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## ABSTRACT

This document summarizes the annual State Performance Reports for programs funded under Chapter 1 of the Education Consolidation and Improvement Act (ECIA), which have been submitted by State Education Agencies (SEAs) for the school years 1979-80 through 1987-88. These reports provide information on Local Education Agency (LEA) and State Agency Neglected or Delinquent (N or D) compensatory education programs. The reports detail the following information: (1) the number of educationally disadvantaged students served; (2) the demographic composition of these students; (3) staffing patterns; (4) the types of services received; and (5) the achievement rates in basic skills areas. The effect of the Aguilar v. Felton decision on nonpublic participation in LEA programs is noted. Statistical data are presented in 61 tables and 19 graphs. The following materials are appended: (1) a discussion of the research methodology; (2) participants by grade; (3) selected participation information by state, 1979-80 through 1987-88; (4) additional achievement information for 1987-88; (5) additional national achievement information, 1979-80 through 1987-88; and (6) national achievement information for 1979-80 through 1987-88 expressed in normal curve equivalents. (FMW)

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# A SUMMARY OF STATE CHAPTER 1 PARTICIPATION AND ACHIEVEMENT INFORMATION FOR 1987-88

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**A SUMMARY OF STATE CHAPTER 1  
PARTICIPATION AND ACHIEVEMENT INFORMATION  
FOR 1987-88**

**BETH SINCLAIR  
BABETTE GUTMANN**

**PREPARED FOR:**

**Office of Planning, Budget and Evaluation**

**U.S. Department of Education**

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## **ACKNOWLEDGMENTS**

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We are also grateful to the Chapter 1 Coordinators in each state for their cooperation and assistance in verifying the information submitted on the State Performance Reports for 1987-88.

Several members of the Decision Resources Corporation staff deserve our special recognition, including Janie Funkhouser for contacting the State Chapter 1 Coordinators, Allison Henderson for providing invaluable technical assistance, and Saunders Freeland for her expert typing of this report.

## EXECUTIVE SUMMARY

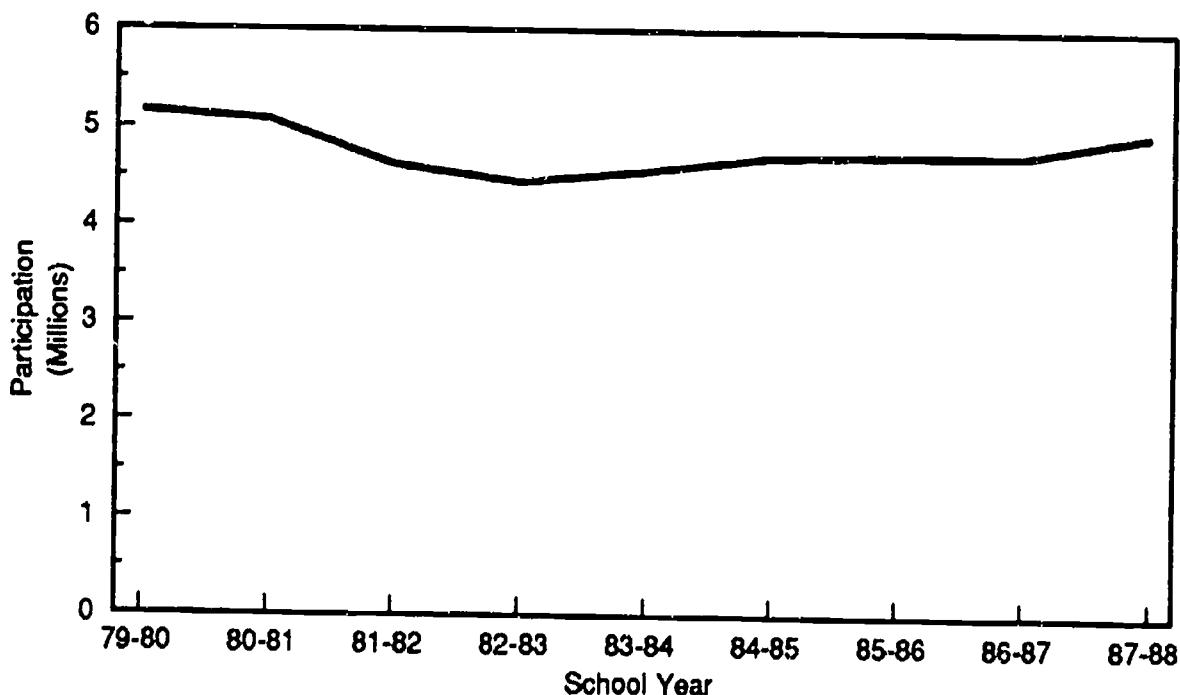
This document summarizes the State Performance Reports for ECIA Chapter 1 which are submitted annually by State Education Agencies (SEAs). These reports provide information on Local Education Agency (LEA) and State Agency Neglected or Delinquent (N or D) compensatory education programs funded through Chapter 1. The reports detail the number of educationally disadvantaged students served, the demographic composition of those students, staffing patterns, the types of services received, and the achievement rates in basic skills areas.

In examining the national participation figures presented in this document, there are several data cautions to be noted. These factors are discussed at the end of the Executive Summary.

### PARTICIPATION PATTERNS FOR CHAPTER 1 LEA PROGRAMS

- After initial declines (1980-1983) in the number of students participating in Chapter 1, the number has steadily increased to nearly 5 million students. (Chart 1)

Chart 1  
Chapter 1 Participation  
1979-80 through 1987-88



- o Public school participation increased from 1986-87 to 1987-88, and nonpublic school participation continued to increase in the third year after the Aquilar v. Felton decision. (Charts 2 and 3)

