DOCUMENT RESUME

ED 351 393 TM 019 232

TITLE	Connecticut Education Evaluation and Remedial Assistance. Grade 4 Mastery Test Results. Summary and Interpretations: 1991-92.
INSTITUTION	Connecticut State Dept. of Education, Hartford.
PUB DATE	92
NOTE	151p.
PUB TYPE	Statistical Data (110) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Achievement Gains; Criterion Referenced Tests; Educational Objectives; Elementary Education; *Elementary School Students; *Grade 4; Intermediate Grades; Listening; *Mastery Tests; Mathematics Achievement; Reading Achievement; State Programs; *State Surveys; Testing Programs; *Test Results; Writing Achievement
IDENTIFIERS	*Connecticut Mastery Testing Program

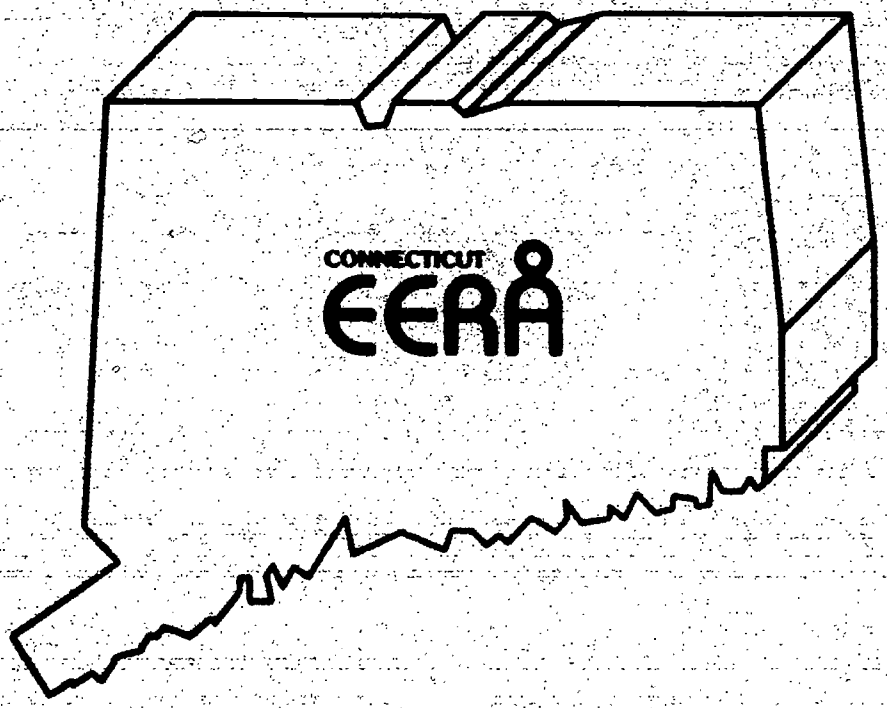
ABSTRACT

An overview and summary are presented of the implementation of the Connecticut Mastery Test for grade 4. The testing program assesses essential skills in mathematics and language arts including listening, reading, and writing for students in grades 4, 6, and 8. The criterion-referenced mastery test assesses how well each student is performing on skills identified by content experts and practicing educators as important for students entering the fourth grade. In 1991, fourth graders mastered an average 21.2 of the 25 mathematics objectives tested, representing no change from the preceding year. A total of 88.4 percent of the students scored at or above the remedial standard, slightly up from the preceding year. In language arts, there was no change from the preceding year, as fourth graders mastered an average of 6.3 of the 9 objectives tested. In writing, fourth graders averaged 4.9 on a scale of 2 to 8, slightly down from 1990, although the number scoring above the remedial standard increased somewhat. In reading, fourth graders averaged 49 units on the Degrees of Reading Power, up slightly from 1990. About 53 percent scored at or above the reading goal, an increase from 1990. Comparative information for 1985 through 1991 is given. Twelve charts present test results, and 12 appendixes provide supplemental information about testing and scoring. (SLD)

CONNECTICUT EDUCATION EVALUATION AND REMEDIAL ASSISTANCE

GRADE 4 MASTERY TEST RESULTS

SUMMARY AND INTERPRETATIONS — 1991–92



CONNECTICUT STATE DEPARTMENT OF EDUCATION

State of Connecticut

Lowell P. Weicker Jr., Governor

Board of Education

John F. Mannix, Chairperson
Lucas Isidro, Vice Chairperson
Glenda M. Armstrong
George T. Carofino
Marcial Cuevas
Beverly P. Greenberg
Michael Helfgott
John Riege
Alphonse Wright

Andrew G. De Rocco (ex officio)
Commissioner of Higher Education

Marilyn A. Campbell
Acting Commissioner of Education

Frank A. Altieri
Deputy Commissioner
Finance and Operations

Printed in the United States of America.

Connecticut
Education Evaluation and Remedial Assistance

GRADE 4 MASTERY TEST RESULTS

SUMMARY AND INTERPRETATIONS: 1991-92

CONNECTICUT STATE DEPARTMENT OF EDUCATION

CONTENTS

CHARTS

APPENDICES

ACKNOWLEDGEMENTS

CONNECTICUT STUDENT ASSESSMENT ADVISORY COMMITTEE

Thomas Jokubaitis, Chair, Wolcott Public Schools
Jay Brennan, West Haven Public Schools
Sue Deffenbaugh, West Hartford Public Schools
Timothy Doyle, Regional School District No. 4
Del Eberhardt, Greenwich Public Schools
June G. Ellis, CT Business and Industry Association
Paul Gionfriddo, Newington Public Schools
Philip Pelosi, Watertown Public Schools
Christine Perry, CT Parent Teacher Association
Anthony L. Singe, Danbury Public Schools
Henry Stockmal, Andover Public Schools
Mark Waxenberg, East Hartford Public Schools

MATHEMATICS ADVISORY COMMITTEE

Steve Leinwand, Chair, CT State Department of Education
Linda Ball, Glastonbury Public Schools
Pat Banning, Windham Public Schools
Betsy Carter, CT State Department of Education
Anthony Ditrio, Norwalk Public Schools
Leroy Dupee, Bridgeport Public Schools
Anita Gaston, Bloomfield Public Schools
David Howell, New Haven Public Schools
Edward Lestinsky, Torrington Public Schools
Mari Muri, CT State Department of Education
Mary Ann Papa, West Hartford Public Schools
Philip Pelosi, Watertown Public Schools
Helen Prescott, Ashford Public Schools
Joyce Reilly, Meriden Public Schools
Mari Smith, Hartford Public Schools
Dolores Vecchiarelli, Westport Public Schools
Sylvia Webb, Middletown, Connecticut

PSYCHOMETRICS ADVISORY COMMITTEE

Robert Gable, Chair, University of Connecticut
Baxter Atkinson, Hartford Public Schools
Del Eberhardt, Greenwich Public Schools
Victor Ferry, Waterford Public Schools
Diane Klotz, New London Public Schools
Michael Muro, Norwalk Public Schools
Edward Reidy, West Hartford Public Schools
Judy Singer, Stamford Public Schools
James Snyder, Windsor Public Schools
William Streich, Farmington Public Schools
J. A. Camille Vautour, South Windsor Public Schools

LANGUAGE ARTS ADVISORY COMMITTEE

Karen Costello, Chair, CT State Department of Education
Lucille Bartolomo, Hartford Public Schools
Evelyn Burnham, Somers Public Schools
Sue Deffenbaugh, West Hartford Public Schools
Martin Espinola, Newington Public Schools
Ellie Goldberg, Windsor Public Schools
Kathy Jones, New Haven Public Schools
Jean Klein, Newtown Public Schools
Jane Logie, Easton Public Schools
Lorene Lugo, Hartford Public Schools
Jacqueline Norcel, Trumbull Public Schools
Geraldine Smith, Canton Public Schools
Lois Smith, Stratford Public Schools
Mary Weinland, Willington Public Schools

BIAS ADVISORY COMMITTEE

M. Claudina Fabregas, Bridgeport Public Schools
Shirle Moone Childs, Windham Public Schools
Carmen M. Cruz, United Social and Mental Health
Angie Galiano-Soler, Division of Education Support Services
Eve Hendricks, CT State Department of Education
Diane Klotz, New London Public Schools
James F. Mitchell, Groton Public Schools
Angel Muniz, New Haven Public Schools
Lyn Nevins, Cooperative Educational Services
Robert Pitacco, Newington Public Schools
Maritza Rosa, New Haven Public Schools

LEGISLATIVE BACKGROUND

In June 1984, the General Assembly of the State of Connecticut amended Section 10-14 m-r of the Connecticut General Statutes, an act concerning Education Evaluation and Remedial Assistance (EERA). This law provides that:

- By May 1, 1985, each local or regional board of education shall have developed and submitted for State Board of Education approval, a new plan of educational evaluation and remedial assistance. Each plan had to address the following:
  - the use of student assessment results for instructional improvement;
  - the identification of individual students in need of remedial assistance in language arts/reading and mathematics;
  - the provision of remedial assistance to students with identified needs; and
  - the evaluation of the effectiveness of the instructional programs in language arts/reading and mathematics.
- The State Board of Education shall administer an annual statewide mastery test in language arts/reading and mathematics to all fourth-, sixth- and eighth-grade students, with the following exceptions:
  - Special Education students who are excluded by a Planning and Placement Team (PPT) decision;
  - students who have been enrolled in an "English as a Second Language" program for two years or less; or
  - students enrolled in a Bilingual Program (as defined in Section 10-17e of the Connecticut General Statutes) for two years or less.
- Each student who scores below the statewide remedial standard on one or more parts of the eighth-grade mastery examination shall be retested. These students shall be retested annually, using the eighth-grade mastery test, only in the deficient area(s) until such students score at or above the statewide remedial standard(s).
- Biennially, each local or regional board of education shall submit to the State Board of Education a report which includes indicators of student achievement and instructional improvement.
- On a regularly scheduled basis, the State Board of Education shall complete field assessments of the implementation of local EERA plans.

- On an annual basis, test results and low income data shall be used to determine the distribution of available state funds to support remedial assistance programs.

The purpose of this report is to provide an overview and summary of the implementation of the fourth-grade Connecticut Mastery Test. The mastery test assesses how well each student is performing on those skills identified by content experts and practicing educators as important for students entering fourth grade to have mastered.

The Connecticut Mastery Test is a critical element in Connecticut's agenda to attain educational equity and excellence. The testing program assesses essential skills in mathematics and language arts, including listening, reading and writing, for grades four, six and eight students. Student achievement is measured and reported in relation to specific learning objectives that students reasonably can be expected to have mastered by the end of grades three, five and seven.

The Connecticut Mastery Test provides valuable educational information which can be used to improve instruction and elevate the achievement of Connecticut's students. The test results are reported in a manner that identifies how well each student is succeeding in relation to clearly defined and meaningful standards. It is our hope that educators throughout the state use the results as a tool to gain better understanding of the learning occurring in our classrooms and the ways to increase learning in the future.

Connecticut is committed to an annual cycle of assessment in order to promote:

- the monitoring of individual student achievement;
- the evaluation of instructional program effectiveness;
- educational goal setting; and
- remedial assistance program improvement.

An examination of the results since 1985 reveals many signs of steady, incremental improvement. The general improvement since the start of the program is quite impressive in some areas. Yet the many Connecticut educators who helped to build the program had the foresight to include some very demanding content and standards. Student performance in relation to these expectations reveals that much remains to be done.

As you examine these results, it is our hope that the many stories they tell will prove useful and informative. Department staff are available to facilitate the interpretations and application of these test scores.

Peter Behuniak
Acting Chief
Bureau of Evaluation and Student Assessment

OVERVIEW OF THE MASTERY TESTING PROGRAM

In the spring of 1984, the Connecticut General Assembly amended the Education Evaluation and Remedial Assistance (EERA) legislation to authorize the creation of mastery tests in the basic skill areas of mathematics and language arts, including listening, reading and writing skills. The tests were to be established for grades four, six and eight.

The goals of the mastery testing program are:

- earlier identification of students needing remedial education;
- testing a more comprehensive range of academic skills;
- setting high expectations and standards for student achievement;
- more useful test achievement information about students, schools and districts;
- improved assessment of suitable equal educational opportunities; and
- continual monitoring of students in grades four, six and eight.

The type of test that best addresses these goals is a criterion-referenced test. Criterion-referenced tests are designed to assess the specific skill levels of students. Such tests usually cover relatively small units of content. Their scores have meaning in terms of what each student knows or can do. Test results are used to identify the areas of strengths and weaknesses of each student.

MASTERY TEST CONTENT

The CMT is designed to assess essential language arts/reading, writing and mathematics skills that can reasonably be expected to be mastered by most students by the end of the third, fifth and seventh grades. The specific skills to be tested within these content areas were identified by committees of educators from throughout the state. In addition, surveys were sent to many teachers, administrators and parents to determine the appropriateness of these skills for the Mastery Test. A complete description of the procedures used in the development of the fourth-grade CMT can be found in Appendix A (p. 31).

Mathematics

The Mathematics Advisory Committee recommended a grade four mathematics test that assessed twenty-five (25) specific objectives in four domains: (1) Conceptual Understanding; (2) Computational Skills; (3) Problem Solving/Applications; and (4) Measurement/Geometry. There are four test items per objective for a total of 100 items on the mathematics test. A detailed list of domains and objectives is given in Appendix B (p. 35).

Language Arts

The Language Arts Advisory Committee recommended a 103-item grade four language arts test that covers two domains: Reading/Listening and Writing/Locating Information. Nine (9) objectives were recommended by the Language Arts Advisory Committee.

The general content of Reading/Listening consisted of narrative, expository and persuasive passages on a variety of topics measuring a student's ability in: (1) Literal Comprehension; (2) Inferential Comprehension; and (3) Evaluative Comprehension. Audiotapes were used to assess students' listening comprehension ability in: (1) Literal Comprehension and (2) Inferential and Evaluative Comprehension. The Degrees of Reading Power (DRP) test was also used to assess reading. The DRP test included eight (8) passages and fifty-six (56) test items. It was designed to measure a student's ability to understand nonfiction English prose at different levels of reading difficulty.

The general content area of Writing/Locating Information consisted of three components. First, there was a writing sample for direct, holistic assessment of student writing. Each student was asked to write a composition on a designated topic. Writing was then judged on a student's demonstrated ability to convey information in a coherent and organized fashion. Second, the mechanics of good writing, which was defined as (1) Capitalization and Punctuation, (2) Spelling, Homonyms and Abbreviations and (3) Agreement, was assessed in a multiple-choice format. Third, Locating Information (Schedules, Maps, Index and Reference Use and Dictionary Meaning), measured students' ability to find and use information from the sources listed. A detailed list with objectives and number of items per objective is given in Appendix C (p. 37).

FUTURE DEVELOPMENT

The Connecticut State Department of Education (CSDE), in conjunction with content consultants and various CMT advisory committees, has begun the development of the second generation of the CMT. The current CMT is under review to determine which skills are appropriate for inclusion on the new test. In addition, new content areas and other forms of assessment techniques (e.g., performance assessment and short-answer questions) are being considered. It is anticipated that the second generation CMT will be administered for the first time statewide in the fall of 1993. Items for this set of exams were piloted in the fall of 1991 and will be followed by a second pilot in the fall of 1992.

SETTING MASTERY STANDARDS BY OBJECTIVE

The essence of the Connecticut Mastery Test (CMT) is the establishment of a specific mastery standard against which each student's knowledge and competency on each objective can be compared. The mastery test incorporates appropriate and challenging expectations for Connecticut public school students. The goal of the CMT Program is for each student to achieve mastery of all objectives. The objectives being tested were identified as appropriate and reasonable for students at each of the grades tested. These tests are designed to measure a student's performance on these specific objectives.

The process of establishing the mastery standards by objective used a statistical method that required two decisions to be utilized. The first decision defined a student who mastered a particular skill as one who had a 95% chance of correctly answering each item within the objective. The second decision was that the specific standard for each objective would identify 99%

of the students who mastered the skill. By applying the two decision rules stated above to a binomial distribution table, mastery standards were established for the 25 mathematics objectives and the 9 language arts objectives.

The mastery standards are as follows:

- In mathematics, for each of the 25 objectives, a student must answer correctly at least 3 out of 4 items.

- In language arts, for the 9 multiple-choice objectives with varying numbers of items, a student must answer correctly the following numbers of items:

	# Items Correct for Mastery
WRITING MECHANICS	
(1) Capitalization & Punctuation	9 out of 12
(2) Spelling	7 out of 9
(3) Agreement	11 out of 15
LOCATING INFORMATION	
(4) Schedules, Maps, Table of Contents, Title Page and Dictionary	8 out of 11
LISTENING COMPREHENSION	
(5) Literal	5 out of 7
(6) Inferential and Evaluative	9 out of 13
READING COMPREHENSION	
(7) Literal	9 out of 12
(8) Inferential	10 out of 14
(9) Evaluative	7 out of 10

No mastery standards were set for the two holistic language arts measures, neither the Degrees of Reading Power (DRP) test nor the Writing Sample, since these measures are not composed of objectives on which mastery could be assessed.

SETTING REMEDIAL (GRANT) STANDARDS

In addition to mastery standards, Section 10-14 m-r of the Connecticut General Statutes requires that the Connecticut State Board of Education establish statewide standards for remedial assistance in order to meet two responsibilities:

- to identify and monitor the progress of students in need of remedial assistance in language arts/reading and mathematics as part of the EERA field assessments; and

- o to distribute EERA funds based on the number of needy students statewide, as well as for use in the Chapter 2 and Priority School District Grants.

Students who score below the remedial standard(s) are eligible for services provided for in EERA legislation. Remedial standards were established by the State Board of Education acting on the recommendations of committees that represented Connecticut citizens and educators. The standard-setting committees recommended the following remedial standards:

1. In mathematics, a student who answers fewer than 69 of the 100 items (69%) correctly is required to receive further diagnosis by the local school district and, if necessary, to be provided with remedial assistance.

2. In reading, a student whose Degrees of Reading Power (DRP) unit score is lower than 41 is required to receive further diagnosis and, if necessary, to be provided with remedial assistance.

3. In writing, a student receiving a total holistic score less than 4 is required to receive further diagnosis by the local school district and, if necessary, to be provided with remedial assistance.

The mastery and remedial standards were established by the State Board of Education on June 23, 1985. For a detailed explanation of the remedial standard-setting process, see Appendix D (p. 39).

STATEWIDE ACHIEVEMENT GOALS

In addition to mastery and remedial standards, statewide achievement goals have been established in the content areas of mathematics, reading (DRP) and writing. These goals represent high expectations and high levels of achievement for Connecticut public school students.

The achievement goals are as follows:

- o In mathematics, all students must master 22 of 25 objectives tested.

- o In reading, a student must score a Degree of Reading Power (DRP) unit score of 50 with 70% comprehension.

- o In writing, a student must score a total holistic score of 7 on a scale of 2 to 8.

STUDENT GROWTH OVER TIME

The Connecticut Mastery Test (CMT) Program is designed to provide criterion-referenced information about the level of student mastery of objectives in grades four, six and eight. However, the basic scores reported for the mastery tests do not provide a system for evaluating achievement growth from grade four to grade six to grade eight. This is so because mastery decisions are based on student performance (mastery/non-mastery) on

objectives that are unique to grade level. Mastery of objectives cannot be compared directly across grade levels and tests because of the differences in the number of objectives, curriculum content and levels of difficulty. In order to make valid interpretations across grade levels, the mastery test performance must first be linked using a procedure called vertical equating.

Purpose of Vertical Equating

Vertical equating is a psychometric technique for comparing tests at all ability levels. This is accomplished by putting them on a new scale which is common to the tests. Vertical equating is based on two assumptions. The first is that learning is continuous. The second is that instruction in each area is related to increased achievement in that area. These assumptions enable test developers to create a score scale that covers a wide range of content over several grades. The development of these "growth scales" is a common practice and has been used successfully in the development of a variety of achievement test batteries. The purpose of vertical equating is to provide one scale score system which can be used to compare performance across multiple grade levels. This score system enables test users to interpret test score information over time without altering the basic nature of the testing program. This achievement growth can be monitored over time on the basis of student performance on the CMT across grades.

Development of Vertical Scales

In order to develop a vertical scale, performance on the grade four, grade six and grade eight mastery tests was statistically linked. This was accomplished during the 1987 administration of the CMT using representative statewide samples of approximately 5,000 sixth-grade students and approximately 7,000 eighth-grade students. Each group of students at grade six and grade eight was administered the appropriate on-grade level test form of the CMT along with one below-grade level section of the CMT. Specifically, each group of eighth-grade students took the grade eight test as usual and a part of the grade six test. Likewise, each sixth-grade group took the grade six test as usual along with a section of the grade four test. Each sample of students took only one below-level section of the CMT involving approximately one hour of additional testing time. Performance on the below-level items was not counted toward the CMT scores of individual students. For each of these linking samples, item difficulty estimates were obtained for the on-grade and below-grade level items by analyzing all items together as one test. Once items from the on-grade and below-grade level tests were linked, item difficulties from each level of the CMT were adjusted to a common metric to produce the vertical scale.

Vertical scales were established in the content areas of mathematics and the reading comprehension section of the language arts test. For each grade and content area, every correct score corresponds to a specific value on a common score scale (vertical scale). Each of the vertical scales was constructed so that each scale score point represents the same theoretical achievement level whether derived from a score on the grade four test, a score on the grade six

test or a score on the grade eight test. This allows valid interpretations of growth across time using tests differing in content, length and item difficulty. All items on the mathematics and reading comprehension tests were used in the development of the vertical scales. The writing and language arts tests were not scaled because of the nature of these assessment processes. The Degrees of Reading Power (DRP) test employs DRP unit scores which are already on a common scale across grades, obviating the need for any other development. (For more information see Congero, W.J., 1989, The Development of Vertical Scales to Enhance the Evaluation of Assessment Data. Paper presented at the annual conference of the National Council of Measurement in Education, San Francisco, CA. This paper is available through the Student Assessment and Testing Unit of the Bureau of Evaluation and Student Assessment.)

Scaled scores can be used to measure growth over time because CMT scores from all three grade levels have been placed on a common scale. These scales provide a means of monitoring students' academic progress from grade to grade. Before the scales were developed, it was difficult to assess the performance of groups of test takers as they moved from grade to grade because of differences in test length, curriculum content covered and levels of difficulty on the fourth-, sixth- and eighth-grade tests.

Since students who took the fourth-grade test in 1988 subsequently took the sixth-grade test in 1990, change in test performance can be assessed across two years' time. Similarly, change in performance can be assessed for 1991 sixth graders who took the grade four test in 1989. A summary of the overall growth in performance for these two groups of students in the content areas of mathematics and reading comprehension can be found in the 1991-92 Grade 6 Summary and Interpretations Manual. Students who took the fourth-grade test in 1986 subsequently took the sixth-grade test in 1988 and the eighth-grade test in 1990. Similarly, students who took the fourth-grade test in 1987 subsequently took the sixth-grade test in 1989 and the eighth-grade test in 1991. A summary of the overall growth in performance for these groups of students in the content areas of mathematics and reading comprehension can be found in the 1991-92 Grade 8 Summary and Interpretations Manual.

NORMATIVE INFORMATION

The CMT Program is designed to provide detailed information about fourth-, sixth- and eighth-grade students' mastery of specific skills and objectives. The provision of national norms with CMT results is intended to enhance the usefulness and flexibility of mastery test information by offering a bridge to conventional norm-referenced testing programs. The decision to provide normative information with the CMT does not change the essential purposes of our criterion-referenced testing program. The CMT will continue to be used for diagnostic and other instructional purposes with results reported at the student, classroom, school, district and state levels.

In particular, national norms provide greater:

- Test Economy. By providing national norms with CMT results, school districts can eliminate their standardized testing programs at these grades, thus saving money and undue testing time while retaining normative data.

- o **Test Efficiency.** Federal compensatory programs require the systematic testing of students using instruments that can provide normative information. Because norms are provided with the CMT, school districts will not have to "double test" compensatory program students. This service allows for increased instructional time for these students.

- o **Test Interpretability.** Criterion-referenced test (CRT) programs may be criticized because the public has difficulty interpreting CRT performance. National norms will assist in the interpretation of CMT performance by providing a traditional benchmark with which the public is familiar.

Development of Norms

In order to provide estimated national norm-referenced data based on CMT performance, items on the CMT were statistically linked to items on a nationally norm-referenced test (NRT). Content-appropriate items from a nationally normed host test were included on the CMT to provide a common referent to both tests. Test equating procedures were then used to link CMT items with the normed test by placing all the items on a common scale. With this linkage in place, estimates of how the performance of Connecticut students compares to a national sample could be made. The NRT used to accomplish this task was the sixth edition of the Metropolitan Achievement Test (MAT-6), normed in 1986. The equating of the CMT to the MAT-6 enabled group summary scores on the CMT to be interpreted relative to the MAT-6 nationally representative normative data.

The CMT was initially equated to the MAT-6 during the pilot testing phase to investigate the relationship of the test content and material between the two tests and the differential nature of the items included on the CMT and MAT-6. In addition, these preliminary data provided a benchmark by which the stability of the link could be monitored over time. The stability issue is monitored each year by readministering MAT-6 items during CMT administrations using representative statewide samples. The comparison of these data with prior information provides the information necessary to identify the instructional effects on student performance over time and to update the CMT/MAT-6 link as appropriate. This monitoring and updating ensures the continued accuracy of the normative estimates.

RESEARCH OPTIONS PROGRAM

The Research Options Program is a free service provided by the Connecticut State Department of Education (CSDE) to help educators and educational policymakers gain access to the extensive information available from the Connecticut Mastery Test (CMT). Participation in the Research Options Program is completely voluntary.

The Research Options Program allows educators and educational policymakers (i.e., superintendents, principals, researchers, evaluators and school board members) to benefit from customized research investigations designed to suit their individual needs or questions. Many school districts have taken advantage of the Research Options Program in previous years to successfully address special local concerns.

The Research Options Program provides a number of ways of examining student achievement, as measured by the CMT. For example, one method is to compare aggregated student test scores obtained from the CMT in two or more categories of interest. Categories might include males and females, special program students compared to non-special program students, or any other comparison. These reports include tables that show the proportion of students mastering each objective, average number of objectives mastered and the achievement indicators for students on each component of the test under consideration. These breakdowns allow district personnel to directly compare the performance of specific groups of students. In addition, graphics are provided, as appropriate, with each report in order to simplify the task of interpreting data.

The Research Options component of the CMT has grown a great deal since the first study was performed on the Connecticut Basic Skills Proficiency Test almost a decade ago. This year, test directors and evaluators in 26 districts took advantage of this valuable resource to address questions of local interest. In addition, statewide programs such as Bilingual Evaluation, Chapter I and School Effectiveness have used the research options to obtain useful information for participants in over 100 districts. [For more information see Mooney, R.F., 1989, The Connecticut Mastery Test Research Options Program: The Application of State Criterion-Referenced Test Reports for Local Research Needs. Paper presented at the annual conference of the National Council of Measurement in Education, San Francisco, CA. See also the Research Options Handbook (1988) provided by the Connecticut State Department of Education. (These references are available through the Student Assessment Unit of the Bureau of Evaluation and Student Assessment.)]

TEST ADMINISTRATION AND SCORING

The regular administration of the Connecticut Mastery Test (CMT) for 1991 was conducted using Form D during a three-week period commencing on September 23, 1991. Test sessions were conducted by local school district staff under the supervision of local test coordinators who had been trained by staff of the Connecticut State Department of Education (CSDE) and The Psychological Corporation (TPC). A student who took all subtests participated in approximately six and one-half hours of testing.

The Grade 4 Connecticut Mastery Test had seven testing sessions.

- Mathematics I (60 minutes)
- Mathematics II (60 minutes)
- Writing Sample (45 minutes)
- Degrees of Reading Power (60 minutes)
- Reading Comprehension (60 minutes)
- Listening Comprehension (45 minutes)
- Writing Mechanics/Locating Information (60 minutes)

At the conclusion of the make-up testing period, answer booklets were returned to TPC in San Antonio, Texas for optical scanning and scoring, and then organized in preparation for holistic scoring workshops.

Scoring of the Language Arts and Mathematics Tests

The mathematics and language arts multiple-choice tests were machine-scored by TPC. Mathematics scores were reported for the total test as well as for mastery by each objective. Language arts scores were reported for mastery of each objective only.

Scoring of the Writing Sample

Every writing sample was scored by Connecticut educators using a technique known as the holistic scoring method. Holistic scoring is an impressionistic and quick scoring process that rates written products on the basis of their overall quality. It relies upon the scorers' trained understanding of the general features that determine distinct levels of achievement on a scale appropriate to the group of writing pieces being evaluated. All participants received on-site training and were required to demonstrate a clear understanding of the scoring criteria prior to actually scoring student essays. Each paper receives a final score between 2 and 8, where 2 represents a poor paper and 8 represents a superior paper. A thorough description of the training and scoring process, including sample papers representing different holistic scores, is presented in Appendix E (p. 45).

Analytic Scoring

All papers receiving holistic scores at or below the remedial standard of 4 also received analytic scoring in four categories (traits): focus, organization, support/elaboration and conventions. Analytic scoring is a thorough, trait-by-trait analysis of those components of a writing sample that are considered important to any piece of writing in any context. This scoring procedure can provide a comprehensive picture of a student's writing performance if enough traits are analyzed. It can identify those traits that make a piece of writing effective or ineffective. However, the traits need to be explicit and well defined so that the raters understand and agree upon the basis for making judgments about the writing sample. The analytic rating guide and sample marker papers for the analytic scoring are presented in Appendix F (p. 57).

Scoring of the Degrees of Reading Power (DRP) Test

The DRP multiple-choice test was machine-scored by TPC. The scores reported are in DRP units. These scores identify the difficulty or readability level of prose that a student can comprehend. This makes it possible to match the difficulty of written materials with student ability. These scores can be better interpreted by referring to the readability levels of some general reading materials as shown below:

- Elementary textbooks (grades 3-5) - 35-58 DRP Units
- Fiction Section - children's magazines - 48 DRP Units

A much more extensive list of reading materials is contained and rated in the Readability Report, Seventh Edition, published by The College Board.

The conversion between DRP unit scores and raw scores can be made from the tabled values obtainable through the Student Assessment and Testing Unit of the Bureau of Evaluation and Student Assessment.

SCHOOL DISTRICT TEST RESULTS REPORTING

The CMT school district reports are designed to provide useful and comprehensive test achievement information about districts, schools and students. Four standard test reports are generated to assist superintendents, principals, teachers, parents and students to understand and use criterion-referenced test results. Appendix G (p. 61) presents samples of the district, school, class and parent/student diagnostic score reports.

FALL 1991 STATEWIDE TEST RESULTS

The Grade 4 Connecticut Mastery Test provides a comprehensive evaluation of student performance on specific skills that Connecticut educators feel are important at the beginning of fourth grade. The mastery test's greatest instructional utility lies in its identification of areas of student weakness and strength. This report profiles the statewide results. Each school district also receives a full complement of reports that identify patterns of academic strength and weakness at the district, school, classroom and individual student levels.

