

DOCUMENT RESUME

ED 359 602

EA 024 993

TITLE Student, Teacher and School Performance. Eighth Annual Report Submitted to the Governor and the General Assembly of the State of Tennessee.

INSTITUTION Tennessee State Board of Education, Nashville.

PUB DATE 29 Jan 93

NOTE 48p.

PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS Academic Achievement; *Educational Assessment; *Educational Objectives; Elementary School Students; Elementary Secondary Education; *Outcomes of Education; *Performance; Public Schools; Secondary School Students; State Action; State Norms; *State Standards

IDENTIFIERS *Tennessee; *Tennessee Comprehensive Assessment Program

ABSTRACT

This report establishes the performance goals for Tennessee school systems, established in accordance with the Education Improvement Act (EIA) of 1992, and describes the initiatives undertaken to assist school systems in achieving the goals. It also summarizes the results from various measures of student, teacher, and school performance. Performance goals to be achieved by the year 2000 include the following areas: academic gain, promotion, proficiency, graduation, and attendance. In general, student, teacher, and school performance results for 1991-92 show a steady improvement over the prior years. Appendices contain standardized test score data and a list of public school waivers and permits by area. (LMI)

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STUDENT, TEACHER AND SCHOOL PERFORMANCE

1993

**Eighth Annual Report
Submitted to the Governor and the
General Assembly
of the
State of Tennessee**

**State Board of Education
Commissioner of Education**

January 29, 1993

BEST COPY AVAILABLE

STUDENT, TEACHER AND SCHOOL PERFORMANCE

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THE PURPOSE

This report sets forth the performance goals for Tennessee school systems, established in accordance with the Education Improvement Act (EIA) of 1992, and describes the initiatives undertaken to assist school systems in achieving the goals. It also summarizes the results from various measures of student, teacher and school performance.

Prepared annually by the State Board of Education and the Commissioner of Education in accordance with the Public Education Governance Reform Act of 1984, this report is a record of the progress made in student, teacher and school performance over the last eight years. The accomplishments indicated represent a solid base for the innovations detailed in the EIA and the Board's Master Plan for Tennessee Schools: Preparing for the 21st Century. The information in this report provides the basis for annual adjustments in the Master Plan.

REPORT HIGHLIGHTS

In general, performance results for 1991-92 show steady improvement over prior years.

STUDENT PERFORMANCE

- Performance goals in five areas - academic gain (measured by value added assessment), promotion, proficiency, graduation, and attendance - have been established. School systems must achieve these goals, approved by the Commissioner of Education and the State Board of Education, by the year 2000.
- For the last three years scores on the Tennessee Comprehensive Assessment Program (TCAP) nationally normed test for students in grades 2-8 and 10 have been above the median national percentiles at every grade level and in each subject (with the exception of 2 subtests in 1991-92).
- Additionally, in 1993 TCAP test results will also be interpreted using value added assessment. Each year the assessment will measure the progress or academic growth made in five subject areas by students in grades 3-8.
- Mastery of the Tennessee curriculum, as measured by the TCAP criterion referenced tests in math and language arts, is especially high in the early grades and has varied somewhat in grades 5 through 8.
- On the TCAP Proficiency Test, 86% of all ninth graders satisfied the math requirement and 82% satisfied the language arts requirement in 1991-92. With the exclusion of special education students, the pass rates were 90% and 87% respectively. Results have been similar for the last three years.
- Attendance rates have been stable over the last eight years. In 1991-92 attendance was 94.7% in grades K-6. In grades 7-12 the rate was 92.3%.
- Promotion rates in grades K-8 have improved over the last seven years from 94% to 95.8%. Because retention in grade is correlated with dropping out of school, promotion rates - especially in grades 1, 7 and 8 - still need to improve.
- Approximately 73% of Tennessee students complete high school either by graduating from a regular high school program or by completing a GED by age 19.
- The drop out rate declined. A new method for counting and tracking students who actually drop out of school estimates that in 1991-92, 20.4% of 9th graders dropped out of school before the end of their 12th grade year. That is a decrease from 23.0% the previous year.

- In five years the number of students participating in the Advanced Placement (AP) program has increased 36%. There were 4,227 AP candidates in 1987. By 1992 there were 5,751. The percentage of exams receiving scores between 3 and 5 (the scores most colleges accept for credit) was 67% - one percentage point above the national average.
- The percentage of students receiving an honors diploma has increased dramatically from 1.4% in 1984-85 to 13.3% in 1991-92.
- In 1992, Tennessee's graduating students scored 20.2 on the composite ACT compared to the national average of 20.6. Since 1985, Tennessee's graduating students' scores on the American College Test (ACT) have improved considerably compared to scores nationwide. This is remarkable because two-thirds of Tennessee's graduating students take the ACT while nationally only one-third of the graduating students take the test.
- Average scores for the Scholastic Aptitude Test (SAT) in Tennessee continue to exceed national averages. In 1991-92, Tennessee's verbal score was 484, compared to 423 nationally; the average math score was 529 compared to 476 nationally. This year 14% of Tennessee seniors took the SAT compared to 42% of high school graduates nationally.
- Beginning in 1993-94, every sophomore will take one preliminary college preparation test - either the P-ACT+ or the PSAT - as a part of the state testing program. Integration of these tests into the regular testing program is expected to help students make better choices in their high school course selections. In 1991-92 more than 21,000 Tennessee students took these tests by choice.

TEACHER PERFORMANCE

- The most comprehensive teacher education reform in decades is being implemented in colleges and universities across the state. Rigorous new programs are attracting more and better candidates. In five years the number of teacher education graduates has increased 30%.
- The number of teacher education graduates from Tennessee public and private colleges and universities increased from 2,196 in 1986-87 to 2,473 in 1990-91. Tennessee hires an average of 3,000 new teachers each year. Slightly more than half are re-entering teachers with prior teaching experience. Nearly one-third of are from out-of-state institutions. Teacher turnover has averaged 7.02%, a rate consistent with national estimates.

SCHOOL PERFORMANCE

- As required by the EIA, a detailed annual report was produced for each of Tennessee's school systems in October 1992. The report included performance indicators, fiscal accountability reporting, and audit results.
- Among teachers employed in fall 1992, 5,101 had achieved Career Level III, 2,781 had achieved Career Level II, and 33,373 had achieved Career Level I. This represents 97% of those eligible. In addition, 2,079 administrators had achieved Career Level I, II, or III certification.

PERFORMANCE GOALS AND STANDARDS FOR TENNESSEE SCHOOL SYSTEMS

The Education Improvement Act of 1992 (EIA) calls for the Commissioner of Education to recommend, and for the State Board of Education to approve, performance goals and standards for school systems and schools regarding the educational progress, as determined through value added assessment, of students in grades three through eight. It also calls for school systems and schools to meet performance goals with respect to attendance rates, dropout rates, and other performance goals. Goals in two additional areas, proficiency and promotion rates, have been approved by the Board.

Implementation of performance goals to be achieved by the year 2000 will begin in five areas: academic gain (measured by value added assessment), promotion, proficiency, graduation, and attendance. Annual rates of progress in each area will be used to assess the degree of effectiveness in local schools. The performance goals for each school system are:

Goal I - Academic Gain

An average gain in reading, language, mathematics, science, and social studies at each grade in grades 3 through 8 that is equal to or greater than the average national gain measured by scale scores (plus or minus two standard errors of measurement) on the TCAP norm referenced tests.

- *Value added assessment results for school systems will be available April 1, 1993.*

Goal II - Promotion

An overall average student promotion rate of at least 97% in grades K-8.

- *The statewide average promotion rate in 1991-92 was 95.8%.*

Goal III - Proficiency

Student mastery of competencies in mathematics and language arts as measured by the TCAP Proficiency Test. The goal using the current test will be 90% success in language arts and in mathematics.

- *In 1991-92 the statewide average pass rate was 90% in mathematics and 87% in language arts. Beginning in 1993-94 a new test will assess skills at more advanced levels.*

Goal IV - Graduation

A graduation (school completion) rate of 90%. The rate shall be calculated by including the following as completers:

- a. Individuals who are enrolled in traditional high school programs and who receive a regular diploma, honors diploma, special education diploma, or a high school certificate in June or August graduations
 - b. Individuals 19 years and under who receive a regular diploma by completing an adult high school program
 - c. Individuals 19 years and under who receive a GED credential
- *The statewide average graduation rate in 1991-92 was 72.9%.*

Goal V - Attendance

An overall average attendance rate of at least 95% for students in grades K-6 and 93% for students in grades 7-12.

- *The statewide average attendance rates were 94.7% for grades K-6 and 92.3% for grades 7-12.*

STUDENT PERFORMANCE

Tennessee Comprehensive Assessment Program (TCAP)

The annual Tennessee Comprehensive Assessment Program (TCAP) was administered for the third time in 1992. The program includes three type of tests, each designed to meet a different need:

- * A nationally normed test, the CTBS/4 is mandated in grades 2 through 8 and grade 10. It provides a reference point to compare the performance of Tennessee students to student performance nationwide.
- * A criterion referenced test measures performance on the state math and language arts curriculum. It is administered with the norm referenced test in grades 2 through 8.
- * The TCAP Proficiency Test measures the achievement of minimum basic math and language arts skills by high school students.
- * This year for the second time, an optional writing assessment was administered in grade 11. In addition, 65 systems participated in a spring pilot test for writing assessment in grades 4 and 8.

TCAP Achievement Test

The TCAP Achievement Test is customized for grades 1 through 8 by combining the norm referenced and criterion referenced components into a single test. Only the norm referenced component is administered to grade 10. The program provides a consistent test format at each grade level and allows educators to track the progress of individual students from year to year.

Using norms established in 1989, the norm referenced test, the CTBS/4, includes assessment of reading, language, math, science, social studies, study and spelling skills. The test traces the growth of essentially the same group of students from year to year.

Statewide results are reported in two ways - median national percentiles and stanines.

The median national percentile is the midpoint in the distribution of percentile ranks for a particular group; 50% of the scores fall at or above the midpoint and 50% fall at or below. In Tennessee, the median national percentiles range from 46 (grade 6, science) to 68 (grade 2, total math). The percentile range broadens at the system level. With the exception in 1992 of grade 6 (total reading and science), Tennessee students as a group have scored at or above the 50th percentile on each norm referenced subtest for the three years the TCAP Achievement Test has been administered.

Stanine scores for the norm referenced test are based on a scale consisting of nine equal units ranging from a low of 1 to a high of 9. Stanines 1-3 are considered below average, stanines 4-6 are considered average, and stanines 7-9 are considered above average. In a normal distribution, 23% of the students have scores in the below average range, 54% in the average range, and 23% in the above average range.

For the third consecutive year, Tennessee student scores on the norm referenced subtests are clustered in the fifth stanine. Nationally 23% of the students fall in the above average stanines on each subtest. The percent of Tennessee students scoring in above average stanines is higher than the national average in 85% of the subtests. The bar charts in Appendix A show the distribution of norm referenced scores at each grade level.

The criterion referenced test, which was developed in Tennessee, measures performance on the state math and language arts curriculum and indicates the levels of mastery of grade level objectives in the domains tested. For example, in grade 2 the math domains tested are numeration, whole number operation, fractions, graphs and tables, measurement, geometry and problem solving; the language domains are mechanics, sentence and paragraph structure, spelling and word identification, comprehension and reference skills.

For each domain, scores show non-mastery, partial mastery and mastery of grade level skills. The bar charts in Appendix A also show the percent of students in each mastery category for the criterion referenced domains at each grade level. The difficulty level of the state curriculum objectives varies within domains from grade to grade; therefore, domain comparisons between grades cannot be made.