Chart 2  
**Chapter 1 Public Participation**  
1979-80 through 1987-88

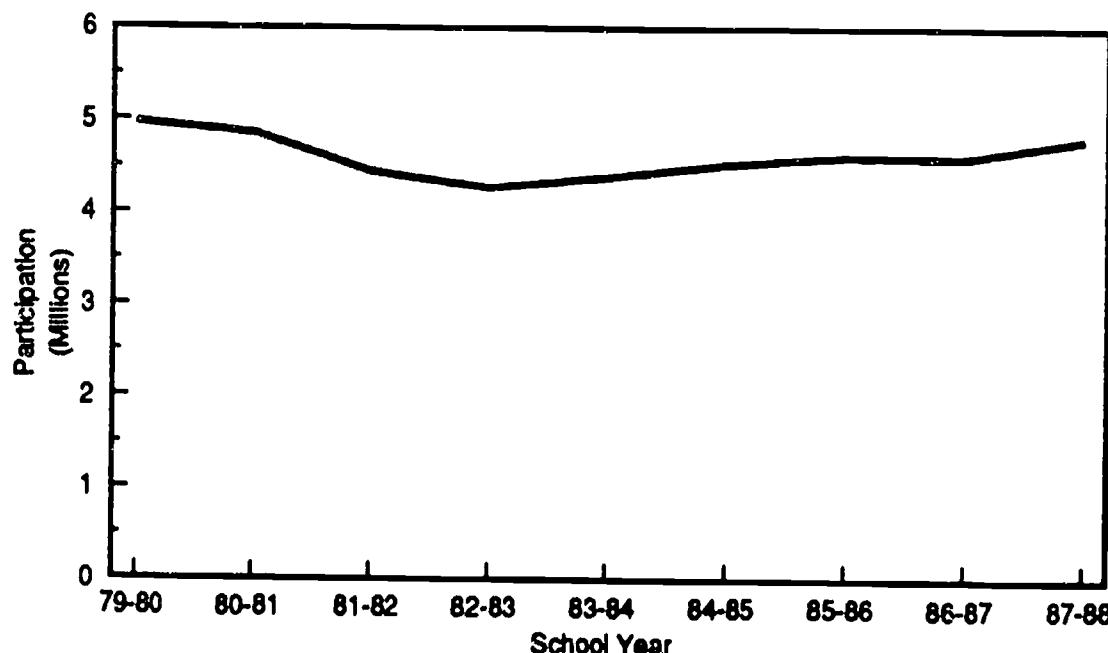
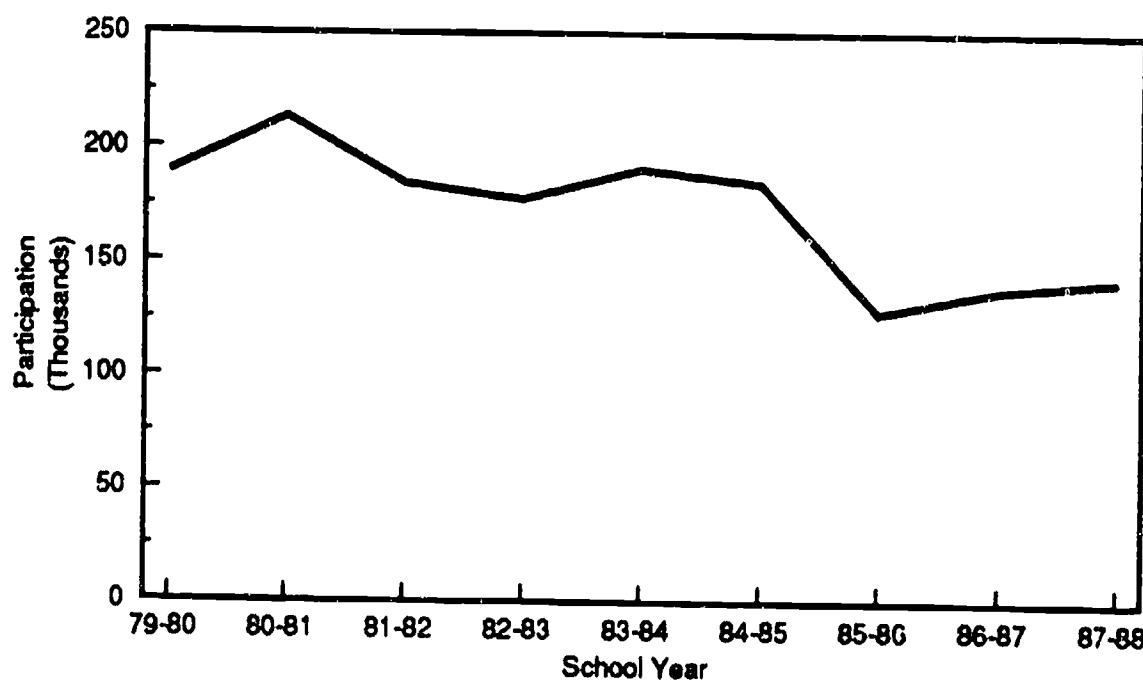
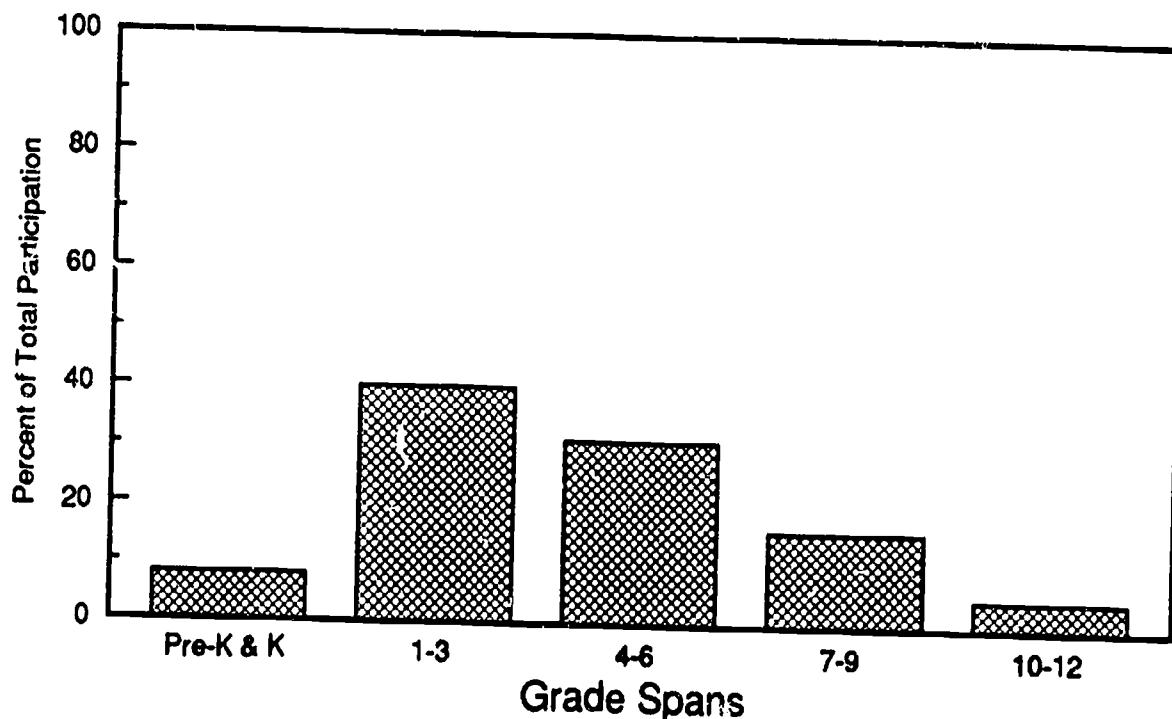


Chart 3  
**Chapter 1 Nonpublic Participation**  
1979-80 through 1987-88



- o Both public and nonpublic participation in Chapter 1 continued to be concentrated in the elementary grades. (Chart 4)

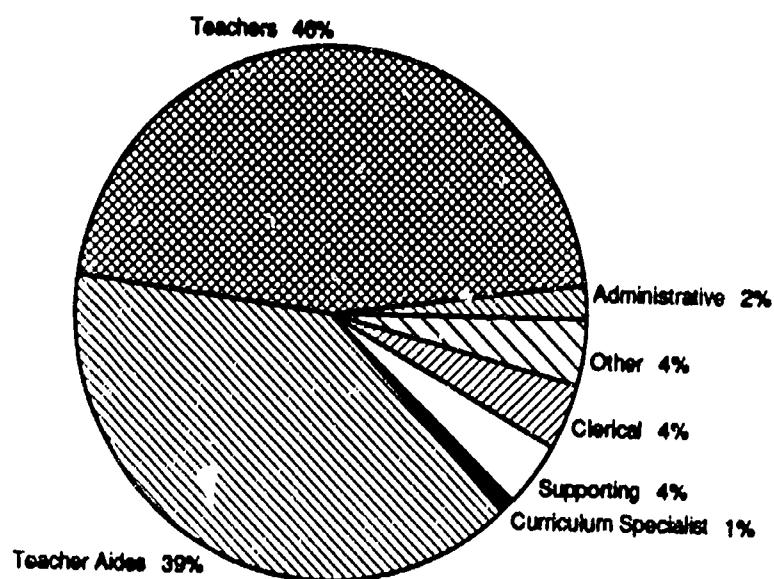
Chart 4  
**Chapter 1 Participation by Grade Span**  
**Total Participation -- 1987-88**



- o Almost three-fourths of the Chapter 1 participants received instruction in reading, and almost one-half of the participants received instruction in mathematics. Eighteen percent each received other language arts and other instructional services. In three of the four areas of instructional services (reading, other language arts, and mathematics), fewer students received instruction in 1987-88 than in 1986-87, despite an overall increase in Chapter 1 participation.
- o Fewer participants received supporting services than received instructional services in 1987-88. Fewer Chapter 1 students received supporting services in every category except transportation from 1986-87 to 1987-88.

- The number of public school students receiving Chapter 1 services in 1987-88 increased in mathematics, other instructional, and transportation, decreased in reading, other language arts, attendance, and health and nutrition. The number of public Chapter 1 students receiving other supporting services remained virtually unchanged. The number of Chapter 1 students receiving services in nonpublic schools decreased in reading, other language arts, health and nutrition, and other supporting services, and increased in mathematics, other instructional services, attendance, and transportation.
- Instructional services for neglected or delinquent students generally decreased and supporting services for neglected or delinquent students generally increased from 1986-87 to 1987-88.
- Approximately one-half of the staff funded by Chapter 1 in 1987-88 were teachers. Teacher aides made up 39 percent of the staff funded by Chapter 1. By state, the percentage of staff who were teachers varied from 12 to 84 percent, and the percentage of staff who were teacher aides varied from 10 to 82 percent. Teachers and teacher aides comprised 85 percent of the total staff funded by Chapter 1 dollars. (Chart 5)

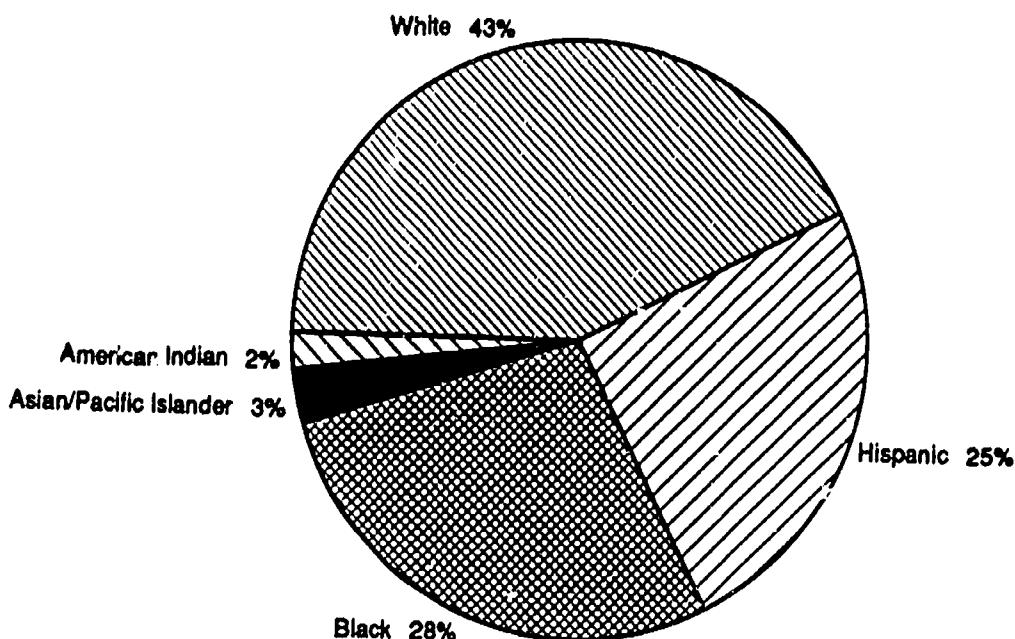
Chart 5  
Chapter 1 FTE Staff by Classification  
1987-88



Percents may not add to 100 due to rounding.