Chart 1 (p. 12) gives a statewide summary of the average number of objectives mastered (mathematics and language arts), average writing and reading scores, the number of students scored, the number of students scoring at or above the remedial standard and goal (where applicable) and the percent of students scoring at or above the remedial standard and goal (where applicable).

The following are highlights of the 1991 Grade 4 CMT results:

MATHEMATICS

- Fourth graders mastered an average of 21.2 of the 25 objectives tested, representing no change from last year.
- A total of 88.4% of the students scored at or above the remedial standard, up slightly from last year's figure of 88.3%.
- A total of 62.3% of the students scored at or above the mathematics goal, an increase from last year's figure of 61%.

LANGUAGE ARTS

- Fourth graders mastered an average of 6.3 of the 9 objectives tested, representing no change from last year.

WRITING

- Fourth graders averaged 4.9 on a scale of 2 to 8, down slightly from last year's 5.1.
- A total of 89.0% of the students scored at or above the remedial standard, an increase from last year's figure of 87.8%.
- A total of 13.9% of the students scored at or above the writing goal, down from last year's figure of 18%.

READING

- Fourth graders averaged 49 units on the Degrees of Reading Power (DRP) test; up slightly from last year's average of 48 units.
- A total of 76% of the students scored at or above the remedial standard, an increase from last year's figure of 72.9%.
- A total of 52.8% of the students scored at or above the reading goal, an increase from last year's figure of 49%.

CHART 1
1991 CONNECTICUT MASTERY TEST RESULTS
GRADE 4 STATEWIDE SUMMARY

SUBJECT	AVERAGE NUMBER OF OBJECTIVES MASTERED	NUMBER OF STUDENTS SCORED	STUDENTS AT OR ABOVE REMEDIAL STANDARD*		STUDENTS AT OR ABOVE STATE GOAL**	
			NUMBER	PERCENT	NUMBER	PERCENT
MATHEMATICS	21.2	35,457	31,332	88.4%	22,073	62.3%
LANGUAGE ARTS	6.3	35,067	———	———	———	———
	AVERAGE HOLISTIC SCORE					
WRITING SAMPLE	4.9	34,877	31,026	89.0%	4,848	13.9%
	AVERAGE DRP UNIT SCORE					
READING	49	35,312	26,843	76.0%	18,632	52.8%

* MATHEMATICS REMEDIAL STANDARD = 69 ITEMS CORRECT
WRITING REMEDIAL STANDARD = 4
READING REMEDIAL STANDARD = 41 DRP UNITS

** MATHEMATICS GOAL = 22 OBJECTIVES MASTERED
WRITING GOAL = 7
READING GOAL = 50 DRP UNITS

Mathematics

In mathematics, fourth graders mastered an average of 21.2 objectives, or 84.8%, of the 25 objectives tested. While the state's goal is that all students master every objective, an interim standard (22 of 25 objectives mastered) has been established which represents a high level of mathematics achievement. Chart 2 (p. 15) illustrates that, statewide, students demonstrated strength (85% or more students achieving mastery) in the basic conceptual and computational skills and simple applications objectives of determining one and ten more/less than a number; addition/subtraction facts with and without regrouping; identifying shapes/angles/sides and objects in arrays; rewriting numbers using expanded notation; reading and interpreting graphs and tables; telling time; determining the value of a set of coins; identifying number sentences and needed information from problems; and solving story problems with addition and subtraction. However, students did not perform as effectively (only 50% of the students achieving mastery) on the objective of rewriting numbers by regrouping. This objective assesses the understanding of place value as well as regrouping for multi-digit computation.

There continues to be a consistent pattern throughout the mathematics subtests of student strengths in primarily computational skills and easy one-step routine applications. These strengths are offset by a pattern of student weaknesses on higher order objectives. For example, students are consistently strong in their ability to recall number facts and compute with whole numbers. However, there is a weakness in regrouping and estimating.

Students getting fewer than 69 questions correct on the 100-question mathematics section (11.6% of fourth grade students tested) were identified as needing further diagnosis and possible remedial instruction.

Language Arts

In language arts, fourth-grade students averaged 6.3 objectives, or 70.0% of the 9 objectives tested. The state's goal is that all students master every objective. Chart 3 (p. 16) illustrates that students did reasonably well on writing mechanics, as well as locating information and literal reading comprehension. However, weaknesses were found in the higher order inferential and evaluative listening and reading comprehension objectives. These results indicate that students need to learn more effective comprehension strategies while simultaneously being exposed to a wide variety of reading selections.

In writing, fourth-grade students averaged 4.9 points on a scale of 2 through 8. The state's goal is that all students be able to produce an organized, well-supported piece of writing, that is, a holistic score of 7 or 8. Chart 4 (p. 17) illustrates that 14% of the students produced an organized, well-supported piece of writing (scores of 7 or 8), and an additional 44% produced a paper which is generally well organized (scores of 5 or 6). A total of 31% of the students scored a 4, which indicates minimally proficient writing, while the remaining 11% scored below the remedial standard (scores of 2 or 3).

In reading (Degrees of Reading Power test), fourth-grade students average 49 units on a scale of 15 through 84. The state's goal is that all students be able to read with high comprehension those materials typically used at the fourth grade or above; that is, at least 50 on the DRP unit scale. Chart 5 (p. 18) illustrates that 53% of the students scored at least 50 on the DRP score scale, 23% scored between 41 and 49 and 24% scored below the remedial standard of 41. The average score of 49 suggests that Connecticut fourth graders typically can read and comprehend expository materials normally used up to grade four. These results indicate that students will probably benefit from continued exposure to nonfiction materials in the primary grades.

CHART 2
MATHEMATICS: PERCENT OF STUDENTS ACHIEVING MASTERY FOR EACH OBJECTIVE

MATHEMATICS OBJECTIVES

CONCEPTUAL UNDERSTANDINGS

1. DETERMINE 1 AND 10 MORE/LESS THAN #
2. EXTEND PATTERNS: #'S AND ATTRIBUTES
3. ORDER WHOLE NUMBERS
4. REWRITE #'S BY EXPANDED NOTATION
5. REWRITE #'S BY REGROUPING: 10'S & 1'S
6. ID FRACTIONAL PARTS OF REGIONS/SETS
7. RELATE MULT/DIV FACTS TO PICTURES

COMPUTATIONAL SKILLS

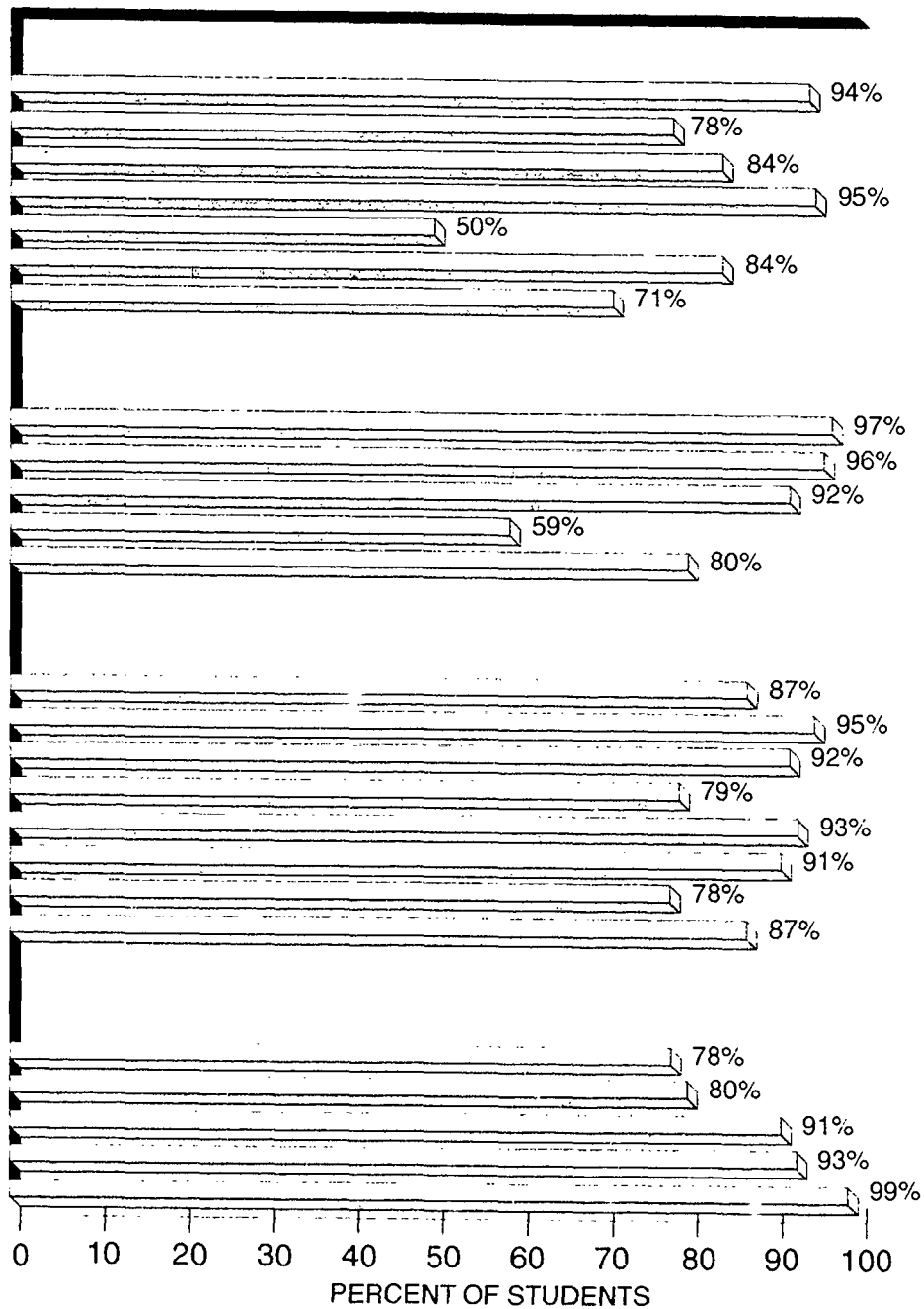
8. ADDITION/SUBTRACTION FACTS TO 18
9. ADD/SUBTRACT WITHOUT REGROUPING
10. ADD 1- & 2-DIGIT #'S WITH REGROUPING
11. ESTIMATE SUMS/DIFFERENCES TO 100
12. MULTIPLY/DIVIDE BY 2, 5, 10

PROBLEM SOLVING/APPLICATIONS

13. IDENTIFY OBJECTS IN AN ARRAY
14. READ/INTERPRET GRAPHS/PICTOGRAPHS
15. READ/INTERPRET TABLES/CHARTS
16. ID NUMBER SENTENCES FROM PICTURES
17. ID NUMBER SENTENCES FROM PROBLEMS
18. SOLVE STORY PROBLEMS WITH +/–
19. SOLVE STORY PROBLEMS/EXTRA INFO
20. IDENTIFY NEEDED INFO IN PROBLEMS

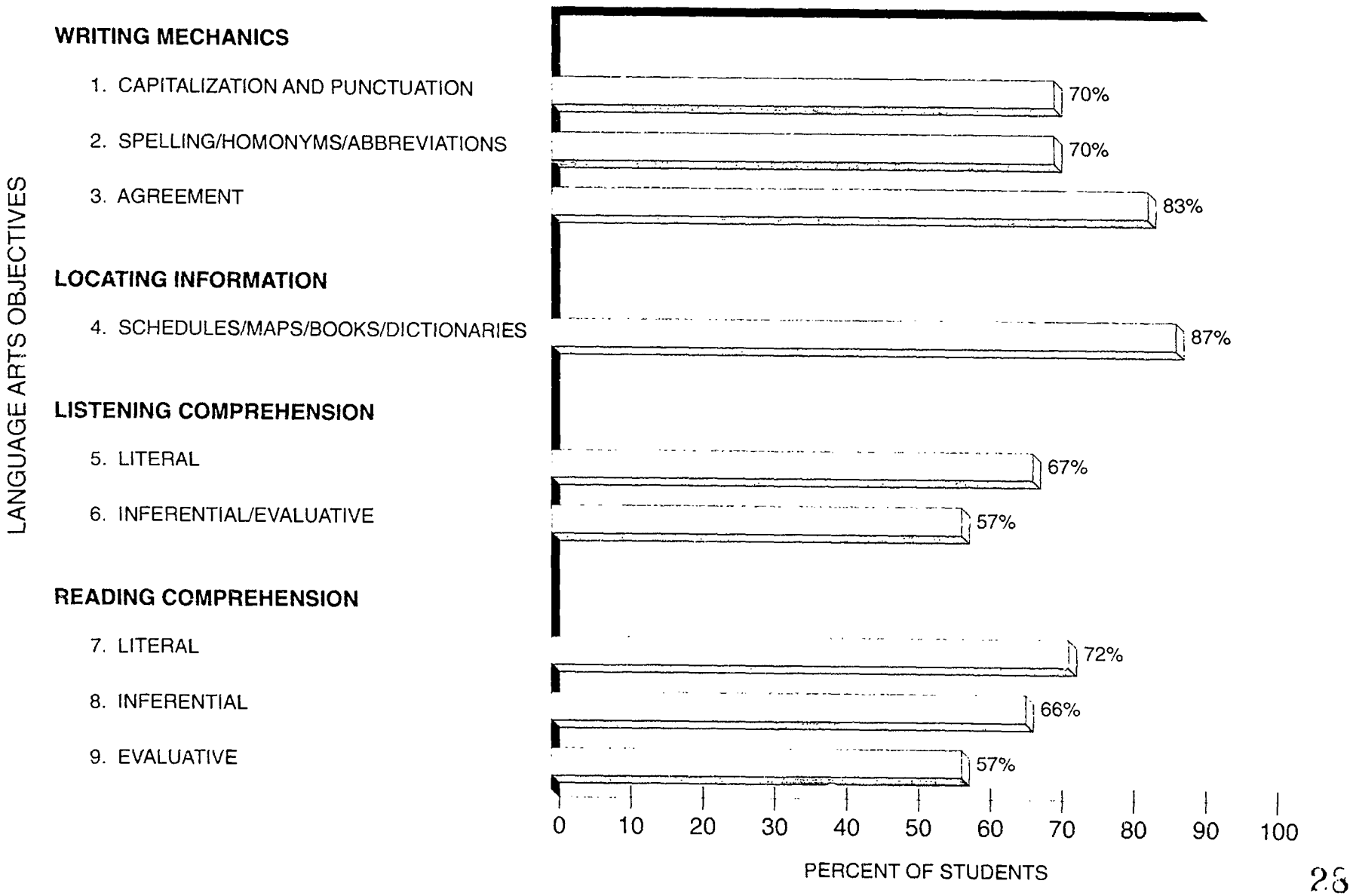
MEASUREMENT/GEOMETRY

21. MEASURE LENGTHS/IDENTIFY UNITS
22. ESTIMATE LENGTHS/AREAS
23. TELL TIME TO NEAREST 1, 1/2, 1/4 HOUR
24. DETERMINE VALUE OF A SET OF COINS
25. IDENTIFY SHAPES/ANGLES/SIDES



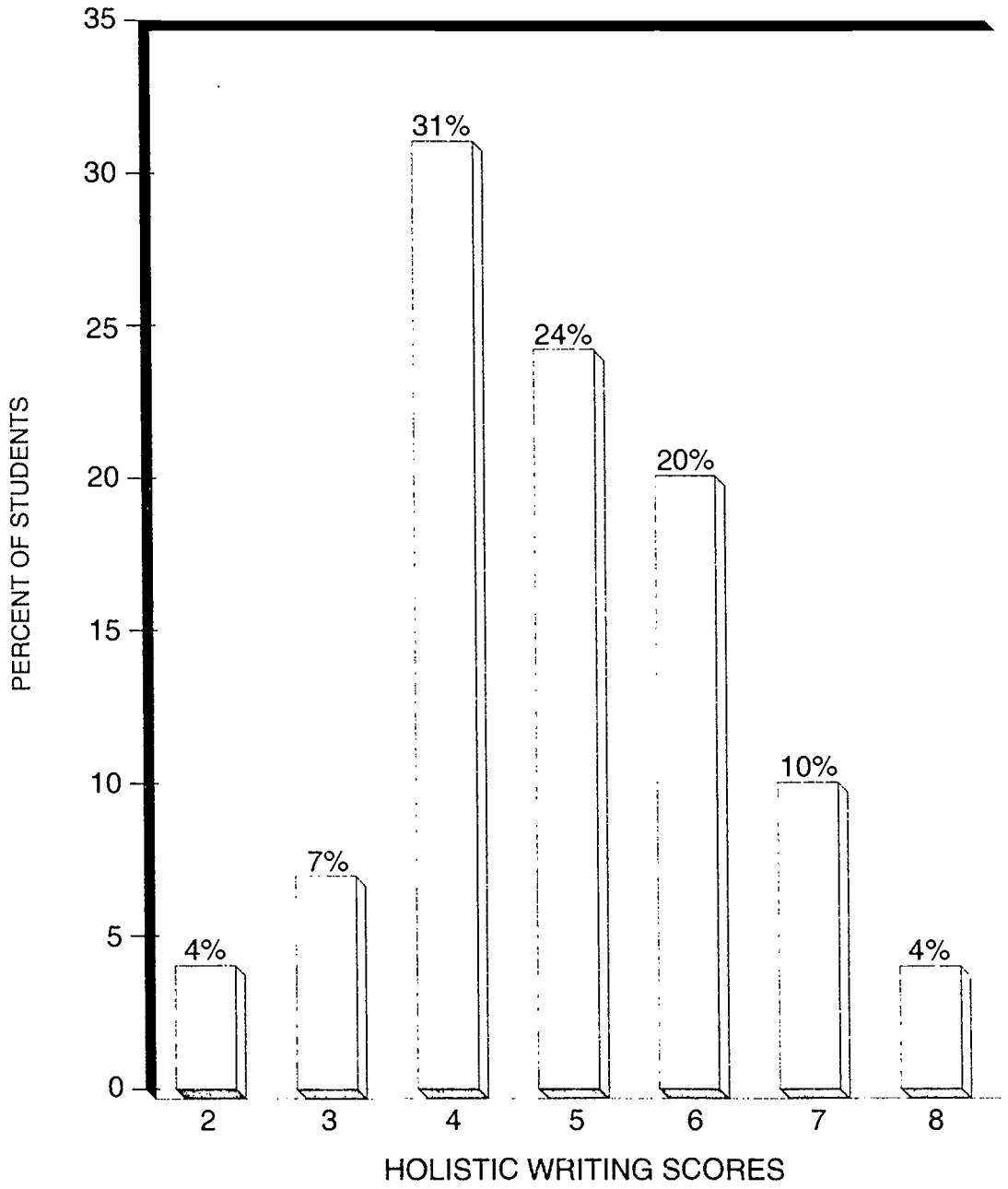
This bar chart illustrates the percent of students, statewide, who mastered each of the 25 mathematics objectives.

CHART 3
LANGUAGE ARTS: PERCENT OF STUDENTS ACHIEVING MASTERY FOR EACH OBJECTIVE



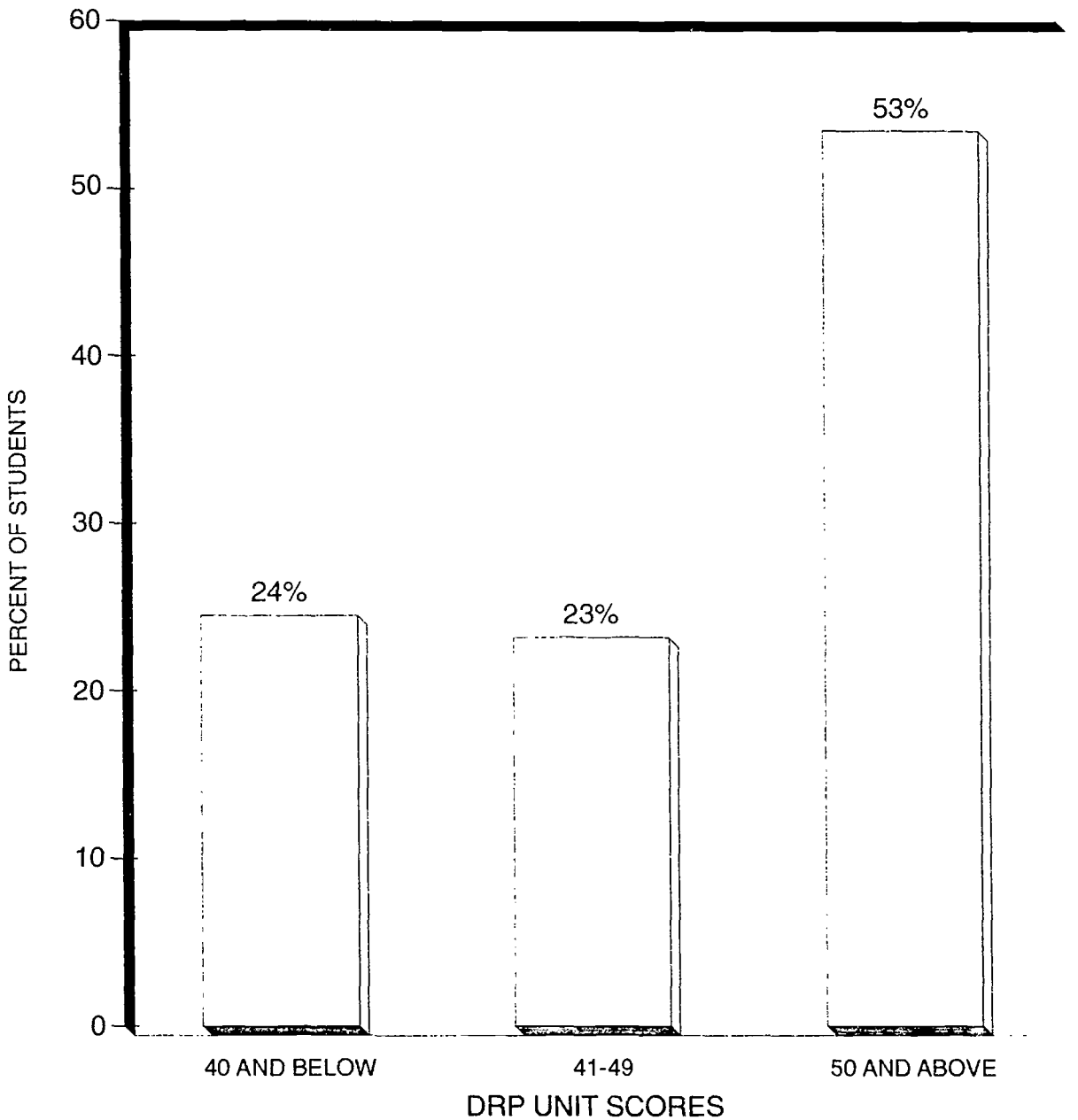
This bar chart illustrates the percent of students, statewide, who mastered each of the nine language arts objectives.

CHART 4
WRITING SAMPLE:
PERCENT OF STUDENTS AT EACH SCORE POINT



This bar chart illustrates the distribution of students who received each *holistic writing* score, statewide. Holistic writing scores are interpreted as follows: a student who scores 7 or 8 has produced a paper which is well written with developed supportive detail; a student who scores 5 or 6 has produced a paper which is generally well organized with supportive detail; a student who scores 4 is minimally proficient; and a student who scores 2 or 3 is in need of further diagnosis and possible remedial assistance.

CHART 5
DEGREES OF READING POWER® (DRP)®: PERCENT OF STUDENTS AT SELECTED RANGES OF DRP UNIT SCORES



This bar chart illustrates the distribution of students, statewide, scoring in each of three *Degrees of Reading Power* (DRP) score categories. DRP score categories are interpreted as follows: a student who scores 50 DRP units or above has met the statewide Reading Goal and can read, with high comprehension, materials which are typically used at grade 4 or above; a student who scores 41-49 DRP units can read, with high comprehension, materials which are typically used below grade 4 but above the Remedial Standard; and a student who scores 40 DRP units or below is in need of further diagnosis and possible remedial assistance.

COMPARISON OF 1985 THROUGH 1991 TEST RESULTS

Charts 6-12 (pp. 21-27) address the comparison of the 1985 through 1991 test results. Charts 6 (p. 21), 9 (p. 24) and 10 (p. 25) present a comparison of statewide average scores on the four subtests, a comparison of the percent of students scoring at or above the remedial standard and a comparison of the percent of students scoring at or above the statewide goals, respectively. The remaining four charts provide a comparison of the percent of students achieving mastery in each mathematics objective (Chart 7, p. 22) and each language arts objective (Chart 8, p. 23), a comparison of student achievement in relation to the remedial standards (Chart 11, p. 26), and a comparison of student achievement in relation to the goals (Chart 12, p. 27).

Chart 6 (p. 21) shows that the statewide average scores increased in all areas tested when 1991 results are compared to 1985 results. In mathematics, the average number of objectives mastered increased from 19.3 in the initial assessment in 1985 to 21.2 in 1991. Mathematics scores have either increased slightly or remained unchanged in each of the test administrations indicating a positive trend. DRP reading performance has also been moving slowly in a positive direction. While the average DRP score was unchanged from 1988 to 1989, there has been a one point increase in each other year moving from 43 in 1985 to 49 in 1991. The average number of language arts objectives mastered has increased slightly over the life of the CMT program from 6.1 objectives mastered in 1985 to 6.3 mastered in 1991. Student performance on the writing samples showed some progress from 1985 to 1991 with the average holistic score increasing from 4.8 to 4.9.

Chart 7 (p. 22) lists the percent of students at mastery for each of the 25 mathematics objectives. From 1985 to 1991, 24 objectives have shown a gain in percent of students at or above mastery and 1 has declined slightly. A comparison of the 1991 and 1985 results shows large gains (at least 10 percentage points) in the percent of students meeting the mastery standard in the following objectives: rewriting numbers by regrouping; identifying fractional parts; relating multiplication/division facts to pictures; estimating sums and differences; reading and interpreting tables/charts; identifying number sentences from pictures; and estimating lengths and areas.

Chart 8 (p. 23) lists the percent of students at mastery for each of the 9 language arts objectives. From 1985 to 1991, 6 objectives have shown a gain in percent of students at or above mastery and 3 objectives have declined.

When 1991 results are compared with 1985, inferential reading comprehension showed the most improvement in the percent of students at mastery with a 15 percentage point gain.

Chart 9 (p. 24) compares the percent of students who scored at or above the remedial standard in mathematics, writing and reading (DRP) for 1985 through 1991. In each content area there has been a gain in the percent of students meeting the remedial standard over the seven CMT administrations. In mathematics, the remedial standard is 69 out of 100 items correct. There was an 8 percentage point increase in performance at or above the remedial standard from 1985 (80%) to 1991 (88%). In writing, the remedial standard is 4 on a scale from 2 to 8. The percent of students scoring at or above the remedial standard increased from 81% in 1985 to 89% in 1991. In reading (DRP) the remedial standard is 41 DRP units with 70% comprehension. There was an 8 percentage point increase in performance at or above the remedial standard from 1985 (68%) to 1991 (76%).

Chart 10 (p. 25) compares the percent of students scoring at or above the statewide goals in mathematics, writing and reading from 1985 through 1991. In mathematics, the goal is 22 of 25 objectives mastered. There was a 20 percentage point increase in performance at or above the statewide goal from 1985 (42%) to 1991 (62%). In writing, the goal is 7 on a scale of 2 to 8. The percent of students scoring at or above the statewide standard decreased slightly from 17% in 1985 to 14% in 1991. In reading (DRP) the statewide goal is 50 DRP units with 70% comprehension. There was an 11 percentage point increase in performance at or above the goal from 1985 (42%) to 1991 (53%).

Chart 11 (p. 26) is a comparison of student achievement in relation to the remedial standards for 1985 through 1991. Over the seven-year period, the percent of students at or above the remedial standard on all three tests (mathematics, reading, writing) has increased from 58.6% in 1985 to 68.5% in 1991, while the percent of students below the remedial standard on all three tests has declined from 8.2% in 1985 to 3.5% in 1991. The percent of students below the remedial standard on one or more subtests has also dropped from 40.4% in 1985 to 30.0% in 1991.

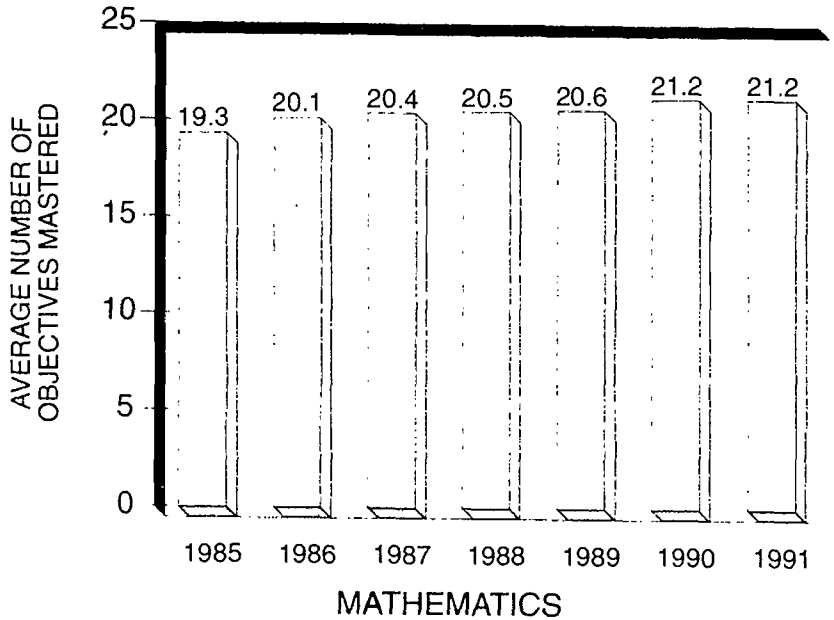
Chart 12 (p. 27) is a comparison of student achievement in relation to the goals for 1985 through 1991. Over the seven-year period, there has been a slight increase in the percent of students reaching the statewide goal on all three tests (mathematics, reading, and writing), while the percent of students below the statewide goal on all three tests has declined from 43.2% in 1985 to 28.0% in 1991. The percent of students above the statewide goal on one or more subtests has increased from 55.6% in 1985 to 69.8% in 1991.