Statewide, domain mastery ranges from a high 96% mastery (grade 2, geometry) to a low 9% mastery (grade 6, ratio, proportion, and percent; grade 7, decimals). For the third year there is an overall greater mastery, with the exception of second grade, of the language arts domains. Second grade students have the highest percent of mastery in the math domains. Language arts performance is slightly greater in grades 3 through 5, but there is a more pronounced mastery difference in grades 6 through 8.

The TCAP summary information includes every student tested. Most special education students are included in the testing.

Student performance is greatly affected by the percent of students receiving free and reduced-price lunch. This data is available by groups of systems with similar economic backgrounds. The chart in Appendix B shows median national percentiles on the norm referenced portion of TCAP for subgroups of school systems based upon county per capita income and the percentage of students receiving free and reduced-price lunch.

Students tested on the TCAP Achievement Test were asked to respond to a short set of questions about school. Selected responses were correlated with performance on the total battery of the norm referenced portion of the test. Key findings are included in Appendix C.

Value Added Assessment

With the 1992 enactment by the Tennessee General Assembly of the 21st Century School Program, a new concept in measuring student achievement over time, called value added assessment, will have a major impact on how TCAP's nationally normed achievement test results are interpreted and used.

Currently, TCAP test results show how well students are achieving at a particular point in time compared to state averages. The value added assessment will measure the progress or academic growth made in reading, language arts, mathematics, science, and social studies each year by students in grades 3-8. By law, the results from the value added assessment will be reported as follows:

- Beginning April 1, 1993, a measure of annual academic growth or educational "value added" for each local school system.

- On or before July 1, 1994, a measure of annual academic growth or educational "value added" for each school.

The value added assessment results should provide teachers, parents, community members, and others with more precise information than is currently available. It should increase the ability to learn what works and what needs improvement.

TCAP Proficiency Test

The TCAP Proficiency Test is designed to ensure that all students who graduate from public schools with a regular diploma have demonstrated competency in a common set of minimum basic skills. Students must achieve a passing score of 70% on both the math and language arts subtests. Students first take the test as ninth graders and may retake the subtest(s) as often as necessary to achieve passing scores. Since 1991, fulfillment of the proficiency requirement may also be accomplished through satisfactory performance on specific math and language arts test items in the criterion referenced component of the eighth grade TCAP Achievement Test.

In 1992, 86% of all ninth graders satisfied the math requirement and 82% satisfied the language arts requirement. When the test scores of special education students are excluded, 90% of the ninth graders satisfied the math requirement, while 87% satisfied the language arts requirement. Results for three years are shown in Appendix D.

The performance goal for each school system specifies - with the exclusion of special education students - a 90% pass rate in both areas. Statewide averages are close to that goal, but there is considerable variation - from 77% to 100% in math and from 72% to 100% in language arts - among school systems.

In accordance with the EIA and Board policy, the TCAP Proficiency Test will be revised to require higher levels of competency with increased emphasis on problem solving.

Attendance

Poor school attendance is often associated with poor academic performance and dropping out of school. Over the last eight years attendance rates have been relatively stable.

The EIA requires all schools to maintain appropriate levels of school attendance. The performance goal for each school system specifies attendance rates of 95% for grades K-6 and 93% for grades 7-12. Among school systems, the current rates range from 92.5% to 97.1% for grades K-6 and from 87.4% to 97.5% for grades 7-12.

Attendance Rates (1984-1992)

<u>Year</u>	<u>Grades K-12</u>	<u>Grades K-6*</u>	<u>Grades 7-12*</u>
1984-85	94.9		
1985-86	94.3		
1986-87	94.2		
1987-88	93.9		
1988-89	93.6	94.7	92.5
1989-90	93.8	94.8	92.7
1990-91	93.9	94.9	92.7
1991-92	93.4	94.7	92.1

* (1984-1988) data not available for K-6 and 7-12.

Promotion

Promotion rates are important indicators of whether or not the instructional program is meeting the students' needs. Retaining students in a grade is expensive, frequently counterproductive, and is highly correlated with dropping out of school. Over the last seven years the statewide promotion rate for grades K-8 has increased from 94% to 95.8% - a positive trend.

The performance goal for each school system specifies a promotion rate of 97%. Among school systems the rate ranges from 91.9% to 99.7%. Promotion rates - particularly in grades 1, 7, and 8 where a disproportionate number of students are retained - need to improve. We are seeing improvement on the first grade level where promotion rates increased from 87.7% in 1985-86 to 93.1% in 1991-92.

Grades K Through 8 Promotion Rates (1984-85 Through 1991-92)

<u>Year</u>	<u>Promotion Rate</u>
1984-85	94.4%
1985-86	94.0%
1986-87	94.2%
1987-88	94.4%
1988-89	94.9%
1989-90	95.3%
1990-91	95.6%
1991-92	95.8%

**Promotion Rates By Grade Level
(1991-92)**

<u>Grade</u>	<u>Promotion Rate</u>
Kindergarten	96.8
First	93.1
Second	97.4
Third	98.1
Fourth	97.8
Fifth	97.5
Sixth	97.1
Seventh	91.2
Eighth	93.7
Average, K-8	95.8

Graduation

Three kinds of information are available relative to high school graduation: dropout information, diploma information, and graduation as defined for purposes of meeting the graduation performance goal.

Dropouts

Tennessee has improved its method for counting and tracking students who actually drop out of school. The Tennessee school register and the Department's policies and procedures for attendance accounting have been revised to distinguish students who drop out from those who transfer to other schools. These procedures are consistent with a method developed by the National Center for Education Statistics (NCES) which is currently being piloted in several states. The dropout rate differs from the graduation data in part because the dropout data does not take into account students who complete their senior year but do not graduate. The dropout rate has declined from 23.0% in 1990-91 to 20.4% in 1991-92, a decrease of 11%.

**Percent of 9th Graders Dropping Out Before the End of 12th Grade
(1990-91, 1991-92)**

	<u>Annual (Event) Rate</u>	<u>4-Year (Cohort) Rate</u>
1990-91	6.3	23.0
1991-92	5.6	20.4

Diplomas

Historical data is available for non-graduates and for students receiving any of the four types of high school diplomas issued in Tennessee.

Students Receiving Diplomas in Spring Graduation (1984-85, 1991-92)

<u>Diploma</u>	<u>1984-85</u>		<u>1991-92</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Regular	42,739	87.6	36,464	76.7
Honors	701	1.4	6,345	13.3
Special Education	1,132	2.3	1,135	2.4
HS Certificate	1,079	2.2	325	0.7
Non-Graduates	<u>3,149</u>	6.5	<u>3,263</u>	6.9
	48,800		47,532	

Several changes over the last seven years are noteworthy. The percent of students receiving honors diplomas increased from 1.4% in 1985 to 13.3% in 1992. These students take a rigorous course of study and maintain a grade point average of 3.0 or better.

The percent of students receiving the high school certificate has steadily decreased since 1985. This certificate is awarded to students who fulfill all the requirements for graduation except for passing the proficiency test. In 1985, 2.2% of the 12th graders were issued the high school certificate; in 1992 only 0.7% received this certificate.

Graduation Performance Goal

The performance goal adopted in accordance with the EIA by the State Board of Education defines graduation (school completion) as including the following:

- a. Individuals who are enrolled in traditional high school programs and who receive a regular diploma, honors diploma or special education diploma, or high school certificate in June or August graduations
- b. Individuals 19 years old and under who receive a high school diploma by completing an adult high school program
- c. Individuals 19 years old and under who receive a GED credential

Using this definition, which is consistent with that adopted by the Council of Chief State School Officers, the number of high school graduates in 1991-92 is calculated as follows:

Regular high school diploma	36,464
Honors diploma	6,345
Special education diploma	1,135
High school certificate	325
GED diploma (19 years and under)	<u>3,828</u>
Total graduates	47,849

Dividing the total number of 1991-92 graduates by the number of ninth graders in the Fall 1988 yields a graduation rate of 72.9%. The graduation rate increased from the prior year

when it was 71.8%. The performance goal for each school system specifies a graduation rate of 90%.

In order to improve the graduation rate, emphasis is being placed on helping students who are at risk of dropping out of school. The Department is assisting educators to use results from the state testing program to identify potential at-risk students. Other initiatives include expanded use of teacher extended contracts to assist at-risk students, peer tutoring programs in high schools, designing and implementing drug education programs, support for high school programs to help pregnant teenagers and teen parents earn diplomas and learn parenting skills, support for alternative schools and in-school suspension programs for disruptive students, assisting local school systems in lowering class size in primary grades in schools with high concentrations of at-risk students, expanded opportunities for school-to-work transition programs, and support for demonstration projects in family and community involvement.

College Entrance Tests

For admission, most colleges and universities require students to submit scores on the American College Test (ACT) or the Scholastic Aptitude Test (SAT).

In general, the smaller the proportion of students from a given state taking either the SAT or the ACT, the higher that state's average score. Since most Tennessee colleges and universities require the ACT, that is what most students take. In 1992 the average ACT scores of Tennessee students were slightly below the national average. Fewer students take the SAT and their scores exceeded the national average.

ACT

Since 1990, the ACT results have included scores on the new Enhanced ACT Assessment. The Enhanced ACT is comprised of four tests: English, math, reading, and science reasoning.

The ACT was taken by 31,245 (66%) of the 1992 Tennessee graduates. Nationally only 34% of the high school graduates took the ACT.

On the 1992 ACT Tennessee high school graduates scored above the average for states in the Southern Association of Colleges and Schools (SACS) region on English, science and reading and matched the SACS region score in math.

The SACS region includes Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

While Tennessee students have historically scored slightly below national averages on all subjects, in recent years the gap has gradually narrowed. This year Tennessee students matched national averages in English and posted gains in math and on the score composite. The average composite score for Tennessee students increased to 20.2 from 20.1 in 1991; the national average remained unchanged at 20.6.

Average ACT Scores (1991 and 1992)

<u>Content Area</u>	<u>Tennessee</u>		<u>SACS Region</u>	<u>Nation</u>	
	<u>1991</u>	<u>1992</u>	<u>1992</u>	<u>1991</u>	<u>1992</u>
English	20.2	20.2	19.8	20.3	20.2
Mathematics	19.1	19.3	19.3	20.0	20.0
Reading	20.8	20.8	20.2	21.2	21.1
Sci Reasoning	19.9	19.9	19.8	20.7	20.7
Composite	20.1	20.2	19.9	20.6	20.6

Tennessee continues to make progress on the ACT as compared to the rest of the nation. In part the improvement may be attributed to more students taking college preparatory coursework to meet the strengthened admissions requirements of Tennessee's public universities and colleges.

ACT also provides information about the graduating class according to type of high school program completed. The percent of students who reported taking a core high school curriculum, defined by ACT as a college preparatory program including four or more years of English and three or more years of math, social studies, and natural science, has increased steadily over the last four years. In 1988, 29% of Tennessee's ACT tested graduates completed the core and in 1992, 40% completed the core. The average ACT scores for these students is from 2.2 to 2.7 points higher than the average score for students completing less than a core curriculum.

SAT

Approximately 13% (5,993) of Tennessee's 1992 graduating seniors took the SAT. Nationally, approximately 42% of all high school graduates take the test.

Tennessee students who take the SAT typically score higher than the southeastern and the national groups on both the verbal and the math subtests. Tennessee's average verbal score dropped three points to 484 but is still well above the 423 verbal score average nationally. The average math score increased one point to 529 - an all-time high for the state. The national math average is 476, up two points from 1991.