- The number of total staff increased 2 percent from 1986-87 to 1987-88, with slight increases in all categories except curriculum specialists, which experienced a decrease.
- In 1987-88, 43 percent of Chapter 1 participants were white, 28 percent were black, 25 percent were Hispanic, 3 percent were Asian or Pacific Islander, and 2 percent were American Indian or Alaskan Native. (Chart 6)

**Chart 6**  
**Chapter 1 Participants by**  
**Racial/Ethnic Classification,**  
**1987-88**



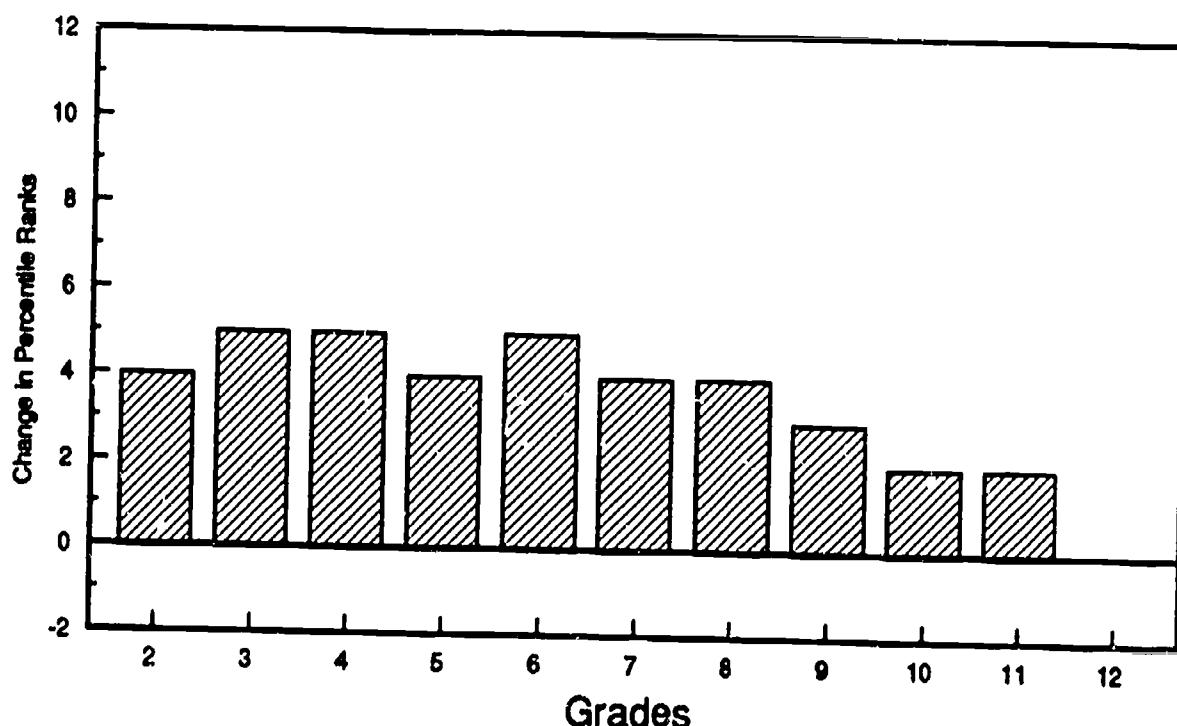
Percents may not add to 100 due to rounding.

- In 1987-88, 55 percent of Chapter 1 participants were males, and 45 percent were females.

## ACHIEVEMENT INFORMATION FOR CHAPTER 1 LEA PROGRAMS

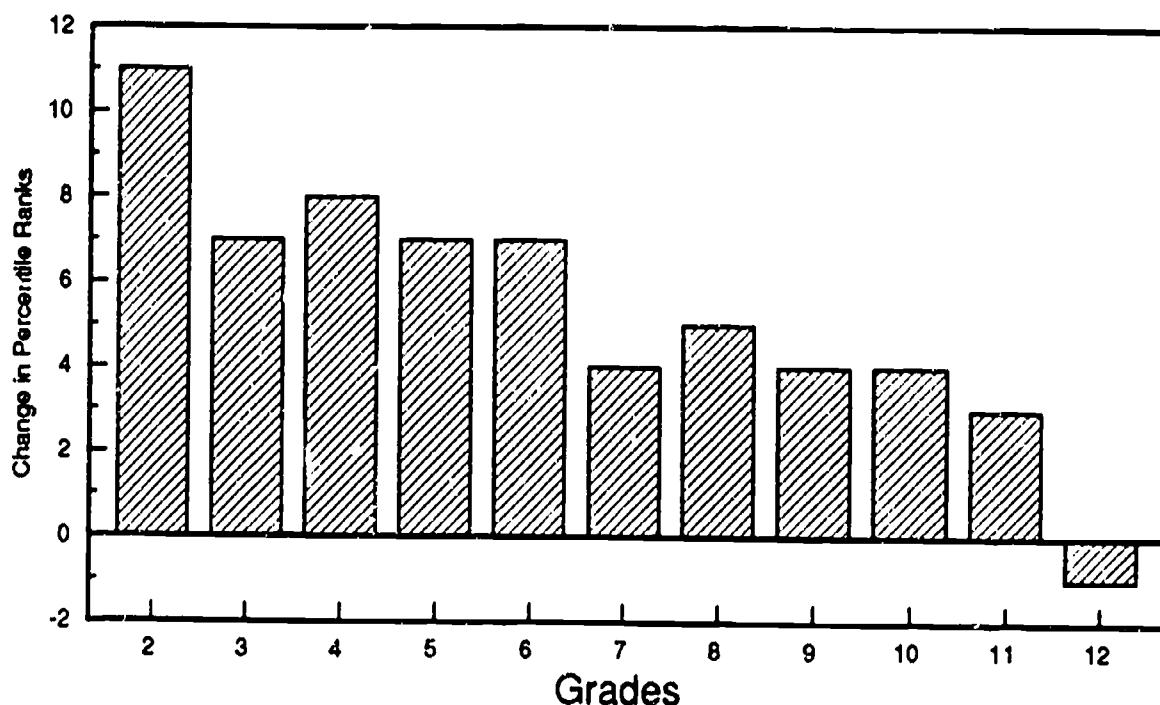
- Forty-six states, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs reported achievement data in 1987-88 using the standard format formerly required under ESEA Title I. Forty-one states and the District of Columbia reported scores from an annual test cycle.
- For Chapter 1 students tested in reading on an annual cycle, increases from pretest to posttest percentiles were found in every grade except grade 12, where pre- and posttest percentiles remained the same. (Chart 7)

Chart 7  
Reading Achievement Percentile Changes  
Annual Testing Cycle -- 1987-88



- For Chapter 1 students tested in mathematics on an annual cycle, increases from pretest to posttest percentiles were found in every grade except grade 12, where scores decreased. (Chart 8)

**Chart 8**  
**Mathematics Achievement Percentile Changes**  
**Annual Testing Cycle - 1987-88**



- Across all grades, the achievement results show consistency in the percentile changes from 1979-80 to 1987-88.

