1970. The total value for local revenue included revenue from sources such as the following; property tax (the major source of local revenue), local government appropriations, tuition, transportation fees, revolving funds (i.e., revenue from food services, book stores, and student body activities) rent from school facilities, etc. Tuition from community college patrons was not included in the calculation. In order to obtain local revenue per pupil, total local revenue was divided by the total number of pupils enrolled in the district as of September 26, 1969 (the fourth Friday of the 1969-70 academic year).

### 10. State School Aid per Pupil (1969-70)

The information to compute this measure was taken from records provided by the local districts and filed with the Michigan Department of Education. The financial data were reported for the fiscal year which ended June 30, 1970. The value for total state school aid represented the direct appropriations from the state *including appropriations for state school aid, driver education, underprivileged children, and other state grants.* In order to compute the *state school aid per pupil,* the total state school aid was divided by the total number of pupils enrolled in the district as shown in the "Fourth Friday Report".

### 11. K-12 Instructional Expense per Pupil (1969-70)

The information to compute this measure was taken from records provided by the local districts and filed with the Michigan Department of Education. The financial information was reported for the fiscal year which ended June 30, 1970. The total K-12 instructional expense included expenditures for salaries and supplies connected with elementary education and secondary education. Expenditures associated

with community colleges special education, summer school, and adult education were omitted from the calculation. In order to obtain a value for instructional expense per pupil, total K-12 instructional expense was divided by the total number of pupils enrolled in the district less special education students as shown in the "Fourth Friday Report".

12. Total Current Operating Expense per Pupil (1969-70)

The information to compute this measure was taken from records provided by the local districts and filed with the Michigan Department of Education. The financial information was reported for the fiscal year which ended June 30, 1970. The total current operating expense included expenses connected with administration, attendance, health services, pupil transportation, plant operation, plant maintenance, and fixed charges, in addition to instructional expenses (including elementary, secondary, special education, summer school, and adult education instructional expenses). Community college expenses were not included in the computation of total operating expense, the value for total current operating expense was divided by the total number of pupils enrolled in the district as shown in the "Fourth Friday Report".

## II. STUDENT BACKGROUND

### A. Student Racial-Ethnic Background*

**(13) Percent of racial-ethnic minority students** was computed for each school in the state. The information to compute this measure was taken from the "Fourth Friday Report". The total number of racial-ethnic minority students included all racial-ethnic minority students in the school *except* pre-kindergarten students. Kindergarten students, special education students and part-time students were all included in the total. Since the information was expressed in terms of a head count, part-time students were not counted differently from full-time students. Students were classified as belonging to a racial-ethnic minority group if they were considered by the school to be of that group. The total number of students included all students except pre-kindergarten students. Again kindergarten students, special education students, and part-time students were included in the total. In order to calculate the *percent of racial-ethnic minority* students, the total number of racial-ethnic minority students was divided by the total number of students and the resultant figure was multiplied by 100.

### B. Student Socioeconomic Background

**(14) Students' estimate of socioeconomic status** was computed for each school in the state. The assessment battery included twenty-five questions designed to indirectly assess group socioeconomic background. The questions concerned biographical information, educational attainment of parents, quality housing, family structure and stability, occupation, income, and possessions. For this measure, the questions asked of the fourth graders and the questions asked of the seventh graders were identical. It is important to note that the students anonymously responded to these questions; only the school name—not the student's name—was recorded on the answer sheet. Thus, it is impossible for anyone to ascertain the responses of a particular individual. *Indeed, the purpose of the instrument is to arrive at a group measure not individual pupil measures.*

## III. SCHOOL/STUDENT PERFORMANCE

### A. Performance on Attitude Measures

Three students attitude measures were included in the 1970-71 educational assessment battery. These were: (1) *importance of school achievement;* (2) *self-perception;* and (3) *attitude toward school.* For these three measures, students in the fourth and seventh grades received identical questions. As in the case of the student socioeconomic background measure, the *purpose of the attitude instrument is to arrive at a group measure not individual pupil measures.* Each is discussed below.

15. Importance of School Achievement

The assessment battery included eight questions regarding the importance of school achievement. Here, too, it is important to note that the students anonymously responded to these questions; only the school name—not the student's name—was recorded on the answer sheet. Thus, again it is impossible for anyone to ascertain the response of a particular individual. A high score indicates that on the average pupils believe good school achievement is important.