Over the last 11 years Tennessee verbal scores increased by nine points while math scores were up 15 points. Nationally, verbal scores dropped one point while math scores increased by 14.

SAT Verbal (1981, 1987-1992)

	<u>1981</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Tennessee	475	487	485	486	483	487	484
Nation	424	430	428	427	424	422	423

SAT Mathematics (1981, 1987-1992)

	<u>1981</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Tennessee	514	524	524	523	525	528	529
Nation	466	476	476	476	476	474	476

The SAT scores of Tennessee students carrying a full academic load of five subjects or more were higher - 116 points in verbal and 107 points in math - than for students who took fewer classes.

There is a disparity between the SAT scores of Tennessee students from urban and rural schools, with big city students outscoring their rural counterparts by 12 points in math and 27 points on verbal. New state funding distributed this year should help bridge the gap by providing greater resources to the poorest school districts.

P-ACT+ and PSAT

Preparatory programs associated with major test publishers are available to Tennessee high school students. More than 15,000 juniors had PSAT scores reported in 1991-92. Approximately 7,300 more students were tested as sophomores. The P-ACT+, given only to sophomores, was taken by 12,254 Tennessee students during the 1991-92 school year.

The scores of Tennessee high school juniors on the 1992 PSAT verbal averaged 41.4 compared to 40.6 for both the south and the nation. The PSAT math average for that same group exceeded the southern math average of 44.9 and matched the 45.5 national math average.

On the 1992 P-ACT+ Tennessee high school sophomores scored above the national average in all four subject area tests and on the composite. The average score ranged from 2.1 points higher in science to 3.3 points higher in English. Tennessee students compiled an 18.6 average on the composite compared to a 15.9 average nationally.

The number of students taking the preliminary tests is expected to jump in the 1992-93 school year when the state will offer to pay the test cost for each student. In 1993-94, every sophomore will be required to take either the PSAT or P-ACT+. The addition of preliminary tests to the state's testing program will help students make better choices in their high school course taking, improve their performance on the ACT and SAT, and help them prepare for the senior exit exam mandated by the EIA.

The sophomore class of 1993-94, which will be required to take either the P-ACT+ or the PSAT, will also be the first high school class to take the exit exam as seniors. Local school systems are responsible for determining which test each student will take. The grade 10 TCAP assessment will continue to be administered during the spring of the sophomore year.

Academic Assessment and Placement Program

Since Fall 1985, freshmen students seeking regular admission to a technical institute, community college or university within the Tennessee Board of Regents System have participated in the Academic Assessment and Placement Program (AAPP) as a condition of enrollment. The AAPP uses a placement test that measures writing, reading

comprehension, logical relationships and mathematical skills. University of Tennessee institutions use other assessments.

Beginning in Fall 1990, the State Department of Education, with the cooperation of the Tennessee Board of Regents, made the Preliminary AAPP test available to high school juniors. High schools administer the test on a voluntary basis each year to target reading, writing, or math skills for remediation while students are still in high school. Approximately 9,400 students from 44 Tennessee systems participated in the 1992 testing. Statewide workshops were held in October to train teachers in the holistic evaluation of writing and offer ways to encourage writing across the curriculum.

Advanced Placement

The number of schools and students participating in the Advanced Placement (AP) program has increased significantly in the last five years. Today 43% (177) of Tennessee's high schools offer AP courses. That compares to 138 Tennessee high schools offering the courses in 1987. Since 1987 the number of AP candidates increased 36%, from 4,227 to 5,751; the total number of AP exams taken also increased 36%, from 6,240 to 8,475.

In 1992, 67% of the Tennessee AP exams received scores between 3 and 5 (scores which most colleges accept for college credit). That compares to 60% for the South and 66% for the nation.

Preparation for College and the Work Place

A decade ago, the College Board identified six basic academic competencies (reading, writing, speaking and listening, mathematics, reasoning and studying); computer competency; and six basic academic subjects (English, the arts, mathematics, science, social studies and foreign language) as needed for college preparation. A business task force convened by the College Board concluded that students entering the world of work needed essentially the same competencies as those preparing for college. Since then, in order to ensure a workforce with high skills and wages, numerous business and industry groups have recommended that all high school students take a rigorous program of high school study.

Tennessee has undertaken a number of additional initiatives to strengthen the preparation of students who will enter universities, community colleges, technical institutes or the work place:

- The State Board of Education revised courses required for graduation. A total of 20 units is required. Students who entered 9th grade after 1990-91 must complete one-half unit of United States government. Students entering 9th grade in 1993-94 must complete 3 units of math. In accordance with the EIA, the State Board of Education, State Department of Education, and others are developing a new policy on the high school.
- A statewide collaborative project of the State Board of Education, the State Department of Education, the Tennessee Board of Regents, the University of Tennessee and the Education EQuality Project of the College Board seeks to strengthen high school preparation to ensure that all students entering college have a reasonable chance for success. Task forces comprised of high school and college teaching personnel in each of the six academic subjects have addressed issues related to content, instructional strategies, assessment, and teacher education.

- Tennessee's high schools have responded to the new requirements for high school graduation and to the strengthened higher education admission standards. The vast majority of students admitted to public universities fully met the 1989 college admission standards.
- The University of Tennessee and the Tennessee Board of Regents provide information to school systems on the performance of their high school graduates who enroll in institutions of higher education. This helps high schools plan effectively.
- Increased rigor in high school course-taking is demonstrated by the increase in the number of students meeting the requirements for the honors diploma. In 1992, 6,345 students (13.3% of seniors) met the requirements compared to 701 (1.4%) in 1985.
- Vocational courses have been revised to emphasize the development of basic competencies and their application to vocational tasks. Vocational education courses, such as mathematics for technology, principles of technology, science IA (agriscience), and applied communications, provide a rigorous curriculum stressing problem solving and the application of math, science and communications competencies.

TEACHER PERFORMANCE

Teacher Education

The most comprehensive reform of teacher education in decades is now in place and is being implemented in colleges and universities across the state. Rigorous new programs are attracting more and better students, which should result in better prepared teachers in Tennessee classrooms.

The new Teacher Education Policy, adopted by the State Board of Education, the Tennessee Higher Education Commission, and the State Certification Commission in 1988, will enhance the academic experience of teacher candidates by requiring them to have an academic major in addition to the professional education core. A full semester of student teaching or a one-year internship will strengthen the practical experience of teachers. New teachers will have a beginning teacher program to support them during their first year of employment. By providing post-baccalaureate teacher education programs, the plan also encourages qualified college graduates without teacher preparation to enter the profession. In addition, highly qualified experienced individuals will be able to enter the teaching profession through alternative licensure programs.

Teacher education programs are now approved in accordance with the National Council for Accreditation of Teacher Education (NCATE) standards and state program standards. Continuing approval of teacher education programs will be based, in part, on the performance of an institution's graduates. The new plan will be thoroughly evaluated. Special efforts are being made to recruit more minorities into teaching.

Teacher Supply and Demand

A report on teacher supply and demand prepared by the State Department of Education provides data that can be used in future policy development.

Several factors including the current workforce, new hires, the reserve pool and the number of teacher education graduates affect the teacher supply. The current workforce includes approximately 46,000 teachers. Tennessee hires an average of 3,000 new teachers each year, slightly more than half of whom are re-entering teachers with prior teaching experience. The average years of experience for new hires is slightly more than three years. Nearly one-third completed their highest degree at out-of-state institutions. The number of teacher education graduates from Tennessee colleges and universities increased 30.3% from 2,196 in 1986-87 to 2,862 in 1991-92.

Three factors - policy changes, teacher turnover and student enrollment - affect demand. Demand will be affected by policy changes, such as those in the Master Plan and the Basic Education Program. There will be an increased need for personnel, particularly in the elementary grades, to reduce class size and provide art, music and physical education teachers and guidance counselors. The average teacher leaves with about 13-15 years of experience. From 1985-86 through 1989-90, teacher turnover averaged 7.02%, a rate consistent with the national range of estimates.

Teacher Licensure: PPST and NTE

Students seeking admission into approved teacher education programs in Tennessee colleges and universities must receive qualifying scores on the Pre-Professional Skills Test (PPST) published by the Educational Testing Service (ETS). Candidates for initial licensure are required to make a minimum score on the Core Battery of the NTE (National Teacher Examination), also an ETS test.

Percent of Students Reporting Passing Scores on the NTE Core Battery (1985-1991)

<u>Year</u>	<u>Percent of Students</u>
1985-86	95
1986-87	96
1987-88	95
1988-89	95
1989-90	96
1990-91	96

Teacher candidates are also required to receive passing scores on specialty area tests in 29 endorsement areas. Tests have been validated and approved for use in 13 additional areas of endorsement.

The Educational Testing Service has revised its teacher licensure examination program. The Board and Department are considering ways to implement the new program.

Professional Development for Teachers

Both the EIA and the Master Plan point to the need to maximize the use of existing and new resources to ensure success for all children. To do this professional development must be made available at the school level to current teachers and principals. The Board's policy on professional development sets forth a framework to: (1) improve student learning, (2) develop learning communities in the schools, and (3) enhance the capacity of local school systems to provide professional development in each school.

While the emphasis for design and delivery of professional development is at the school level, the role of the state in providing professional development activities will continue to be essential. Professional development activities offered by the State Department of Education in the last year include:

- * Non-Graded Elementary Workshops
- * K-12 Mathematics Summer Workshop
- * Tennessee Arts Academy
- * Tennessee Educational Technology Conference
- * Governor's Academy for Teachers of Writing
- * Governor's Academy for Teachers of Foreign Language
- * Special Education Institutes
- * Vocational Education Summer Conference
- * Skills Enhancement: The Teaching Process
- * Skills Enhancement: Cooperative Learning
- * Positive Attitudes in Tennessee Schools
- * Partnerships to Assist School Success (for minority teacher recruitment)

Career Ladder

The Comprehensive Education Reform Act created a Career Ladder certification system based upon performance. The program is optional for all teachers so Career Ladder certificates are supplemental to the professional license. Educators who receive Career Ladder I status are evaluated by the local school systems. Educators who receive upper level Career Ladder II or III certification are evaluated in various areas of competence by state trained peer evaluators. Applicants may elect to have their principal serve as one of the three evaluators.

Approximately 97% of all currently employed public school educators eligible for the Career Ladder program are participating on one of the three levels.

Number of Employed Educators* With Career Ladder Teacher Certificates (1985-1992)

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Career Level I	34,877	32,459	31,807	31,535	32,668	32,738	33,388	33,373
Career Level II	558	1,261	2,019	2,410	2,663	2,712	2,766	2,781
Career Level III	<u>781</u>	<u>2,164</u>	<u>3,026</u>	<u>3,768</u>	<u>4,320</u>	<u>4,676</u>	<u>4,980</u>	<u>5,101</u>
Totals	36,216	35,884	36,852	37,713	39,651	40,126	41,134	41,255

* Includes elementary and secondary teachers, secondary vocational teachers, special education teachers, librarians and counselors.

Extended Contracts

In 1989-90 significant changes in the extended contract program were implemented based on 1988 legislation. School systems are required to conduct a comprehensive needs assessment to determine high priority student needs and to develop programs to meet these needs. These programs serve a full range of students at the primary, middle grades, secondary, and adult education levels. Summer schools, before and after school tutoring, and programs supplementing student opportunities are designed to remediate student needs, prevent failure and improve academic success.