#### **ALLOCATION AND COST INFORMATION FOR CHAPTER 1 LEA PROGRAMS**

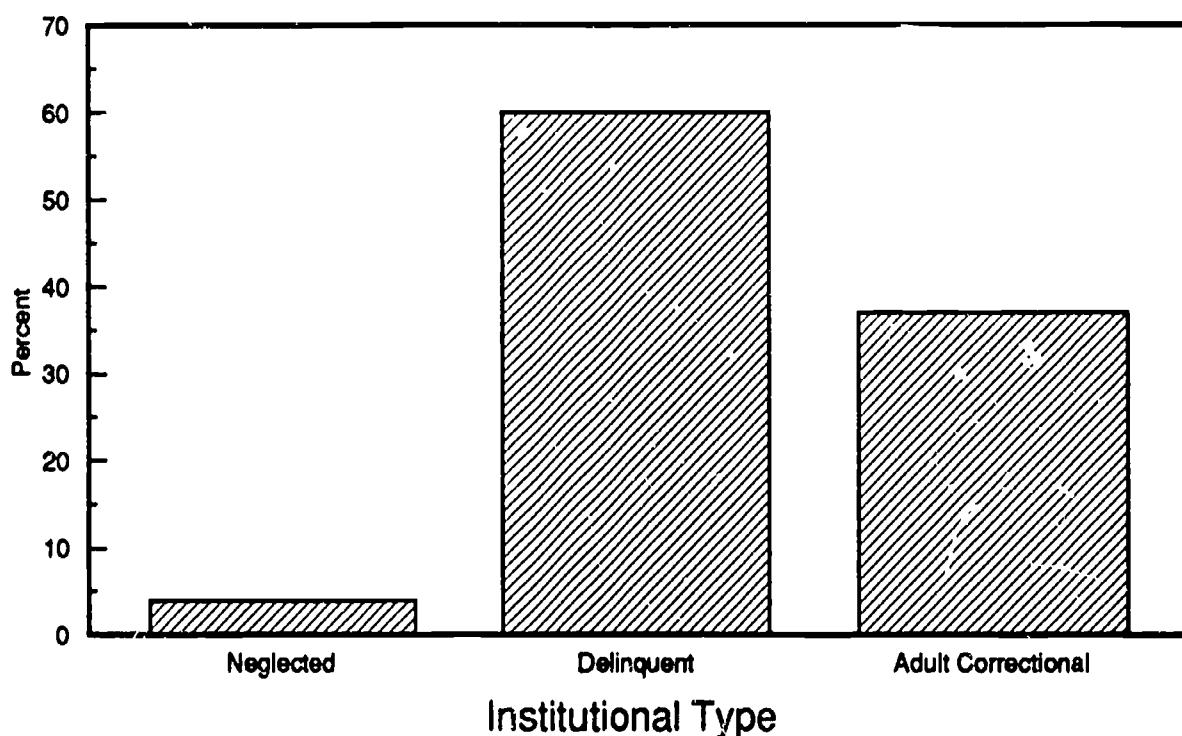
- Chapter 1 funding for 1987-88 was approximately \$3.4 billion, a 13 percent increase from the 1986-87 allocations.
- The Chapter 1 dollars per participant figure was \$696 in 1987-88, an 8 percent increase in the previous year's figure of \$645 per

participant. This figure represents the Chapter 1 allocation for 1987-88 divided by the number of Chapter 1 participants in 1987-88.

**INFORMATION ON STATE AGENCY NEGLECTED OR DELINQUENT PROGRAMS FOR 1987-88**

- o Sixty percent of the state agency N or D participants were classified as delinquent, and 37 percent were classified as adult correctional. Participants in programs for the neglected comprised 4 percent of the individuals served. (Chart 9)

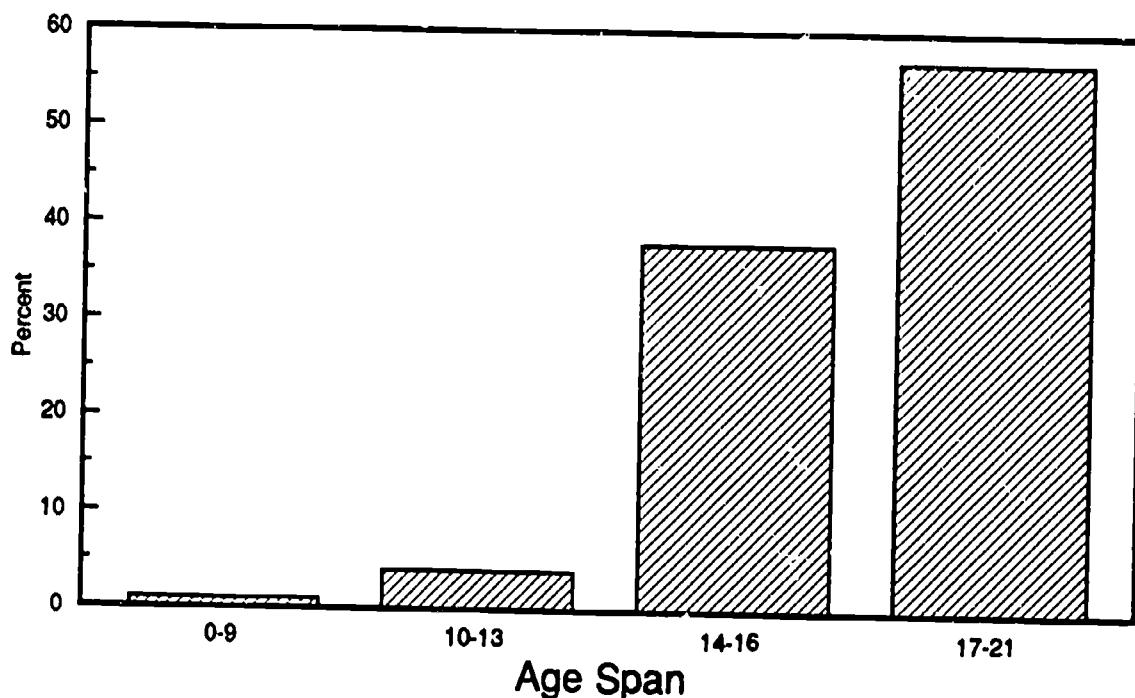
**Chart 9**  
**State Agency Neglected or Delinquent Participation by Institution**



Percents may not add to 100 due to rounding.

- More than one-half of the state agency N or participants were 17 through 21 years old.  
(Chart 10)

Chart 10  
**State Agency Neglected or Delinquent  
Participation by Age**



Percents may not add to 100 due to rounding.

- Almost three-quarters of the state agency N or D participants received reading instruction, and two-thirds received mathematics instruction.
- Eighty-eight percent of the state agency N or D participants were male, and 12 percent were female.
- Forty-five percent of the state agency N or D participants were black, and 37 percent were white. The remaining 18 percent were Hispanic, American Indian or Alaskan Native, and Asian or Pacific Islander.

- o The allocations for Chapter 1 state agency N or D programs in 1987-88 was \$32.6 million, an increase of 4 percent from the 1986-87 allocations.

#### NOTES

In examining the national participation figures in this report, three factors should be noted. First, 1987-88 was the third year following the Aquilar v. Felton decision. In 1985-86, there was a 31 percent decrease from 1984-85 in nonpublic participation in LEA programs. In 1987-88, the number of nonpublic participants continued to increase but the level was still 42,000 less than the total prior to Aquilar v. Felton.

The second factor to be considered is closely related to the first. In preparation for the 1986-87 report, it was found that Puerto Rico had not included nonpublic participants in schools with religious affiliation in the total nonpublic participation counts. In 1986-87 and 1987-88, Puerto Rico's total nonpublic participation in school with religious affiliation were added to the national totals, but in 1986-87 information on the breakdowns by gender, year of birth, race/ethnicity, grade, and service area could not be provided. In 1987-88, breakdowns for these students were provided by gender and race/ethnicity only.

Finally, to the extent that states revised their figures for 1986-87, the numbers found in this report will not correspond to those found in previous documents displaying State Performance Report information.

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## INTRODUCTION

Chapter 1 of the Education Consolidation and Improvement Act (ECIA) of 1981, formerly ESEA Title I, was designed to provide financial assistance to local education agencies to meet the special needs of educationally deprived children. In 1987-88, the program continued to be the largest program of federal education aid to elementary and secondary school students.

Evaluation requirements have been part of the law from its beginning, but states were not required to report to the federal government in a uniform way until 1979. Beginning with the 1979-80 school year, each state education agency (SEA) compiled reports from each of its school districts, or an approved representative sample of its districts, and submitted a state report to the U.S. Department of Education.<sup>1</sup>

This report summarizes the 1987-88 State Performance Reports for ECIA Chapter 1.<sup>2</sup> These performance reports provide information on local education agency (LEA) compensatory education programs and state agency compensatory education programs for neglected or delinquent children. For LEA programs, information is reported on the number of participants (by gender, year of birth, ethnicity, and grade by public/nonpublic designation), the types of services provided (by public/nonpublic designation), the number of staff, and achievement. For state agency neglected or delinquent programs, information is collected on the number of participants (by ethnicity, gender, age group, and institutional designation) and the type of services provided (by institutional designation).