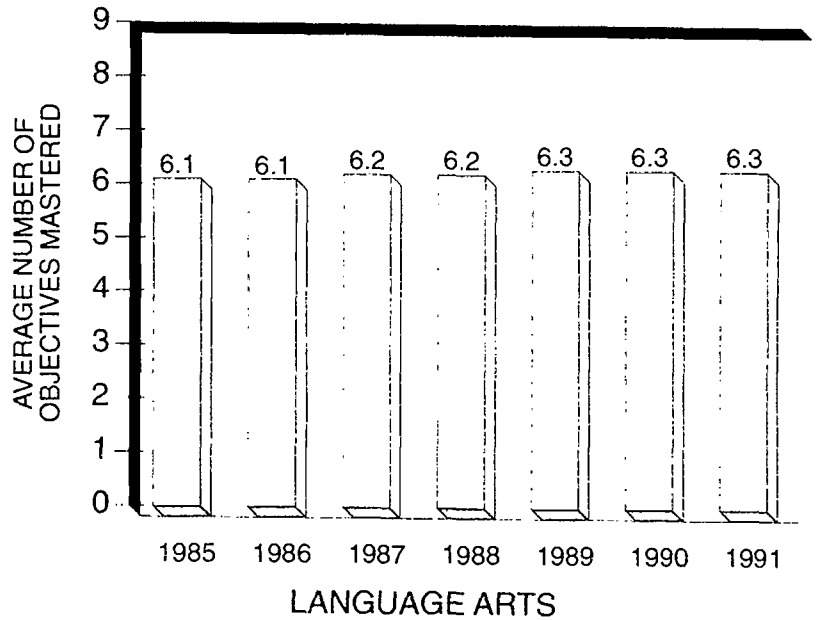
Test Results by District

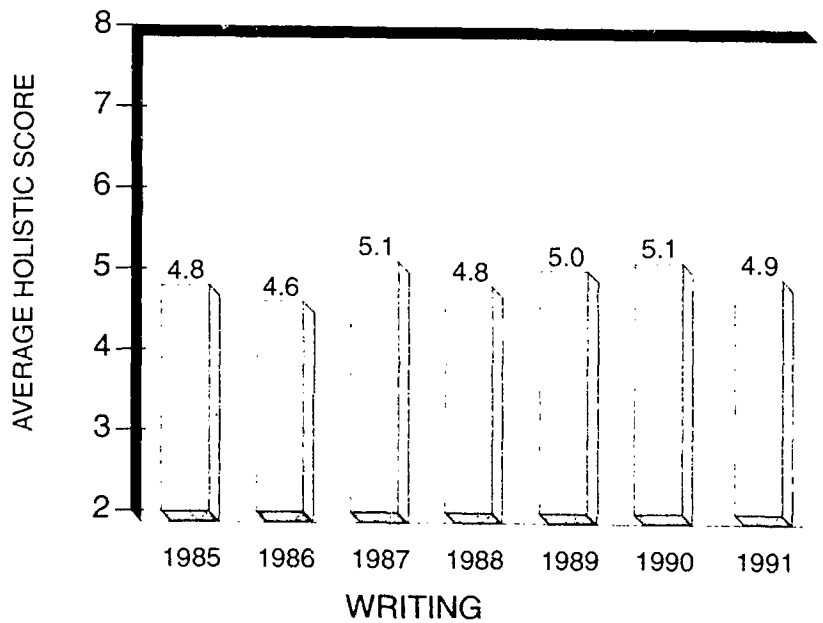
Appendices H and I address the comparison of test results by school district. Appendix H (p. 73) and Appendix I (p. 81) present a listing of the mathematics and language arts test results, respectively, for each Connecticut school district. In each appendix, school districts are listed alphabetically, followed by regional school districts. The Type of Community (TOC) designation in the second column and the Education Reference Group (ERG) designation in the third column indicate the TOC and ERG groups with which each district or school has been classified. Definitions of the TOC and ERG classifications are provided in Appendix J (p. 89) and Appendix K (p. 91), respectively. TOC and ERG summaries follow the alphabetical listings of school district results in mathematics and language arts.

The State Department of Education advises against comparing scores between and among school districts. It is more meaningful to compare district results longitudinally within each district. It is also not appropriate or meaningful to sum across the different tests and subtests for comparative purposes because of differences in test length, mastery criteria and remedial standards. These comparisons are inappropriate because it is impossible to identify, solely on the basis of this information, how the average student has performed in the districts being compared. Average scores and standard deviations provide more appropriate comparative information on how well the average student is performing, although many factors may affect the comparability of these statistics as well.

CHART 6
COMPARISON OF STATEWIDE AVERAGE SCORES FOR 1985 THROUGH 1991







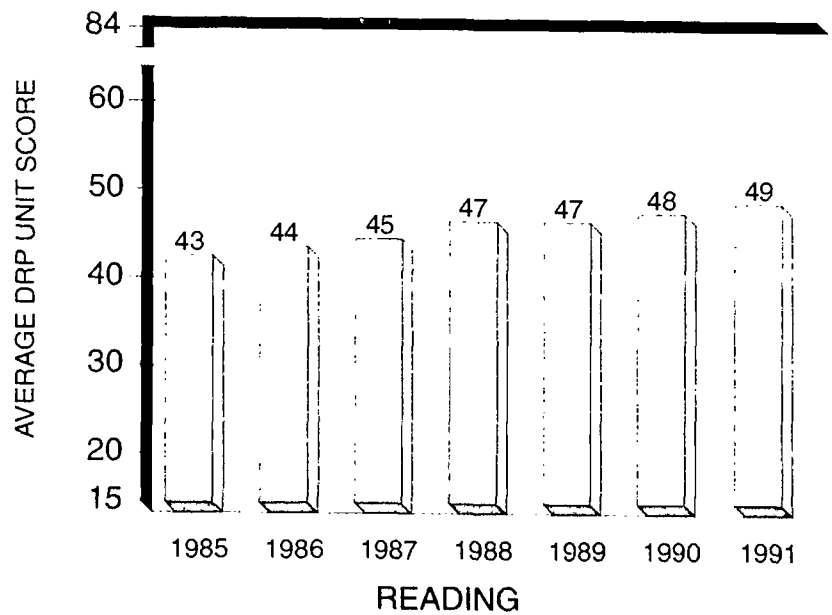


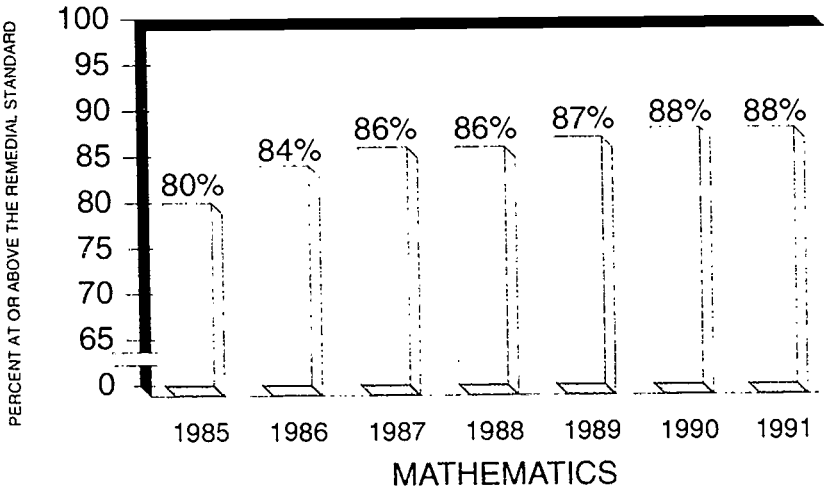
CHART 7
MATHEMATICS: COMPARISON OF THE PERCENT OF STUDENTS ACHIEVING MASTERY IN EACH OBJECTIVE FOR 1985 THROUGH 1991

OBJECTIVE	PERCENT OF STUDENTS AT MASTERY							PERCENTAGE POINT GAIN FROM 1985 TO 1991
	1985	1986	1987	1988	1989	1990	1991	
CONCEPTUAL UNDERSTANDINGS								
1. DETERMINE 1 AND 10 MORE/LESS THAN #	91%	92%	93%	91%	91%	93%	94%	3%
2 EXTEND PATTERNS. #'S AND ATTRIBUTES	72%	75%	78%	69%	71%	77%	78%	6%
3. ORDER WHOLE NUMBERS	78%	82%	84%	83%	83%	83%	84%	6%
4 REWRITE #'S BY EXPANDED NOTATION	96%	96%	96%	96%	96%	95%	95%	-1%
5. REWRITE #'S BY REGROUPING 10'S & 1'S	35%	39%	41%	45%	48%	49%	50%	15%
6 ID FRACTIONAL PARTS OF REGIONS/SETS	73%	85%	86%	90%	90%	83%	84%	11%
7. RELATE MULT/DIV FACTS TO PICTURES	54%	61%	62%	59%	60%	71%	71%	17%
COMPUTATIONAL SKILLS								
8. ADDITION/SUBTRACTION FACTS TO 18	91%	97%	97%	98%	98%	97%	97%	6%
9. ADD/SUBTRACT WITHOUT REGROUPING	95%	96%	97%	97%	97%	96%	96%	1%
10. ADD 1- & 2-DIGIT #'S WITH REGROUPING	89%	87%	88%	84%	85%	92%	92%	3%
11. ESTIMATE SUMS/DIFFERENCES TO 100	28%	46%	52%	49%	51%	59%	59%	31%
12. MULTIPLY/DIVIDE BY 2, 5, 10	79%	80%	81%	78%	78%	80%	80%	1%
PROBLEM SOLVING/APPLICATIONS								
13. IDENTIFY OBJECTS/NUMBERS IN AN ARRAY	82%	87%	88%	89%	90%	87%	87%	5%
14. READ/INTERPRET GRAPHS/PICTOGRAPHS	89%	90%	91%	92%	93%	95%	95%	6%
15 READ/INTERPRET TABLES/CHARTS	78%	84%	86%	90%	91%	92%	92%	14%
16 ID NUMBER SENTENCES FROM PICTURES	57%	58%	60%	60%	62%	79%	79%	22%
17. ID NUMBER SENTENCES FROM PROBLEMS	91%	91%	92%	93%	93%	93%	93%	2%
18 SOLVE STORY PROBLEMS WITH +/–	83%	76%	78%	85%	85%	91%	91%	8%
19. SOLVE STORY PROBS WITH EXTRA INFO	73%	63%	65%	78%	79%	77%	78%	5%
20 IDENTIFY NEEDED INFO IN PROBLEMS	79%	82%	83%	83%	83%	87%	87%	8%
MEASUREMENT/GEOMETRY								
21 MEASURE LENGTHS/IDENTIFY UNITS	76%	79%	81%	82%	83%	78%	78%	2%
22 ESTIMATE LENGTHS/AREAS	70%	79%	81%	72%	72%	80%	80%	10%
23 TELL TIME TO NEAREST 1, 1/2, 1/4 HOUR	86%	90%	91%	94%	95%	91%	91%	5%
24 DETERMINE VALUE OF A SET OF COINS	91%	93%	94%	92%	92%	92%	93%	2%
25. IDENTIFY SHAPES/ANGLES/SIDES	97%	97%	97%	97%	97%	99%	99%	2%

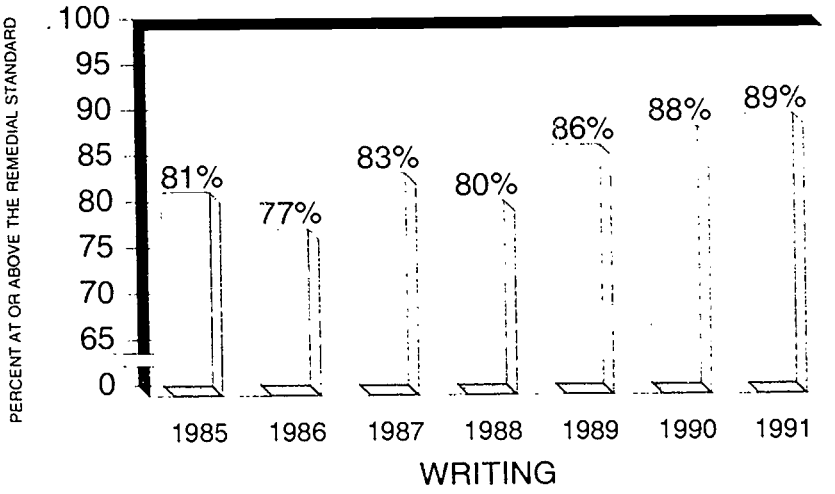
CHART 8
LANGUAGE ARTS: COMPARISON OF THE PERCENT OF STUDENTS ACHIEVING MASTERY IN EACH OBJECTIVE FOR 1985 THROUGH 1991

OBJECTIVE	PERCENT OF STUDENTS AT MASTERY							PERCENTAGE POINT GAIN FROM 1985 TO 1991
	1985	1986	1987	1988	1989	1990	1991	
WRITING MECHANICS								
1. CAPITALIZATION AND PUNCTUATION	74%	83%	85%	70%	72%	71%	70%	-4%
2. SPELLING/HOMONYMS/ABBREVIATIONS	66%	62%	62%	68%	67%	71%	70%	4%
3. AGREEMENT	80%	81%	82%	84%	84%	83%	83%	3%
LOCATING INFORMATION								
4. SCHEDULES/MAPS/BOOKS/DICTIONARIES	81%	85%	87%	88%	89%	88%	87%	6%
LISTENING COMPREHENSION								
5. LITERAL	73%	54%	55%	68%	68%	66%	67%	-6%
6. INFERENTIAL/EVALUATIVE	60%	64%	66%	74%	74%	57%	57%	-3%
READING COMPREHENSION								
7. LITERAL	67%	71%	73%	65%	66%	72%	72%	5%
8. INFERENTIAL	51%	58%	60%	52%	53%	67%	66%	15%
9. EVALUATIVE	55%	52%	54%	51%	52%	58%	57%	2%

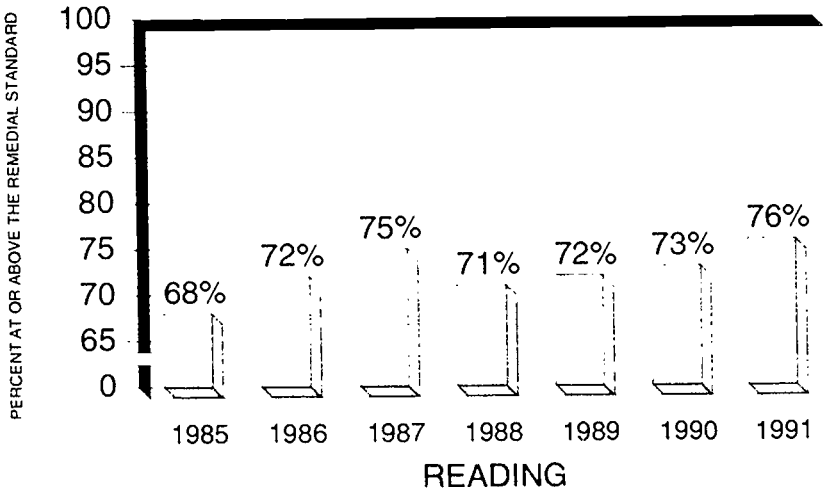
CHART 9
COMPARISON OF THE PERCENT OF STUDENTS SCORING AT OR ABOVE THE REMEDIAL STANDARD IN EACH SUBJECT AREA FOR 1985 THROUGH 1991



MATHEMATICS GROWTH SINCE 1985 8%

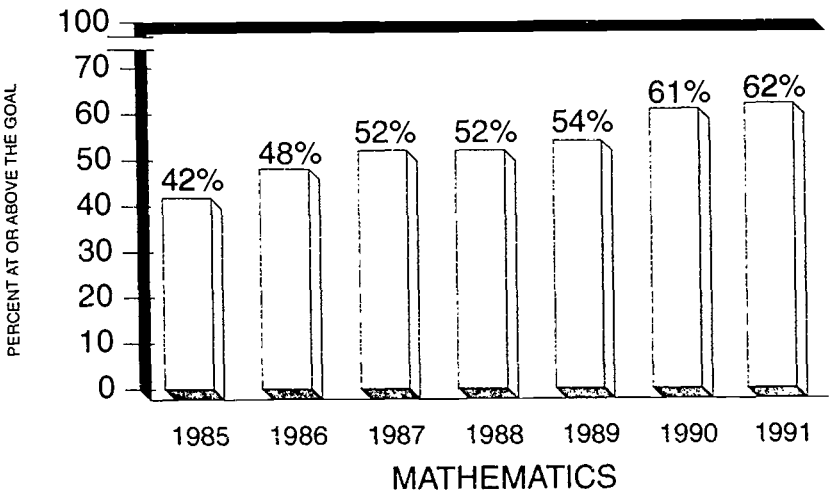


WRITING GROWTH SINCE 1985 8%



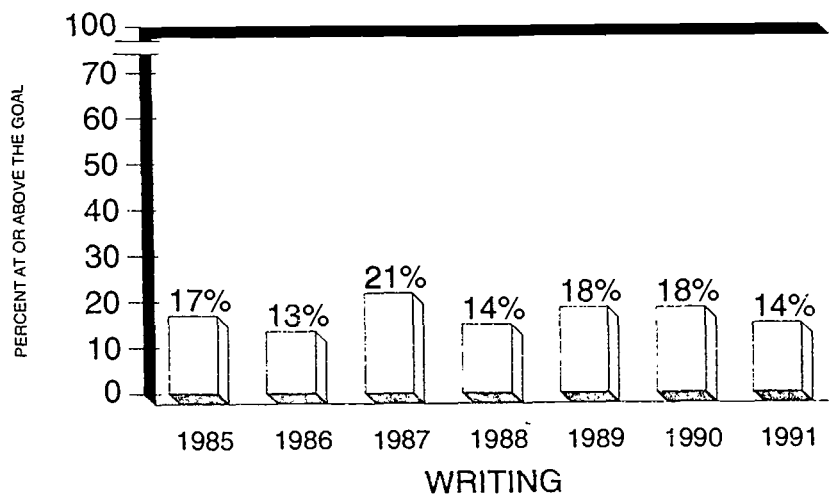
READING GROWTH SINCE 1985 8%

CHART 10
COMPARISON OF THE PERCENT OF STUDENTS SCORING AT OR ABOVE THE GOAL IN EACH SUBJECT AREA FOR 1985 THROUGH 1991



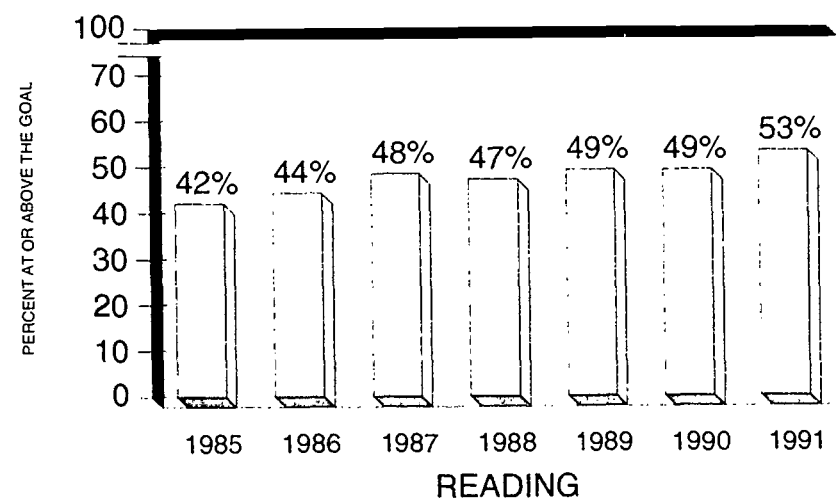
MATHEMATICS GROWTH SINCE 1985 20%

MATHEMATICS GOAL IS 22 OF 25 OBJECTIVES MASTERED



WRITING GROWTH SINCE 1985 -3%

WRITING GOAL IS 7 ON A SCALE OF 2 TO 8



READING GROWTH SINCE 1985 11%

READING GOAL IS 50 DRP UNITS WITH 70% COMPREHENSION

CHART 11
COMPARISON OF STUDENT ACHIEVEMENT IN RELATION TO THE REMEDIAL STANDARDS
1985 THROUGH 1991 ADMINISTRATIONS

	1985		1986		1987		1988		1989		1990		1991	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STUDENTS AT OR ABOVE THE STANDARD:														
ON ALL THREE TESTS	17,499	58.6	18,311	59.8	19,840	63 9	19,387	60 4	21,520	65.0	22,788	66 2	24,502	68.5
ON TWO OF THE TESTS	5,647	18.9	6,109	19 9	5,997	19 3	6,590	20 5	6,259	18 9	6,571	19 1	6,251	17.5
ON ONE OF THE TESTS	3,913	13 1	3,617	11 8	3,341	10 8	3 883	12.1	3,348	10 1	3 379	9.8	3,255	9.1
ON NONE OF THE TESTS	2,822	9 4	2,588	8 5	1,867	6 0	2,259	7 0	1,975	6 0	1,666	4 8	1,737	4 9
STUDENTS BELOW THE STANDARD:	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
ON ALL THREE TESTS	2,459	8 2	2,265	7 4	1,643	5 3	1,804	5 6	1 665	5 0	1 376	4 0	1,249	3 5
ON TWO OF THE TESTS	3 943	13 2	3,671	12 0	3,284	10 6	3,993	12 4	3,404	10 3	3 346	9 7	3,210	9 0
ON ONE OF THE TESTS	5 664	19 0	6 113	20 0	5,729	18 5	6,647	20 7	6,204	18 7	6,556	19 1	6,281	17 6
ON NONE OF THE TESTS	17 815	59 6	18 576	60 7	20 389	65 7	19,675	61 3	21,829	65 9	23,126	67 2	25,005	70 0
NUMBER OF STUDENTS TESTED	29,881		30,625		31,045		32 119		33,102		34,404		35,745	
NUMBER OF STUDENTS BELOW REMEDIAL STANDARD ON ONE OR MORE SUBTESTS (UNDUPLICATED COUNT)	12 066	40 4	12 049	39 3	10,656	34 3	12,444	38 7	11 273	34 2	11 278	32 8	10,740	30 0

CHART 12
COMPARISON OF STUDENT ACHIEVEMENT IN RELATION TO THE GOALS
1985 THROUGH 1991 ADMINISTRATIONS

	1985		1986		1987		1988		1989		1990		1991	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STUDENTS AT OR ABOVE THE STATE GOAL:														
ON ALL THREE TESTS	3.159	10 6	2 739	8 9	4.535	14 6	3.268	10 2	4.203	12 7	4.498	13.1	3.910	10 9
ON TWO OF THE TESTS	6 809	22 8	8 373	27 3	8.825	28 4	9.482	29 5	9.768	29 5	11.092	32.2	12.777	35 7
ON ONE OF THE TESTS	6 634	22 2	7 009	22 9	6.968	22 4	7 497	23 3	7.409	22 4	8.044	23.4	8.273	23 1
ON NONE OF THE TESTS	13 279	44 4	12.504	40 8	10 717	34 5	11.872	37.0	11.722	35 4	10.770	31.3	10.785	30.2
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STUDENTS BELOW THE STATE GOAL:														
ON ALL THREE TESTS	12 912	43 2	12.009	39 2	10.549	34 0	11.547	36 0	11.344	34 3	10.311	30 0	10.011	28.0
ON TWO OF THE TESTS	6 932	23 2	7.369	24 1	7.104	22 9	7.678	23.9	7.616	23 0	8.306	24 1	8.545	23 9
ON ONE OF THE TESTS	6 824	22 8	8.457	27 6	8 778	28 3	9 576	29 8	9 887	29 9	11.245	32 7	13.031	36 5
ON NONE OF THE TESTS	3.213	10 8	2.790	9 1	4.614	14 9	3.318	10 3	4.255	12 9	4.542	13 2	4.158	11 6
NUMBER OF STUDENTS TESTED	29 881		30 625		31.045		32 119		33 102		34 404		35 745	
NUMBER OF STUDENTS ABOVE THE STATE GOAL ON ONE OR MORE SUBTESTS (UNDUPLICATED COUNT)	16 602	55 6	18 121	59 2	20.328	65 5	20 247	63 0	21.380	64 6	23.634	68 7	24.960	69 8

Normative Results

Normative information is provided to indicate how well the average student in Connecticut performs compared to a national sample of students. Norms have been available for the mathematics test, the language arts test and the reading comprehension test since 1987. This year, for the second year, normative information is also being provided for mathematics problem solving. These norms are based on links established between the CMT and the sixth edition of the Metropolitan Achievement Test (MAT-6). The norms are expressed in percentile ranks which provide estimates of group performance relative to the performance of the national MAT-6 norm group. Percentile ranks range from 1 to 99. A percentile rank of 50 represents the score that divides the norm group into two equal parts; half scoring below and half scoring above this value. Each reported percentile rank represents the performance of a nationally representative sample of students in relation to Connecticut student performance.

The following are the estimated norms for the grade four statewide averages. In the content areas of total mathematics, language arts and reading comprehension (not DRP), data are provided for the 1987 through 1991 administrations. Normative information in the content area of mathematics problem solving is presented for the 1990 and 1991 administrations only.

Grade Four

	1987	1988	1989	1990	1991
Total Mathematics	67	66	67	68	68
Language Arts	69	70	69	67	66
Reading Comprehension	60	58	59	58	56
Mathematics Problem Solving	—	—	—	68	69

Patterns in the data are summarized below.

- In each content area and administration year, the mean national percentile rankings of Connecticut students substantially exceed the national average (50th percentile rank).
- The norms for mathematics and language arts have remained similar to one another over the five years with percentile ranks ranging from 66 to 70 in value. In 1991 the reading comprehension performance continues to be lower than either mathematics or language arts when compared to a national sample.
- The percentile ranks within each content area are quite stable across the five years, differing in value by no more than four points.

It should be pointed out that these norms provide a way to interpret the performance of the average Connecticut student relative to a national sample. They do not address the issue of how Connecticut, as a state, compares to other states. The fact that, in 1991, the average Connecticut student is at the 68th percentile in mathematics does not mean that the state as a whole would be in the 68th percentile if it were compared to other states. A

state-by-state achievement testing program has been endorsed by the Council of Chief State School Officers (CCSSO) and the National Governors' Association (NGA) and is in progress using the National Assessment of Educational Progress (NAEP) Program. Connecticut participated in the 1990 trial state assessment for mathematics at grade eight. Results of this assessment were released June 6, 1991, at a national press conference in Washington, D.C. In addition, Connecticut participated in the 1992 trial state assessment in grades four and eight.

Norms Available to Districts

Total mathematics, language arts, reading comprehension and mathematics problem solving norms can also be calculated for groups of students at the district level. Each year all districts are notified by the CMT contractor that norms for their own districts and schools within their districts are optionally available. In addition, districts are offered all materials and directions necessary to hand-calculate norms for groups of students within their districts (e.g., Chapter I students). There is no charge for either of these services. Any district that requests this information receives it directly from the CMT contractor. No district receives normative information unless it is specifically requested by the superintendent. Over one half of Connecticut school districts have requested norms in the past.

Participation Rate Results

Appendix L (p. 95) presents the number of fourth-grade students in each district and the percents of students who participated in the grade four mastery testing during the fall 1991 statewide administration. Appendix L also shows the percent of students exempted from CMT testing. The alphabetical listing of districts provides the following information for each district:

Column 1	The name of the district
Column 2	The total fourth-grade population at the start of mastery testing
Column 3	The number of students eligible for testing
Column 4	The percent of total population exempted from testing
Columns 5-8	The percent of eligible students tested in each content area

The results in Appendix L illustrate that participation rates by school district on the fourth-grade CMT were quite high, with only a few exceptions. However, the high percentage of students exempted from the CMT, statewide, combined with the large variation in exemption rates among districts, has raised concerns about the fair application of exemption procedures and its impact on students. The Department has examined the impact of the exclusion provisions on the CMT programs for Special Education and bilingual students. The results from these analyses are available from the Division of Research, Evaluation, and Assessment.

APPENDIX A

Test Construction

Test Construction

The development of the fourth-grade criterion-referenced mastery test required the formation of seven statewide advisory committees. These included the Mathematics and Language Arts Advisory Committees, the Psychometrics Advisory Committee, the Bias Advisory Committee, the Connecticut Student Assessment Advisory Committee (formerly the Mastery Test Implementation Advisory Committee), and two standard-setting committees, one for mathematics and one for language arts. These committees were comprised of representatives from throughout the state. Members were selected for their area of expertise. Approximately 150 Connecticut educators participated on the mastery test committees which met over 80 times during the first 18 months of test development. (See Acknowledgements, p. v and page 44.)

Beginning in the spring of 1984, content committees in both language arts and mathematics participated in each stage of the test development process, including assisting the State Department of Education in the selection of The Psychological Corporation as its test contractor. First, the content committees reviewed the curriculum materials prevalent throughout the state and the scope of the national tests in use in Connecticut at the respective grade levels. Additional resources included the Connecticut curriculum guides in mathematics and language arts, developed in 1981, as well as the results of recent Connecticut Assessment of Educational Progress (CAEP) assessments in mathematics and language arts. Next, the committees identified sets of preliminary mathematics and language arts objectives which reflected existing curriculum materials and the goals of the mastery testing program. The content committees defined an objective as an operationalized learning outcome that was fairly narrow and clearly defined.

Four criteria were used in identifying the appropriate learning outcomes or test objectives and in selecting specific test items to be included on the Grade 4 Connecticut Mastery Test (CMT). To have been considered for use, test objectives and items must have been:

(1) significant and important;
(2) developmentally appropriate;
(3) reasonable for most students to achieve; and
(4) generally representative of what is taught in Connecticut schools.

Once the objectives were identified, item specifications and/or sample items were written. Item specifications are written descriptions of the types and forms of test items that assess an objective. They also prescribe the types of answer choices that can be used with each item.

After the test specifications were written and agreed upon, the test contractor wrote items and response choices for each of the objectives. The items were then reviewed by the content committees. Items which met the criteria of the test specifications and received the approval of the content committees were considered for the pilot test. Before testing, the Bias Advisory Committee reviewed each item for potential discrimination related to gender, race or ethnicity in the language or format of the question or response choices. After their review was completed, the pilot test forms were constructed. Over 500 customized Connecticut items were included in the October 1984 grade four pilot test in language arts and mathematics.

The Psychometrics Advisory Committee provided advice concerning other aspects of the pilot test including the sampling design, statistical bias analysis, the design of item specifications and pilot test administration procedures. The recommendations proposed by the Psychometrics Advisory Committee were reviewed and endorsed by the Connecticut Student Assessment Advisory Committee.

Pilot Tests

After the items had been reviewed, twelve test forms (six in mathematics and six in language arts) were piloted for the grade four test. The purpose of several pilot test forms was to ensure that enough test items were included to construct three comparable test forms from the pilot test results.

Over 6,000 grade four students participated in the October 1984 pilot test. In January 1985, the pilot test results were made available to Connecticut State Department of Education (CSDE) staff. The process of selecting items to construct three comparable test forms began by the Bias Advisory Committee examining the pilot test statistics of each item for potential bias. As a result, some items were eliminated from the item pool. From the remaining items, test forms were constructed to be equivalent in content and difficulty at both the objective and total test levels.

Once the items were sorted on this basis, the test contractor prepared three complete forms of the mathematics test and two complete forms of the language arts test. These forms were approved by the content committees. Each form was created to be equal in difficulty and test length. A third language arts test was constructed after a few additional items were piloted as part of a later test administration. Later, during subsequent CMT administrations, enough items were pilot tested to yield two additional test forms. The psychometric procedures used to construct each of these test forms focused primarily on the use of the one-parameter item response model.