Students Served in Extended Contract Programs (1987-1992)

	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>	<u>1990-91</u>	<u>1991-92</u>
Summer	60,598	69,965	97,000	127,000	119,115
School Year	84,894	108,120	303,762	289,000	289,147

**Educators Working on Extended Contract
(1988-1992)**

	<u>1988-89*</u>	<u>1989-90</u>	<u>1990-91</u>	<u>1991-92</u>
CL II/III Teachers	4,950	5,276	5,310	5,016
CL II/III Administrators	1,113	1,197	1,371	1,226
Non-Career Level Educators**	<u>N/A</u>	<u>1,196</u>	<u>1,632</u>	<u>1,328</u>
Totals	6,063	7,669	8,313	7,570

* Estimated: Data not available.

** Non-Career Level II/III educators were not eligible for extended contracts until 1989-90.

The 1990-91 figures are higher than the 1991-92 figures due to funding cuts in education and the flexibility given to school systems.

SCHOOL PERFORMANCE

21st Century School Report Card

As required by the EIA, the first issue of a detailed annual report was distributed on October 1, 1992. The report, titled the 21st Century School Report Card, was produced individually and specifically for each of Tennessee's school systems. The core text of each report had eight pages of information on each local education agency and included reporting of performance indicators, fiscal accountability reporting, and audit results. The report also contained TCAP test data for each school.

Much of the data required by legislation wasn't available, but programs for gathering, analyzing, and reporting all information required by the legislation are underway. Value added assessment data will be reported by April 1, 1993, and will be included in the subsequent annual reports.

Professional Development for Administrators

Effective school leadership is important for improving the performance of schools. Several initiatives address professional development for principals, assistant principals, supervisors of instruction, and superintendents.

In the future, professional development will be focused at the school level, with principals providing leadership and facilitating the development of a learning community in the school. Principals will be evaluated by their superintendents in part based on their success in promoting the development of their faculty members. In addition, principals, in conjunction with their superintendents, will devise their own annual professional development plans. Professional development opportunities include:

- * The Tennessee Academy for School Leaders provides training for principals, assistant principals, vocational directors and supervisors of instruction in teacher evaluation, instructional leadership, organizational management, communications, and mentoring.
- * The Tennessee Executive Development Program for superintendents includes the CEO Leadership Institute and the opportunity for superintendents to develop and implement school system improvement projects.
- * The Tennessee Academy for School Leaders, in cooperation with the Tennessee School Boards Association, has provided professional development for the approximately 900 local school board members across the state on topics ranging from school law to educational innovations. In 1992-93 there will be sessions on strategic planning for superintendents to attend with the entire school board.

Career Ladder

One of the keys to a school system's success is the performance of its principals, assistant principals, and supervisors of instruction. Under the Career Ladder program, the performance of administrators is evaluated.

Employed Tennessee Instructional Leaders with Career Ladder Certificates (1985-1992)

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Career Ladder I*	2,721	1,556	1,191	1,196	1,086	1,045	1,008	907
Career Ladder II	100	165	173	226	224	197	193	174
Career Ladder III	<u>51</u>	<u>573</u>	<u>755</u>	<u>887</u>	<u>973</u>	<u>1,003</u>	<u>1,033</u>	<u>998</u>
Total	2,872	2,294	2,119	2,309	2,283	2,245	2,234	2,079

* In 1985 Career Ladder I educators fast-tracked until they were eligible for Career Ladder evaluation.

Employment Waivers and Permits

Of the 45,000 teachers employed in public schools in Tennessee during 1991-92, only 527 (1.3%) lacked proper teaching credentials.

A school system requests an employment standard waiver for a licensed teacher when a qualified person is not available for the assignment and the available teacher does not have the necessary endorsement to teach in the anticipated area of assignment. For a waiver to be issued, the teacher must be licensed, hold at least one endorsement in another teaching area, and have an approved plan for obtaining proper endorsement. A waiver must be requested for each teacher who teaches more than two classes in an area in which the teacher is not properly endorsed.

A permit is issued when a system is unable to secure a qualified teacher for the existing vacancy, and the person the system wants to employ does not hold a Tennessee teacher's license. This person may be employed only until a qualified teacher can be secured for the position.

Waivers and Permits Issued for Public Schools (1986-1992)

	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>	<u>1990-91</u>	<u>1991-92</u>
Waivers	469	595	532	492	488	413
Permits	<u>161</u>	<u>125</u>	<u>139</u>	<u>110</u>	<u>98</u>	<u>114</u>
Total	630	720	671	602	586	527

As shown in Appendix E, special education continues to be the area in which the greatest number of waivers are issued.

The Board and the Commissioner are committed to the continued development of a well educated teaching force. Initiatives to improve teacher education and provide professional development for teachers are described elsewhere in this report.

Elementary Guidance Counselors

Many of the statutory duties of elementary guidance counselors are related to school performance. Guidance counselors assist teachers in the use and interpretation of student test scores, early identification and prevention of potential attendance and retention problems, and developing strategies to decrease discipline problems.

They also counsel students in classrooms, individually and in small groups; coordinate programs with the school, home, and community; and consult with parents, school staff, and students. Guidance counselors teach the prevention of sexual abuse and drug abuse and assist in AIDS education.

With additional Basic Education Program funding for 1992-93, school systems employed approximately 160 additional elementary guidance counselors, for a statewide total of approximately 400. In 1985-86, the first year of the elementary guidance counselor program, 40 local school systems employed an estimated 150 counselors.

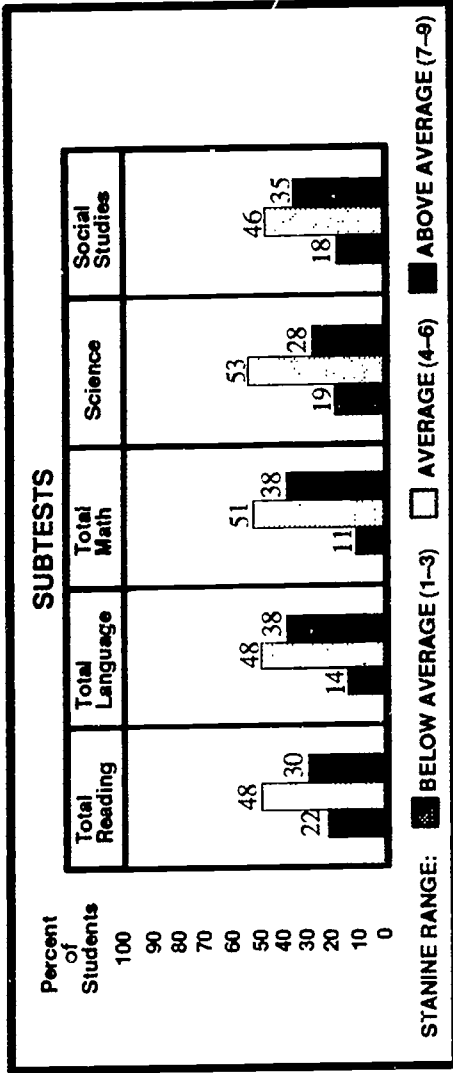
Guidance counselors in the seven developmental districts receive training in program planning and program evaluation. Training has also occurred in school systems in which new counselors have been employed. A summer workshop is held annually for training in drug education, family life curriculum, and AIDS education.

Superintendents, principals, and teachers receive staff development to increase effectiveness of elementary guidance programs. Superintendents have been surveyed to assess the effectiveness of guidance services.