The SEAs are required to submit participation information to the U.S. Department of Education in a standard format. Although achievement information may be reported in any format desired by

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<sup>1</sup>If a state sampled its school districts for reporting participation and staffing information, the inclusion or exclusion of districts in any reporting year may account for fluctuations in the figures from year to year. In 1987-88, no states reported participation and staffing information based on a sample of school districts. In 1986-87, only one state, Arizona, reported participation and staffing information based on a sample of school districts.

<sup>2</sup>State performance reports were received from the 50 states, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs in 1987-88.

the SEA, many SEAs continue to use the standard format that was required under ESEA Title I.

In addition to providing summaries for the 1987-88 school year, this report presents information for LEA programs on changes from 1986-87 to 1987-88 for all data items, and on trends for selected data items covering the nine-year period 1979-80 through 1987-88.

Two noteworthy factors affect the national figures presented in this report. First, the 1987-88 school year was the third year following the Aguilar v. Felton decision. Nonpublic participation increased in 1986-87 and 1987-88, but the level is still well below the levels of nonpublic participation seen prior to Aguilar v. Felton.

Second, prior to the 1986-87 school year, Puerto Rico's nonpublic participation counts did not include nonpublic participants in religiously affiliated schools. The total nonpublic participation counts for 1986-87 and 1987-88 have been updated to reflect actual participation in both religiously and non-religious schools;<sup>3</sup> however, counts by the various breakdowns (gender, year of birth, race/ethnicity, grade, and service area) generally could not be provided for either year.<sup>4</sup>

This report is organized into four chapters and six appendices. The first chapter presents participation information on LEA programs for 1987-88, a comparison of these data with the data for 1986-87, and trend information starting with the 1979-80 school year. Chapter 2 provides achievement data for LEA programs in 1987-88 as well as trends in achievement since 1979-80. Chapter 3 presents funding information for the Chapter 1 LEA programs, and Chapter 4 provides participation information for state agency neglected or delinquent programs for 1987-88.

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<sup>3</sup>The actual number of nonpublic participants in Puerto Rico in 1986-87 was 10,013, including 2,997 participants in non-religious schools and 7,016 participants in religious schools. The actual number of nonpublic participants in 1987-88 was 16,528, including 9,735 participants in non-religious schools and 6,793 participants in religious schools.

<sup>4</sup>The counts by gender and race/ethnicity were provided for 1987-88.

The methodology used to prepare this report is described in Appendix A. Other appendices include: participation counts by grade (Appendix B); state-by-state listings of selected participation information for LEA programs for 1979-80 through 1987-88 (Appendix C); additional achievement data for LEA programs in 1987-88 (Appendix D); national achievement data for the nine-year period since 1979-80 (Appendix E); and achievement data expressed as normal curve equivalents for 1979-80 through 1987-88 (Appendix F).

## CHAPTER 1

### PARTICIPATION PATTERNS FOR CHAPTER 1 LEA PROGRAMS

This chapter presents information on participation patterns for Chapter 1 LEA programs. It describes participation patterns in 1987-88 and compares these data to that for school year 1986-87. There are also descriptions of the nine-year trends from 1979-80 through 1987-88. The data in this chapter include the 50 states, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs.

#### OVERALL PARTICIPATION PATTERNS

##### Numbers of Chapter 1 Students

After initial declines in the number of students participating in Chapter 1 (1980-1983), the number has consistently increased to nearly 5 million students.

During school year 1987-88, 4,950,522 students participated in Chapter 1 LEA programs. This represents a 5 percent increase (or 217,861 students) from participation in the previous year. (Table 1.1)

The largest participation count during the nine-year period 1979-80 through 1987-88 was in 1979-80 when approximately 5.2 million students received Chapter 1 services. After declining between 1979-80 and 1982-83, Chapter 1 participation increased until 1985-86, when it declined slightly, and increased again between 1986-87 and 1987-88.

##### Public/Nonpublic Participation

Public school participation has increased fairly steadily since 1982-83. While nonpublic school participation experienced a sharp post-Felton decrease, it has increased steadily since 1985-86.

Sixteen percent of public school students enrolled in pre-kindergarten through grade 8 in 1987-88 participated in Chapter 1. By state, the percentages of elementary public school students participating in Chapter 1 varied from a low of 5 percent in Wyoming, to a high of 43 percent in Puerto Rico. Forty-three states, the District of Columbia, and Puerto Rico

reported 10 percent or more of their elementary public school students as participating in Chapter 1. (Table 1.2 and Figure 1.1)

In contrast, only 4 percent of public school students enrolled in grades 9 through 12 participated in Chapter 1 during 1987-88. Public secondary participation ranged from less than 1 percent in Iowa, Louisiana, Maryland, Missouri, Ohio, Virginia, and West Virginia, to 11 percent in Puerto Rico. Thirty-six states and the District of Columbia served between 1 and 5 percent of their public secondary students in Chapter 1 programs in 1987-88. (Table 1.3 and Figure 1.2)

#### Changes from 1986-87 to 1987-88

The number of public school participants increased by 213,269, or 5 percent, from 1986-87 to 1987-88. The number of nonpublic school participants increased by 4,592 students between 1986-87 and 1987-88, an increase of 3 percent. (Table 1.1)

There were increases (of 1 percent or greater) in public school participation in 35 states, the District of Columbia, and the Bureau of Indian Affairs between 1986-87 and 1987-88. These increases varied in size from 1 percent in Colorado, the District of Columbia, Florida, and Illinois, to 17 percent in New Hampshire. Eleven states and Puerto Rico had decreases in public school participation between 1986-87 and 1987-88. The decreases ranged from 1 percent in Delaware, Tennessee, Virginia, and Wisconsin, to 9 percent in Montana and Wyoming. Four states, Hawaii, Louisiana, Nebraska, and North Carolina, maintained virtually the same levels of participation from 1986-87 to 1987-88. (Table 1.4)

Nonpublic Chapter 1 participation increased (by 1 percent or greater) in 21 states, the District of Columbia, and Puerto Rico. The increases ranged from 3 percent in Kansas to 673 percent in Alabama. Decreases were found in 27 states. The range of decreases varied from 1 percent in Maine to 64 percent in Utah. Changes of less than 1 percent in the number of participants were reported in Georgia and Wisconsin. (The Bureau of Indian Affairs reported no nonpublic participants.) (Table 1.5)

Substantial year-to-year changes in nonpublic participation were reported in some states. Reasons given for reported increases include continued participation increases in the third year following Aguilar v. Felton and popular innovations in the Chapter 1 programs that have attracted more students. Explanations provided by states for reported decreases in the number of nonpublic students include serving nonpublic students during the summer at the public school in the students' district

thereby classifying the students as public Chapter 1 students, nonpublic school closings, and generally fewer students being educated in a nonpublic environment.

### Nine-Year Trends

Chapter 1 student participation patterns vary by public and nonpublic status over the nine-year period 1979-80 to 1987-88. Participation by public school students decreased from 1979-80 through 1982-83, increased from 1983-84 to 1985-86, remained virtually unchanged in 1986-87 and continued to increase in 1987-88. (Table 1.1)

Nonpublic participation increased by 13 percent in 1980-81, followed by a large decrease in 1981-82. No distinct participation pattern is evident in the succeeding years until 1985-86 when, following the Aguilar v. Felton decision, a dramatic decrease in nonpublic participation was reported. Participation has increased steadily since 1985-86. (Table 1.1)

### Grade Level Participation

Both public and nonpublic participation in Chapter 1 continues to be concentrated in the elementary grades.

In 1987-88, the largest percentage (40 percent) of public school Chapter 1 participants was found in grades 1 through 3. Thirty-one percent of public school participants were in grades 4 through 6, and 16 percent were in grades 7 through 9. Less than 15 percent of all public participants were found in pre-kindergarten and kindergarten (8 percent), and grades 10 through 12 (5 percent).<sup>6</sup> (Table 1.6 and Figure 1.3)

Nonpublic school Chapter 1 participation in 1987-88 showed similar percentages of students in the elementary grades. Forty-one percent of nonpublic participants were in grades 1 through 3, and 34 percent of nonpublic participants were in grades 4 through 6. Fourteen percent of the nonpublic participants were in grades 7 through 9, 3 percent were in pre-kindergarten and kindergarten, and 2 percent were in grades 10 through 12. (Table 1.6 and Figure 1.3)

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<sup>6</sup>Grade-by-grade tables for both public and nonpublic school participants are found in Appendix B.