Survey

In October 1984, a survey of preliminary grade four mastery test objectives was sent to over 3,000 Connecticut educators. The purpose of the survey was to determine (1) the importance of the proposed mathematics and reading/language arts objectives and (2) whether the objectives were taught prior to the beginning of grade four. Over a 50% response rate was achieved which included approximately one-third of the respondents representing urban school districts. As a result of the survey, two objectives were not considered to be important learning outcomes before fourth grade and consequently were eliminated from the fourth-grade language arts test by the Language Arts Advisory Committee.

APPENDIX B

Grade Four Mathematics Objectives

Grade Four Mathematics Objectives

The 25 objectives of the fourth-grade mathematics test are listed below. There are four test items for each objective. The number of items in each domain is indicated in the parentheses.

CONCEPTUAL UNDERSTANDINGS (28)

1. Identify the number one more, one less, ten more or ten less than a given number
2. Extend patterns involving numbers and attributes
3. Order whole numbers
4. Rewrite numbers using expanded notation
5. Rewrite numbers by regrouping tens and ones
6. Identify fractional parts of regions and sets from pictures for halves, thirds, fourths and sixths
7. Relate multiplication and division facts to rectangular arrays

COMPUTATIONAL SKILLS (20)

8. Know addition and subtraction facts to 18
9. Add and subtract one- and two-digit numbers without regrouping
10. Add one- and two-digit numbers with regrouping
11. Estimate sums and differences to 100
12. Multiply and divide by 2, 5 and 10

PROBLEM SOLVING/APPLICATIONS (32)

13. Identify objects or numbers that do or do not belong in a collection, matrix, or array
14. Read and interpret bar graphs and pictographs
15. Read and interpret data from tables and charts
16. Identify or write number sentences from pictures
17. Identify number sentences from addition or subtraction story problems
18. Solve simple story problems involving addition or subtraction
19. Solve and identify number sentences in simple story problems involving addition and subtraction, with extraneous information
20. Identify needed information in problem situations

MEASUREMENT/GEOMETRY (20)

21. Measure length and identify appropriate units for measuring length and distance
22. Estimate lengths and areas
23. Tell time to the nearest hour, half hour and quarter hour, using analog and digital clocks
24. Determine the value of a set of coins
25. Identify shapes, angles and sides

Performance on all 25 objectives is reported at the student, classroom, school, district and state levels.

APPENDIX C

Grade Four Language Arts Objectives

Grade Four Language Arts Objectives

There are nine multiple-choice objectives and two holistic measures, one for reading and one for writing, within the fourth-grade language arts test. The number of items for each content area or objective is indicated in the parentheses.

WRITING MECHANICS (36)

1. Capitalization and Punctuation (12)
2. Spelling Words, Homonyms and Abbreviations (9)
3. Agreement (15)

LOCATING INFORMATION (11)

4. Schedules, Maps, Table of Contents, Title Page and Dictionary (11)

LISTENING COMPREHENSION (20)

5. Literal (7)
6. Inferential and Evaluative (13)

READING COMPREHENSION (36)

7. Literal (12)
8. Inferential (14)
9. Evaluative (10)

DEGREES OF READING POWER (56)

WRITING SAMPLE (1)

Holistic scoring is provided for all students. Analytic scoring is provided for students who score at or below the remedial standard of 4 (on a scale of 2-8).

Performance on all nine Language Arts objectives, the Degrees of Reading Power and Writing Sample is reported at the student, classroom, school, district and state levels.

APPENDIX D

Remedial (Grant) Standard-Setting Process

and

Standard-Setting Committees

Remedial (Grant) Standard-Setting Process

Background

There are several acceptable strategies for setting standards on criterion-referenced tests. Each of the proposed methods has one or more unique characteristics. One common element to the various methods is that they all offer to the individuals who are setting the standards some process which reduces the arbitrariness of the resulting standard. Different methods accomplish this in different ways. All methods systematize the standard-setting process so that the result accurately reflects the collective informed judgment of those setting the standard.

Types of Standard-Setting Methods

Standard-setting methods can generally be categorized into three types: test question review, individual performance review and group performance review. Test question review methods specify a procedure for standard setters to examine each test question and make a judgment about that question. For example, standard setters might be asked to rate the difficulty or the importance of each question. These judgments are combined mathematically to produce a standard. Individual performance review methods also require standard setters to make judgments, but the judgments are made on the basis of examining data that indicate how well individual students perform on test items. These data may be based on actual pilot test results or projected results using mathematical theories. In this method, additional student information, such as grades, may also be used to inform the standard setters. Group performance review methods provide for judgments to be made based on the performance of a reference group of students. That is, standard setters review the group performance and make a determination where the standard should be set based on the group results.

Selection of a Standard-Setting Method

Several factors affect the choice of a particular standard-setting method. The type of test is one consideration. For example, some methods are only appropriate for multiple-choice questions or for single correct answer questions while other methods are more flexible. For instance, time constraints are a consideration if student performance data are necessary. In this case, a pilot test must be conducted and the test results must be analyzed prior to setting the standards. Another consideration is the relative importance of the decisions that will be made on the basis of the standard. For example, a classroom test affecting only a few students would not require as stringent a procedure as would a statewide test determining whether a student is allowed to graduate from high school. Other relevant factors include the number of test items, permanence of the standard, purpose of the test and the extent of available financial and other resources to support the standard-setting process.

On February 4, 1985, the Mastery Test Psychometrics Advisory Committee met to consider the issue of standard-setting procedures and voted unanimously to approve the following proposal.

A PROPOSAL FOR SETTING THE REMEDIAL STANDARDS ON THE CONNECTICUT MASTERY TESTS

1. Two standard-setting committees will be created: one for mathematics and one for reading and writing.

2. This description of a minimally proficient student will be given to each of the committees:

> Imagine a student who is just proficient enough in reading, writing and mathematics to successfully participate in his/her regular fourth-grade coursework.

3a. In mathematics, an adaptation of the Angoff procedure will be used. The committee will be provided with each item appearing on one form of the mathematics test. The committee will be given the following directions:

> Consider a group of 100 of these students who are just proficient enough to be successful in regular fourth-grade coursework. How many of them would be expected to correctly answer each of the questions?

The committee will rate each item. The committee will then be given the opportunity to discuss their rating of each item. Sample pilot data will be presented. Committee members will be given the opportunity to adjust their item ratings. The item ratings will then be averaged in accordance with the Angoff procedure in order to produce a recommended test standard.

b. In reading, the committee will review and discuss each passage of the Degrees of Reading Power (DRP) test. Student performance data will be presented. The committee will consider the reading difficulty that should be expected of a student at the grade level being tested. The committee members will identify the passage that has the appropriate level of reading difficulty consistent with the above description of a minimally proficient student.

c. In writing, the committee will read four sample essays. These essays will have been prescored holistically (on a scale from 2 to 8) in order to rank the quality of the essays. Committee members will classify essays into one of three categories: 1) definitely NOT proficient, 2) borderline and 3) definitely proficient. These classifications will be discussed in light of the holistic scores. The committee will then classify approximately twenty-five additional essays. The essay ratings will be discussed in the same manner as the original four essays. When all essays have been discussed, the essays which fell in the borderline category will be focused upon to determine the standard. The committee will determine where, among the borderline essays, the standard should be established.

4. The standards recommended in step 3 will be presented to the Connecticut Student Assessment Advisory Committee (formerly the Mastery Test Implementation Advisory Committee) for discussion and action.

Connecticut's Strategy

Several steps were employed to create an acceptable and valid test standard for Connecticut tests. Initially, a separate standard-setting committee was convened for each test on which standards were to be set. Individuals were chosen to serve as members on the committee on the basis of their familiarity with the area being assessed and the nature of the examinees. One source of such members was the test content committees related to the project. For example, members of the Mathematics Advisory Committee were represented on the committee setting standards for the mathematics mastery test.

The actual procedures used to set standards were an adaptation of a method proposed by William Angoff (1970). This test question review method required members of a standard-setting committee to estimate the probability that a question would be correctly answered by examinees who possess no more than the minimally acceptable knowledge or skill in the areas being assessed. Standard setters then reviewed pilot test data for sample items as further evidence of the appropriateness of the judgments being made. The original probability estimates assigned to each test question were reviewed and adjustments made by the standard setters. The final individual item probabilities were summed to yield a suggested test standard for each member of the committee. The suggested standards were averaged across members of the committee to produce the recommended test standard.

The recommended test standard was presented to the Connecticut Student Assessment Advisory Committee and the State Board of Education.

In mid-March 1985, Mathematics and Language Arts Standard-Setting Committees met to set the remedial standards for the Grade 4 Mastery Test. The following information summarized the results of the standard-setting activities conducted by CSDE staff:

I. Mathematics (100-item test)

Using the procedures previously outlined, the standard setters rated each item and considered the pilot data. Committee members discussed items and were given the opportunity to adjust their initial ratings. The final ratings were averaged to produce a remedial standard. It was recommended that a raw score of 69 be the remedial mathematics standard. Below is a summary of the ratings.

Procedure	# Judges	Range %	Mean % Correct	Raw Score
Angoff	21	56.7-81.3	68.7	68.7

II. Reading (Degrees of Reading Power, 56-item test)

Standard setters used two procedures to establish a remedial reading standard. First, they examined the passages in the Degrees of Reading Power (DRP) test, asking themselves which passage is too difficult for the student who is just proficient enough to successfully participate in fourth-grade coursework. Discussion occurred throughout this selection process.

Second, they examined textbooks which are typically used in grades three and four and selected those textbooks which a minimally proficient student would not be expected to read in order to successfully participate in fourth-grade coursework. Discussion occurred throughout this selection process.

The average readability values of the selected passages and textbooks and the pilot test data were then revealed to the standard setters. The standard setters discussed the readability values and the pilot test data and recommended the DRP unit score of 41 as the remedial standard. This standard was accepted by the State Board of Education at the 70% comprehension level. Below is a summary of the ratings.

Procedure	# Judges	Readability Range	Recommended Remedial Standard
A. Test Passage Review	17	42-48 DRP Units	41 DRP Units
B. Textbook Review	17	42-51 DRP Units	

III. Writing (45-minute writing sample)

Using the procedure previously outlined, standard setters read and rated 21 essays written to a narrative prompt and 21 essays written to an expository prompt. After discussions and final ratings, the holistic scores for the papers were revealed to the group. The committee then discussed the appropriate remedial writing standard in light of the degree to which their ratings matched the holistic scores. It was the recommendation of the committee that a holistic writing score of 4 be used as the remedial writing standard. Below is a summary of the ratings.

NARRATIVE PROMPT
Rating After Discussion

Holistic Score	Definitely NOT Proficient	Borderline	Definitely Proficient
2	84%	4%	12%
3	37%	6%	57%
4	4%	4%	92%
5	8%	6%	86%
6	20%	2%	78%
7	4%	0%	96%
8	4%	2%	94%

EXPOSITORY PROMPT
Rating After Discussion

Holistic Score	Defini ely NOT Proficient	Borderline	Definitely Proficient
2	94%	0%	6%
3	33%	2%	65%
4	4%	12%	84%
5	0%	2%	98%
6	2%	4%	94%
7	0%	0%	100%
8	0%	0%	100%

LANGUAGE ARTS STANDARD-SETTING COMMITTEE

Evelyn P. Burnham, Colebrook Public Schools
Nicholas P. Criscuolo, New Haven Public Schools
Mary R. Fisher, Thompson Public Schools
Marguerite Fuller, Bridgeport Public Schools
Anne Jackel, Thompson Public Schools
Dorothy Kaplan, Middletown Public Schools
Robert Kinder, CT State Department of Education
Bob Lincoln, Toll and Public Schools
Virginia Lity, Bridgeport Public Schools
Virginia Manulls, Colebrook Public Schools
Noreen McDermott, Hartford Public Schools
Elizabeth Nelligan, Canton Public Schools
Dorothy Nevers, Canton Public Schools
Carol D. Parmelee, Middletown Public Schools
Beverly R. Peterman, Stamford Public Schools
Geraldine Smith, Canton Public Schools
Mary Weinland, CT State Department of Education

MATHEMATICS STANDARD-SETTING COMMITTEE

Betsy Andersen, Manchester, Connecticut
Betsy Carter, CT State Department of Education
Geraldine M. Cemprola, Ridgefield Public Schools
Linda Cherry, Suffield Public Schools
Elizabeth B. Cubeta, Middletown Public Schools
Corretta K. Dean, Bridgeport Public Schools
Tony Ditrio, Norwalk Public Schools
Anita Gaston, Bloomfield Public Schools
Janet Heintz, Farmington Public Schools
Mary Anna Keough, Meriden Public Schools
Steven Leinwand, CT State Department of Education
Wesley Masten, Norwalk Public Schools
Irene B. Moriarty, Meriden Public Schools
Pamela Munro, Windham Public Schools
Eileen O'Reilly, Manchester Public Schools
Lois Piper, Norwalk Public Schools
Twila Pollard, New Haven Public Schools
Rosemary Powers, Bloomfield Public Schools
Sylvia E. Webb, Middletown Public Schools
George A. Wells, New Haven Public Schools
Frank K. Whittaker, Bridgeport Public Schools

APPENDIX E

Grade Four Overview of Holistic Scoring

and

Marker Papers for Holistic Scoring

An Overview of Holistic Scoring

Description of the Method

Holistic scoring involves judging a writing sample for its total effect. The scorer makes an overall evaluation taking into account all characteristics which distinguish good writing. No one feature (such as spelling, rhetoric, or organization) should be weighted to the exclusion of all other features. Contributing to the rationale underlying holistic scoring is evidence that:

- no aspect of writing can be judged independently and result in an overall score of quality;
- teachers can recognize and concur upon good writing samples; and
- teachers tend to rank entire pieces of writing in the same way, regardless of the importance they might attach to the particular components of writing.

The scoring scale for holistic scoring is determined by the quality of the specific samples being evaluated. That is, the success of a particular response is determined in relationship to the range of ability reflected in the set of writing samples being assessed.

Preparation for Scoring

Prior to the training/scoring sessions, a committee consisting of Connecticut State Department of Education (CSDE) consultants, representatives of the Language Arts Advisory Committee and other language arts specialists from throughout the state, two chief readers and a project director from Measurement Inc. of Durham, North Carolina and a reading specialist from The Psychological Corporation met and read a substantial number of essays drawn from the total pool of essays to be scored. Approximately 60 essays were selected to serve as "range-finders" or "marker papers" representing the range of achievement demonstrated in the total set of papers. Copies of those range-finders served as training papers during the scoring workshops which followed. Each range-finder paper was assigned a score according to a four-point scale, where 1 represented a poor paper and 4 represented a superior paper.

Scoring Workshops

During the month of November, several holistic scoring workshops were held in various locations throughout the state. Attendance at the grade four scoring workshops totaled 271 teachers. A chief reader and two assistants were present at every workshop in addition to representatives of the CSDE. Each workshop consisted of a training session and a scoring session.

Training and Qualifying

- All teachers were shown approximately fourteen range-finder papers. The chief reader discussed each paper and explained the reason why each received its score.

- All teachers were given a six-paper practice set. They scored the papers independently and recorded the scores on their papers. When all teachers were finished, the chief reader discussed each paper and explained why each received its score.

- All teachers were given a nine-paper training set. They scored the papers independently, based on an overall impression, and recorded their scores on a monitor sheet as well as on their papers. As they finished reading and scoring, they brought the monitor sheet to the team leader who checked the scores. When all teachers were finished and all monitor sheets were checked, the chief reader discussed the nine-paper set.

- Regardless of whether or not they qualified on the first training set, all teachers were then given another nine-paper training set. They scored the papers and had the monitor sheets checked. Set Two was not discussed, except with non-qualifiers.

- Teachers were considered qualified if they scored six or more papers correctly on either set. Teachers who met the standard began scoring actual test papers after Set Two.

- If any teacher did not qualify, they received additional training by one of the team leaders or by the chief reader away from the scoring room. They had two more opportunities to qualify. Any teacher who failed to qualify would have been excused from the project and paid for one day.

The Scoring Session

Once scorers qualified, actual scoring of the writing exercises began according to the steps outlined below:

- Scorers read each paper once carefully but quickly and designated a score. Again, the score reflected the scorer's overall impression of the response as it corresponded with the features of written composition which were internalized during the training process.

- Each paper was read and scored by a second scorer independently of the first, that is, without seeing the score assigned by the first reader. The chief reader had the responsibility of adjudicating any disagreement of more than one point between the judgments of the first two scorers. In other words, adjacent scores (i.e., awarded scores of 4 and 3, 1 and 2, 2 and 3) were acceptable, but larger discrepancies (i.e., scores of 2 and 1, 3 and 1, 1 and 4) were resolved by the chief reader. In general, with successful training, the occurrence of large score discrepancies is rare.

- The two scores for each paper were added to produce the final score for each student, resulting in scores between 2 and 8.

Understanding the Holistic Scores

Examples of actual student papers which are representative of the scoring range will assist the reader in understanding the statewide standard set for writing and interpreting the test results. Sample papers representing four different holistic scores are presented on the following pages. Note that the process of summing the scores assigned by the two readers expands the scoring scale to account for "borderline" papers. A paper which receives a 4 from both scorers (for a total score of 8) is likely to be better than a paper to which one reader assigns a 4 and another reader assigns a 3 (for a total score of 7). In addition, it should be emphasized that each of the score points represents a range of student papers--some 4 papers are better than others.

A score of Not Scorable (NS) was assigned to student papers in certain cases. A score of NS indicates that the student's writing skills remain to be assessed. The cases in which a score of NS was assigned were as follows:

- responses merely repeated the assignment;
- illegible responses;
- responses in languages other than English;
- responses that failed to address the assigned topic in any way; and
- responses that were too brief to score accurately, but which demonstrated no signs of serious writing problems (for example, a response by a student who wrote the essay first on scratch paper and who failed to get very much of it copied).

Both readers had to agree that a paper deserved a NS before this score was assigned. If the two readers disagreed, the chief reader arbitrated the discrepancy. Papers which were assigned a score of NS were not included in summary reports of test results.

Summary Comments

The fact that standards must be maintained and reinforced throughout a scoring session cannot be overemphasized. Holistic scoring depends for its usefulness on consistency of scoring among all scorers throughout the sessions.

CONNECTICUT MASTERY TEST
1991 Grade Four
Writing Assignment

One day you meet a creature from outer space. You are the only one who can see it.

Write a story telling your classmates about your adventure with the creature from outer space.

- Tell what the creature looked like and how it acted.
- Write a story about what happened when you met it.

CONNECTICUT MASTERY TEST WRITING SAMPLE

One day I was walk in space. When I saw the earth creature. It was ugly brown five teeth, three eye ball when I saw it come right at me. I ran to my Space rocket. The creature was right at me. I boom in to earth. Then I him again.

SCORE POINT: 1

This sparse response is an unsuccessful attempt to write a narrative. It is sketchy with few details and almost no sequencing of events.

CONNECTICUT MASTERY TEST WRITING SAMPLE

The ugy Alien

He is very ugy. The Alien is nice. He looked funny. And he has anteenas on his head. He has three eyes. The has Big eyes.

He is very, very and lots funny. The Alien is radcal and cool. He acted cool and radcal and awsam. He acted funny to he wauld be a funny acter too.

We bumpt in to etater and I ran he said don't be afraid. We want to I saw Mars we landed on Mars it was fun on the way back we the Milky way and the sun and the moon.

SCORE POINT: 1

This unsuccessful narrative attempts to tell what the creature looked like, how it acted, and what happened when the writer met the creature. The response does have some sequenced events in the third paragraph, but, in order to receive a higher score, the writer needs either to make the description more specific and use it to embellish the storyline, or to present a more sustained narrative sequence.

CONNECTICUT MASTERY TEST WRITING SAMPLE

Space Creature

One day I was walking and I saw a space ship and a creature inside it. I was the one who could see him. Nobody else could. He looked like a giant. He had blue eyes and I like blue eyes. He had arms they are long and his legs are very long. He was as a giant. When he walked it was going and making a loud noise. It was very tall.

The creature acted like he had never seen me before. It acted real funny he is funny by making funny faces at me. He acted real happy because he had a smile on his face. It did things like talking funny and making alot of noise. He had funny ears because they are very very big point on it. He acted sick but happy because he looked sick and he had a big smile. So he was sick and happy.

I did many things with the creature. First I said hello and he said hello to me. I watched him walk around making alot of noise when he walks. Third I touch him he felt soft and smooth. I said hello again and he said hello. He said what your name. I said He said oh thats a nice name. I said thank you.

When I met him I felt happy. When I was there I felt great when I was there. I went in the space ship and went home. I got out and I wanted to go back but I can't and I felt sad that I can't go backs. I said that to my friends and they did not belive me at all because they said that is not true. I said yes it is and they said I Believe you. But they really didn't believe me. But they gate said that. But it was real.

SCORE POINT: 2

This long response is a minimally successful narrative. Although the response has specific details, many of the details do not clarify the storyline. A better organizational plan, more control of the details, and a more sustained sequence are necessary for a higher score.

My Friend

One day I met a creature from outer space! He came to visit his family on earth. I was walking down the street when I saw him. At first we both were scared! But after awhile we became friends. I asked him his name he said "Mac". I said my name was . Oh! my brother is ! said the creature. He took me home with him. He looked like a person with a funny haircut. I met his family, they were nice! The next day I brought him to my house for lunch. I said to my family, "this is my new friend." They said where? I said to myself Oh no I the only one who can see him! so he ate lunch with us. After that we played "No Gravity Baseball." He is my best friend. Then we went out for ice-cream. What a friend!

SCORE POINT: 2

This tightly controlled response has a good narrative sequence but needs more embellishment of details (like that about the creature's invisibility) for a higher score.

One day I was riding my bike down the street. Then I saw a giant frizbe coming at me. I+ sweeted this weird dust in my eyes I fell asleep. I woke up and there was a "green thing looking at me. As soon as I saw it I ran and screamed. No one noitesd. It was like I was invisable. I was scared. I turned around the thing was getting on my bike "My bike!" I screamed. But it was to late it was rideing it down the street. I chased after it'n running as fast as I can. Soon I was running right nexted to it. The bike began to lift into the air. I jumped and grabed the seat "This reminds me of ET" I said. We were a houndret ~~feet~~ off the ground. We were going into space! My hands sliped I let go. I closed my eyes but I wasent falling I was floating. I was in space! The allen locked at me but I noitesd it was wearing a mask. it pulled it off. The allen looked just like me. "I'm from planet Jaith" the allen said. "Hi my name is I said. "Mine too" the allen said. "I brought you hear to ask if I can be a eathling" said. "Well ~~b~~ecause you can" I said. Until these people came out, they looked just like my family "This is my family." said. I laughed.

SCORE POINT: 3

This successful narrative is vivid with good details that advance the storyline (The bike began to lift into the air; a houndret feet off the ground). Although there is some lack of clarity at the end of the story, it does not detract from the response's overall effectiveness. More development is needed for a higher score.

One day I was outside riding my bike when this creature from outerspace appeared in front of me and I am your friend from outerspace we were friends that day and on. When I met the creature I asked him his name later I asked him that he said his name was Eagar. After that we went into my house and went up stairs to my room Eagar told me a secret the secret was that I could only see him and no one else can. When it was dinner time I went down stairs and left Eagar in my room after dinner I went backs up stairs I almost forgot Eagar is alive and has pink ears. We played games up in my room until 8 O'clock. Then we turned on the TV and watched some shows. We played some running around games. Eagar got hurt because he was running around with his eyes closed. At ten it was time to go to bed. We closed our eyes and went to sleep. When it was the next morning it was time to say good by to Eagar

I said to Eagar I had fun with you. That night I had a dream that Eagar came back I knew that wouldn't happen. That was the story about Eagar.

SCORE POINT: 3

This sustained response is tightly controlled and sequenced. Effective use of transitions contributes to the success of the response. A more sustained sequence and more development are needed for a higher score.

Space Creature

One day I was playing in a park with my dog. I was the only one who could see it. At first I was scared it was as big as me. This creature was light-purple. It had short legs, antlers, and short arms. I was surprised that it was purple. I don't know why I was surprised. After-all it was a space creature and they can be any color. People thought that I was crazy because they can't see it.

The creature acted different than humans of course. It walked in a funny way. wibble-wobble. That is what I said in my mind when it walked. I by thought that since it would act like a baby at times that that was even weirder than the way it walked. It tried to play with my dogs but they thought the creature was crazy. So I put my dog in

the bedroom with my dad. I think my dad should be able to handle the two dogs. So that is just what I did.

The creature and I had a great day. The creature and I played a space game called Pokit. Then we played dress-ups. I had a hat the exact same color as the creature. We had a great deal of fun playing dress-up. When we finally cleaned up we worked on the computer. I typed 5 words a minute. Next we played a game this game took as long as two full games of Monopoly and not Monopoly Jr. but only with two people. The creature won the game. Finally, I learned a new langue and I could say every letter in the alphebet. I could also say a couple of words. So I was able to comunicate a little better.

My adventure with the creature was the most exiting day of my life. I was so happy with the creature I didn't want him to leave.

but I knew I had to let go and say goodbye so I did just that let go and said, "Good Bye." When I went in and told my family they didn't believe a word I said

SCORE POINT: 4

This successful response is developed, organized and fluent. The response evidences an ability often characteristic of "4" writers of developing an idea thoroughly by examining it from different perspectives (At first I was scared; I was surprised that it was purple. I don't know why I was surprised. After all it was a space creature and they can be any color).

It's November. The snow is on the ground. I was outside one day in the snow when I saw a spaceship coming straight down out of the sky! The spaceship crashed in my back yard. I ran toward it. But all of a sudden I stopped. A hach on the ship was opening! I wanted to run away but I couldn't. I just kept staring at the spaceship. Something came out of the ship! All of a sudden the frown on my face turned to a smile. The thing that came out of the ship was small, fat, and green. It looked at me and said "Hi" I said hello to the creature. The creature was nice! I thought to my self. Just then my dad came out and said "What are you doing out there" I was amazed! Dad couldn't even see the

alien! Dad went back inside. Then the alien said "You must help me! When my ship crashed a part broke! If I can't return to my planet in five days I will die. You must help me find new parts for my spaceship. "We could look in the junkyard behind my house in the woods" I said. "Ok" said the alien. "It's back here. I hope you find what you need. When we got to the junkyard we looked for parts. "I found it!" said the alien. He was holding a pice of metal in the shape of a cube. We ran up to the ship. The alien went inside, instaled the part and came back out. We said goodby and the alien got back into the ship and blasted off into the sky. I waved bye and went into my house.

SCORE POINT: 4

This fluent, economical response creates a mood which immediately draws the reader into the story. In addition the storyline is nicely embellished with specific details (A hach on the ship was opening; look in the junkyard; a pice of metal in the shape of a cube; blasted off into the sky).

APPENDIX F

Grade Four Analytic Rating Guide

and

Marker Papers for Analytic Scoring

Grade Four Analytic Rating Guide

FOCUS: How effectively does the writer unify the paper by a dominant topic?

1 = switches and/or drifts frequently from the dominant topic

2 = switches and/or drifts somewhat from the dominant topic

3 = stays on topic throughout the response

ORGANIZATION: Is there a plan that clearly governs the sequence from the beginning to the end of the response, and is the plan effectively signaled?

1 = no discernible plan

2 = inferable plan and/or discernible sequence; some signals may be present

3 = controlled, logical sequence with a clear plan

SUPPORT/ELABORATION: To what extent is the narrative developed by details that describe and explain the narrative elements (character, action and setting)?

1 = vague or sketchy details that add little to the clarity of the response or specific details but too few to be called list-like

2 = details that are clear and specific but are list-like, or uneven, or not developed

3 = somewhat developed details that enhance the clarity of the response

CONVENTIONS: To what extent does the student use the conventions of standard written English (e.g., sentence formation, spelling, usage, capitalization, punctuation)?

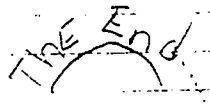
1 = many errors

2 = some errors

3 = few errors

CONNECTICUT MASTERY TEST WRITING SAMPLE

I had to go outer space and I was scard and I miss meat to go home but I said I can see and I like It but I say a my car I said I like car It was a car I wet up the home and I see I the geep I said some ing come and I rad home and My bad was going and I saw you to I like It with My Jerry and I said Who who who who.



FOCUS: 2

ORGANIZATION: 2

SUPPORT/ELABORATION: 1

CONVENTIONS: 1

Page 6

CONNECTICUT MASTERY TEST WRITING SAMPLE

One day a meet a creature from outer spece. The creature looked like a monste wif grer eyes. yello arc then a runeg a fall down a was scard a co for help and a scream hes ears was violet. And Nobody can see it only me.

FOCUS: 3

ORGANIZATION: 1

SUPPORT/ELABORATION: 1

CONVENTIONS: 1

Page 6

CONNECTICUT MASTERY TEST WRITING SAMPLE

A big bad creature is on my street
I saw a big and bad green looking creature from
out of space looking in my window last night.
He looked like he wanted to eat me. So I ran
out of my room and got bebe gun and
open my fe tried eat me, so I shot dead in
the eye. The next I was was walk to
school. I saw him walking behind me so
I ran so fast as I could into my house
and locked the door. He got so he down the door
and so my teatcher and all my

FOCUS: 3

ORGANIZATION: 3

SUPPORT/ELABORATION: 2

CONVENTIONS: 2

CONNECTICUT MASTERY TEST WRITING SAMPLE

My Friend

One day I met a creature
from outer space! He came to visit
his family on earth. I was walking
down the street when I saw him.
At first we both were scared! But
after awhile, we became friends. I
asked him his name he said "Mac".
I said my name was Oh! my
brother is ! said the creature. He
took me home with him. He looked like a
person with a funny haircut. I met
his family they were nice! The next
day I brought him to my house
for lunch. I said to my family "this
is my new friend". They said where?
I said to myself Oh no. I the only
one who can see him! so he ate lunch
with us. After that we played "No
Gravity Baseball". He is my best
friend. Then we went out for ice-
cream. What a friend!