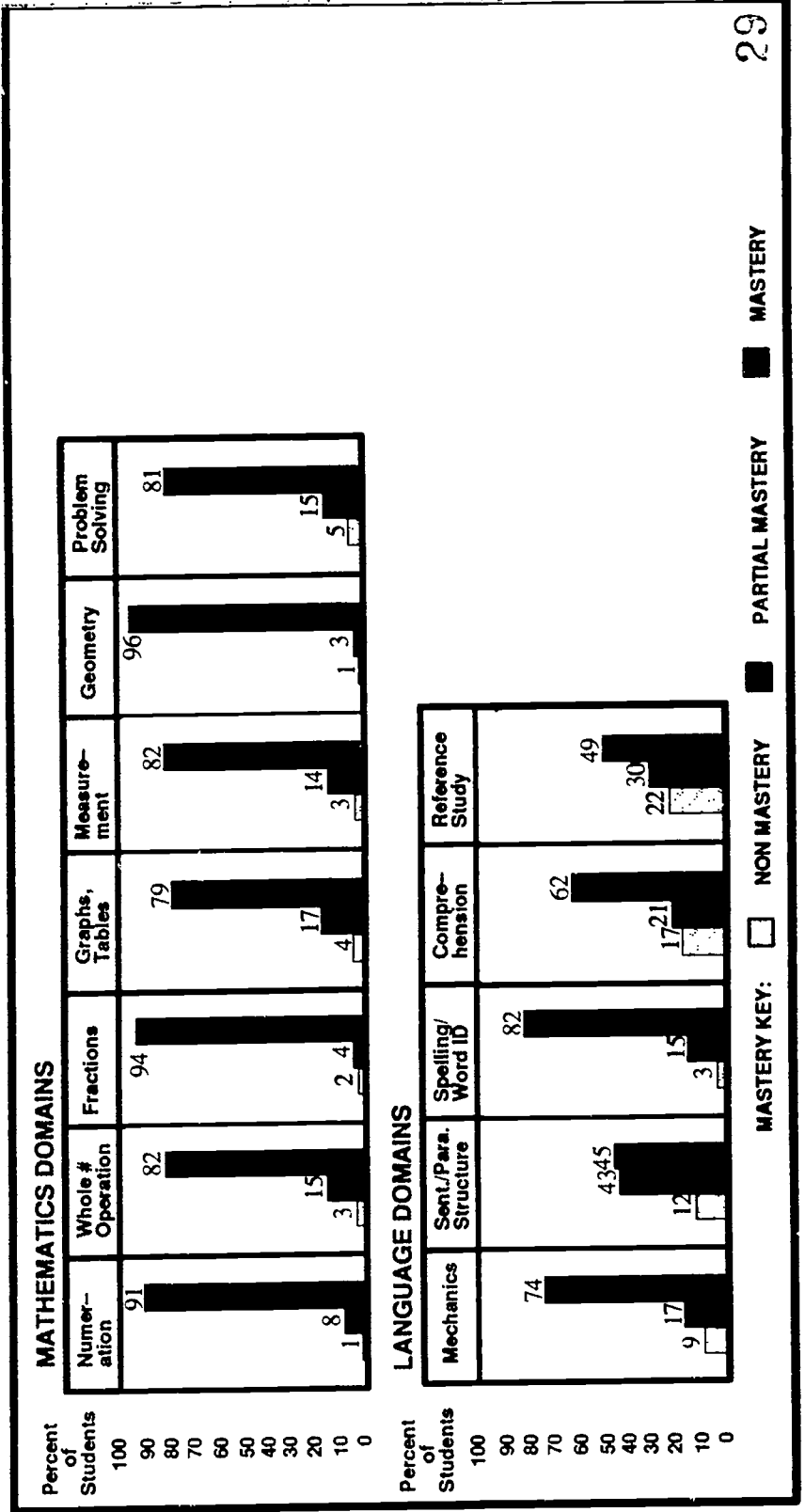
APPENDICES

APPENDIX A: TCAP STATEWIDE SUMMARY – GRADE 2

CTBS/4 NORM REFERENCED COMPONENT

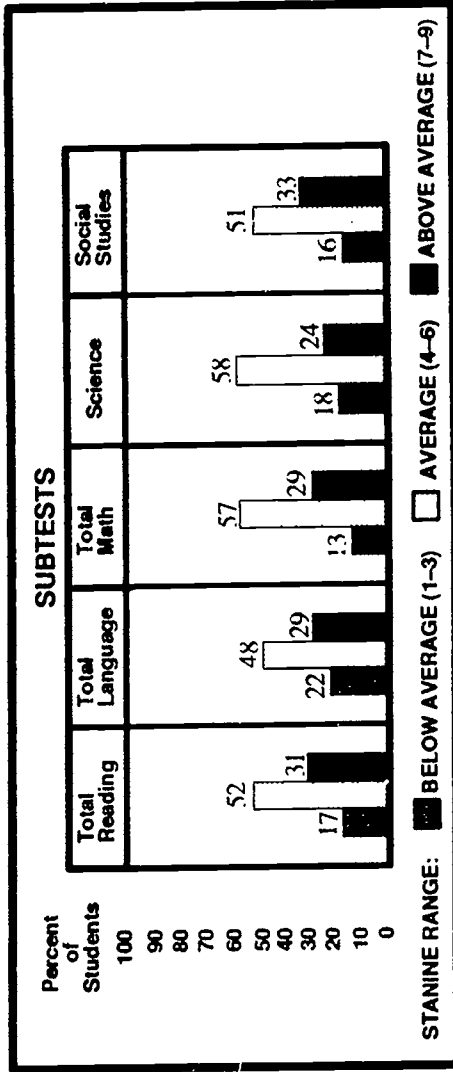


TENNESSEE CRITERION REFERENCED COMPONENT



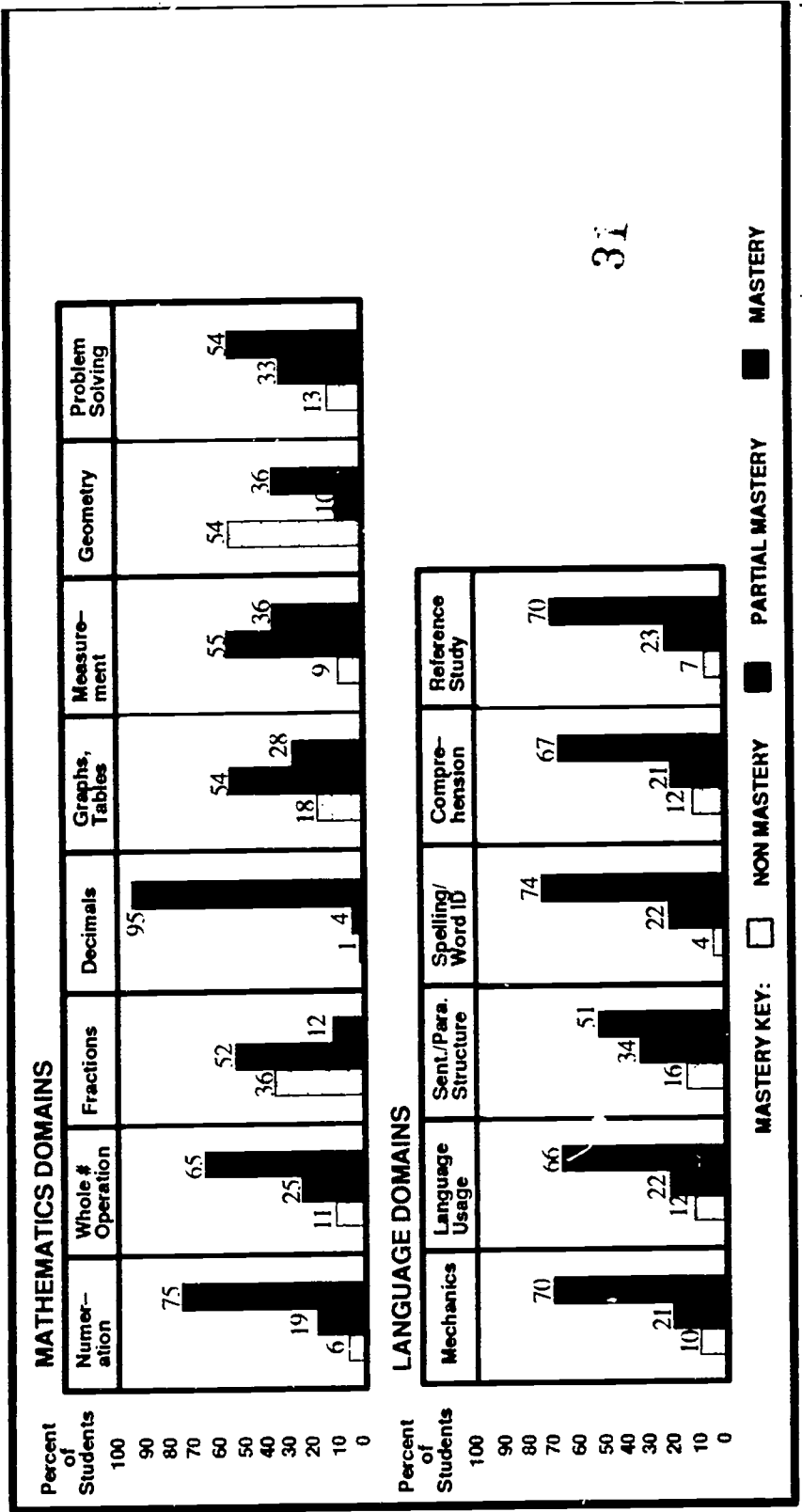
TCAP STATEWIDE SUMMARY – GRADE 3

CTBS/4
NORM REFERENCED
COMPONENT



28

TENNESSEE
CRITERION REFERENCED
COMPONENT

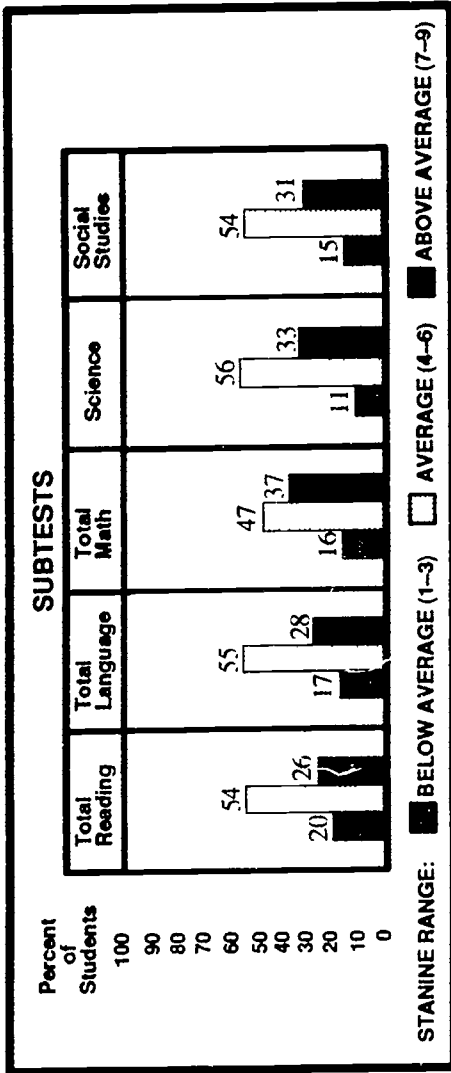


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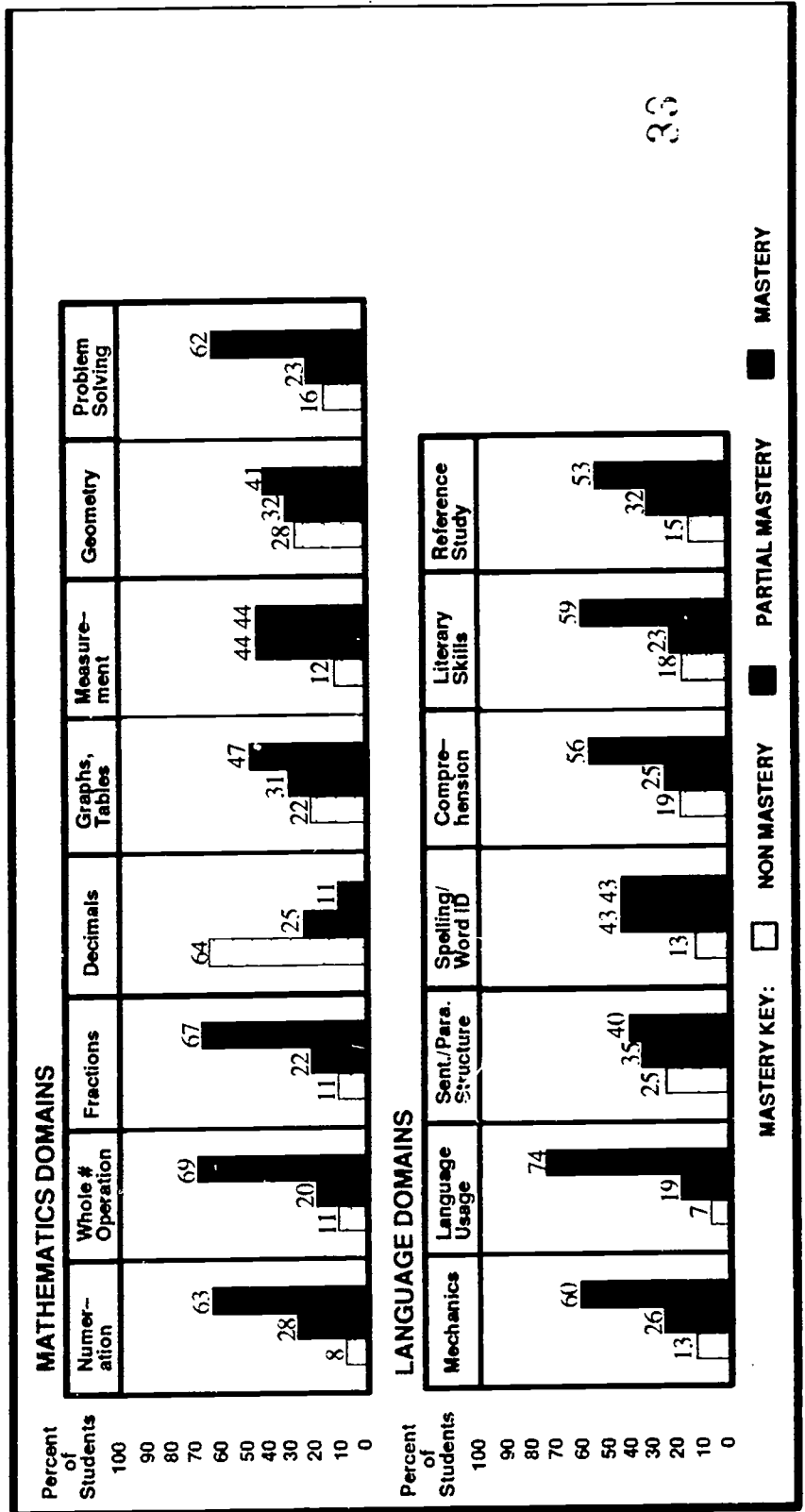
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TCAP STATEWIDE SUMMARY -- GRADE 4