Public participation increased in all grade spans and decreased in the ungraded category between 1986-87 and 1987-88. The increases ranged from 1 percent in grades 7 through 9 to 9 percent in pre-kindergarten and kindergarten. The public participation of those reported as ungraded was 72 percent lower in 1987-88 than in 1986-87. This decrease was due primarily to Connecticut, which reported significantly lower numbers of public ungraded participants between 1986-87 and 1987-88.<sup>6</sup>

Between 1986-87 and 1987-88, nonpublic participation increased in pre-kindergarten and kindergarten and the elementary grades and decreased in the junior high and high school grades. The largest increase (10 percent) was found in grades 4 through 6, followed by an increase of 8 percent in grades 1-3 and an increase of 5 percent in pre-kindergarten and kindergarten. The largest decrease (41 percent) was found in grades 10 through 12, while nonpublic participation decreased 10 percent in grades 7 through 9. Nonpublic ungraded participation increased from 1986-87, but still remained less than 1 percent of all nonpublic participation.<sup>7</sup>

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<sup>6</sup>In 1987-88, Michigan reported 1,429 ungraded public participants--1 percent of the state's total public participation, and Rhode Island reported 161 ungraded public participants--1 percent of the state's total public participation. Two other states, Connecticut and Louisiana, also reported ungraded participants in 1987-88. Six states, Connecticut, Colorado, Michigan, Mississippi, Rhode Island, and Vermont, reported ungraded public participants in 1986-87.

<sup>7</sup>Four states (Connecticut, Michigan, Mississippi, and Wisconsin) reported nonpublic ungraded participants in 1986-87 and three states (Connecticut, Michigan, and Wisconsin) in 1987-88.

Table 1.1  
Chapter 1 Participants: Public, Nonpublic, and Total --  
1979-80 to 1987-88<sup>a/</sup>

Year	Public <sup>b/</sup>	Percent Change Year-to-Year	Nonpublic <sup>c/</sup>	Percent Change Year-to-Year	Total	Percent Change Year-to-Year
1979-80	4,973,708		189,114		5,162,822	
1980-81	4,862,308	-2	213,499	13	5,075,807	-2
1981-82	4,434,447	-9	184,084	-14	4,618,531	-9
1982-83	4,270,424	-4	177,210	-4	4,447,634	-4
1983-84 <sup>d/</sup>	4,381,975	3	190,660	8	4,572,635	3
1984-85	4,528,177	3	184,532	-3	4,712,709	3
1985-86 <sup>e/</sup>	4,611,948	2	127,922	-31	4,739,870	1
1986-87 <sup>f/</sup>	4,594,761	*	137,900	8	4,732,661	*
1987-88 <sup>f/</sup>	4,808,030	5	142,492	3	4,950,522	5

\* Less than 1 percent.

- a/ Guam reported participant information in 1979-80 and 1980-81; the Trust Territories reported participant information in 1979-80, 1980-81, 1981-82, and 1983-84; and the Virgin Islands reported participant information in 1979-80.
- b/ Public Chapter 1 participation counts for the years 1979-80 through 1985-86 have been revised since the 1985-86 report to reflect a readjustment of the public participation counts supplied by California. Public participation counts supplied by California were also adjusted for the years 1986-87 and 1987-88.
- c/ By-pass students in Missouri and Virginia were not included prior to 1983-84.
- d/ The numbers for nonpublic participants in California for 1983-84 were adjusted to reflect the average of the numbers reported for the years 1982-83 and 1984-85.
- e/ The 1985-86 State Performance Reports were the first ones to provide information following the Aguilar v. Felton decision.
- f/ The 1986-87 and 1987-88 nonpublic participation counts include participants in schools with religious affiliation in Puerto Rico. The inclusion of these participants in 1986-87 overestimates the actual percentage increase from 1985-86.

Table 1.2

**Public School Enrollment and Chapter 1  
Public Participants for Grades Pre-K through 8 -- 1987-88**

State	Public School Enrollment a/	Chapter 1 Public Participation b/	Percent Receiving Chapter 1
Alabama	521,004	118,222	23
Alaska	76,694	4,578	6
Arizona	412,501	41,829	10
Arkansas	307,248	60,357	20
California	3,172,094	735,529	23
Colorado	391,986	32,589	8
Connecticut	326,250	43,447	13
Delaware	66,714	10,016	15
District of Columbia	62,857	14,976	24
Florida	1,171,809	129,756	11
Georgia	795,032	133,796	17
Hawaii	115,854	12,526	11
Idaho	153,356	17,910	12
Illinois	1,251,790	124,056	10
Indiana	658,656	93,879	14
Iowa	328,436	38,029	12
Kansas	298,516	32,163	11
Kentucky	449,033	82,320	18
Louisiana	582,742	103,531	18
Maine	145,499	23,676	16
Maryland	473,220	58,043	12
Massachusetts	565,042	65,449	12
Michigan	1,086,325	137,668	13
Minnesota	496,553	56,455	11
Mississippi	364,129	91,350	25
Missouri	557,073	79,012	14
Montana	108,017	9,494	9
Nebraska	188,166	24,294	13
Nevada	119,077	8,195	7
New Hampshire	113,965	10,826	9
New Jersey	747,402	148,743	20
New Mexico	195,413	27,612	14
New York	1,735,527	271,219	16
North Carolina	753,595	102,805	14
North Dakota	84,379	8,692	10
Ohio	1,219,967	127,551	10
Oklahoma	410,995	54,622	13
Oregon	317,920	36,976	12
Pennsylvania	1,077,812	188,944	18
Rhode Island	93,094	13,253	14
South Carolina	431,585	49,710	12
South Dakota	91,362	12,411	14
Tennessee	582,432	99,248	17
Texas	2,350,856	361,076	15
Utah	313,953	23,587	8
Vermont	65,012	9,072	14
Virginia	685,172	71,587	10
Washington	540,936	56,909	11
West Virginia	236,926	32,012	14
Wisconsin	521,533	56,174	11
Wyoming	70,369	3,383	5
Puerto Rico	498,853	216,468	43
Bureau of Indian Affairs	-- c/	-- c/	-- c/
Total	27,885,878	4,378,322	16

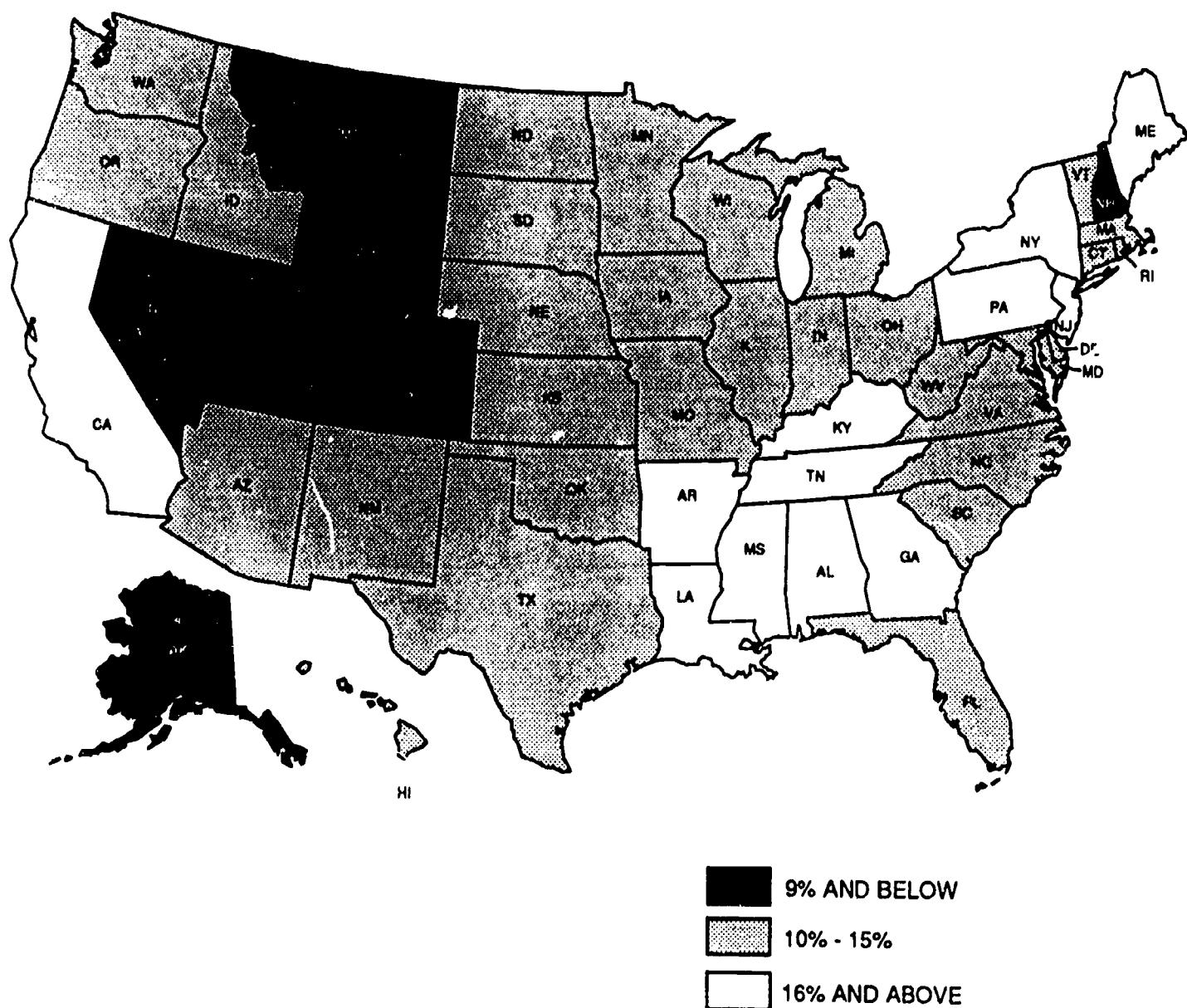
a/ Estimated public school enrollment -- pre-kindergarten through grade 8.  
Source: National Center for Education Statistics (NCES).

b/ Public School Participation -- pre-kindergarten through grade 8.

c/ The percent receiving Chapter 1 cannot be calculated because comparable information on Bureau of Indian Affairs enrollment is not collected by NCES.