FOCUS: 3

ORGANIZATION: 3

SUPPORT/ELABORATION: 3

CONVENTIONS: 3

APPENDIX G

Sample Grade Four Mastery Test Score Reports

- o Class Diagnostic Report
  - Mathematics
- o School by Class Report
  - Mathematics
- o District by School Report
  - Mathematics
- o Class Diagnostic Report
  - Language Arts
- o School by Class Report
  - Language Arts
- o District by School Report
  - Language Arts
- o Parent/Student Diagnostic Report

CONNECTICUT MASTERY TESTING PROGRAM

CLASS DIAGNOSTIC REPORT

MATHEMATICS PART 1 OF 2

THE PSYCHOLOGICAL CORPORATION

PAGE 1

TEACHER: B A
GROUP CODE: 001
SCHOOL: A
SCHOOL CODE:
DISTRICT: B DISTRICT
DISTRICT CODE:

GRADE: 04 FORM: D

TEST DATE: 09/91

NUMBER OF STUDENTS TESTED: 27

NUMBER OF STUDENTS NEEDING FURTHER DIAGNOSIS IN MATHEMATICS : 4

OBJECTIVES	MASTERY CRITERIA # OF ITEMS CORRECT	N I	C O	M I	B E	A L	C H	R E	M A	J O	R O	A N	K I	H I	M E	R Y	C H	NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE: CLASS #/%	SCHOOL #/%	DISTRICT #/%
CONCEPTUAL UNDERSTANDINGS																				
1. Determine 1 & 10 more/less than a number	3 of 4	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	26/96	92/98	205/97
2. Extend patterns	3 of 4	4	4	3	2	2	4	4	4	4	4	3	3	4	3	3	4	21/78	73/78	175/83
3. Order whole numbers	3 of 4	4	4	4	3	3	4	3	4	4	4	3	2	4	4	4	2	24/89	82/87	190/90
4. Rewrite numbers using expanded notation	3 of 4	3	4	4	3	2	4	3	4	3	4	3	3	4	4	4	4	26/96	92/98	206/98
5. Rewrite numbers by regrouping	3 of 4	0	4	0	0	0	4	0	2	3	4	0	0	2	4	4	0	13/48	48/51	103/49
6. Identify fractional parts	3 of 4	1	4	4	1	1	4	4	3	2	1	4	4	4	4	4	4	20/74	74/79	179/85
7. Relate mult/division facts to pictures	3 of 4	1	4	3	1	0	4	1	4	3	4	0	3	3	4	4	4	20/74	58/62	145/69
COMPUTATIONAL SKILLS																				
8. Add/subtract facts to 18	3 of 4	4	4	4	4	4	4	3	3	4	3	4	4	4	4	4	4	27/100	93/99	208/99
9. Add/subtract without regrouping	3 of 4	4	4	4	3	4	4	4	4	3	4	3	1	4	4	4	4	26/96	90/96	205/97
10. Add with regrouping	3 of 4	4	3	4	4	4	4	4	4	4	4	4	1	4	4	4	4	26/96	88/94	200/95
11. Estimate sums and differences	3 of 4	1	4	3	2	0	4	1	3	3	3	1	0	4	3	3	3	16/59	60/64	140/66
12. Multiply and divide by 2, 5, 10	3 of 4	2	4	4	1	1	4	2	4	4	4	0	2	4	4	4	4	19/70	72/77	167/79

INDICATES A SCORE AT OR ABOVE THE STATE GOAL
INDICATES A SCORE BELOW THE REMEDIAL STANDARD THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS

A = ABSENT
V = VOID

COPY 1

PROCESS NO. 19150074-3566-01253-1

84 85

CLASS DIAGNOSTIC REPORT

TEACHER: B A
GROUP CODE: 001
SCHOOL: A
SCHOOL CODE:
DISTRICT: B DISTRICT
DISTRICT CODE:

GRADE: 04 FORM: D

TEST DATE: 09/91

NUMBER OF STUDENTS TESTED: 27

NUMBER OF STUDENTS NEEDING FURTHER DIAGNOSIS IN MATHEMATICS : 4

OBJECTIVES	MASTERY CRITERIA # OF ITEMS CORRECT	N I	C O	M I	B E	A L	C H	R E	M A	J O	R O	A N	K I	N I	M E	R Y	C H
PROBLEM SOLVING AND APPLICATIONS																	
13. Identify objects/numbers in an array	3 of 4	4	3	4	2	2	4	4	2	4	4	3	2	3	4	4	4
14. Read and interpret graphs	3 of 4	3	4	3	3	3	4	4	4	4	4	4	4	3	3	4	3
15. Read and interpret tables	3 of 4	4	4	4	4	2	4	4	4	4	3	4	4	4	4	4	4
16. Identify number sentences from pictures	3 of 4	1	4	3	1	0	4	2	3	3	4	2	3	3	4	4	3
17. Identify number sentences from problems	3 of 4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4
18. Solve story problems using add/sub	3 of 4	4	4	4	2	3	4	4	4	4	4	3	3	4	4	4	4
19. Solve story problems with extra info	3 of 4	4	4	4	3	2	4	2	4	3	4	2	3	3	4	4	3
20. Identify needed information in problems	3 of 4	4	4	4	3	3	4	3	4	3	4	4	3	4	4	4	3
MEASUREMENT AND GEOMETRY																	
21. Measure length/identify units	3 of 4	0	4	4	3	2	4	3	3	4	4	3	3	4	4	3	3
22. Estimate length/area	3 of 4	3	4	3	2	3	4	4	4	4	3	2	2	4	4	3	3
23. Tell time	3 of 4	4	4	4	4	0	4	3	4	4	4	1	2	4	4	4	3
24. Determine the value of a set of coins	3 of 4	4	4	3	1	2	4	3	4	4	4	3	3	4	4	4	4
25. Identify shapes/angles/sides	3 of 4	4	4	4	4	4	4	4	4	4	3	4	3	4	4	4	4
TOTAL NUMBER OF OBJECTIVES MASTERED (Mathematics State Goal = 22 of 25 objectives mastered)		18	§ 25	§ 24	13	11	§ 25	19	§ 23	§ 24	§ 24	17	16	§ 24	§ 25	§ 25	§ 23
NUMBER OF ITEMS CORRECT (Mathematics remedial standard = 69 of 100 items correct)		75	98	89	* 61	* 55	100	77	91	90	92	* 68	* 66	93	97	96	86

NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

OBJECTIVE	CLASS #/%	SCHOOL #/%	DISTRICT #/%
13	22/81	84/89	195/92
14	27/100	93/99	208/99
15	26/96	93/99	205/97
16	21/78	75/80	178/84
17	27/100	91/97	204/97
18	26/96	91/97	202/96
19	22/81	79/84	177/84
20	26/96	88/94	199/94
21	24/89	77/82	186/88
22	21/78	80/85	186/88
23	23/85	89/95	197/93
24	25/93	89/95	201/95
25	27/100	94/100	211/100
AVERAGE NUMBER OF OBJECTIVES MASTERED (#/% AT/ABOVE STATE GOAL)	21.5 (17/63)	21.8 (63/67)	22.1 (147/70)
#/% BELOW REMEDIAL STANDARD	4/15	11/12	14/7

§ INDICATES A SCORE AT OR ABOVE THE STATE GOAL.
* INDICATES A SCORE BELOW THE REMEDIAL STANDARD. THIS STUDENT MUST RECEIVE FUTHER DIAGNOSIS

A = ABSENT
V = VOID

COPY 1

PROCESS NO. 19150074-3566-01254-1

86

BEST COPY AVAILABLE

87

THE PSYCHOLOGICAL CORPORATION

CONNECTICUT MASTERY TESTING PROGRAM

SCHOOL BY CLASS REPORT

GRADE: 04 FORM: D TEST DATE: 09/91
SCHOOL: A
SCHOOL CODE:
DISTRICT: B
DISTRICT CODE:
Scores indicate Number/Percent of students mastering each objective

MATHEMATICS

OBJECTIVES	MASTERY CRITERIA	001	002	004	005					SCHOOL	DISTRICT
NUMBER OF STUDENTS TESTED		27	25	22	20					94	211
		#/%	#/%	#/%	#/%					#/%	#/%
CONCEPTUAL UNDERSTANDINGS											
1. Determine 1 & 10 more/less than a number	3 of 4	26/96	25/100	21/95	20/100					92/98	205/97
2. Extend patterns	3 of 4	21/78	18/72	17/77	17/85					73/78	175/83
3. Order whole numbers	3 of 4	24/89	23/92	18/82	17/85					82/87	190/90
4. Rewrite numbers using expanded notation	3 of 4	26/96	24/96	22/100	20/100					92/98	206/98
5. Rewrite numbers by regrouping	3 of 4	13/48	14/56	11/50	10/50					48/51	103/49
6. Identify fractional parts	3 of 4	20/74	20/80	18/82	16/80					74/79	179/85
7. Relate mult/division facts to pictures	3 of 4	20/74	12/48	14/64	12/60					58/62	145/69
COMPUTATIONAL SKILLS											
8. Add/subtract facts to 18	3 of 4	27/100	25/100	22/100	19/95					93/99	208/99
9. Add/subtract without regrouping	3 of 4	26/96	23/92	21/95	20/100					90/96	205/97
10. Add with regrouping	3 of 4	26/96	21/84	22/100	19/95					88/94	200/95
11. Estimate sums and differences	3 of 4	16/59	15/60	15/68	14/70					60/64	140/66
12. Multiply and divide by 2, 5, 10	3 of 4	19/70	19/76	17/77	17/85					72/77	167/79
PROBLEM SOLVING AND APPLICATIONS											
13. Identify objects/numbers in an array	3 of 4	22/81	23/92	20/91	19/95					84/89	195/92
14. Read and interpret graphs	3 of 4	27/100	24/96	22/100	20/100					93/99	208/99
15. Read and interpret tables	3 of 4	26/96	25/100	22/100	20/100					93/99	205/97
16. Identify number sentences from pictures	3 of 4	21/78	20/80	16/73	18/90					75/80	178/84
17. Identify number sentences from problems	3 of 4	27/100	25/100	21/95	18/90					91/97	204/97
18. Solve story problems using add/sub	3 of 4	26/96	24/96	22/100	19/95					91/97	202/96
19. Solve story problems with extra info	3 of 4	22/81	22/88	18/82	17/85					79/84	177/84
20. Identify needed information in problems	3 of 4	26/96	22/88	22/100	18/90					88/94	199/94
MEASUREMENT AND GEOMETRY											
21. Measure length/identify units	3 of 4	24/89	20/80	20/91	13/65					77/82	186/88
22. Estimate length/area	3 of 4	21/78	21/84	20/91	18/90					80/85	186/88
23. Tell time	3 of 4	23/85	24/96	22/100	20/100					89/95	197/93
24. Determine the value of a set of coins	3 of 4	25/93	23/92	22/100	19/95					89/95	201/95
25. Identify shapes/angles/sides	3 of 4	27/100	25/100	22/100	20/100					94/100	211/100
AVERAGE NUMBER OF OBJECTIVES MASTERED		21.5	21.5	22.1	22.0					21.8	22.1
NUMBER/PERCENT OF STUDENTS AT OR ABOVE STATE GOAL*		17/63	16/64	15/68	15/75					63/67	147/70
NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARD**		4/15	4/16	1/5	2/10					11/12	14/7

* State Goal is 22 of 25 Objectives Mastered.
** Remedial Standard is 69 of 100 Items Correct.

COPY 01

PROCESS NO. 19150074-3566-01223-1

THE PSYCHOLOGICAL CORPORATION

CONNECTICUT MASTERY TESTING PROGRAM

DISTRICT BY SCHOOL REPORT

GRADE: 04 FORM: D TEST DATE: 09/91

MATHEMATICS

DISTRICT: B DISTRICT
DISTRICT CODE:
Scores indicate Number/Percent of students mastering each objective

OBJECTIVES	MASTERY CRITERIA	SCHOOL A	SCHOOL B	SCHOOL C	DISTRICT
NUMBER OF STUDENTS TESTED		37	80	94	211
		#/%	#/%	#/%	#/%
CONCEPTUAL UNDERSTANDINGS					
1. Determine 1 & 10 more/less than a number	3 of 4	37/100	76/95	92/98	205/97
2. Extend patterns	3 of 4	34/92	68/85	73/78	175/83
3. Order whole numbers	3 of 4	34/92	74/93	82/87	190/90
4. Rewrite numbers using expanded notation	3 of 4	36/97	78/98	92/98	206/98
5. Rewrite numbers by regrouping	3 of 4	17/46	38/48	48/51	103/49
6. Identify fractional parts	3 of 4	33/89	72/90	74/79	179/85
7. Relate mult/division facts to pictures	3 of 4	29/78	58/73	58/62	145/69
COMPUTATIONAL SKILLS					
8. Add/subtract facts to 18	3 of 4	37/100	78/98	93/99	208/99
9. Add/subtract without regrouping	3 of 4	37/100	78/98	90/96	205/97
10. Add with regrouping	3 of 4	37/100	75/94	88/94	200/95
11. Estimate sums and differences	3 of 4	31/84	49/61	60/64	140/66
12. Multiply and divide by 2, 5, 10	3 of 4	31/84	64/80	72/77	167/79
PROBLEM SOLVING AND APPLICATIONS					
13. Identify objects/numbers in an array	3 of 4	36/97	75/94	84/89	195/92
14. Read and interpret graphs	3 of 4	36/97	79/99	93/99	208/99
15. Read and interpret tables	3 of 4	37/100	75/94	93/99	205/97
16. Identify number sentences from pictures	3 of 4	33/89	70/88	75/80	178/84
17. Identify number sentences from problems	3 of 4	37/100	76/95	91/97	204/97
18. Solve story problems using add/sub	3 of 4	36/97	75/94	91/97	202/96
19. Solve story problems with extra info	3 of 4	34/92	64/80	79/84	177/84
20. Identify needed information in problems	3 of 4	36/97	75/94	88/94	199/94
MEASUREMENT AND GEOMETRY					
21. Measure length/identify units	3 of 4	35/95	74/93	77/82	186/88
22. Estimate length/area	3 of 4	33/89	73/91	80/85	186/88
23. Tell time	3 of 4	36/97	72/90	89/95	197/93
24. Determine the value of a set of coins	3 of 4	36/97	76/95	89/95	201/95
25. Identify shapes/angles/sides	3 of 4	37/100	80/100	94/100	211/100
AVERAGE NUMBER OF OBJECTIVES MASTERED		23.1	22.2	21.8	22.1
NUMBER/PERCENT OF STUDENTS AT OR ABOVE STATE GOAL*		29/78	55/69	63/67	147/70
NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARD**		0/0	3/4	11/12	14/7

* State Goal is 22 of 25 Objectives Mastered.
** Remedial Standard is 69 of 100 Items Correct.

COPY 01

PROCESS NO. 19150074-3566-01152-1

CONNECTICUT MASTERY TESTING PROGRAM

CLASS DIAGNOSTIC REPORT

THE PSYCHOLOGICAL CORPORATION

LANGUAGE ARTS

PAGE 1

GRADE: 04 FORM: D

TEACHER: B A
GROUP CODE: 001
SCHOOL: A
SCHOOL CODE:
DISTRICT: B DISTRICT
DISTRICT CODE:

TEST DATE: 09/91

NUMBER OF STUDENTS TESTED: 27

NUMBER OF STUDENTS NEEDING FURTHER DIAGNOSIS
IN WRITING : 8
IN READING : 6

OBJECTIVES	MASTERY CRITERIA # OF ITEMS CORRECT	NI	CO	MI	BE	AL	CH	RE	MA	JO	RO	AN	KI	WI	ME	RY	CH	CLASS #/%	SCHOOL #/%	DISTRICT #/%
WRITING MECHANICS																				
1. Capitalization and Punctuation	9 of 12	5	11	10	10	7	6	10	9	9	7	5	6	10	10	7	8	16/59	49/52	136/64
2. Spelling (words/homonyms/abbreviations)	7 of 9	6	8	8	8	7	7	8	7	7	6	6	5	8	6	7	7	18/67	64/68	160/76
3. Agreement	11 of 15	14	14	13	12	10	14	15	11	13	13	13	10	15	14	14	10	23/85	83/88	193/91
LOCATING INFORMATION																				
4. Locating Information (schedules, maps, table of contents & title page, and dictionary)	8 of 11	11	11	11	7	6	11	9	10	8	10	8	7	9	9	11	9	22/81	87/93	199/94
LISTENING COMPREHENSION																				
5. Literal	5 of 7	6	6	6	5	6	7	6	6	5	5	5	4	5	7	4	4	23/85	68/72	162/77
6. Inferential and Evaluative	9 of 13	10	12	12	6	8	10	6	7	10	11	8	9	11	12	10	7	18/67	62/66	134/64
READING COMPREHENSION																				
7. Literal	9 of 12	12	11	10	7	9	11	10	8	9	11	10	12	12	12	11	8	23/85	79/84	185/88
8. Inferential	10 of 14	9	12	12	10	8	12	11	11	9	8	9	8	13	12	13	12	18/67	69/73	168/80
9. Evaluative	7 of 10	6	10	8	8	6	10	9	8	5	9	5	6	6	9	8	7	15/56	65/69	144/68
																		AVERAGE NUMBER OF OBJECTIVES MASTERED		
TOTAL NUMBER OF OBJECTIVES MASTERED		5	9	9	6	3	8	8	7	7	6	4	2	8	8	7	4	6.5	6.7	7.0
HOLISTIC MEASURES OF WRITING AND READING																		#/% AT/ABOVE STATE GOALS (#/% BELOW REMEDIAL STANDARDS)		
WRITING SAMPLE		5	4	*3	*3	*3	4	4	*2	*3	4	*2	4	4	4	4	*2	0/0 (8/30)	2/2 (17/18)	28/13 (25/12)
**Analytic Scores: Focus			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
Organization			3	3	2	2	3	3	3	3	2	2	2	2	2	3	2			
Support/Elaboration			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2			
Conventions			3	3	2	2	3	2	2	2	3	2	2	2	2	2	2			
(State Goal = 7 of 8; Remedial Standard = 4 of 8)																				
DEGREES OF READING POWER (DRP)™ (State Goal=50 DRP Units; Remedial Standard=41 DRP Units)		* 31	§ 72	§ 68	* 34	45	§ 57	42	§ 66	§ 53	§ 57	* 39	45	§ 72	§ 84+	§ 54	44	17/63 (6/22)	55/59 (15/16)	141/67 (20/9)

§ INDICATES A SCORE AT OR ABOVE THE STATE GOAL
* INDICATES A SCORE BELOW THE REMEDIAL STANDARD THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS
** ANALYTIC SCORES ARE GIVEN ONLY FOR THOSE STUDENTS WHO SCORED AT OR BELOW THE REMEDIAL STANDARD
1 = NEEDS REMEDIAL ASSISTANCE 2 = BORDERLINE PERFORMANCE 3 = SATISFACTORY PERFORMANCE

A = ABSENT
V = VOID
NS = NOT SCORABLE

COPY 1

PROCESS NO. 19150074-3566-01255-1

CONNECTICUT MASTERY TESTING PROGRAM

SCHOOL BY CLASS REPORT

THE PSYCHOLOGICAL CORPORATION

GRADE: 04 FORM: D TEST DATE: 09/91
SCHOOL: A
SCHOOL CODE:
DISTRICT: B
DISTRICT CODE:
Scores indicate Number/Percent of students mastering each objective

LANGUAGE ARTS

		001	002	004	005					SCHOOL	DISTRICT
NUMBER OF STUDENTS TESTED		27	25	22	20					94	211
OBJECTIVES	MASTERY CRITERIA	#/%	#/%	#/%	#/%					#/%	#/%
WRITING MECHANICS											
1. Capitalization and Punctuation	9 of 12	16/59	14/56	10/45	9/45					49/52	136/64
2. Spelling (words/homonyms/abbreviations)	7 of 9	18/67	17/68	12/55	17/85					64/68	160/76
3. Agreement	11 of 15	23/85	22/88	20/91	18/90					83/88	193/91
LOCATING INFORMATION											
4. Locating Information (schedules, maps, table of contents & title page, and dictionary)	8 of 11	22/81	24/96	22/100	19/95					87/93	199/94
LISTENING COMPREHENSION											
5. Literal	5 of 7	23/85	18/72	16/73	11/55					68/72	162/77
6. Inferential and Evaluative	9 of 13	18/67	16/64	18/82	10/50					62/66	134/64
READING COMPREHENSION											
7. Literal	9 of 12	23/85	20/80	20/91	16/80					79/84	185/88
8. Inferential	10 of 14	18/67	20/80	18/82	13/65					69/73	168/80
9. Evaluative	7 of 10	15/56	18/72	17/77	15/75					65/69	144/68
HOLISTIC MEASURES OF WRITING AND READING										#/% OF STUDENTS AT STATED LEVEL	
WRITING SAMPLE* NUMBER/PERCENT PRODUCING MATERIAL THAT IS:	HOLISTIC SCORE	#/%	#/%	#/%	#/%					#/%	#/%
Well written with developed supportive detail (At or above the state goal)	7 or 8	0/0	2/8	0/0	0/0					2/2	28/13
Generally well organized with supportive detail	5 or 6	7/26	6/25	4/18	6/30					23/25	84/40
Minimally proficient	4	12/44	10/42	17/77	12/60					51/55	73/35
Below the remedial standard	2 or 3	8/30	6/25	1/5	2/10					17/18	25/12
DEGREES OF READING POWER (DRP)** NUMBER/PERCENT OF STUDENTS	DRP UNIT SCORE	#/%	#/%	#/%	#/%					#/%	#/%
At/above the reading goal for beginning grade 04	50+	17/63	16/64	12/55	10/50					55/59	141/67
Below the reading goal for beginning grade 04 but at or above the remedial standard	41 to 49	4/15	7/28	7/32	6/30					24/26	50/24
Below the remedial standard	Below 41	6/22	2/8	3/14	4/20					15/16	20/9
AVERAGE NUMBER OF OBJECTIVES MASTERED IN LANGUAGE ARTS		6.5	6.8	7.0	6.4					6.7	7.0
AVERAGE HOLISTIC WRITING SCORE		3.9	4.3	4.2	4.2					4.1	4.8
AVERAGE DRP UNIT SCORE		51	52	51	50					51	53

* State Goal is 7 for Writing. Remedial Standard is 4 for Writing.

** State Goal is 50 DRP Units for Reading. Remedial Standard is 41 DRP Units For Reading.

COPY 01

PROCESS NO. 19150074-3566-01224-1

CONNECTICUT MASTERY TESTING PROGRAM

DISTRICT BY SCHOOL REPORT

THE PSYCHOLOGICAL CORPORATION

GRADE: 04 FORM: D TEST DATE: 09/91

LANGUAGE ARTS

DISTRICT: B DISTRICT
DISTRICT CODE:
Scores indicate Number/Percent of students mastering each objective

OBJECTIVES	MASTERY CRITERIA	SCHOOL A	SCHOOL B	SCHOOL C	DISTRICT
NUMBER OF STUDENTS TESTED		37	80	94	211
		#/%	#/%	#/%	#/%
WRITING MECHANICS					
1. Capitalization and Punctuation	9 of 12	32/86	55/69	49/52	136/64
2. Spelling (words/homonyms/abbreviations)	7 of 9	31/84	65/81	64/68	160/76
3. Agreement	11 of 15	35/95	75/94	83/88	193/91
LOCATING INFORMATION					
4. Locating Information (schedules, maps, table of contents & title page, and dictionary)	8 of 11	36/97	76/95	87/93	199/94
LISTENING COMPREHENSION					
5. Literal	5 of 7	28/76	66/83	68/72	162/77
6. Inferential and Evaluative	9 of 13	26/70	46/58	62/66	134/64
READING COMPREHENSION					
7. Literal	9 of 12	34/92	72/90	79/84	185/88
8. Inferential	10 of 14	34/92	65/81	69/73	168/80
9. Evaluative	7 of 10	27/73	52/65	65/69	144/68
HOLISTIC MEASURES OF WRITING AND READING					#/% OF STUDENTS AT STATED LEVEL
WRITING SAMPLE* NUMBER/PERCENT PRODUCING MATERIAL THAT IS:	HOLISTIC SCORE	#/%	#/%	#/%	#/%
Well written with developed supportive detail (At or above the state goal)	7 or 8	11/30	15/19	2/2	28/13
Generally well organized with supportive detail	5 or 6	20/54	41/51	23/25	84/40
Minimally proficient	4	6/16	16/20	51/55	73/35
Below the remedial standard	2 or 3	0/0	8/10	17/18	25/12
DEGREES OF READING POWER (DRP)** NUMBER/PERCENT OF STUDENTS	DRP UNIT SCORE	#/%	#/%	#/%	#/%
At/above the reading goal for beginning grade 04	50+	30/81	56/70	55/59	141/67
Below the reading goal for beginning grade 04 but at or above the remedial standard	41 to 49	6/16	20/25	24/26	50/24
Below the remedial standard	Below 41	1/3	4/5	15/16	20/9
AVERAGE NUMBER OF OBJECTIVES MASTERED IN LANGUAGE ARTS		7.6	7.2	6.7	7.0
AVERAGE HOLISTIC WRITING SCORE		5.7	5.2	4.1	4.8
AVERAGE DRP UNIT SCORE		57	53	51	53

* State Goal is 7 for Writing. Remedial Standard is 4 for Writing.

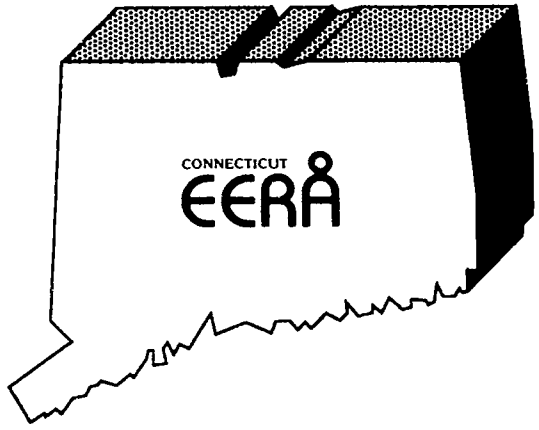
** State Goal is 50 DRP Units for Reading. Remedial Standard is 41 DRP Units For Reading.

COPY 01

PROCESS NO. 19150074-3566-01153-1

Connecticut Mastery Testing Program

GRADE 4



PARENT / STUDENT DIAGNOSTIC REPORT

Your child's scores on the Connecticut Mastery Test are reported inside.

For a description of the Connecticut Mastery Testing Program, see the back cover of this folder.

For general information about your local district's testing program, please contact your superintendent of schools.

For further information on the Connecticut Mastery Testing Program, contact: Connecticut State Department of Education, Student Assessment and Testing, Box 2219, Hartford, Connecticut 06145, (203) 566-4008.

CONNECTICUT MASTERY TESTING PROGRAM

GRADE 4 REPORT

MATHEMATICS

TEACHER: B A
SCHOOL: A
DISTRICT: B DISTRICT

GRADE: 04
TEST DATE: 09/91
FORM: D

STUDENT OBJECTIVES ANALYSIS FOR

M C

OBJECTIVES TESTED	MASTERY CRITERIA NUMBER CORRECT	STUDENT SCORE
CONCEPTUAL UNDERSTANDINGS		
1. Identify the number one more, one less, ten more or ten less than a given number	3 of 4	4
2. Extend patterns involving numbers and attributes	3 of 4	4
3. Order whole numbers	3 of 4	4
4. Rewrite numbers using expanded notation	3 of 4	4
5. Rewrite numbers by regrouping tens and ones	3 of 4	4
6. Identify fractional parts of regions and sets from pictures for halves, thirds, fourths, and sixths	3 of 4	3
7. Relate multiplication and division facts to rectangular arrays	3 of 4	1
COMPUTATIONAL SKILLS		
8. Know addition and subtraction facts to 18	3 of 4	4
9. Add and subtract one and two digit numbers without regrouping	3 of 4	3
10. Add one and two digit numbers with regrouping	3 of 4	2
11. Estimate sums and differences to 100	3 of 4	4
12. Multiply and divide by 2, 5, and 10	3 of 4	3
PROBLEM SOLVING AND APPLICATIONS		
13. Identify objects or numbers that do or do not belong in a collection, matrix, or array	3 of 4	4
14. Read and interpret bar graphs and pictographs	3 of 4	3
15. Read and interpret data from tables and charts	3 of 4	4
16. Identify or write number sentences from pictures	3 of 4	3
17. Identify number sentences from addition or subtraction story problems	3 of 4	3
18. Solve simple story problems involving addition or subtraction	3 of 4	3
19. Solve and identify number sentences in simple story problems, involving addition and subtraction, with extraneous information	3 of 4	4
20. Identify needed information in problem situations	3 of 4	4
MEASUREMENT AND GEOMETRY		
21. Measure length and identify appropriate units for measuring length and distance	3 of 4	4
22. Estimate lengths and areas	3 of 4	2
23. Tell time to the nearest hour, half hour and quarter hour using analog and digital clocks	3 of 4	4
24. Determine the value of a set of coins	3 of 4	3
25. Identify shapes, angles and sides	3 of 4	4

This student has attained the state goal in mathematics by mastering 22 of 25 mathematics objectives.

TOTAL NUMBER OF OBJECTIVES MASTERED (out of 25) = 22
(State Goal is 22 of 25 Objectives Mastered)
NUMBER OF ITEMS CORRECT (out of 100) = 85
(Remedial Standard is 69 of 100 items correct)

COPY 1

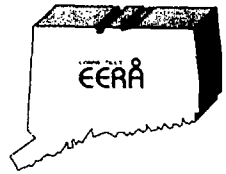
PROCESS NO. 19151634-4444-00081-1

THE PSYCHOLOGICAL CORPORATION®
HARCOURT BRACE JOVANOVICH, INC.

CONNECTICUT MASTERY TESTING PROGRAM

GRADE 4 REPORT

LANGUAGE ARTS



TEACHER: B A
SCHOOL: A
DISTRICT: B DISTRICT

GRADE: 04
TEST DATE: 09/91
FORM: D

STUDENT OBJECTIVES ANALYSIS FOR

M C

OBJECTIVES TESTED	MASTERY CRITERIA NUMBER CORRECT	STUDENT SCORE
WRITING MECHANICS		
1. Capitalization and Punctuation	9 of 12	9
2. Spelling (words, homonyms, and abbreviations)	7 of 9	3
3. Agreement (verb tense, subject-verb, and pronoun referent)	11 of 15	11
LOCATING INFORMATION		
4. Locating Information (schedules, maps, table of contents and title page, and dictionary)	8 of 11	10
LISTENING COMPREHENSION		
5. Literal (understands the meanings of ideas clearly stated by a speaker)	5 of 7	6
6. Inferential and Evaluative (understands the meanings of ideas not clearly stated, but implied, by a speaker and is able to make critical judgments about them)	9 of 13	7
READING COMPREHENSION		
7. Literal (understands the meanings of ideas clearly stated within a passage)	9 of 12	9
8. Inferential (understands the meanings of ideas not stated, but implied, within a passage)	10 of 14	11
9. Evaluative (able to make critical judgments about statements and inferences within a passage)	7 of 10	5
TOTAL NUMBER OF OBJECTIVES MASTERED (out of 9) =		6

WRITING SAMPLE	STUDENT SCORE
Holistic Writing Score (Remedial Standard is 4 of 8) (Writing Goal is 7 of 8)	2

This student has scored below the remedial standard on the writing test. School district personnel will provide further diagnosis. If necessary, remedial help will be provided. Questions concerning these scores should be directed to this student's teacher or principal.

DEGREES OF READING POWER (DRP)™	STUDENT SCORE
DRP Units (Remedial Standard is 41 DRP Units) (Reading Goal is 50 DRP Units)	44

This student has scored below the reading goal for beginning fourth graders but above the remedial standard.

COPY 1

PROCESS NO. 19151634-4444-00082-1

PARENT/STUDENT DIAGNOSTIC REPORT

Dear Parent:

Inside you will find the results of the Connecticut Mastery Test administered to your child earlier this fall. The test results help to show you and the school district's professional staff how well your child is performing on those skills identified by the State of Connecticut as important for students entering fourth grade to have mastered.