CTBS/4
NORM REFERENCED
COMPONENT

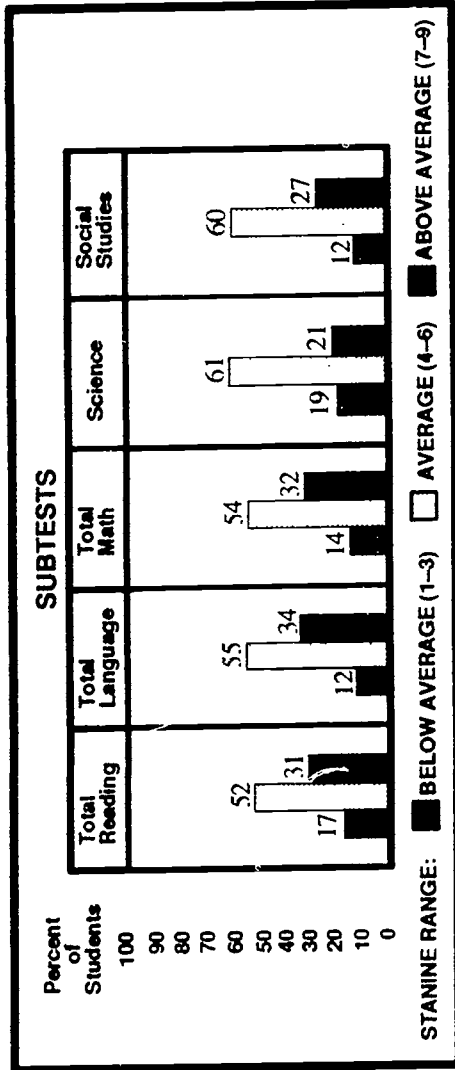


TENNESSEE
CRITERION REFERENCED
COMPONENT

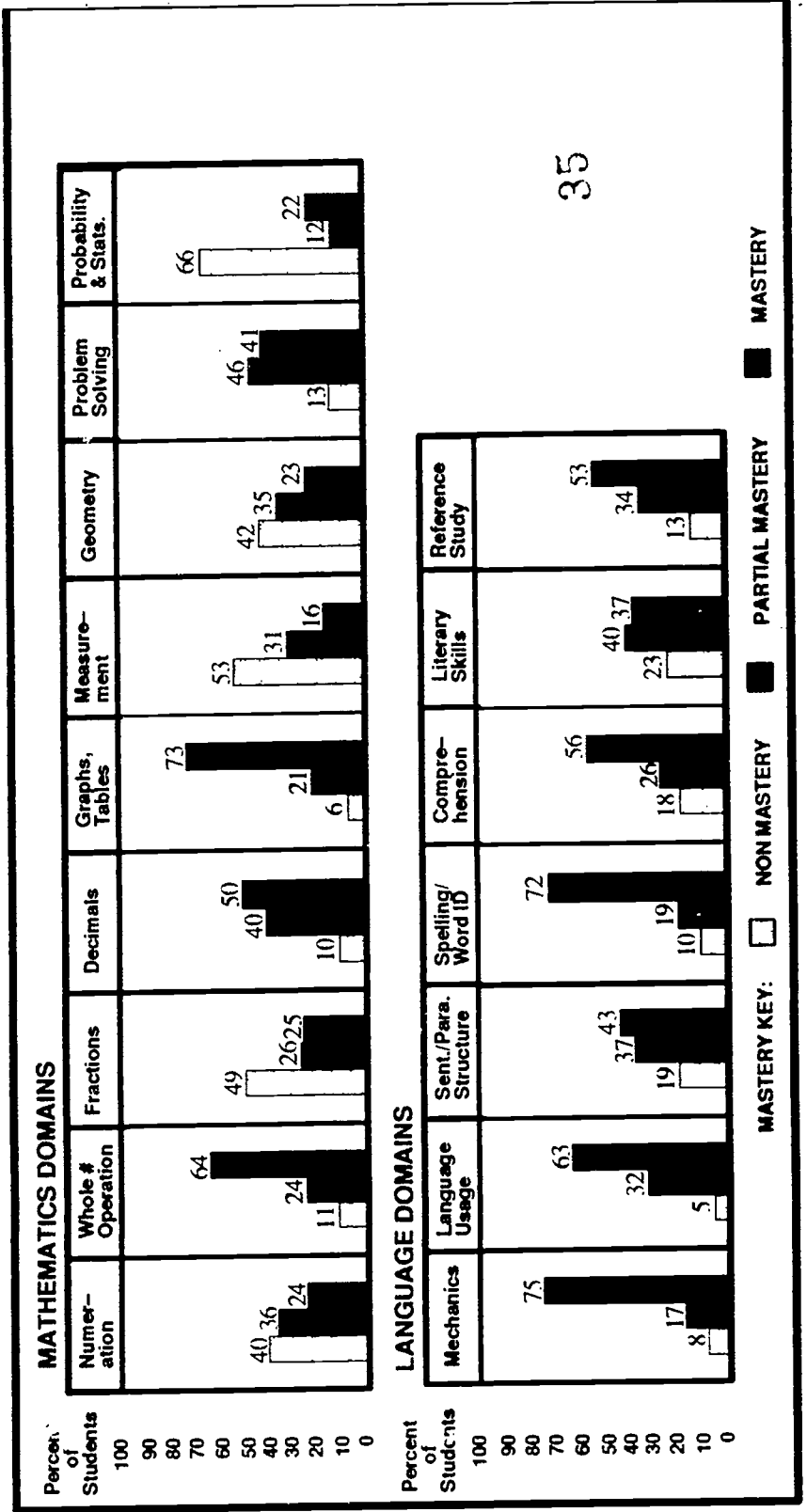


TCAP STATEWIDE SUMMARY – GRADE 5

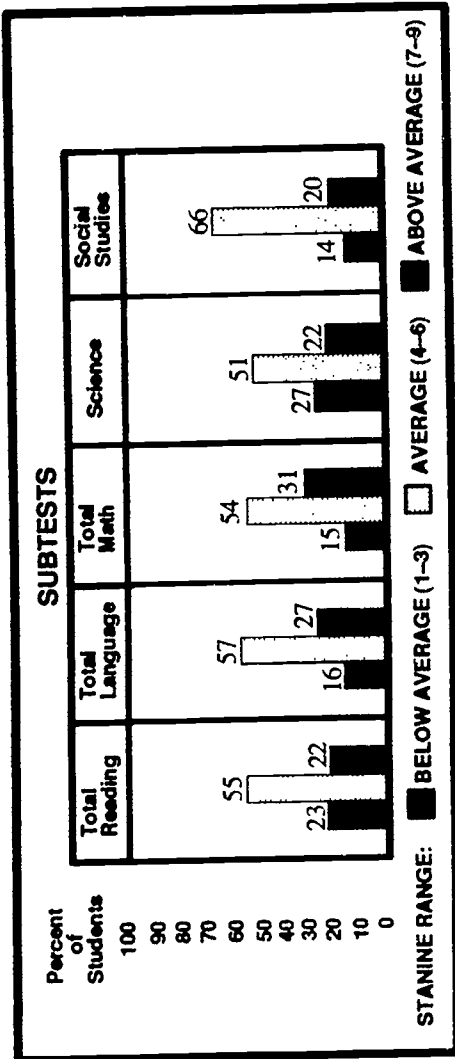
CTBS/4
NORM REFERENCED
COMPONENT



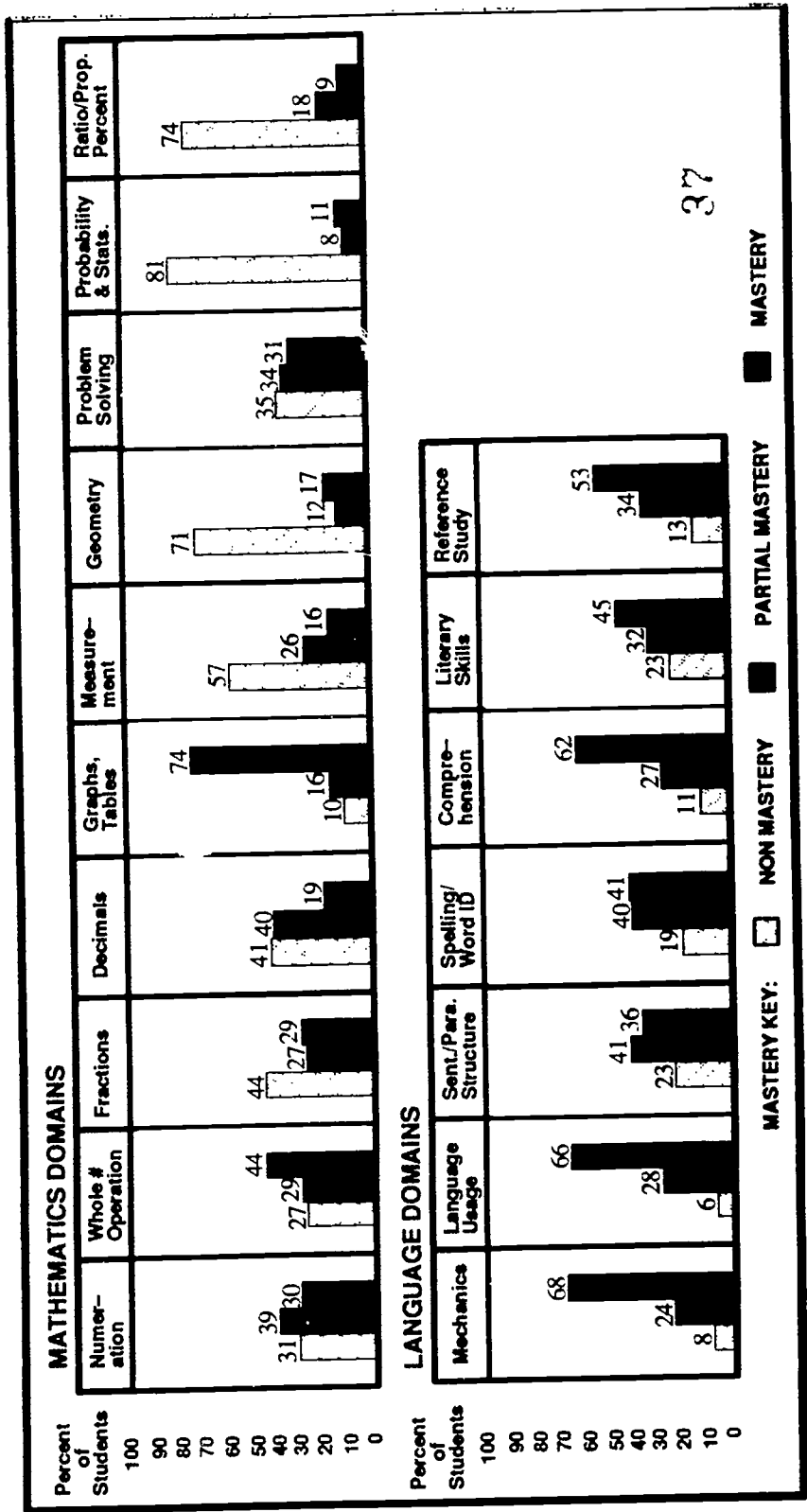
TENNESSEE
CRITERION REFERENCED
COMPONENT