**Figure 1.1**

# **Percent of Total Public School Enrollment Receiving Chapter 1 Services by State for Grades Pre-K through 8 1987-88**



Source: Enrollment data provided by the National Center for Education Statistics.

Note: The District of Columbia and Puerto Rico have values in the category 16% and above.

Table 1.3

Public School Enrollment and Chapter 1  
Public Participants for Grades 9 through 12 -- 1987-88

State	Public School Enrollment a/	Chapter 1 Public Participation b/	Percent Receiving Chapter 1
Alabama	208,230	1,871	1
Alaska	28,984	232	1
Arizona	159,920	12,180	8
Arkansas	129,788	2,696	2
California	1,317,228	113,470	9
Colorado	168,250	3,499	2
Connecticut	139,215	8,606	6
Delaware	28,945	151	1
District of Columbia	23,578	749	3
Florida	492,965	3,982	1
Georgia	315,915	5,204	2
Hawaii	50,306	1,697	3
Idaho	59,088	954	2
Illinois	559,656	30,453	5
Indiana	305,473	4,155	1
Iowa	152,390	694	1
Kansas	122,596	2,061	2
Kentucky	193,663	4,243	2
Louisiana	210,351	440	1
Maine	66,318	507	1
Maryland	210,577	537	1
Massachusetts	260,278	7,697	3
Michigan	520,019	7,397	1
Minnesota	224,928	1,776	1
Mississippi	141,421	7,988	6
Missouri	244,987	551	1
Montana	44,190	2,885	7
Nebraska	79,934	837	1
Nevada	49,276	1,033	2
New Hampshire	52,080	619	1
New Jersey	345,580	36,102	10
New Mexico	91,816	2,209	2
New York	858,543	52,731	6
North Carolina	332,381	10,762	3
North Dakota	34,625	418	1
Ohio	573,444	2,129	1
Oklahoma	173,217	2,785	2
Oregon	137,975	7,120	5
Pennsylvania	590,730	20,402	3
Rhode Island	40,967	1,424	3
South Carolina	183,336	3,967	2
South Dakota	35,455	380	1
Tennessee	241,351	1,814	1
Texas	885,931	15,704	2
Utah	109,433	1,655	2
Vermont	27,743	553	2
Virginia	294,245	610	1
Washington	234,819	6,376	3
West Virginia	107,310	160	1
Wisconsin	250,830	6,876	3
Wyoming	28,086	225	1
Puerto Rico	173,984	19,926	11
Bureau of Indian Affairs	-- c/	-- c/	-- c/
Total	12,138,366	427,996	4

\* Less than 1 percent.

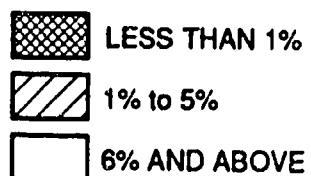
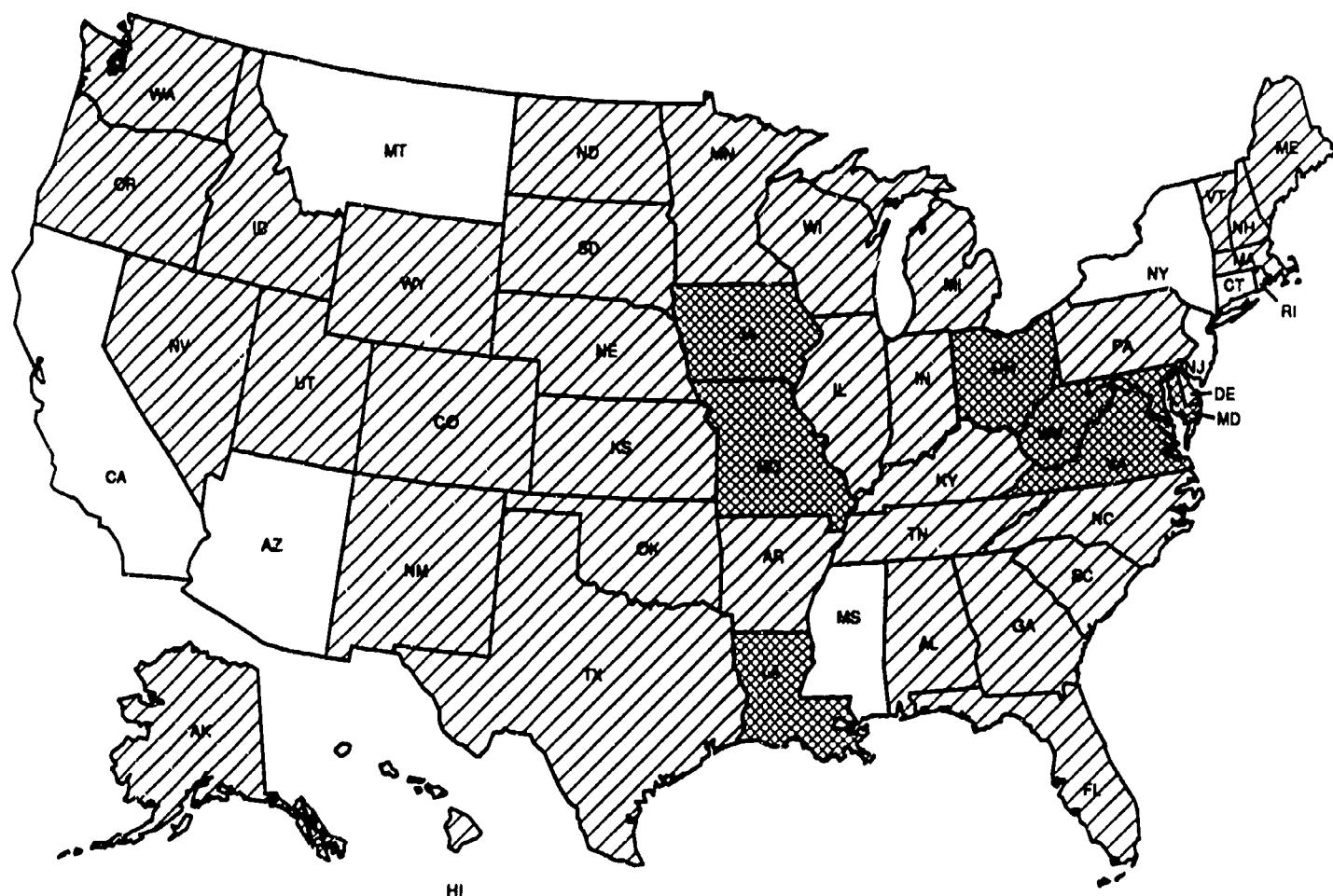
a/ Estimated public school enrollment -- grades 9 through grade 12.  
Source: National Center for Education Statistics (NCES).

b/ Public School Participation -- grades 9 through 12.

c/ The percent receiving Chapter 1 cannot be calculated because comparable information on Bureau of Indian Affairs enrollment is not collected by NCES.

Figure 1.2

## Percent of Total Public School Enrollment Receiving Chapter 1 Services by State for Grades 9 through 12 1987-88



Source: Enrollment data provided by the National Center for Education Statistics.

Note: The District of Columbia has a value in the category 1% to 5% and Puerto Rico has a value in the category 6% and above.