These tests are designed to determine the specific skill levels of students. The test results will be used to:

- provide your school with information for use in assessing the progress of individual students over time;
- provide your school with information based on which improvements in the general instructional program can be made; and
- provide information on appropriate basic skills remedial assistance for students so indicated.

Mastery testing will occur each fall in grades four, six, and eight for all students and in high school for those students for whom retesting is required.

If you have any questions about these test results, please ask your child's teacher(s). The teacher(s) will share with you other observations and recommendations based on experience in working with your son or daughter during the last several months.

Description of the Test

Mathematics: The mathematics test assesses twenty-five (25) specific objectives in four general areas of: (1) Conceptual Understandings; (2) Computational Skills; (3) Problem Solving/Applications; and (4) Measurement/Geometry. Test items evaluate a student's ability to order and rename numbers; compute and estimate sums and differences; read and interpret tables, graphs, and charts; solve a broad range of problems; measure and estimate length and width; identify shapes; and tell time.

Language Arts: The language arts test covers two general areas: Reading/Listening Comprehension, and Writing/Locating Information. There are nine (9) objectives and two holistic measures, one in reading and one in writing.

The content of Reading/Listening Comprehension consists of narrative, expository, and persuasive passages on a variety of topics measuring a student's reading and listening ability in: (1) Literal Comprehension; (2) Inferential or Interpretive Comprehension; and (3) Evaluative or Critical Comprehension. Audio tapes are used to assess a student's listening comprehension ability. Also used is the "Degrees of Reading Power" (DRP) Test which includes eight (8) passages and fifty-six (56) test items. It is designed to measure a student's ability to understand nonfiction English prose on a graduated scale of reading difficulty.

The content of Writing/Locating Information consists of three components. First, writing skills are directly assessed. A student is asked to write on a designated topic. The writing is judged on the student's demonstrated ability to convey information in a coherent and organized fashion. Second, the test assesses the mechanics of good writing, which are defined as: (1) Capitalization and Punctuation, (2) Spelling (words, homonyms, and abbreviations); and (3) Agreement. Finally, the test assesses Locating Information through the use of schedules, maps, title pages, tables of contents, and dictionaries. This part of the test measures a student's ability to find and use information from listed sources.

APPENDIX H

Fall 1991 Grade Four

State by District Report:

Mathematics

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 09/91

SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

DISTRICT	NUMBER TESTED	TOC	ERG	CONCEPTUAL UNDERSTANDINGS							COMPUTATIONAL SKILLS					PROBLEM SOLVING AND APPLICATIONS								MEASUREMENT AND GEOMETRY					TOTAL MATH		
				determine 1 & 10 more/less than number	extend patterns	order whole numbers	rewrite #'s using expanded notation	rewrite numbers by regrouping	identify fractional parts	relate mult/div facts to pictures	add/subtract facts to 18	add/subtract without regrouping	add with regrouping	estimate sums and differences	multiply and divide by 2, 5, 10	identify objects/numbers in array	read and interpret graphs	read and interpret tables	identify # sentences from pictures	identify # sentences from problems	solve story problems using add/subt	solve story problems with extra info	identify needed info in problems	measure length/identify units	estimate length/area	tell time	determine the value of a set of coins	identify shapes/angles/sides	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis	Percent of Students Meeting State Goal
ANDOVER	30	4	3	100	90	100	97	67	93	90	100	100	100	83	77	97	97	100	97	100	97	100	97	83	93	93	97	97	23.4	0	83
ANSONIA	160	5	6	98	78	92	94	51	92	71	96	99	92	74	88	91	96	99	82	95	95	84	96	84	79	90	94	99	22.1	6	67
ASHFORO	41	6	4	100	68	85	98	59	90	73	100	100	93	76	78	93	95	100	95	98	95	80	93	95	98	100	93	100	22.5	7	71
AVON	155	4	1	98	90	93	99	59	92	88	98	99	97	85	92	94	99	99	86	99	97	92	95	94	90	98	99	99	23.3	1	83
BARKHAMSTED	51	6	3	94	90	88	98	71	94	75	100	94	90	51	80	94	94	94	80	100	96	80	92	86	92	98	98	100	22.3	4	73
BERLIN	211	4	3	97	83	90	98	49	85	69	99	97	95	66	79	92	99	97	84	97	96	84	94	88	88	93	95	100	22.1	7	70
BETHANY	63	4	2	95	89	87	98	73	90	73	92	98	94	68	89	90	98	98	86	98	92	87	95	87	89	95	92	98	22.6	5	75
BETHEL	278	4	4	99	88	91	97	56	85	81	99	98	96	69	90	92	98	96	88	96	95	86	95	86	86	97	96	99	22.6	5	77
BLOOMFIELD	183	2	4	96	82	86	97	51	96	74	96	97	90	75	88	89	96	93	74	92	89	80	88	78	83	92	90	98	21.7	8	68
BOLTON	79	4	2	97	86	90	97	59	91	85	94	96	94	73	97	89	95	97	84	97	95	86	96	86	91	96	96	100	22.7	4	82
BOZRAH	33	5	3	97	73	91	94	27	79	61	97	94	94	39	79	79	97	94	82	88	88	58	73	73	73	97	94	100	20.2	6	39
BRANFORD	224	4	4	96	78	86	95	58	78	77	98	99	96	73	83	92	95	96	81	96	97	88	96	77	85	95	96	99	22.1	3	68
BRIDGEPORT	1578	1	7	80	53	63	87	17	74	54	96	96	89	31	69	72	93	83	59	87	85	52	68	59	63	81	85	97	17.9	29	26
BRISTOL	628	3	6	95	80	88	97	38	84	68	97	96	92	56	83	87	97	93	77	93	93	77	86	81	82	94	95	99	21.3	9	60
BROOKFIELD	195	4	2	97	88	94	97	66	89	75	99	98	94	83	83	93	96	97	88	96	94	88	94	78	87	93	95	99	22.6	5	76
BROOKLYN	93	6	5	94	76	90	95	46	87	76	97	95	88	69	83	80	94	91	80	89	86	74	85	84	82	94	95	99	21.3	13	66
CANAAN	13	6	4	100	83	100	92	58	92	92	100	100	100	42	100	100	85	85	77	85	100	85	85	100	75	92	92	100	22.3	8	75
CANTERBURY	90	6	3	99	83	91	98	53	97	79	99	97	97	69	84	91	99	97	86	96	90	84	92	88	87	97	96	100	22.5	3	76
CANTON	99	4	2	100	91	98	99	71	90	87	99	95	100	78	88	96	98	96	91	95	96	92	97	92	90	97	97	100	23.3	4	85
CHAPLIN	28	6	5	96	86	96	96	50	75	75	96	100	93	71	61	89	100	100	86	100	100	93	96	93	82	100	89	93	22.2	4	64
CHESHIRE	370	2	2	98	87	85	98	68	89	82	98	97	94	59	86	94	98	96	88	97	96	86	93	81	87	96	93	98	22.4	5	75
CHESTER	42	6	3	95	88	100	100	36	86	69	98	93	95	50	93	93	100	98	90	100	100	86	95	83	76	100	100	100	22.2	0	74
CLINTON	180	5	4	97	86	83	98	76	85	76	94	88	88	64	73	90	98	96	85	96	91	82	94	84	87	97	92	100	22.0	5	67
COLCHESTER	150	5	5	97	66	87	97	51	71	61	96	94	95	53	67	81	99	95	84	97	93	88	93	78	86	96	91	100	21.2	9	55
COLEBROOK	21	6	3	100	90	90	100	67	100	76	95	100	95	29	62	100	100	100	95	95	86	86	100	86	86	100	100	100	22.4	0	71
COLUMBIA	67	5	3	96	87	91	99	72	88	78	96	96	99	78	82	91	99	99	88	99	90	93	94	90	87	100	97	100	22.8	3	72
CORNWALL	15	6	3	100	100	100	100	100	87	100	100	100	100	100	93	100	100	100	100	100	100	100	100	93	100	100	100	100	24.7	0	100
COVENTRY	122	4	3	98	89	93	100	63	83	80	96	98	98	73	74	93	97	98	80	98	96	85	93	84	83	93	94	100	22.4	6	72

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 09/91

				OBJECTIVES TESTED																								TOTAL MATH		
				CONCEPTUAL UNDERSTANDINGS							COMPUTATIONAL SKILLS					PROBLEM SOLVING AND APPLICATIONS					MEASUREMENT AND GEOMETRY										
				determine 1 & 10 more/less than number	extend patterns	**order whole numbers**	rewrite #'s using expanded notation	**rewrite numbers by regrouping**	identify fractional parts	**relate mult/div facts to pictures**	add/subtract facts to 18	**add/subtract without regrouping**	add with regrouping	**estimate sums and differences**	multiply and divide by 2, 5, 10	**identify objects/numbers in array**	read and interpret graphs	**read and interpret tables**	identify # sentences from pictures	**identify # sentences from problems**	solve story problems using add/subt	**solve story problems with extra info**	identify needed info in problems	estimate length/area	**tell time**	determine the value of a set of coins	**identify shapes/angles/sides**	Average Number of Objectives Mastered	**Percent of Students Needing Further Diagnosis**	Percent of Students Meeting State Goal		
DISTRICT	NUMBER TESTED	TOC	ERG	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																										
CROMWELL	154	4	4	97	79	86	98	42	92	71	97	97	91	60	79	92	98	92	78	93	93	80	87	80	87	92	90	99	21.5	8	62
DANBURY	622	3	6	95	80	87	94	59	92	75	97	96	91	71	83	89	96	92	77	91	89	79	85	81	83	92	91	99	21.6	11	68
DARIEN	229	2	1	95	87	90	97	63	82	76	99	96	92	62	94	90	97	97	86	94	95	87	94	89	84	98	93	99	22.4	5	75
DEEP RIVER	48	6	5	100	88	94	100	52	88	77	100	100	94	56	85	90	100	98	88	94	94	83	94	81	85	98	94	100	22.3	10	75
DERBY	85	5	6	96	85	99	98	48	95	80	98	100	93	55	92	96	99	99	86	98	96	85	91	80	91	94	96	100	22.5	1	72
EASTFORD	24	6	3	96	92	92	100	79	100	88	96	96	96	71	96	100	88	96	83	96	96	83	100	88	67	96	92	100	22.8	8	83
EAST GRANBY	53	4	2	96	87	91	98	53	96	66	92	94	87	66	83	96	96	98	85	98	92	81	96	85	91	91	92	100	22.1	4	72
EAST HADDAM	104	5	4	97	87	92	98	53	91	74	99	99	92	66	91	89	96	98	88	95	93	80	89	88	84	94	95	99	22.3	6	71
EAST HAMPTON	157	5	3	97	80	88	99	61	87	71	96	97	93	49	76	88	97	97	85	99	94	85	94	78	87	95	96	99	21.9	6	63
EAST HARTFORD	394	2	6	95	80	87	88	54	87	71	95	96	91	69	81	90	96	93	74	90	90	78	87	76	78	92	91	98	21.3	13	62
EAST HAVEN	230	2	5	96	84	89	96	56	90	71	97	96	90	68	83	92	99	97	82	97	93	86	88	71	81	95	90	98	21.8	7	65
EAST LYME	176	4	2	99	88	90	98	66	89	77	96	95	90	60	77	91	97	96	84	98	95	83	96	85	89	98	91	99	22.3	6	71
EASTON	67	4	1	97	79	90	97	55	91	73	97	93	99	72	85	91	94	99	88	99	96	90	96	90	85	97	94	100	22.4	7	75
EAST WINDSOR	112	4	5	95	80	91	95	59	87	72	99	96	88	56	85	90	94	95	80	94	91	80	87	77	85	96	93	99	21.6	10	71
ELLINGTON	149	4	3	96	89	87	97	50	86	74	98	98	91	60	81	87	99	95	85	95	89	85	93	85	87	94	93	99	21.9	7	70
ENFIELD	452	3	5	98	82	93	97	54	94	77	98	98	96	80	88	92	98	98	83	95	95	84	94	87	90	92	95	100	22.6	3	74
ESSEX	66	6	4	97	86	92	100	53	86	71	100	97	92	68	94	91	98	98	83	97	92	88	95	86	82	100	94	100	22.4	5	74
FAIRFIELD	456	2	2	99	93	95	98	57	92	81	98	98	96	77	91	96	100	98	87	97	96	90	97	86	91	96	96	100	23.0	2	81
FARMINGTON	265	4	2	98	87	90	97	68	94	86	98	98	96	75	92	94	97	97	86	97	96	88	94	91	89	97	95	100	23.0	5	83
FRANKLIN	26	5	3	96	81	73	96	50	85	73	100	96	88	54	81	96	96	100	85	96	96	81	92	88	92	96	100	100	21.9	4	54
GLASTONBURY	382	4	2	93	81	89	98	62	81	70	97	95	90	55	82	90	96	96	86	95	96	86	92	83	86	96	97	99	21.9	8	70
GRANBY	121	4	2	99	93	96	100	73	93	88	98	99	97	69	89	96	98	98	90	99	96	88	97	91	86	94	98	99	23.2	3	83
GREENWICH	447	2	2	99	91	94	98	66	87	79	98	98	97	77	88	94	97	95	89	96	94	88	93	86	89	95	97	99	22.8	5	80
GRISWOLD	133	4	6	96	83	87	94	53	88	68	96	95	88	26	70	93	95	92	88	96	92	78	92	68	82	94	92	100	21.2	5	55
GROTON	512	3	4	93	72	86	93	39	81	70	97	96	92	51	83	83	96	94	80	93	91	78	88	77	77	93	90	100	20.9	12	56
GUILFORD	265	4	2	97	88	93	98	72	90	77	97	99	95	57	87	93	97	98	85	96	96	92	97	80	87	97	94	99	22.6	2	76
HAMDEN	407	2	4	96	77	81	95	47	83	69	96	96	90	54	82	84	95	92	81	93	91	75	87	76	79	91	92	100	21.0	12	59
HAMPTON	22	5	4	95	77	91	95	45	82	82	95	95	91	32	64	91	100	91	95	95	86	100	100	73	91	86	91	95	21.4	5	50

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 09/91

OBJECTIVES TESTED

	CONCEPTUAL UNDERSTANDINGS							COMPUTATIONAL SKILLS							PROBLEM SOLVING AND APPLICATIONS							MEASUREMENT AND GEOMETRY							TOTAL MATH		
DISTRICT	determine 1 & 10 more/less than number	order whole numbers	extend patterns	rewrite #'s using expanded notation	rewrite numbers by regrouping	identify fractional parts	relate mult/div facts to pictures	add/subtract facts to 18	add/subtract without regrouping	add with regrouping	estimate sums and differences	multiply and divide by 2, 5, 10	identify objects/numbers in array	read and interpret graphs	read and interpret tables	identify # sentences from pictures	solve story problems from problems	solve story problems using add/subt	identify needed info in problems	measure length/identity units	tell time	estimate length/area	identify shapes/angles/sides	determine the value of a set of coins	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis	Percent of Students Meeting State Goal
NUMBER TESTED																														
TOC																														
ERG																														
	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																													
HARTFORD	76	49	49	85	13	58	48	95	92	83	25	60	70	84	72	57	83	79	47	63	53	54	76	84	96	16.5	41	20
1779	1	7																										
HARTLAND	91	84	91	97	50	91	63	97	97	94	66	88	88	91	97	91	97	94	100	97	78	94	100	97	100	22.3	0	66
32	6	3																										
HEBRON	97	88	94	99	70	95	83	99	98	94	68	87	92	100	98	90	96	92	91	94	85	89	99	94	100	22.9	2	75
133	5	2																										
KENT	100	93	93	100	87	100	73	87	87	93	87	100	93	100	93	87	100	100	87	100	100	93	100	100	100	23.5	0	87
15	6	4																										
KILLINGLY	94	81	90	97	55	86	68	96	95	92	68	79	89	97	94	77	95	89	81	90	84	82	92	94	100	21.6	7	66
231	6	6																										
LEBANON	100	92	94	99	78	99	88	97	97	94	85	92	99	99	98	89	97	95	93	93	92	88	94	100	100	23.5	2	90
88	6	4																										
LEDYARD	97	76	89	96	52	82	72	96	95	94	57	82	86	97	95	85	95	93	86	93	86	81	94	91	100	21.7	7	67
251	4	2																										
LISBON	97	79	87	94	58	76	66	98	92	90	55	68	87	94	94	77	95	97	82	89	76	85	94	95	100	21.2	11	63
62	4	5																										
LITCHFIELD	100	86	90	97	61	97	85	96	97	94	65	90	94	97	97	90	97	96	90	97	85	92	99	96	100	22.9	1	78
72	6	3																										
MADISON	98	83	87	96	53	81	70	98	99	95	65	85	89	98	97	80	95	95	85	93	89	84	94	95	100	22.1	4	67
210	5	2																										
MANCHESTER	96	86	93	97	84	95	89	96	96	92	81	86	95	97	97	78	95	92	86	93	86	86	94	97	99	22.9	4	81
548	3	4																										
MANSFIELD	100	87	94	100	67	93	82	100	96	95	74	88	96	96	99	86	96	96	93	95	88	92	96	94	99	23.0	1	82
136	6	4																										
MARLBOROUGH	100	89	93	96	64	89	85	99	97	95	85	88	92	99	96	92	96	97	92	91	93	86	96	99	100	23.1	5	82
74	5	2																										
MERIDEN	90	73	80	91	58	83	68	95	92	88	61	69	84	93	88	72	87	83	71	79	79	75	86	89	99	20.3	20	59
625	3	6																										
MIDDLETOWN	92	75	83	93	45	80	67	94	95	91	43	74	88	95	92	78	94	89	74	89	63	83	89	89	98	20.5	14	54
308	3	6																										
MILFORD	96	91	82	95	49	89	72	98	98	93	55	84	94	96	95	86	94	94	81	88	82	84	95	94	100	21.8	7	67
472	3	4																										
MONROE	97	86	86	97	61	93	78	98	97	97	68	89	89	94	94	80	94	92	83	89	86	84	97	93	100	22.2	8	73
265	4	2																										
MONTVILLE	95	81	90	99	52	87	74	97	97	91	55	76	90	96	94	82	92	89	80	85	86	85	93	92	100	21.5	11	65
204	4	5																										
NAUGATUCK	97	82	88	96	42	90	73	98	98	94	71	83	91	97	94	82	94	92	78	89	83	85	93	95	98	21.8	7	66
381	2	6																										
NEW BRITAIN	90	70	78	93	50	80	68	97	96	93	61	72	85	93	89	73	89	87	67	79	74	75	85	91	98	20.4	17	53
665	3	6																										
NEW CANAAN	99	94	91	98	66	92	83	99	98	96	67	95	97	97	95	87	98	97	89	96	86	87	96	95	100	23.0	2	82
182	2	1																										
NEW FAIRFIELD	99	85	92	97	53	89	75	99	98	96	54	82	90	98	97	84	97	98	84	95	91	90	96	96	99	22.3	4	69
183	4	2																										
NEW HARTFORD	99	92	90	99	59	99	86	97	99	99	79	88	95	99	99	88	97	99	86	99	90	93	96	96	99	23.2	1	84
73	5	3																										
NEW HAVEN	88	60	78	89	43	67	63	94	93	86	44	67	75	88	81	62	87	82	59	74	65	64	76	89	96	18.7	27	42
1327	1	7																										
NEWINGTON	99	90	86	94	45	92	83	99	95	93	72	88	95	96	96	81	96	95	85	93	90	85	99	94	100	22.4	4	74
278	2	3																										
NEW LONDON	85	52	67	91	19	53	54	98	95	92	29	68	75	88	86	68	91	86	66	79	59	68	81	88	96	18.3	28	31
237	3	6																										
NEW MILFORD	96	84	83	98	58	87	74	97	97	95	59	81	90	96	95	87	96	95	87	94	80	85	95	93	99	22.0	6	69
338	5	4																										
NEWTOWN	99	94	95	98	83	94	85	96	95	89	69	85	96	99	97	87	96	94	91	99	80	91	96	96	100	23.1	2	83
254	5	2																										

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 09/91

OBJECTIVES TESTED

- CONCEPTUAL UNDERSTANDINGS
- COMPUTATIONAL SKILLS
- PROBLEM SOLVING AND APPLICATIONS
- MEASUREMENT AND GEOMETRY

TOTAL MATH

DISTRICT	NUMBER TESTED	TOC	ERG	determine 1 & 10 more/less than number	extend patterns	order whole numbers	rewrite #'s using expanded notation	identify fractional parts	rewrite numbers by regrouping	relate mult/div facts to pictures	add/subtract facts to 18	add/subtract without regrouping	add with regrouping	estimate sums and differences	multiply and divide by 2, 5, 10	identify objects/numbers in array	read and interpret graphs	read and interpret tables	identify # sentences from pictures	solve story problems from problems	solve story problems using add/subt	identify needed info in problems	measure length/identity units	estimate length/area	tell time	determine the value of a set of coins	identify shapes/angles/sides	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis	Percent of Students Meeting State Goal
				SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
NORFOLK	18	6	4	100	72	94	83	33	89	56	100	100	89	44	67	89	72	83	78	83	89	83	89	94	89	83	83	83	20.3	22	50
NORTH BRANFORD	181	4	3	98	88	92	96	44	81	71	99	97	94	77	81	93	96	97	85	93	94	86	91	87	89	95	94	98	22.2	7	71
NORTH CANAAN	38	6	4	97	74	74	95	58	87	74	100	95	92	50	79	84	92	97	79	95	95	79	89	79	82	95	87	100	21.3	11	61
NORTH HAVEN	234	2	3	98	86	89	94	56	80	74	98	97	93	58	76	94	97	95	77	97	96	83	91	86	82	94	94	98	21.8	8	68
NORTH STONINGTON	70	5	3	96	90	87	99	31	73	69	100	99	97	44	96	89	99	99	83	97	97	84	91	84	84	94	93	97	21.7	7	64
NORWALK	705	3	6	89	70	73	90	32	75	69	94	93	86	53	78	83	92	88	65	87	84	67	80	80	74	87	87	97	19.7	20	49
NORWICH	390	3	6	97	77	84	97	50	83	75	98	97	94	61	83	88	97	95	84	94	93	79	91	82	85	92	94	98	21.7	9	66
OLD SAYBROOK	100	5	4	98	89	94	96	67	95	74	98	95	89	65	73	92	97	96	80	95	91	87	94	83	89	95	94	99	22.3	8	71
ORANGE	136	2	1	99	90	94	97	66	86	76	100	99	95	83	92	95	99	99	88	96	98	87	96	89	91	98	98	100	23.1	3	81
OXFORD	131	5	3	98	88	90	99	49	87	68	98	97	92	54	87	89	95	97	88	97	96	87	96	79	89	95	95	99	22.1	8	69
PLAINFIELD	191	6	6	94	78	84	93	50	80	69	97	96	93	66	69	85	95	93	77	92	90	78	90	80	83	90	92	100	21.1	11	59
PLAINVILLE	164	4	5	96	80	84	95	34	86	72	99	99	94	56	80	93	95	97	84	95	96	82	96	82	82	93	95	99	21.6	4	64
PLYMOUTH	150	2	5	99	85	94	99	62	96	79	99	99	95	86	93	97	97	97	85	96	96	89	95	89	85	96	95	100	23.0	2	83
POMFRET	49	6	4	94	88	76	96	39	86	76	96	100	92	31	78	96	90	92	78	100	86	82	90	90	92	94	92	98	21.3	6	59
PORTLAND	120	5	4	98	72	91	96	58	91	58	97	97	83	58	54	83	96	93	81	93	92	87	92	86	78	93	91	99	21.2	12	58
PRESTON	55	4	5	98	73	85	100	49	75	71	98	98	85	35	85	84	95	96	84	95	91	80	87	73	87	84	98	100	21.1	11	58
PUTNAM	108	6	6	97	73	81	94	43	87	65	96	94	93	50	73	79	94	94	74	92	90	73	83	77	77	96	96	97	20.7	13	53
REDDING	101	5	1	98	92	96	100	66	86	64	97	92	88	58	81	89	98	97	82	95	91	88	97	81	79	98	98	99	22.1	8	67
RIDGEFIELD	259	5	1	98	93	96	98	80	95	88	100	99	95	84	95	95	96	98	88	97	97	92	98	88	85	97	97	99	23.5	3	88
ROCKY HILL	145	4	4	99	85	95	98	59	91	83	98	100	97	71	86	93	98	97	87	97	97	92	96	89	83	92	95	99	22.8	3	77
SALEM	53	5	4	92	83	83	94	62	87	67	98	94	79	38	58	90	89	92	85	91	94	85	92	73	83	91	94	100	21.0	10	50
SALISBURY	49	6	4	98	88	82	94	63	80	76	98	98	94	61	90	90	98	98	85	98	96	94	94	88	82	100	96	100	22.3	2	67
SCOTLAND	18	6	5	100	89	89	100	44	89	78	94	94	100	50	89	94	100	100	83	94	89	89	94	89	100	89	94	100	22.3	6	83
SEYMOUR	170	5	5	97	86	89	98	42	89	72	99	97	94	67	84	91	99	98	85	97	97	86	94	85	89	96	95	99	22.3	4	72
SHARON	30	6	4	97	77	73	97	50	63	70	100	97	93	53	83	83	93	90	83	93	87	80	90	87	67	100	87	100	20.9	10	43
SHELTON	348	3	3	97	85	88	95	41	91	75	98	98	95	58	86	88	97	96	82	96	93	80	93	78	85	97	95	100	21.9	7	65
SHERMAN	20	6	2	100	95	100	100	65	100	85	100	100	100	90	100	100	95	100	90	95	95	95	95	90	95	95	95	100	23.8	0	85
SIMSBURY	294	4	1	99	92	95	99	71	90	83	99	98	96	82	88	95	98	98	86	98	97	91	97	88	89	99	98	99	23.3	1	84

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 09/91

OBJECTIVES TESTED: CONCEPTUAL UNDERSTANDINGS (CU); COMPUTATIONAL SKILLS (CS); PROBLEM SOLVING AND APPLICATIONS (PS); MEASUREMENT AND GEOMETRY (MG); TOTAL MATH

SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

DISTRICT	NUMBER TESTED	TOC	ERG	CU: determine 1 & 10 more/less than number	CU: extend patterns	CU: order whole numbers	CU: rewrite #'s using expanded notation	CU: rewrite numbers by regrouping	CU: identify fractional parts	CU: relate mult/div facts to pictures	CS: add/subtract facts to 18	CS: add/subtract without regrouping	CS: add with regrouping	CS: estimate sums and differences	CS: multiply and divide by 2, 5, 10	PS: identify objects/numbers in array	PS: read and interpret graphs	PS: read and interpret tables	PS: identify # sentences from pictures	PS: identify # sentences from problems	PS: solve story problems using add/subt	PS: solve story problems with extra info	PS: identify needed info in problems	MG: measure length/identify units	MG: estimate length/area	MG: tell time	MG: determine the value of a set of coins	MG: identify shapes/angles/sides	TOTAL MATH: Average Number of Objectives Mastered	TOTAL MATH: Percent of Students Needing Further Diagnosis	TOTAL MATH: Percent of Students Meeting State Goal
SOMERS	115	4	3	98	78	88	99	51	91	77	95	97	95	62	81	93	99	96	85	95	95	80	97	80	84	96	97	99	22.1	1	65
SOUTHINGTON	445	3	5	99	87	92	98	55	89	76	99	99	96	73	88	92	99	97	82	96	96	87	94	89	89	95	97	100	22.6	4	76
SOUTH WINDSOR	347	2	2	98	90	89	96	53	83	75	98	97	97	73	90	94	96	97	86	97	96	87	95	78	86	96	97	99	22.4	4	73
SPRAGUE	33	4	5	94	85	94	91	61	88	82	97	100	94	88	94	97	100	100	85	100	91	73	97	88	79	94	97	100	22.7	6	76
STAFFORD	148	5	5	98	83	84	97	56	84	73	98	98	95	59	79	93	96	95	85	95	91	89	92	81	88	95	95	99	22.0	5	65
STAMFORD	861	1	6	90	67	69	89	38	72	63	95	93	87	39	69	76	89	84	68	90	85	66	76	65	69	84	86	97	19.1	25	47
STERLING	49	6	5	100	92	88	96	53	92	90	100	94	90	65	73	96	98	96	86	100	94	92	94	82	86	96	94	98	22.4	2	69
STONINGTON	180	4	5	97	85	93	96	62	93	80	99	99	93	78	82	93	94	94	83	96	89	82	93	87	86	94	96	99	22.4	6	77
STRATFORD	477	2	5	94	80	87	97	55	90	73	96	92	87	46	78	89	98	93	82	94	88	78	87	79	83	92	89	99	21.3	11	63
SUFFIELD	151	4	3	97	91	94	97	80	95	84	98	98	93	75	79	94	98	98	87	98	95	89	92	79	87	95	93	100	22.9	5	81
THOMASTON	79	4	5	99	86	94	99	43	82	68	100	99	94	57	81	92	97	95	89	96	96	82	89	82	81	94	96	99	21.9	5	68
THOMPSON	111	6	6	97	79	86	97	56	91	72	99	98	95	50	80	82	95	95	85	97	96	83	94	77	82	96	94	99	21.8	8	64
TOLLAND	194	5	3	94	84	96	97	48	91	70	97	97	95	64	86	90	98	99	89	97	96	89	95	82	86	99	98	100	22.4	4	71
TORRINGTON	337	3	6	97	78	76	98	51	85	74	96	98	94	65	77	88	98	93	78	96	94	81	90	85	83	95	95	99	21.6	9	63
TRUMBULL	343	2	2	98	89	96	99	65	95	80	99	100	97	82	92	93	97	98	86	96	97	89	93	90	86	99	95	100	23.1	3	80
UNION	6	6	5	100	67	100	100	67	100	83	100	100	100	83	83	67	100	100	83	100	83	100	100	100	83	100	100	100	23.0	0	83
VERNON	267	3	4	98	84	88	96	60	91	69	99	98	94	52	82	93	96	97	84	96	94	82	93	82	81	96	96	99	22.0	4	68
VOLUNTOWN	30	6	5	100	77	87	97	60	93	83	97	100	100	80	87	77	97	100	93	100	97	90	93	90	80	93	97	100	22.7	0	80
WALLINGFORD	475	3	5	97	78	81	95	46	84	70	98	99	93	63	80	88	95	97	80	95	95	82	91	81	84	93	96	99	21.6	8	62
WATERBURY	937	1	6	89	55	68	86	24	74	51	96	95	86	34	66	80	90	81	67	89	85	61	76	55	66	83	88	96	18.4	28	33
WATERFORD	201	4	4	98	70	85	98	41	91	69	95	98	94	63	84	85	97	96	87	97	88	87	93	79	85	95	97	100	21.7	5	61
WATERTOWN	253	2	5	99	89	94	98	52	94	79	98	98	95	71	88	94	99	99	86	98	95	88	96	89	85	96	97	100	22.7	4	79
WESTBROOK	51	6	4	98	84	78	98	57	80	63	90	92	86	45	71	92	92	94	75	96	84	80	94	82	78	90	94	100	21.0	14	59
WEST HARTFORD	610	2	2	95	83	89	98	67	87	75	98	97	93	72	82	90	97	97	85	94	94	85	92	87	83	96	95	99	22.3	8	75
WEST HAVEN	513	2	6	97	91	92	97	71	94	83	98	98	95	66	92	96	96	96	84	98	96	87	96	81	84	93	96	99	22.8	3	77
WESTON	120	5	1	98	86	93	98	63	84	79	98	98	95	64	92	92	98	99	91	97	98	84	95	88	88	99	93	100	22.7	3	75
WESTPORT	216	3	1	99	91	92	100	73	93	86	99	99	97	73	96	97	99	99	91	99	98	91	98	91	92	99	99	100	23.5	1	86
WETHERSFIELD	220	2	3	98	87	90	99	50	91	73	98	98	96	72	86	91	98	95	82	95	97	85	91	89	86	97	96	100	22.4	5	75