TCAP STATEWIDE SUMMARY - GRADE 6



CTBS/4
NORM REFERENCED
COMPONENT

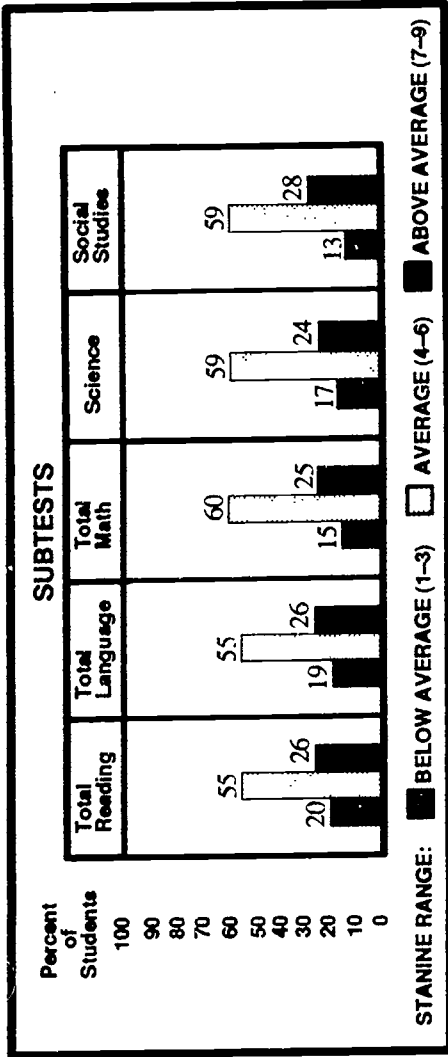


TENNESSEE
CRITERION REFERENCED
COMPONENT

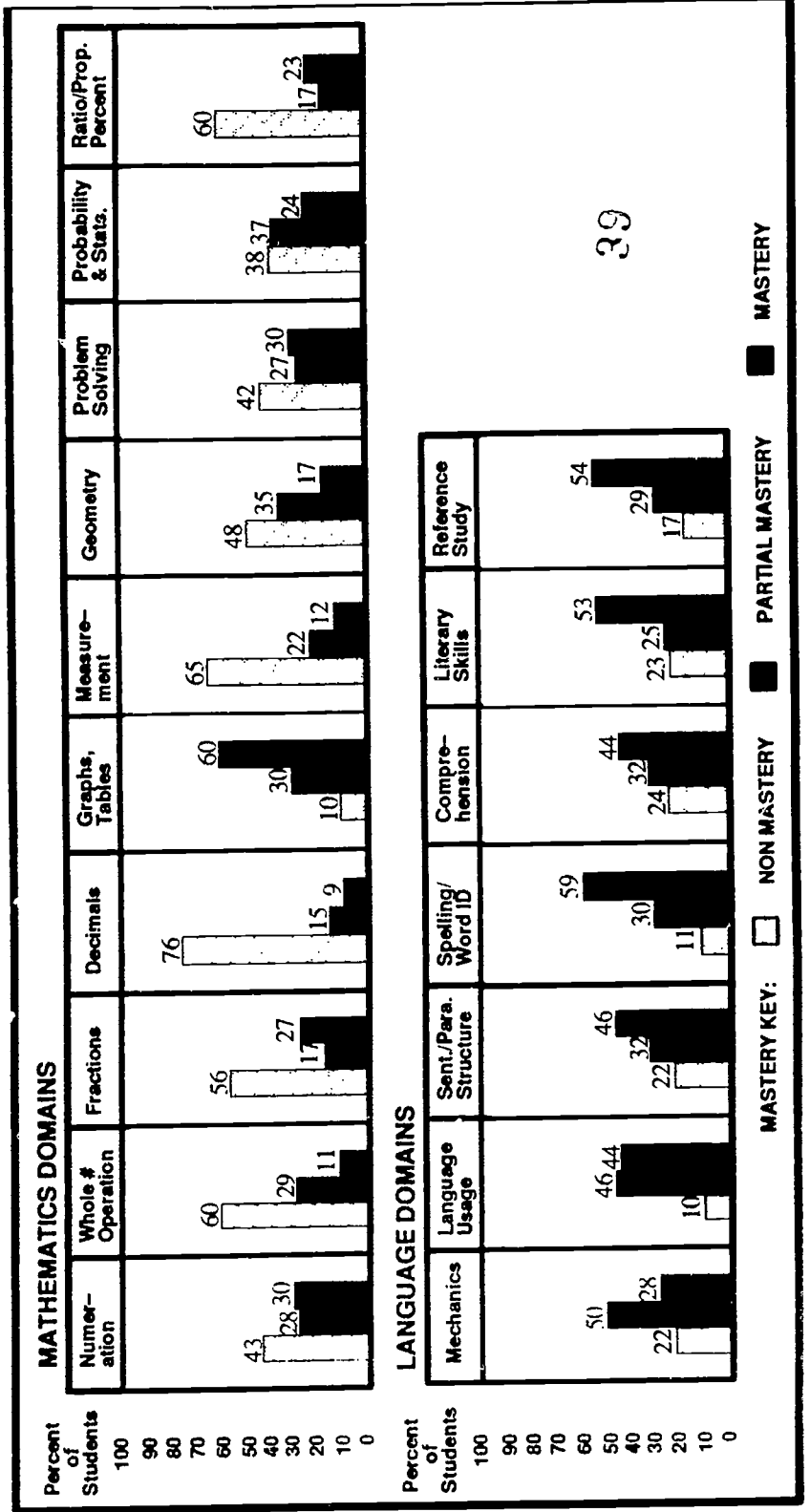
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TCAP STATEWIDE SUMMARY – GRADE 7

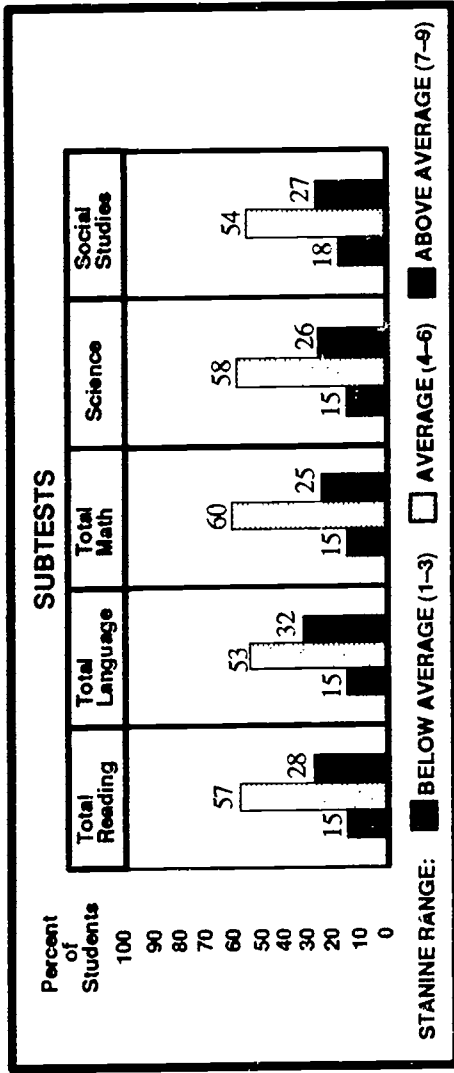
CTBS/4
NORM REFERENCED
COMPONENT



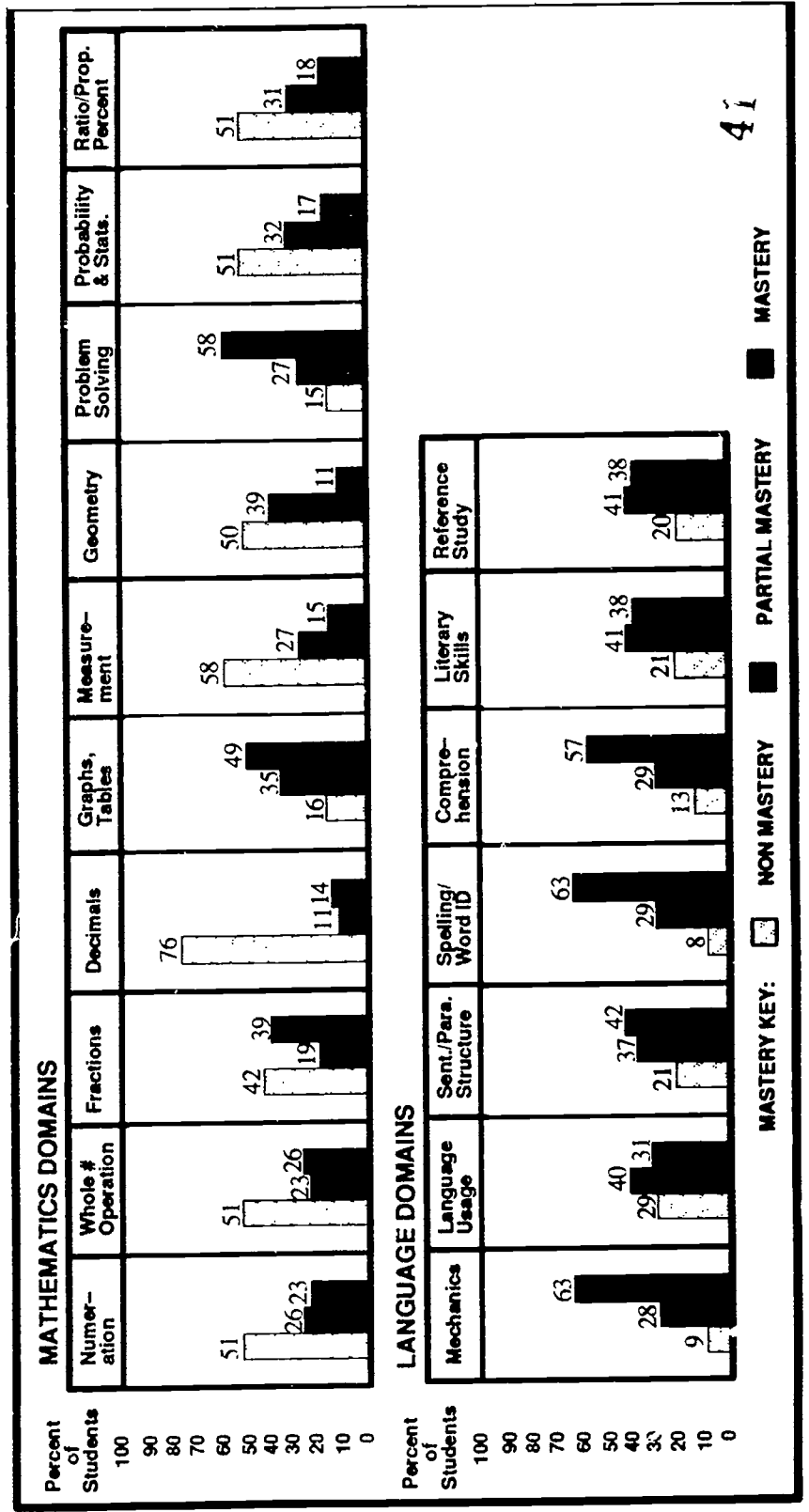
TENNESSEE
CRITERION REFERENCED
COMPONENT