16. Self-Perception

The assessment battery included seven questions designed to measure the student's self-perception. Again, the students responded anonymously. A high score indicates that on the average pupils believe themselves to be quite capable in school situations

17. Attitude Toward School

The assessment battery included seven questions designed to measure the student's attitude toward school. Responses were anonymous. A high score indicates that on the average pupils have a positive attitude toward school.

### B. Performance on Basic Skills Measures

Performance on the basic skills portion was determined by measuring the following: (1) *vocabu-*

*lary;* (2) *reading;* (3) *mechanics of written English;* (4) *mathematics;* and (5) *composite achievement.* The number of items and time limits were increased for these tests in order to produce individually reliable measures. Additional technical information concerning these measures will be provided in a future educational assessment report.

### 18. Vocabulary

The *vocabulary* test contained 50 verbal analogy problems which were designed to measure students' knowledge of the meaning of words and the relationships between words and concepts. The time allowed to work on this section was 20 minutes at both grades.

### 19. Reading

The *reading* test contained 50 questions which assessed paragraph comprehension, ability to understand words from the context in which they are encountered, and ability to identify the correct synonym for a word. Students at both grade levels were allowed 35 minutes to work on this section.

### 20. Mechanics of Written English

The *mechanics of written English* test consisted of four parts, each separately timed. In part A, spelling, students were to identify misspelled words. The fourth grade test presented 15 items to be completed in five minutes; the seventh grade test had 20 items and allowed six minutes. In part B, effectiveness of written expression, students were required to select the best way of expressing a thought. The test contained 14 items for each grade and nine minutes were allowed for its completion. In part C, written usage, students were to recognize grammatical errors. The fourth grade test contained 14 items and the seventh grade test contained 17 items; both tests to be completed in eight minutes. In part D, punctuation and capitalization, students were to recognize errors of punctuation and capitalization. The fourth grade test presented 12 items to be completed in eight minutes, and the seventh grade test presented 14 items to be completed in seven minutes.

### 21. Mathematics

The *mathematics* test involved mathematical reasoning and problem solving. In addition, problems in the seventh grade test involved algebraic and geometric concepts. Each grade had 30 minutes in which to answer 40 questions.

### 22. Basic Skills Composite Achievement

A *composite achievement* score was computed for each student. The composite score was obtained by averaging the individual's standard scores on *reading,* the *mechanics of written English,* and the *mathematics* tests. The test scores were averaged in such a way that each score contributed equally to the average—despite the fact that the number of items was different on the three tests. IT SHOULD BE NOTED THAT THE *VOCABULARY* TEST SCORE WAS NOT INCLUDED IN THE CALCULATION OF THE COMPOSITE ACHIEVEMENT SCORE. The *vocabulary* score is believed to respond more slowly to the influence of schooling. Therefore, the *vocabulary* score was excluded to focus the composite achievement score upon those aspects of achievement that respond more readily to change.

## C. Performance on Dropout Rate (1969-70)*

**(23) School dropout rate** was computed from information taken from records provided by the local districts and filed with the Michigan Department of Education. The measure was based on the local district's enrollment of students in grades 9-12 during the 1968-69 academic year. Included as dropouts were students who left school for any of the following reasons: married, sent to corrective institution, accepted employment, or dropped from attendance roll because absent 10-30 days. *Not* included as dropouts were students who left the district because they transferred to another district, were sent to institutions for defectives, or the student was sick or died. The dropout rate is calculated by dividing the number of dropouts by the sum of the number of students enrolled on the "fourth Friday" plus new students enrolled during the year. The resultant figure was multiplied by 100.

## IV. SCHOOL AND DISTRICT SIZE

**(24) Number of Students in school** was obtained by counting all pupils enrolled in grades one through twelve *except* special education pupils. Kindergarten pupils were not counted. Pupils who attended the school for a portion of the day and attended a nonpublic school for the remainder of the day, were included on a full time equivalency basis. For example, a pupil who attended a school for one-fourth of each day and attended a nonpublic school for the other three-fourths of each day was counted as 1/4 pupil.

**(25) District state aid membership*** is defined as the total number of pupils legally enrolled in the district at the close of school on the fourth Friday following Labor Day of the school year. The count includes prorated portions of instructional time spent by private school pupils in the public school district.