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 09/91

OBJECTIVES TESTED

- CONCEPTUAL UNDERSTANDINGS
- COMPUTATIONAL SKILLS
- PROBLEM SOLVING AND APPLICATIONS
- MEASUREMENT AND GEOMETRY

TOTAL MATH

DISTRICT	NUMBER TESTED	TOC	ERG	determine 1 & 10 more/less than number	extend patterns	order whole numbers	rewrite #'s using expanded notation	identify fractional parts	rewrite numbers by regrouping	add/subtract facts to 18	relate mult/div facts to pictures	add with regrouping	add/subtract without regrouping	multiply and divide by 2, 5, 10	estimate sums and differences	read and interpret graphs	identify objects/numbers in array	identify # sentences from pictures	read and interpret tables	solve story problems using add/subt	solve story problems from problems	identify needed info in problems	identify # sentences from problems	estimate length/area	measure length/identity units	determine the value of a set of coins	tell time	identify shapes/angles/sides	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis	Percent of Students Meeting State Goal
				SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																											
WILLINGTON	60	5	4	98	90	88	97	88	97	82	98	90	88	78	82	93	93	93	80	92	93	92	95	92	88	95	97	98	22.8	5	82
WILTON	199	4	1	97	91	89	99	77	96	81	98	97	91	57	95	95	93	95	87	94	92	87	92	78	86	96	94	99	22.6	5	79
WINCHESTER	143	6	5	100	82	83	98	31	84	72	98	97	94	57	81	91	95	96	85	94	94	87	93	86	90	93	94	98	21.7	6	65
WINDHAM	244	6	6	87	67	74	94	54	78	71	95	93	86	55	67	80	89	88	72	90	84	72	81	64	73	85	88	97	19.8	21	49
WINDSOR	338	2	4	95	79	86	95	56	86	70	97	96	92	64	81	86	96	93	78	96	94	79	87	80	85	92	93	99	21.5	10	62
WINDSOR LOCKS	137	4	5	94	91	92	97	43	89	76	95	97	95	69	83	95	95	93	82	96	95	85	95	88	85	98	96	100	22.2	4	69
WOLCOTT	177	2	5	98	82	91	99	51	86	76	98	95	90	66	86	88	99	98	81	96	94	84	93	86	80	94	92	98	22.0	8	68
WOODBRIDGE	91	4	1	100	89	90	96	76	84	92	99	100	96	78	95	98	98	96	90	99	96	91	96	97	93	100	96	100	23.4	2	88
WOODSTOCK	95	6	3	94	78	77	93	59	83	69	93	91	79	39	73	84	92	89	76	89	84	75	86	69	87	95	89	97	20.4	16	59
REGIONAL SCH 6	69	6	4	100	80	91	97	55	78	72	91	96	94	65	80	86	100	100	86	97	88	87	93	81	87	96	94	99	21.9	4	70
REGIONAL SCH 10	193	5	3	100	87	92	99	60	92	75	96	99	96	78	85	92	98	98	88	98	92	88	95	84	89	98	99	99	22.8	3	79
REGIONAL SCH 12	76	6	2	99	93	91	96	57	97	75	97	100	92	86	93	92	100	93	91	95	91	88	97	86	87	96	99	100	22.9	3	82
REGIONAL SCH 13	119	5	3	97	76	81	98	51	66	61	99	94	94	50	74	87	97	94	82	96	97	87	97	78	87	96	95	97	21.3	8	54
REGIONAL SCH 14	126	4	2	95	88	90	98	64	90	83	97	98	98	72	87	89	96	94	85	98	94	85	95	81	85	99	96	100	22.6	5	75
REGIONAL SCH 15	242	4	3	100	87	95	97	59	90	82	100	99	94	72	88	91	100	98	88	97	96	90	97	94	91	96	97	100	23.0	2	80
REGIONAL SCH 16	149	4	5	93	80	90	99	32	87	69	96	97	90	64	88	89	97	96	83	91	92	77	89	89	85	95	94	100	21.6	7	70
REGIONAL SCH 17	147	6	3	99	88	89	98	78	90	75	97	97	92	49	78	96	97	97	88	96	88	81	93	88	86	98	97	99	22.3	4	70
REGIONAL SCH 18	102	6	2	97	90	92	97	59	88	77	99	97	96	70	90	98	95	97	92	97	93	90	95	78	83	95	96	98	22.6	4	79

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 09/91

DISTRICT	NUMBER TESTED	TOC	ERG	OBJECTIVES TESTED: CONCEPTUAL UNDERSTANDINGS — determine 1 & 10 more/less than number	extend patterns	order whole numbers	rewrite #'s using expanded notation	rewrite numbers by regrouping	identify fractional parts	relate multiply facts to pictures	add/subtract facts to 18	add/subtract without regrouping	add with regrouping	estimate sums and differences	multiply and divide by 2, 5, 10	identify objects/numbers in array	read and interpret graphs	read and interpret tables	identify # sentences from pictures	identify # sentences from problems	solve story problems using add/subt	solve story problems with extra info	identify needed info in problems	measure length/identify units	estimate length/area	tell time	determine the value of a set of coins	identify shapes/angles/sides	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis	Percent of Students Meeting State Goal
				SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																										
TOC 1 TOTAL	6482			83	56	64	87	25	68	55	95	94	86	33	66	74	89	79	61	87	83	55	70	59	62	79	86	96	17.9	31	31
TOC 2 TOTAL	7355			97	86	90	96	58	89	76	98	97	93	68	86	92	97	96	83	95	94	84	92	83	84	95	94	99	22.2	6	72
TOC 3 TOTAL	8252			94	78	84	95	50	85	72	97	96	92	61	81	88	96	93	78	93	91	78	87	80	82	92	93	99	21.3	11	63
TOC 4 TOTAL	6840			97	85	90	97	58	88	77	98	97	94	66	84	92	97	96	85	96	94	86	93	85	86	95	95	99	22.3	5	73
TOC 5 TOTAL	3904			97	85	90	98	60	88	74	97	97	93	64	82	91	97	97	86	96	94	87	94	83	86	96	95	99	22.3	5	70
TOC 6 TOTAL	2750			96	82	87	97	56	87	74	97	96	92	62	80	89	95	95	83	95	91	83	91	82	84	94	94	99	21.8	8	68
ERG 1 TOTAL	2049			98	90	93	98	69	90	82	99	98	95	73	92	94	97	97	88	97	96	89	96	88	88	98	96	100	23.0	3	81
ERG 2 TOTAL	5965			97	87	91	98	64	89	78	98	97	95	69	87	92	97	97	86	96	95	87	94	85	87	96	95	99	22.6	5	76
ERG 3 TOTAL	3933			98	86	90	97	54	88	75	98	97	94	64	83	91	97	97	85	96	94	85	93	84	87	96	95	99	22.2	5	71
ERG 4 TOTAL	5369			96	82	87	96	57	88	75	97	96	92	63	82	90	96	95	82	95	93	83	91	82	84	94	94	99	21.9	7	68
ERG 5 TOTAL	4717			97	82	89	97	51	88	74	98	97	93	65	83	90	97	96	83	95	93	84	92	84	85	94	94	99	22.0	6	69
ERG 6 TOTAL	8866			93	73	80	93	45	82	68	96	95	90	55	76	85	94	90	74	92	89	73	84	74	77	89	91	98	20.6	15	56
ERG 7 TOTAL	4684			81	53	62	87	23	66	54	95	94	86	32	65	72	88	78	59	86	82	52	68	59	60	77	85	96	17.6	33	28
STATE TOTAL	35583			94	78	84	95	50	84	71	97	96	92	59	80	87	95	92	79	93	91	78	87	78	80	91	93	99	21.2	12	62

APPENDIX I

Fall 1991 Grade Four

State by District Report:

Language Arts

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 09/91

	OBJECTIVES TESTED									TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)			WRITING SAMPLE										
	WRITING MECHANICS			LOCATING INFORMATION	LISTENING COMPREHENSION		READING COMPREHENSION																	
	capitalization and punctuation	spelling (words/homonyms/abbreviations)	agreement	schedules, maps table of contents dictionary	literal	inferential and evaluative	literal	inferential	evaluative	Average Number of Objectives Mastered	Below 41 (% Needing Further Diagnosis)	41-49	50+ (% Meeting State Goal)	Average DRP Score	2	3	4	5	6	7	8	Average Holistic Score	% of Students Needing Further Diagnosis	% of Students Meeting State Goal
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)	9/12	7/9	11/15	8/11	5/7	9/13	9/12	10/14	7/10															
DISTRICT	NUMBER TESTED	T O C	E R G	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																				
ANDOVER	30	4	3	80	77	97	97	80	90	87	77	77	7.6	10	13	77	53	0	10	33	23	10	23	0	5.0	10	23
ANSONIA	159	5	6	69	77	92	97	76	77	83	74	76	7.2	12	20	68	52	2	1	20	26	24	15	11	5.6	3	27
ASHFORD	41	6	4	73	73	85	90	78	71	80	66	59	6.8	15	22	63	52	0	0	12	34	27	20	7	5.8	0	27
AVON	155	4	1	90	84	96	97	79	75	85	81	79	7.7	10	25	66	53	1	1	23	24	32	13	6	5.5	1	19
BARKHAMSTED	51	6	3	84	69	92	92	76	69	78	82	63	7.1	24	18	59	50	2	0	35	18	24	12	10	5.4	2	22
BERLIN	211	4	3	64	76	91	94	77	64	88	80	68	7.0	9	24	67	53	3	9	35	25	15	10	4	4.8	12	13
BETHANY	63	4	2	73	71	89	92	73	68	78	78	75	7.0	19	21	60	51	3	3	24	22	30	10	8	5.3	6	17
BETHEL	278	4	4	76	78	89	94	75	71	86	81	78	7.3	12	19	69	53	2	6	28	26	23	10	6	5.1	8	16
BLOOMFIELD	183	2	4	70	67	83	83	58	49	68	59	59	6.0	23	27	49	49	2	8	31	20	23	12	4	5.1	10	16
BOLTON	79	4	2	88	86	93	99	80	79	84	84	83	7.8	4	9	87	58	3	5	29	23	12	22	6	5.3	8	29
BOZRAH	31	5	3	71	71	90	90	71	55	70	67	53	6.4	17	37	47	49	0	3	29	35	13	13	6	5.2	3	19
BRANFORD	224	4	4	81	74	87	94	76	60	81	75	59	6.9	15	17	68	52	2	8	29	28	19	10	4	5.0	10	14
BRIDGEPORT	1571	1	7	52	65	63	69	42	25	43	36	28	4.2	84	29	18	40	9	14	42	17	11	5	2	4.3	23	7
BRISTOL	628	3	6	69	75	84	87	67	54	72	63	50	6.2	19	29	51	49	6	8	30	24	21	9	3	4.9	13	12
BROOKFIELD	195	4	2	86	79	91	92	72	64	81	75	58	7.0	15	20	65	52	3	3	20	26	17	22	10	5.6	5	32
BROOKLYN	88	6	5	74	74	84	92	37	43	71	69	58	6.2	20	33	48	48	1	9	33	23	18	7	8	5.0	10	15
CANAAN	14	6	4	71	79	86	86	79	86	71	57	64	6.8	29	7	64	50	0	15	38	8	31	0	8	4.8	15	8
CANTERBURY	90	6	3	71	73	88	88	73	62	74	76	64	6.7	19	32	49	49	1	6	56	15	18	4	0	4.6	7	4
CANTON	99	4	2	85	80	95	97	81	76	83	85	75	7.6	10	14	76	56	8	2	30	25	21	9	4	4.9	10	13
CHAPLIN	28	6	5	93	86	86	96	61	43	82	75	68	6.9	25	25	50	47	0	4	57	21	14	4	0	4.6	4	4
CHESHIRE	370	2	2	84	80	91	94	76	68	85	80	78	7.4	12	21	67	53	4	4	31	23	21	11	7	5.1	7	18
CHESTER	42	6	3	88	67	98	98	67	64	83	83	62	7.1	7	33	60	52	0	8	36	18	21	10	8	5.1	8	18
CLINTON	180	5	4	81	74	91	95	72	54	85	76	49	6.8	8	26	67	53	1	11	27	29	17	12	4	5.0	12	16
COLCHESTER	150	5	5	68	77	87	93	79	61	77	79	69	6.9	10	25	65	52	1	5	22	27	28	13	5	5.3	5	17
COLEBROOK	21	6	3	86	33	90	95	67	52	95	86	67	6.7	10	29	62	50	0	5	33	24	29	5	5	5.1	5	10
COLUMBIA	67	5	3	79	85	84	96	78	72	82	70	66	7.1	15	25	60	51	5	15	48	17	8	8	0	4.3	20	8
CORNWALL	14	6	3	100	93	100	100	100	100	93	86	79	8.5	7	0	93	58	0	21	57	21	0	0	0	4.0	21	0
COVENTRY	122	4	3	67	66	86	94	70	57	82	75	57	6.6	9	30	61	52	4	13	37	21	18	6	1	4.6	17	7

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 09/91

	OBJECTIVES TESTED									TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)			WRITING SAMPLE											
	WRITING MECHANICS			LOCATING INFORMATION	LISTENING COMPREHENSION		READING COMPREHENSION																		
	capitalization and punctuation	spelling (words/homonyms/abbreviations)	agreement	schedules, maps table of contents dictionary	literal	inferential and evaluative	literal	inferential	evaluative	Average Number of Objectives Mastered	Below 41 (% Needing Further Diagnosis)	41-49	50+ (% Meeting State Goal)	Average DRP Score	2	3	4	5	6	7	8	Average Holistic Score	% of Students Needing Further Diagnosis		% of Students Meeting State Goal	
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)	9/12	7/9	11/15	8/11	5/7	9/13	9/12	10/14	7/10																

DISTRICT	NUMBER TESTED	TOC	ERG	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																					
CROMWELL	155	4	4	72	66	81	87	73	59	74	66	50	6.3	17	19	63	51	2	8	27	35	15	10	3	5.0	10	14
DANBURY	621	3	6	69	68	81	85	64	52	69	63	54	6.1	32	26	42	46	4	6	36	24	20	6	4	4.8	11	10
DARIEN	229	2	1	82	83	92	94	81	73	87	83	69	7.5	9	21	70	54	2	3	21	21	28	18	7	5.5	5	25
DEEP RIVER	48	6	5	77	77	96	96	75	77	88	83	75	7.4	21	19	60	52	0	13	10	44	27	2	4	5.1	13	6
DERBY	85	5	6	80	74	92	96	75	56	74	69	65	6.8	21	24	55	49	4	5	41	19	21	8	2	4.8	8	11
EASTFORD	25	6	3	64	84	96	92	72	84	84	80	76	7.3	12	20	68	53	0	0	32	20	32	12	4	5.4	0	16
EAST GRANBY	53	4	2	74	87	92	98	75	60	77	70	62	7.0	9	23	68	52	6	6	21	37	19	12	0	4.9	12	12
EAST HADDAM	105	5	4	79	69	87	90	69	74	70	71	65	6.7	16	22	62	50	5	3	28	28	28	6	4	5.0	8	10
EAST HAMPTON	155	5	3	83	73	90	93	79	73	79	78	59	7.1	15	28	57	51	1	3	31	29	25	9	3	5.1	3	12
EAST HARTFORD	394	2	6	68	58	82	88	61	49	68	61	53	5.9	31	26	43	46	5	7	36	24	20	6	3	4.8	12	9
EAST HAVEN	230	2	5	76	70	90	95	69	61	76	73	69	6.8	13	34	54	50	1	1	32	31	26	6	3	5.1	2	9
EAST LYME	177	4	2	76	72	85	94	72	67	79	78	67	6.9	17	19	64	52	1	4	34	25	23	10	3	5.1	5	13
EASTON	67	4	1	85	74	92	94	86	64	83	83	70	7.3	17	21	62	50	0	2	29	26	27	11	6	5.3	2	17
EAST WINDSOR	112	4	5	74	77	89	90	72	64	77	73	70	6.9	19	22	59	50	4	4	26	17	28	19	3	5.3	7	22
ELLINGTON	149	4	3	76	84	91	96	76	67	87	81	64	7.2	11	22	67	52	1	3	26	28	30	10	1	5.2	4	11
ENFIELD	452	3	5	67	75	93	94	74	66	78	71	64	6.8	17	25	58	50	4	9	26	29	18	13	2	4.9	13	15
ESSEX	66	6	4	82	82	94	97	75	83	94	91	76	7.7	8	15	77	54	2	2	23	14	35	14	12	5.7	3	26
FAIRFIELD	456	2	2	83	72	94	95	81	69	85	82	56	7.2	12	21	67	52	2	5	26	21	24	14	8	5.3	7	22
FARMINGTON	261	4	2	90	73	94	97	80	72	82	82	75	7.5	11	18	71	53	0	6	16	31	24	18	6	5.5	6	24
FRANKLIN	26	5	3	73	77	77	92	85	77	81	77	85	7.2	19	23	58	50	0	8	54	19	15	0	4	4.6	8	4
GLASTONBURY	382	4	2	80	71	92	94	77	70	87	81	66	7.2	14	22	64	51	2	5	26	26	23	12	5	5.2	7	18
GRANBY	121	4	2	90	79	96	98	73	72	85	83	79	7.6	8	24	68	53	2	3	28	26	16	19	5	5.3	6	24
GREENWICH	445	2	2	82	80	90	95	81	74	86	81	70	7.4	14	20	66	53	3	4	27	24	23	14	6	5.2	7	20
GRISWOLD	131	4	6	72	70	91	93	69	66	76	68	61	6.7	22	29	49	48	6	6	38	28	15	5	2	4.6	12	7
GROTON	511	3	4	75	67	87	92	70	59	75	68	57	6.5	25	23	52	48	7	9	35	24	16	6	2	4.6	16	9
GUILFORD	258	4	2	80	79	97	98	82	77	88	84	76	7.6	8	14	77	54	1	4	24	24	27	12	9	5.4	5	21
HAMDEN	407	2	4	72	77	85	86	66	55	75	72	69	6.6	24	29	47	47	2	5	23	20	26	17	7	5.4	7	24
HAMPTON	22	5	4	64	59	95	95	86	73	95	91	68	7.3	23	14	64	49	0	14	36	27	5	9	9	4.9	14	18

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 09/91

DISTRICT	NUMBER TESTED	TOC	ERG	OBJECTIVES TESTED: WRITING MECHANICS — capitalization and punctuation	WRITING MECHANICS — spelling (words/homonyms/abbreviations)	WRITING MECHANICS — agreement	LOCATING INFORMATION — schedules, maps table of contents dictionary	LISTENING COMPREHENSION — literal	LISTENING COMPREHENSION — inferential and evaluative	READING COMPREHENSION — literal	READING COMPREHENSION — inferential	READING COMPREHENSION — evaluative	TOTAL LANGUAGE ARTS — Average Number of Objectives Mastered	DEGREES OF READING POWER (DRP) — Below 41 (% Needing Further Diagnosis)	DEGREES OF READING POWER (DRP) — 41-49	DEGREES OF READING POWER (DRP) — 50+ (% Meeting State Goal)	DEGREES OF READING POWER (DRP) — Average DRP Score	WRITING SAMPLE — 2	WRITING SAMPLE — 3	WRITING SAMPLE — 4	WRITING SAMPLE — 5	WRITING SAMPLE — 6	WRITING SAMPLE — 7	WRITING SAMPLE — 8	WRITING SAMPLE — Average Holistic Score	WRITING SAMPLE — % of Students Needing Further Diagnosis	WRITING SAMPLE — % of Students Meeting State Goal
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)				9/12	7/9	11/15	8/11	5/7	9/13	9/12	10/14	7/10															
				SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																							
HARTFORD	1788	1	7	34	52	45	56	32	18	35	30	23	3.3	64	23	14	37	17	14	35	20	9	4	1	4.1	31	5
HARTLAND	32	6	3	91	84	100	100	81	59	91	81	53	7.4	9	6	84	56	0	6	16	34	31	6	6	5.3	6	13
HEBRON	133	5	2	77	67	91	98	80	83	85	74	76	7.3	12	17	71	52	4	11	35	27	15	5	3	4.7	15	8
KENT	15	6	4	80	93	100	93	80	73	100	87	73	7.8	7	20	73	57	0	14	50	29	7	0	0	4.3	14	0
KILLINGLY	231	6	6	71	56	84	91	67	60	69	56	64	6.2	26	25	49	47	7	11	33	28	12	8	1	4.5	18	9
LEBANON	89	6	4	72	70	91	93	85	56	88	73	64	7.0	9	26	65	53	3	1	31	28	22	8	6	5.1	5	14
LEDYARD	251	4	2	72	75	87	91	77	65	81	77	60	6.9	16	23	61	50	6	4	31	20	23	12	2	4.9	11	14
LISBON	60	4	5	67	80	88	92	69	59	79	76	74	6.9	12	28	60	51	0	3	42	23	15	13	3	5.0	3	17
LITCHFIELD	72	6	3	72	81	85	99	82	79	89	85	88	7.6	8	13	79	56	3	8	38	28	15	7	1	4.7	11	8
MADISON	211	5	2	79	73	94	95	78	65	85	81	59	7.1	9	17	75	54	0	2	22	28	21	17	10	5.6	2	27
MANCHESTER	543	3	4	79	73	91	93	70	66	78	69	67	6.9	12	23	65	52	3	7	30	25	21	10	5	5.0	9	14
MANSFIELD	136	6	4	71	79	88	96	71	61	84	76	70	7.0	12	21	68	53	1	4	24	22	21	16	13	5.6	4	29
MARLBOROUGH	74	5	2	78	76	93	96	73	73	85	88	82	7.5	12	12	75	53	0	4	41	28	19	8	0	4.9	4	8
MERIDEN	625	3	6	51	60	71	76	56	42	58	56	51	5.2	32	24	44	46	4	7	32	25	18	11	4	4.9	10	14
MIDDLETOWN	308	3	6	64	66	82	89	63	50	71	63	58	6.0	23	27	50	48	2	3	39	26	16	11	2	4.9	5	14
MILFORD	472	3	4	82	72	89	93	70	69	75	69	67	6.9	21	24	55	49	1	4	22	28	28	12	5	5.3	5	17
MONROE	258	4	2	83	75	90	92	77	72	78	77	72	7.2	20	21	60	50	3	5	26	25	22	13	6	5.2	8	19
MONTVILLE	204	4	5	83	73	89	92	73	53	75	74	61	6.7	19	26	54	50	0	8	33	31	21	5	1	4.9	8	7
NAUGATUCK	378	2	6	81	67	86	90	63	63	70	66	60	6.5	28	25	48	48	3	3	34	30	21	6	2	4.9	6	9
NEW BRITAIN	661	3	6	59	62	70	79	56	40	57	51	42	5.2	43	24	33	42	9	11	37	22	15	4	2	4.4	20	6
NEW CANAAN	182	2	1	80	78	92	96	82	66	84	82	68	7.3	8	13	79	56	1	0	20	22	28	20	9	5.7	1	29
NEW FAIRFIELD	183	4	2	81	78	90	95	81	69	85	80	63	7.2	13	17	70	52	1	5	36	25	21	8	4	5.0	7	12
NEW HARTFORD	73	5	3	88	78	97	99	84	82	82	82	79	7.7	7	23	70	53	4	4	34	21	23	12	1	5.0	8	14
NEW HAVEN	1314	1	7	52	59	66	73	45	37	48	43	43	4.7	48	25	26	41	7	9	42	19	16	5	2	4.5	16	7
NEWINGTON	278	2	3	79	69	91	92	77	59	83	74	56	6.8	11	24	65	53	1	10	33	26	21	6	3	4.8	11	9
NEW LONDON	236	3	6	52	56	69	79	42	34	56	46	42	4.7	48	27	24	41	7	16	39	20	15	3	0	4.3	23	3
NEW MILFORD	338	5	4	75	70	89	93	69	58	81	76	73	6.8	18	21	61	50	1	4	31	27	21	10	4	5.1	6	15
NEWTOWN	253	5	2	87	84	96	98	80	81	91	84	80	7.8	6	14	80	56	1	4	22	31	22	15	4	5.3	6	19

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 09/91

	OBJECTIVES TESTED									TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)		WRITING SAMPLE											
	WRITING MECHANICS			LOCATING INFORMATION	LISTENING COMPREHENSION		READING COMPREHENSION																	
	capitalization and punctuation	spelling (words/homonyms/abbreviations)	agreement	schedules, maps table of contents dictionary	literal	inferential and evaluative	literal	inferential	evaluative	Average Number of Objectives Mastered	Below 41 (% Needing Further Diagnosis)	41-49 50+ (% Meeting State Goal)	Average DRP Score	2	3	4	5	6	7	8	Average Holistic Score	% of Students Needing Further Diagnosis	% of Students Meeting State Goal
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)	9/12	7/9	11/15	8/11	5/7	9/13	9/12	10/14	7/10															
DISTRICT	NUMBER TESTED	T O C	E R G	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																				
NORFOLK	18	6	4	61	56	72	72	67	61	61	72	61	5.8	33	28	39	47	0	17	50	22	11	0	0	4.3	17	0
NORTH BRANFORD	183	4	3	70	82	91	95	67	64	78	75	64	6.9	15	22	62	51	2	2	43	25	18	6	3	4.9	4	9
NORTH CANAAN	38	6	4	65	59	86	95	81	68	78	76	70	6.8	22	27	51	49	8	21	18	39	8	5	0	4.3	29	5
NORTH HAVEN	231	2	3	72	71	93	94	73	68	82	76	63	6.9	9	23	68	53	1	4	28	30	19	14	5	5.2	6	19
NORTH STONINGTON	70	5	3	73	84	96	99	87	76	89	84	69	7.6	11	24	64	52	0	7	33	23	25	10	1	5.0	7	12
NORWALK	706	3	6	65	67	76	81	59	50	63	59	50	5.7	35	27	38	45	7	9	36	22	15	7	3	4.6	16	11
NORWICH	387	3	6	79	68	90	90	67	59	76	74	59	6.6	20	23	57	50	1	2	32	21	21	15	8	5.4	3	23
OLD SAYBROOK	100	5	4	65	66	86	92	70	63	78	66	62	6.5	15	29	56	50	0	3	29	29	29	5	5	5.2	3	10
ORANGE	136	2	1	92	72	93	96	84	72	85	74	75	7.4	8	21	71	54	0	3	32	24	24	11	6	5.3	3	17
OXFORD	131	5	3	77	76	92	93	76	58	83	78	73	7.1	15	21	63	52	1	2	28	23	27	10	10	5.4	2	20
PLAINFIELD	191	6	6	70	69	85	86	66	57	71	64	61	6.3	26	25	49	47	5	11	31	19	18	14	3	4.9	16	16
PLAINVILLE	164	4	5	74	79	89	94	70	63	78	72	67	6.9	17	25	58	50	2	9	27	26	21	12	4	5.1	10	15
PLYMOUTH	150	2	5	83	77	91	95	74	70	83	81	71	7.2	11	26	63	52	3	6	28	25	23	12	3	5.1	9	15
POMFRET	49	6	4	65	76	88	94	78	71	78	69	53	6.7	22	24	53	49	2	8	24	43	14	4	4	4.9	10	8
PORTLAND	120	5	4	64	67	87	91	73	53	77	73	63	6.5	22	33	45	48	3	7	30	22	24	9	4	5.0	10	13
PRESTON	55	4	5	73	69	95	95	82	60	80	78	58	6.9	27	18	55	48	2	0	7	20	49	16	5	5.9	2	22
PUTNAM	106	6	6	65	64	74	83	56	51	67	63	43	5.6	28	30	43	46	8	8	31	34	13	5	2	4.6	15	7
REDDING	101	5	1	88	70	93	93	77	81	78	70	66	7.2	12	21	67	53	3	4	22	28	33	7	4	5.2	7	11
RIDGEFIELD	259	5	1	88	82	95	96	84	74	90	87	81	7.8	5	15	80	57	1	2	20	25	25	16	10	5.6	3	27
ROCKY HILL	145	4	4	86	81	94	97	83	72	82	77	77	7.5	12	13	75	53	1	8	32	25	26	9	1	5.0	8	10
SALEM	53	5	4	72	68	87	91	79	66	77	72	70	6.8	21	19	60	50	8	8	40	19	15	9	2	4.6	15	11
SALISBURY	49	6	4	61	61	86	92	69	67	86	82	51	6.6	20	14	65	52	10	4	29	24	18	10	4	4.8	14	14
SCOTLAND	18	6	5	50	72	89	78	83	78	78	89	39	6.6	22	17	61	51	0	12	35	29	12	6	6	4.8	12	12
SEYMOUR	170	5	5	81	80	92	94	80	69	76	69	68	7.1	14	26	60	50	1	2	33	25	26	7	5	5.2	4	13
SHARON	30	6	4	80	63	87	90	90	80	80	63	67	7.0	17	40	43	49	0	3	33	33	20	0	10	5.1	3	10
SHELTON	348	3	3	78	84	92	96	69	65	83	76	61	7.0	15	20	65	51	2	2	24	24	29	13	5	5.4	4	19
SHERMAN	20	6	2	80	90	85	90	80	80	90	75	80	7.5	10	20	70	54	0	15	15	35	20	15	0	5.1	15	15
SIMSBURY	294	4	1	82	81	94	97	84	73	85	84	76	7.6	5	21	73	54	3	4	28	26	20	13	6	5.2	7	19