TCAP STATEWIDE SUMMARY – GRADE 8

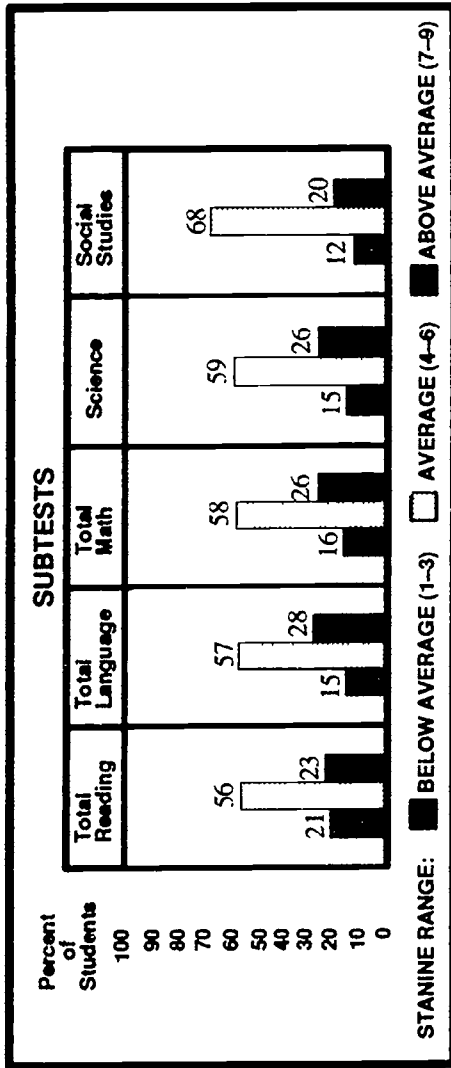


CTBS/4
NORM REFERENCED
COMPONENT



TENNESSEE
CRITERION REFERENCED
COMPONENT

TCAP STATEWIDE SUMMARY – GRADE 10



CTBS/4
NORM REFERENCED
COMPONENT

APPENDIX B
MEDIAN NATIONAL PERCENTILES
SCHOOL SYSTEM SUBGROUP SUMMARY
1992

Subgroup	Grade 3	Grade 5	Grade 10
1. Income Under \$11,700/ Free/Reduced Lunch Above 40%	56	56	51
2. Income Under \$11,700/ Free/Reduced Lunch 33% - 40%	57	63	58
3. Income Under \$11,700/ Free/Reduced Lunch Under 33%	58	65	55
4. Income \$11,700 - \$12,999/ Free/Reduced Lunch Above 40%	57	61	52
5. Income \$11,700 - \$12,999/ Free/Reduced Lunch 33% - 40%	59	61	56
6. Income \$11,700 - \$12,999/ Free/Reduced Lunch Under 33%	59	61	56
7. Income Above \$12,999/ Free/Reduced Lunch Above 40%	49	50	49
8. Income Above \$12,999/ Free/Reduced Lunch 33% - 40%	64	69	63
9. Income \$13,000 - \$14,299/ Free/Reduced Lunch Under 33%	61	66	61
10. Income Above \$14,299/ Free/Reduced Lunch Under 33%	69	73	65

APPENDIX C

TCAP RESEARCH QUESTIONS SUMMARY

Students tested on the TCAP Achievement Test were asked to respond to a short set of questions about school. Selected responses were correlated with performance on the norm referenced portion of the test. Some key findings include:

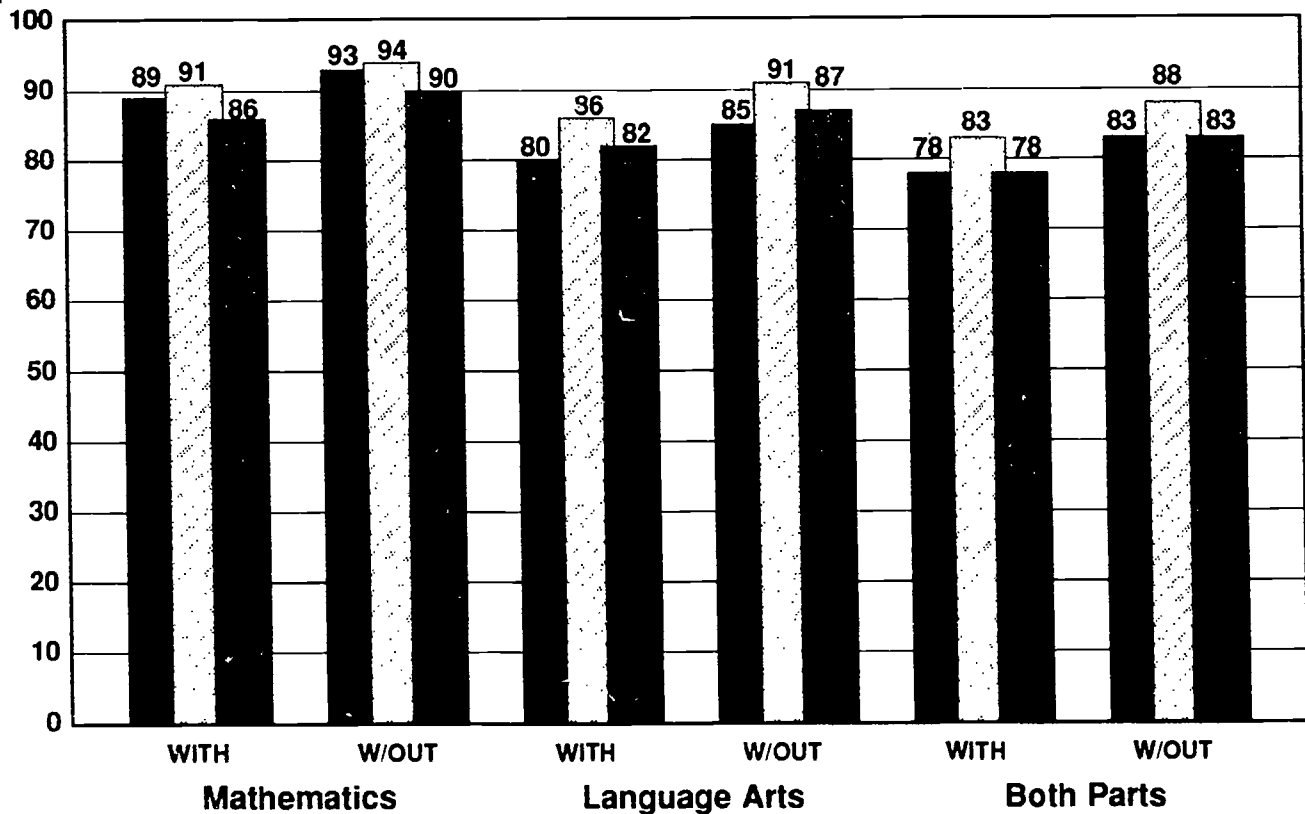
- o Students who watched television in moderation (1-3 hours per day) scored higher than those who watched television more or less often.
- o The reading scores of students in grades 2 through 5 tended to increase as "reading for fun" increased.
- o Almost half (49%) of the students in grade 10 reported working outside of school. Scores decreased as the number of work hours increased.
- o Students who take textbooks home "almost every day" had the highest scores in grades 6 through 8. Students in grades 2 through 8 who indicated they are "not allowed" to take books home had significantly lower scores.
- o In the upper grades, students who reported reading a newspaper or magazine article at least weekly had significantly greater reading scores than those who "rarely" read.
- o Seventy percent of students in grade 10 indicated that television or radio is their primary source of information about current events.
- o Scores in grades 2 through 8 decreased as the number of reported absences from school increased.

APPENDIX D

TENNESSEE PROFICIENCY REQUIREMENT STATEWIDE RESULTS SPRING 1990–1992 COMPARISON

Ninth Grade Students
(Grade Repeaters Excluded)
With and Without Special Education

Percentage
of
Students
Meeting the
Requirement



Key: ■ 1990 □ 1991 ▨ 1992

APPENDIX E
Waivers and Permits By Area: Public Schools
1986-87 through 1991-92

	1986-1987		1987-1988		1988-1989		1989-1990		1990-1991		1991-1992	
	W	P	W	P	W	P	W	P	W	P	W	P
Special Education												
Resource	93	9	74	5	51	2	90	7	58	5	51	1
CDC	19	4	20	1	15	1	14	2	14	1	14	2
Special Education	84	13	125	19	136	23	87	10	99	6	93	12
Speech/Language	2	2	4	1	4	5	6	2	10	5	17	1
School Psychologist	0	2	0	0	4	1	0	0	0	0	0	0
Homebound	2	0	2	1	2	1	4	0	2	0	1	0
Gifted	9	0	19	1	6	0	3	0	8	1	3	0
Visually Limited	9	0	5	0	3	0	5	0	4	0	2	0
Deaf/Hard of Hearing Teacher	1	0	2	1	2	0	2	1	4	1	1	2
ESL (Native Language)	1	9	7	8	9	7	5	4	4	4	5	1
Guidance Counselor	7	1	2	0	7	2	6	1	14	0	14	0
Chapter I Reading	1	2	4	1	5	1	4	1	6	0	5	0
Chapter I Mathematics	0	0	0	1	1	0	1	0	0	0	0	0
Other	0	1	1	0	0	0	1	1	0	0	0	0
Total Special Education	228	43	265	39	245	43	228	29	223	23	206	19
Percent Instructional Areas	49.5	26.9	45.4	31.7	46.9	31.6	47.9	27.6	47.2	26.4	51.2	17.0
General Education												
Kindergarten	29	5	23	1	25	0	26	4	15	2	24	4
Elementary Grades	22	17	35	22	46	14	30	14	17	16	19	14
Art	8	1	7	0	6	0	5	0	8	0	1	1
English	13	6	25	5	15	8	20	8	17	0	12	5
Foreign Language	16	19	26	13	24	12	12	14	17	5	11	11
Health & Physical Education	26	4	9	5	15	8	14	2	14	2	5	6
Librarian	31	3	22	1	24	3	26	0	25	1	26	1
Mathematics	16	16	25	4	15	6	22	3	17	3	12	7
Science	15	8	36	5	14	8	17	4	16	2	8	4
Social Studies	13	2	44	2	31	3	20	2	30	2	20	1
Music	13	4	5	5	0	6	6	5	10	4	4	13
Adult Education	0	2	0	1	0	2	0	0	0	0	0	0
Computer	0	0	0	0	6	2	3	1	3	1	2	1
Total General Education	202	87	257	64	221	72	204	57	189	38	144	68
Percent Instructional Areas	43.8	54.4	44.1	52.0	42.4	52.9	42.9	54.3	40.0	43.7	35.8	60.7
Vocational Education												
Agriculture	0	3	2	3	3	2	2	2	1	2	0	2
Marketing	8	3	7	0	4	0	5	1	4	2	3	1
Home Economics	1	1	14	2	9	3	5	1	21	1	10	3
Industrial Arts	3	4	0	0	1	3	1	1	3	1	0	2
Health Occupations	0	2	0	0	0	4	0	0	1	3	0	1
Business/Office	12	3	25	4	18	4	19	1	15	2	28	3
Trade & Industry	5	12	3	11	8	5	6	13	6	15	4	13
VIP/VAP	2	2	3	0	8	0	2	0	8	0	4	0
Job Training/Co-op	0	0	7	0	5	0	4	0	1	0	3	0
Total Vocational Education	31	30	61	20	54	21	44	19	60	26	52	25
Percent Instructional Areas	6.7	18.7	10.5	16.3	10.7	15.5	9.2	18.1	12.7	29.9	12.9	22.3
SUB-TOTALS ALL AREAS												
	461	160	583	123	522	136	476	105	472	87	402	112
Other												
Principal	5	0	8	0	6	0	7	0	8	0	11	0
Supervisor	3	0	3	1	2	0	1	0	2	0	0	0
School Social Worker	0	1	0	1	0	2	0	0	2	0	0	1
Other	0	0	1	0	2	1	8	5	4	11	0	1
Total Other	8	1	12	2	10	3	16	5	16	11	11	2
GRAND TOTALS	469	161	595	125	532	139	492	110	488	98	413	114



State Board of Education Authorization
No. 331749. 900 copies. This public
document was promulgated at a cost of
\$.83 per copy. March 1993.