126

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 09/91

	OBJECTIVES TESTED									TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)			WRITING SAMPLE												
	WRITING MECHANICS			LOCATING INFORMATION	LISTENING COMPREHENSION		READING COMPREHENSION																			
	capitalization and punctuation	spelling (words/homonyms/abbreviations)	agreement	schedules, maps table of contents dictionary	literal	inferential and evaluative	literal	inferential	evaluative	Average Number of Objectives Mastered	Below 41 (% Needing Further Diagnosis)	41-49	50+ (% Meeting State Goal)	Average DRP Score	2	3	4	5	6	7	8	Average Holistic Score	% of Students Needing Further Diagnosis		% of Students Meeting State Goal	
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)	9/12	7/9	11/15	8/11	5/7	9/13	9/12	10/14	7/10																	
DISTRICT	NUMBER TESTED	TOC	ERG	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																						
SOMERS	116	4	3	75	73	88	91	57	51	73	67	61	6.5	18	19	63	50	8	13	29	32	11	6	1	4.5	21	7
SOUTHINGTON	446	3	5	77	75	89	95	77	69	84	77	78	7.2	13	19	68	52	0	2	17	29	25	21	6	5.6	2	27
SOUTH WINDSOR	346	2	2	81	77	95	97	78	70	87	82	68	7.3	9	21	70	53	1	4	22	27	26	15	6	5.4	5	21
SPRAGUE	32	4	5	84	81	81	84	63	50	72	63	59	6.4	31	16	53	48	6	3	45	16	19	6	3	4.7	10	10
STAFFORD	146	5	5	62	66	88	91	69	54	73	64	60	6.3	20	30	50	49	2	12	36	28	10	10	1	4.7	14	11
STAMFORD	861	1	6	58	62	70	75	54	44	57	55	49	5.2	37	22	41	45	7	8	35	22	18	7	3	4.7	15	11
STERLING	48	6	5	79	72	83	90	60	55	73	58	60	6.3	23	31	46	47	2	0	40	23	27	6	2	5.0	2	8
STONINGTON	180	4	5	76	65	86	92	70	55	77	70	41	6.3	26	22	52	48	1	4	34	30	18	9	4	5.0	6	13
STRATFORD	477	2	5	68	71	87	88	70	56	69	63	58	6.3	21	27	52	49	4	7	42	22	17	6	2	4.7	11	8
SUFFIELD	152	4	3	84	66	93	93	76	62	82	79	59	7.0	9	27	64	52	1	7	21	26	28	13	5	5.3	7	18
THOMASTON	80	4	5	85	85	94	95	76	70	77	68	57	7.1	22	32	47	49	3	1	39	23	22	10	3	5.0	4	13
THOMPSON	110	6	6	75	60	89	90	77	48	79	70	60	6.5	15	32	53	50	1	5	33	20	33	7	1	5.1	6	8
TOLLAND	194	5	3	84	80	94	95	82	75	88	80	69	7.5	10	16	74	54	2	6	20	34	22	15	3	5.2	7	17
TORRINGTON	328	3	6	77	71	84	90	71	57	72	63	50	6.3	19	25	55	50	2	6	26	27	20	14	6	5.2	7	20
TRUMBULL	342	2	2	87	85	94	95	78	71	82	77	69	7.4	13	20	67	53	1	1	24	27	24	17	6	5.5	1	23
UNION	6	6	5	83	100	100	100	100	67	100	83	83	8.2	0	33	67	54	17	0	50	33	0	0	0	4.0	17	0
VERNON	266	3	4	83	84	93	92	74	65	81	68	52	7.0	10	23	67	52	0	4	23	32	25	11	5	5.3	4	16
VOLUNTOWN	30	6	5	80	73	97	100	77	50	93	87	77	7.3	10	17	73	51	0	0	23	23	40	10	3	5.5	0	13
WALLINGFORD	475	3	5	67	73	88	92	69	60	76	72	53	6.5	19	24	57	49	4	4	39	24	20	6	3	4.8	8	9
WATERBURY	937	1	6	53	61	70	75	49	33	51	44	33	4.7	42	27	31	43	7	14	37	22	14	4	2	4.4	20	6
WATERFORD	201	4	4	74	75	92	95	72	57	78	65	62	6.7	21	28	51	49	3	12	35	25	18	4	2	4.6	16	6
WATERTOWN	249	2	5	87	80	97	96	76	65	80	78	67	7.3	10	16	74	54	2	6	30	22	21	12	7	5.2	7	20
WESTBROOK	51	6	4	84	73	86	88	71	53	82	76	45	6.6	18	33	49	49	2	2	31	24	33	6	2	5.1	4	8
WEST HARTFORD	607	2	2	74	71	87	91	80	65	80	78	60	6.9	16	18	66	52	2	7	26	22	23	15	5	5.2	9	20
WEST HAVEN	509	2	6	70	71	86	93	66	52	72	69	51	6.3	23	29	48	49	1	6	34	25	21	9	4	5.0	7	13
WESTON	120	5	1	81	83	92	96	85	74	84	84	80	7.6	13	14	73	53	0	3	21	24	26	15	12	5.7	3	27
WESTPORT	216	3	1	87	85	94	98	80	72	94	90	79	7.8	6	10	84	58	0	1	20	25	24	17	13	5.7	1	29
WETHERSFIELD	220	2	3	81	79	91	93	77	68	79	78	61	7.1	10	18	72	54	3	8	20	32	22	9	5	5.1	11	14

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 09/91

	OBJECTIVES TESTED									TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)			WRITING SAMPLE															
	WRITING MECHANICS			LOCATING INFORMATION	LISTENING COMPREHENSION		READING COMPREHENSION							2	3	4	5	6	7	8	Average Holistic Score		% of Students Needing Further Diagnosis		% of Students Meeting State Goal	
	capitalization and punctuation	spelling (words/homonyms/abbreviations)	agreement	schedules, maps table of contents dictionary	literal	inferential and evaluative	literal	inferential	evaluative	Average Number of Objectives Mastered	Below 41 (% Needing Further Diagnosis)	41-49	50+ (% Meeting State Goal)	Average DRP Score														
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)	9/12	7/9	11/15	8/11	5/7	9/13	9/12	10/14	7/10																				
DISTRICT	NUMBER TESTED	TOC	ERG	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
HILLINGTON	60	5	4	80	58	90	90	80	63	78	69	73	6.8	18	17	65	53	3	7	27	27	17	18	2	5.1	10	20		
HILTON	199	4	1	82	80	91	95	77	79	89	82	74	7.5	11	20	69	53	2	5	12	23	32	12	14	5.7	7	26		
HINCHESTER	143	6	5	76	69	90	92	69	66	75	66	62	6.6	28	24	48	47	4	10	35	23	22	4	2	4.7	14	6		
HINDHAM	239	6	6	49	50	65	74	61	47	53	50	43	5.0	46	23	31	41	11	19	28	24	11	6	2	4.3	29	8		
HINDSOR	337	2	4	69	69	86	89	66	45	74	70	52	6.2	21	28	52	49	5	10	32	25	18	8	1	4.7	15	9		
HINDSOR LOCKS	137	4	5	73	74	91	94	72	68	74	72	66	6.8	17	26	58	50	1	9	33	34	16	7	1	4.8	10	7		
HOLCOTT	177	2	5	77	64	88	95	70	64	73	71	66	6.7	21	28	50	49	2	6	30	24	25	12	1	5.1	8	13		
HOODBRIOGE	91	4	1	79	75	95	96	75	71	88	84	66	7.3	9	15	76	54	0	2	24	31	34	7	2	5.3	2	9		
HOODSTOCK	95	6	3	74	59	83	91	81	67	76	69	67	6.7	28	20	52	48	2	15	29	24	22	6	1	4.7	17	7		
REGIONAL SCH 6	69	6	4	84	68	88	97	71	77	84	78	74	7.2	13	32	55	50	0	1	25	30	29	9	6	5.4	1	14		
REGIONAL SCH 10	193	5	3	84	79	92	95	77	69	87	76	66	7.2	11	18	72	54	2	4	15	29	29	15	6	5.5	6	21		
REGIONAL SCH 12	76	6	2	86	66	93	96	82	78	84	79	66	7.3	16	18	66	51	0	0	24	17	32	13	14	5.8	0	28		
REGIONAL SCH 13	119	5	3	74	67	88	95	78	67	82	74	59	6.8	18	23	59	50	0	3	24	37	19	13	3	5.3	3	17		
REGIONAL SCH 14	124	4	2	86	77	98	96	80	72	88	80	53	7.3	6	19	76	56	1	6	17	21	30	21	3	5.5	7	25		
REGIONAL SCH 15	242	4	3	86	82	95	96	83	77	88	85	71	7.7	6	19	75	56	1	2	21	21	19	21	13	5.7	3	34		
REGIONAL SCH 16	149	4	5	79	73	87	91	80	72	79	77	65	7.0	14	16	70	52	6	5	34	19	23	9	3	4.9	11	12		
REGIONAL SCH 17	148	6	3	80	81	90	97	82	75	84	78	54	7.2	7	22	72	54	0	1	21	25	25	20	7	5.6	1	27		
REGIONAL SCH 18	99	6	2	69	72	91	98	73	54	82	76	67	6.8	17	20	63	52	0	3	34	22	30	7	4	5.2	3	11		

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 09/91

DISTRICT	NUMBER TESTED	TOC	ERG	OBJECTIVES TESTED: WRITING MECHANICS — capitalization and punctuation	WRITING MECHANICS — spelling (words/homonyms/abbreviations)	WRITING MECHANICS — agreement	LOCATING INFORMATION — schedules, maps table of contents dictionary	LISTENING COMPREHENSION — literal	LISTENING COMPREHENSION — inferential and evaluative	READING COMPREHENSION — literal	READING COMPREHENSION — inferential	READING COMPREHENSION — evaluative	TOTAL LANGUAGE ARTS — Average Number of Objectives Mastered	DEGREES OF READING POWER (DRP) — Below 41 (% Needing Further Diagnosis)	DEGREES OF READING POWER (DRP) — 41-49	DEGREES OF READING POWER (DRP) — 50+ (% Meeting State Goal)	DEGREES OF READING POWER (DRP) — Average DRP Score	WRITING SAMPLE — 2	WRITING SAMPLE — 3	WRITING SAMPLE — 4	WRITING SAMPLE — 5	WRITING SAMPLE — 6	WRITING SAMPLE — 7	WRITING SAMPLE — 8	WRITING SAMPLE — Average Holistic Score	WRITING SAMPLE — % of Students Needing Further Diagnosis	WRITING SAMPLE — % of Students Meeting State Goal
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)				9/12	7/9	11/15	8/11	5/7	9/13	9/12	10/14	7/10														
				SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																						
TOC 1 TAL	6471			48	59	61	68	42	29	45	40	33	4.3	51	25	23	41	10	12	38	20	13	5	2	4.4	22	7
TOC 2 TOTAL	7333			77	73	89	92	73	62	78	74	63	6.8	17	23	60	51	2	5	29	24	22	12	5	5.1	8	16
TOC 3 TOTAL	8229			70	70	84	88	66	56	72	65	57	6.3	24	24	52	48	4	6	31	25	20	10	4	5.0	10	14
TOC 4 TOTAL	6822			79	76	91	94	76	67	82	78	67	7.1	14	21	65	52	2	5	28	26	22	12	5	5.1	8	16
TOC 5 TOTAL	3898			78	75	91	94	77	68	82	77	69	7.1	13	21	66	52	2	5	27	27	22	12	5	5.2	6	17
TOC 6 TOTAL	2736			72	68	86	91	72	62	77	70	61	6.6	21	24	55	49	3	8	31	25	21	9	4	5.0	11	13
ERG 1 TOTAL	2049			85	80	93	96	81	73	87	83	75	7.5	8	18	74	54	1	2	22	24	27	14	9	5.5	4	23
ERG 2 TOTAL	5936			81	76	92	95	78	70	84	80	68	7.3	13	19	68	53	2	4	26	25	23	14	6	5.3	6	20
ERG 3 TOTAL	3931			78	76	91	94	76	67	83	77	64	7.1	12	22	66	52	2	6	29	26	22	11	4	5.1	8	16
ERG 4 TOTAL	5365			76	72	88	92	71	62	78	71	63	6.7	18	24	59	50	3	7	29	26	22	10	4	5.1	9	14
ERG 5 TOTAL	4704			74	74	90	93	72	62	77	72	64	6.8	17	25	58	50	2	6	31	26	21	10	3	5.0	8	13
ERG 6 TOTAL	8831			64	65	78	83	60	49	64	59	50	5.7	31	26	43	46	5	8	34	24	18	8	3	4.8	13	11
ERG 7 TOTAL	4673			45	58	57	66	39	26	41	36	30	4.0	56	25	19	40	11	13	39	19	12	4	2	4.3	24	6
STATE TOTAL	35489			70	70	83	87	67	57	72	66	57	6.3	24	23	53	49	4	7	31	24	20	10	4	4.9	11	14

APPENDIX J

Type of Community Classifications

Type of Community

TOC 1 = LARGE CITY - a town with a population of more than 100,000.

TOC 2 = FRINGE CITY - a town contiguous with a large city and with a population over 10,000.

TOC 3 = MEDIUM CITY - a town with a population between 25,000 and 100,000 and not a Fringe City.

TOC 4 = SMALL TOWN (Suburban) - a town within an SMSA* with a population of less than 25,000, not a Fringe City.

TOC 5 = SMALL TOWN (Emerging Suburban) - a town with a population of less than 25,000 included in what was a proposed 1980 SMSA but not included in a 1970 SMSA.

TOC 6 = SMALL TOWN (Rural) - a town not included in an SMSA, with a population of less than 25,000.

*Standard Metropolitan Statistical Area

APPENDIX K

Education Reference Group Descriptions

Education Reference Group Descriptions

The education reference groups were formed from an analysis of districts' median family income, a percentage of high school graduates, a percentage of those in managerial/professional occupations, a percentage of single-parent families, a percentage of those below poverty and a percentage of non-English home language from the 1980 census. The groups have not been named, but have been labeled I through VII. Note, however, that the groups run from extremely affluent suburban communities (I) to our three largest cities of Hartford, Bridgeport and New Haven (VII). Some differ widely with respect to all of the family background variables; others differ slightly with respect to one or two. In addition to the six variables used to classify districts, the group descriptions below also include superintendents' comments that were provided in a Department survey in 1988.

Group I. These 13 districts were wealthy, professional suburbs. The median family income in 1979 averaged $40,425. Residents were extremely well educated. Nearly 90% had at least a high school diploma, 42% had a bachelor's degree and 49% had a managerial or professional job. There were relatively few children with educational disadvantages here. Only 7% of the families were single-parent, about 8% spoke a language other than English at home and almost no one (2%) lived in poverty. Superintendents within these towns used the adjectives "suburban," "affluent," "growing" and "bedroom community" to describe them.

Group II. Residents in the 29 districts of Group II were affluent, well-educated professionals, but to a lesser extent than residents of Group I. The median family income averaged $28,113, more than 83% of the residents had high school diplomas, 29% had a college degree and 36% had a managerial or professional job. Like Group I, this group had a low percentage of people who spoke another language at home (8%), almost no one in poverty (2%) and relatively few single-parent families (9%). Like the superintendents in Group I, superintendents from these towns described their communities as "affluent," "bedroom communities," "growing" and "suburban."

Group III. These 34 districts were mostly rural bedroom communities. Like Groups I and II, these towns did not have many disadvantaged children. There were only 7% who spoke a language other than English at home, only 7% who were from single-parent families and only 3% who were poor. Adults were slightly less affluent (median family income of $24,431), less likely to have a high school diploma (77%) and less likely to have a managerial or professional job (28%) than people in Group II. Like the previous two groups, these towns were described by superintendents as "suburban," "growing" and "bedroom communities." Several superintendents used "rural" and "middle class" (as well as "affluent") to describe their communities.

Group IV. This group of 37 districts was probably the most diverse set of towns, containing a number of coastal and resort communities, as well as rural and suburban areas. Group IV was similiar to Group III in median family income ($22,609), percentage of high school graduates (77%), percentage of managers/professionals (29%) and percentage of non-English home language (7%), but had a significantly higher percentage of single-parent families (12% versus 7%) and a slightly higher percentage of families below poverty (5% versus 3%). Superintendents' descriptions reflect this group's diversity. They describe their towns as "bedroom," "growing," "rural," "suburban," "middle income" and "affluent."

Group V. These 30 districts made up the first group of working class/blue collar communities. This group had a significantly lower percentage of high school graduates (68%) and percentage of managers/professionals (19%) than Group IV. Other characteristics were similar to Group IV: the average income was $21,920, there were 11% single-parent families, 5% below poverty and 9% of the population spoke a language other than English at home.

Group VI. This group of 23 districts included the state's medium-sized cities, the larger cities of Stamford and Waterbury, several former mill towns and some densely populated blue collar suburbs. Group VI had similar socioeconomic characteristics as Group V, but significantly greater proportions of single-parent families and families in which English was not the primary home language. The median family income of $20,325 was below the state average. An average of 16% of the residents spoke another language at home and 17% of the families were headed by single parents. Only 63% of the residents had high school diplomas, and 6% lived below poverty level.

Group VII. Hartford, Bridgeport and New Haven were vastly different from other communities in Connecticut. An average of 28% of the families spoke a language other than English, 46% were headed by single parents, 20% lived in poverty and the median family income was $15,240.

APPENDIX L

Student Participation Rates

PARTICIPATION RATES FOR FOURTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1991-1992

DISTRICT	TOTAL FOURTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
ANDOVER	30	30	.0	100.0	100.0	100.0	100.0
ANSONIA	182	161	11.5	99.4	97.5	97.5	98.1
ASHFORD	45	41	8.9	100.0	100.0	100.0	100.0
AVON	156	155	.6	100.0	100.0	99.4	100.0
BARKHAMSTED	52	52	.0	98.1	98.1	98.1	98.1
BERLIN	225	211	6.2	100.0	100.0	99.5	100.0
BETHANY	64	63	1.6	100.0	100.0	100.0	100.0
BETHEL	281	278	1.1	100.0	100.0	98.6	99.6
BLOOMFIELD	198	183	7.6	100.0	99.5	99.5	99.5
BOLTON	79	79	.0	100.0	98.7	97.5	97.5
BOZRAH	37	33	10.8	100.0	93.9	93.9	90.9
BRANFORD	238	224	5.9	100.0	99.6	98.7	98.7
BRIDGEPORT	1,715	1,583	7.7	99.7	98.7	95.5	98.5
BRISTOL	654	630	3.7	99.7	99.7	98.9	99.0
BROOKFIELD	198	195	1.5	100.0	100.0	96.4	99.5
BROOKLYN	101	93	7.9	100.0	94.6	93.5	92.5
CANAAN	16	14	12.5	92.9	100.0	92.9	100.0
CANTERBURY	93	90	3.2	100.0	98.9	98.9	97.8
CANTON	99	99	.0	100.0	100.0	100.0	100.0
CHAPLIN	28	28	.0	100.0	100.0	100.0	100.0
CHESHIRE	375	370	1.3	100.0	99.5	98.9	99.7
CHESTER	42	42	.0	100.0	100.0	92.9	100.0
CLINTON	188	180	4.3	100.0	100.0	100.0	100.0
COLCHESTER	161	150	6.8	100.0	100.0	100.0	100.0
COLEBROOK	21	21	.0	100.0	100.0	100.0	100.0
COLUMBIA	72	67	6.9	100.0	100.0	98.5	100.0
CORNWALL	17	15	11.8	100.0	93.3	93.3	93.3
COVENTRY	130	124	4.6	98.4	98.4	97.6	95.2
CROMWELL	159	155	2.5	99.4	100.0	100.0	100.0
DANBURY	700	626	10.6	99.4	99.2	98.1	98.9
DARIEN	236	229	3.0	100.0	100.0	100.0	99.1
DEEP RIVER	48	48	.0	100.0	100.0	100.0	100.0
DERBY	97	85	12.4	100.0	100.0	100.0	100.0
EASTFORD	26	25	3.8	96.0	100.0	100.0	100.0
EAST GRANBY	54	53	1.9	100.0	100.0	98.1	100.0
EAST HADDAM	106	105	.9	99.0	100.0	100.0	100.0
EAST HAMPTON	162	157	3.1	100.0	98.1	98.1	98.1
EAST HARTFORD	474	399	15.8	98.7	98.7	97.7	97.7
EAST HAVEN	248	233	6.0	98.7	98.7	95.7	98.3
EAST LYME	179	177	1.1	99.4	99.4	100.0	98.9
EASTON	69	67	2.9	100.0	98.5	98.5	98.5
EAST WINDSOR	114	112	1.8	100.0	100.0	99.1	100.0
ELLINGTON	161	151	6.2	98.7	98.7	98.0	96.7
ENFIELD	470	452	3.8	100.0	100.0	98.9	100.0
ESSEX	66	66	.0	100.0	100.0	100.0	100.0
FAIRFIELD	493	456	7.5	100.0	100.0	99.3	100.0
FARMINGTON	276	265	4.0	100.0	98.5	98.5	98.5
FRANKLIN	26	26	.0	100.0	100.0	100.0	100.0
GLASTONBURY	389	382	1.8	100.0	100.0	99.7	99.7
GRANBY	125	121	3.2	100.0	100.0	100.0	100.0
GREENWICH	500	452	9.6	98.9	98.2	97.6	97.6
GRISWOLD	138	133	3.6	100.0	98.5	97.7	97.7
GROTON	536	514	4.1	99.6	99.4	98.8	99.4
GUILFORD	278	265	4.7	100.0	97.4	95.8	97.0

PARTICIPATION RATES FOR FOURTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1991-1992

DISTRICT	TOTAL FOURTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
HAMDEN	421	407	3.3	100.0	100.0	99.5	100.0
HAMPTON	24	22	8.3	100.0	100.0	100.0	100.0
HARTFORD	2,106	1,846	12.3	96.4	96.7	90.1	95.1
HARTLAND	32	32	.0	100.0	100.0	100.0	100.0
HEBRON	136	133	2.2	100.0	100.0	100.0	99.2
KENT	16	15	6.3	100.0	100.0	93.3	100.0
KILLINGLY	239	233	2.5	99.1	99.1	99.1	98.7
LEBANON	99	89	10.1	98.9	100.0	96.6	96.6
LEDYARD	256	251	2.0	100.0	100.0	98.8	99.2
LISBON	68	62	8.8	100.0	96.8	96.8	93.5
LITCHFIELD	73	72	1.4	100.0	100.0	100.0	100.0
MADISON	217	211	2.8	99.5	100.0	99.1	100.0
MANCHESTER	570	548	3.9	100.0	99.1	98.2	98.9
MANSFIELD	140	136	2.9	100.0	100.0	100.0	100.0
MARLBOROUGH	75	74	1.3	100.0	100.0	100.0	98.6
MERIDEN	656	626	4.6	99.8	99.8	99.4	99.8
MIDDLETOWN	318	308	3.1	100.0	100.0	99.4	100.0
MILFORD	485	473	2.5	99.8	99.8	97.0	99.4
MONROE	274	265	3.3	100.0	97.4	97.0	97.4
MONTVILLE	206	204	1.0	100.0	100.0	100.0	100.0
NAUGATUCK	417	381	8.6	100.0	98.7	97.6	98.4
NEW BRITAIN	757	670	11.5	99.3	98.5	94.9	97.6
NEW CANAAN	192	184	4.2	98.9	98.4	98.4	98.9
NEW FAIRFIELD	184	183	.5	100.0	100.0	100.0	100.0
NEW HARTFORD	77	73	5.2	100.0	100.0	100.0	100.0
NEW HAVEN	1,473	1,334	9.4	99.5	98.1	94.6	97.2
NEWINGTON	287	278	3.1	100.0	100.0	99.6	100.0
NEW LONDON	259	239	7.7	99.2	98.7	96.7	97.5
NEW MILFORD	353	338	4.2	100.0	100.0	99.4	99.7
NEWTOWN	263	254	3.4	100.0	98.8	97.2	98.4
NORFOLK	18	18	.0	100.0	100.0	100.0	100.0
NORTH BRANFORD	184	183	.5	98.9	99.5	97.8	98.9
NORTH CANAAN	40	38	5.0	100.0	97.4	100.0	97.4
NORTH HAVEN	242	234	3.3	100.0	98.3	97.0	98.7
NORTH STONINGTON	75	72	4.0	97.2	97.2	95.8	97.2
NORWALK	757	710	6.2	99.3	99.4	96.1	98.7
NORWICH	423	393	7.1	99.2	98.5	98.2	98.0
OLD SAYBROOK	101	100	1.0	100.0	100.0	100.0	98.0
ORANGE	136	136	.0	100.0	100.0	99.3	100.0
OXFORD	143	131	8.4	100.0	100.0	99.2	100.0
PLAINFIELD	200	194	3.0	98.5	98.5	97.9	98.5
PLAINVILLE	173	164	5.2	100.0	100.0	98.8	99.4
PLYMOUTH	164	150	8.5	100.0	100.0	96.7	99.3
POMFRET	49	49	.0	100.0	100.0	100.0	100.0
PORTLAND	120	120	.0	100.0	100.0	99.2	100.0
PRESTON	59	56	5.1	98.2	98.2	98.2	98.2
PUTNAM	121	108	10.7	100.0	97.2	96.3	97.2
REDDING	101	101	.0	100.0	100.0	100.0	100.0
RIDGEFIELD	263	259	1.5	100.0	100.0	100.0	100.0
ROCKY HILL	151	145	4.0	100.0	100.0	100.0	100.0
SALEM	56	53	5.4	100.0	100.0	100.0	100.0
SALISBURY	51	49	3.9	100.0	100.0	100.0	100.0
SCOTLAND	20	18	10.0	100.0	100.0	94.4	100.0
SEYMOUR	176	170	3.4	100.0	100.0	98.8	100.0

PARTICIPATION RATES FOR FOURTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1991-1992

DISTRICT	TOTAL FOURTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
SHARON	31	30	3.2	100.0	100.0	100.0	100.0
SHELTON	365	350	4.1	99.4	99.1	98.3	99.4
SHERMAN	21	20	4.8	100.0	100.0	100.0	100.0
SIMSBURY	304	296	2.6	99.3	99.0	99.0	99.3
SOMERS	118	116	1.7	99.1	100.0	97.4	99.1
SOUTHINGTON	470	446	5.1	99.8	100.0	99.1	99.6
SOUTH WINDSOR	357	348	2.5	99.7	99.4	98.9	99.4
SPRAGUE	35	33	5.7	100.0	97.0	93.9	97.0
STAFFORD	167	149	10.8	99.3	98.0	98.0	98.0
STAMFORD	913	861	5.7	100.0	100.0	97.9	99.9
STERLING	51	49	3.9	100.0	98.0	98.0	98.0
STONINGTON	183	180	1.6	100.0	100.0	99.4	100.0
STRATFORD	480	477	.6	100.0	99.8	99.6	100.0
SUFFIELD	155	153	1.3	98.7	99.3	98.7	98.7
THOMASTON	83	80	3.6	98.8	100.0	98.8	98.8
THOMPSON	114	111	2.6	100.0	99.1	98.2	98.2
TOLLAND	194	194	.0	100.0	100.0	99.5	100.0
TORRINGTON	355	337	5.1	100.0	97.0	97.0	97.0
TRUMBULL	347	343	1.2	100.0	99.7	99.4	99.4
UNION	6	6	.0	100.0	100.0	100.0	100.0
VERNON	299	267	10.7	100.0	98.5	98.1	99.3
VOLUNTOWN	31	30	3.2	100.0	100.0	100.0	100.0
WALLINGFORD	490	475	3.1	100.0	100.0	99.2	99.4
WATERBURY	1,032	937	9.2	100.0	100.0	97.8	99.9
WATERFORD	205	201	2.0	100.0	100.0	100.0	100.0
WATERTOWN	277	253	8.7	100.0	98.4	97.2	98.4
WESTBROOK	53	51	3.8	100.0	100.0	100.0	100.0
WEST HARTFORD	630	610	3.2	100.0	99.5	99.2	99.5
WEST HAVEN	549	516	6.0	99.4	98.6	97.7	98.3
WESTON	121	121	.0	99.2	99.2	99.2	97.5
WESTPORT	223	216	3.1	100.0	100.0	99.1	99.1
WETHERSFIELD	236	220	6.8	100.0	100.0	99.5	99.5
WILLINGTON	60	60	.0	100.0	100.0	100.0	100.0
WILTON	203	199	2.0	100.0	100.0	99.0	99.5
WINCHESTER	152	143	5.9	100.0	100.0	100.0	100.0
WINDHAM	275	244	11.3	100.0	98.0	96.7	98.0
WINDSOR	351	338	3.7	100.0	99.7	99.7	99.4
WINDSOR LOCKS	146	138	5.5	99.3	99.3	97.8	99.3
WOLCOTT	177	177	.0	100.0	100.0	100.0	100.0
WOODBRIDGE	92	91	1.1	100.0	100.0	100.0	100.0
WOODSTOCK	101	95	5.9	100.0	100.0	100.0	100.0
REGIONAL SCH 6	73	69	5.5	100.0	100.0	100.0	100.0
REGIONAL SCH 10	198	193	2.5	100.0	100.0	99.5	100.0
REGIONAL SCH 12	82	76	7.3	100.0	100.0	100.0	100.0
REGIONAL SCH 13	119	119	.0	100.0	100.0	100.0	100.0
REGIONAL SCH 14	135	126	6.7	100.0	98.4	96.8	98.4
REGIONAL SCH 15	253	243	4.0	99.6	99.6	99.6	99.2
REGIONAL SCH 16	152	150	1.3	99.3	99.3	99.3	99.3
REGIONAL SCH 17	156	148	5.1	99.3	100.0	99.3	100.0
REGIONAL SCH 18	109	103	5.5	99.0	96.1	94.2	96.1

PARTICIPATION RATES FOR FOURTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1991-1992

DISTRICT	TOTAL FOURTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
TOC 1 TOTAL	7,239	6,561	9.4	98.8	98.4	94.4	97.7
TOC 2 TOTAL	7,787	7,374	5.3	99.7	99.3	98.6	99.1
TOC 3 TOTAL	8,787	8,280	5.8	99.7	99.3	98.0	99.0
TOC 4 TOTAL	7,061	6,858	2.9	99.7	99.4	98.7	99.0
TOC 5 TOTAL	4,070	3,911	3.9	99.8	99.5	99.1	99.3
TOC 6 TOTAL	2,908	2,761	5.1	99.6	99.0	98.3	98.7
ERG 1 TOTAL	2,096	2,054	2.0	99.8	99.6	99.3	99.4
ERG 2 TOTAL	6,195	5,974	3.6	99.8	99.2	98.6	99.0
ERG 3 TOTAL	4,102	3,950	3.7	99.6	99.4	98.7	99.1
ERG 4 TOTAL	5,599	5,376	4.0	99.9	99.7	99.0	99.5
ERG 5 TOTAL	4,936	4,726	4.3	99.8	99.5	98.6	99.3
ERG 6 TOTAL	9,630	8,902	7.6	99.6	99.1	97.7	98.8
ERG 7 TOTAL	5,294	4,763	10.0	98.3	97.8	93.1	96.8
STATE TOTAL	37,852	35,745	5.6	99.5	99.2	97.8	98.8

Connecticut State Department of Education

Division of Research, Evaluation and Student Assessment
Douglas A. Rindone, Acting Director

Bureau of Evaluation and Student Assessment
Peter Behuniak, Acting Chief

Student Assessment and Testing Unit
William J. Congero, Coordinator

Patricia Brandt
Richard Cloud
Naomi Wise
Education Service Specialists

John B. Rogers
Education Service Assistant

Richard F. Mooney, Senior Program Associate

Stephen Martin, Assessment Associate

Division of Curriculum and Professional Development
Betty Sternberg, Director

Steven Leinwand
Mari Muri
Mathematics Consultants

Karen Costello
Reading/Language Arts Consultant