**Table 1.4**  
**Chapter 1 Public School Participants**  
**by State -- 1986-87 and 1987-88**

State	Total Public Participants 1986-87	Total Public Participants 1987-88	Percent Change
Alabama	114,653	120,093	5
Alaska	4,701	4,810	2
Arizona	49,905	54,009	8
Arkansas	62,108	63,053	2
California	765,795	848,999	11
Colorado	35,750	36,088	1
Connecticut	51,048	52,113	2
Delaware	10,238	10,167	-1
District of Columbia	15,541	15,725	1
Florida	132,741	133,738	1
Georgia	135,467	139,000	3
Hawaii	14,212	14,223	*
Idaho	17,739	18,864	6
Illinois	153,267	154,509	1
Indiana	100,058	98,034	-2
Iowa	34,253	38,723	13
Kansas	33,444	34,224	2
Kentucky	90,153	86,563	-4
Louisiana	103,755	104,033	*
Maine	25,701	24,183	-6
Maryland	55,687	58,580	5
Massachusetts	74,963	73,146	-2
Michigan	142,689	146,494	3
Minnesota	56,330	58,231	3
Mississippi	92,996	99,338	7
Missouri	71,496	79,563	11
Montana	13,665	12,379	-9
Nebraska	25,231	25,131	*
Nevada	8,000	9,228	15
New Hampshire	9,759	11,445	17
New Jersey	176,489	184,845	5
New Mexico	28,036	29,821	6
New York	301,175	323,950	8
North Carolina	113,511	113,567	*
North Dakota	8,816	9,110	3
Ohio	122,692	129,680	6
Oklahoma	58,371	57,407	-2
Oregon	42,096	44,096	5
Pennsylvania	198,155	209,346	6
Rhode Island	13,212	14,838	12
South Carolina	51,285	53,677	5
South Dakota	12,312	12,791	4
Tennessee	102,121	101,062	-1
Texas	345,147	376,780	9
Utah	21,971	25,242	15
Vermont	8,975	9,625	7
Virginia	73,020	72,197	-1
Washington	61,794	63,285	2
West Virginia	31,528	32,172	2
Wisconsin	63,633	63,050	-1
Wyoming	3,984	3,608	-9
Puerto Rico	240,005	236,394	-2
Bureau of Indian Affairs	15,088	16,801	11
<b>NATION</b>	<b>4,594,761</b>	<b>4,808,030</b>	<b>5</b>

\* Less than 1 percent.

Table 1.5  
Chapter 1 Nonpublic School Participants  
by State -- 1986-87 and 1987-88

State	Total Nonpublic Participants 1986-87	Total Nonpublic Participants 1987-88	Percent Change
Alabama	125	966	673
Alaska	39	226	479
Arizona	1,200	773	-36
Arkansas	352	367	4
California	16,126	17,877	11
Colorado	338	276	-18
Connecticut	3,426	3,168	-8
Delaware	507	540	7
District of Columbia	440	540	23
Florida	2,714	2,404	-11
Georgia	357	356	*
Hawaii	68	85	25
Idaho	118	105	-11
Illinois	6,195	5,596	-10
Indiana	2,144	2,100	-2
Iowa	2,384	2,327	-2
Kansas	762	784	3
Kentucky	2,014	1,803	-10
Louisiana	2,709	3,503	29
Maine	305	303	-1
Maryland	2,020	2,376	18
Massachusetts	4,392	4,684	7
Michigan	2,812	2,651	-6
Minnesota	2,843	2,771	-3
Mississippi	1,687	1,784	6
Missouri	2,833	2,458	-13
Montana	191	177	-7
Nebraska	1,422	1,281	-10
Nevada	143	77	-46
New Hampshire	301	338	12
New Jersey	6,819	6,367	-7
New Mexico	1,070	1,344	26
New York	20,319	21,071	4
North Carolina	372	478	28
North Dakota	31	300	-5
Ohio	7,997	6,012	-25
Oklahoma	204	170	-17
Oregon	513	218	-58
Pennsylvania	13,697	16,415	20
Rhode Island	443	420	-5
South Carolina	89	130	46
South Dakota	494	480	-3
Tennessee	390	894	129
Texas	9,472	4,183	-56
Utah	91	33	-64
Vermont	234	203	-13
Virginia	568	613	8
Washington	668	806	21
West Virginia	202	160	-21
Wisconsin	2,926	2,920	*
Wyoming	37	51	38
Puerto Rico a/	10,013	16,528	65
Bureau of Indian Affairs b/	--	--	--
<b>NATION</b>	<b>137,900</b>	<b>142,492</b>	<b>3</b>

\* Less than 1 percent.

a/ The 1986-87 and 1987-88 nonpublic participation counts include participants in schools with religious affiliation in Puerto Rico.

b/ Bureau of Indian Affairs has no nonpublic students.

Table 1.6

Chapter I Participants by Grade Span, Public, Nonpublic  
and Total -- 1986-87 and 1987-88

	1986-87		1987-88		Percent Change in Number
	Number	(Percent) <sup>a/</sup>	Number	(Percent) <sup>a/</sup>	
<b>Public</b>					
Pre-K and Kindergarten	348,087	(8)	380,669	(8)	9
Grades 1-3	1,822,880	(40)	1,934,450	(40)	6
Grades 4-6	1,427,249	(31)	1,476,910	(31)	3
Grades 7-9	775,829	(17)	786,416	(16)	1
Grades 10-12	214,679	(5)	227,873	(5)	6
Ungraded <sup>b/</sup>	6,037	(*)	1,712	(*)	-72
Total	4,594,761	(100)	4,808,030	(100)	5
<b>Nonpublic</b>					
Pre-K and Kindergarten	4,588	(3)	4,807	(3)	5
Grades 1-3	54,418	(39)	58,961	(41)	8
Grades 4-6	44,345	(32)	48,848	(34)	10
Grades 7-9	21,714	(16)	19,537	(14)	-10
Grades 10-12	5,581	(4)	3,301	(2)	-41
Ungraded <sup>c/</sup>	238	(*)	245	(*)	3
Total	137,900 <sup>d/</sup>	(100) <sup>e/</sup>	142,492 <sup>d/</sup>	(100) <sup>e/</sup>	3
<b>Total</b>					
Pre-K and Kindergarten	352,675	(7)	385,476	(8)	9
Grades 1-3	1,877,298	(40)	1,993,411	(40)	6
Grades 4-6	1,471,594	(31)	1,525,758	(31)	4
Grades 7-9	797,543	(17)	805,953	(16)	1
Grades 10-12	220,260	(5)	231,174	(5)	5
Ungraded	6,275	(*)	1,957	(*)	-69
Total	4,732,661 <sup>d/</sup>	(100) <sup>e/</sup>	4,950,522 <sup>d/</sup>	(100) <sup>e/</sup>	5

\* Less than 1 percent.

<sup>a/</sup> Percents may not add to 100 due to rounding.

<sup>b/</sup> Six states (Colorado, Connecticut, Michigan, Mississippi, Rhode Island, and Vermont) reported public ungraded participants in 1986-87, and four states (Connecticut, Louisiana, Michigan, and Rhode Island) in 1987-88.

<sup>c/</sup> Four states (Connecticut, Michigan, Mississippi, and Wisconsin) reported nonpublic ungraded participants in 1986-87, and three states (Connecticut, Michigan, and Wisconsin) in 1987-88.

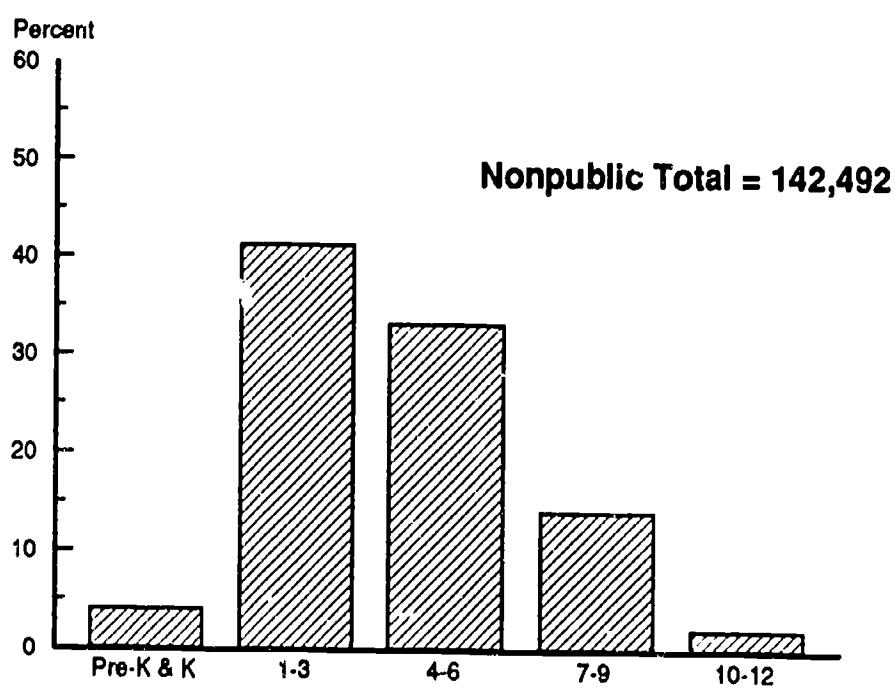
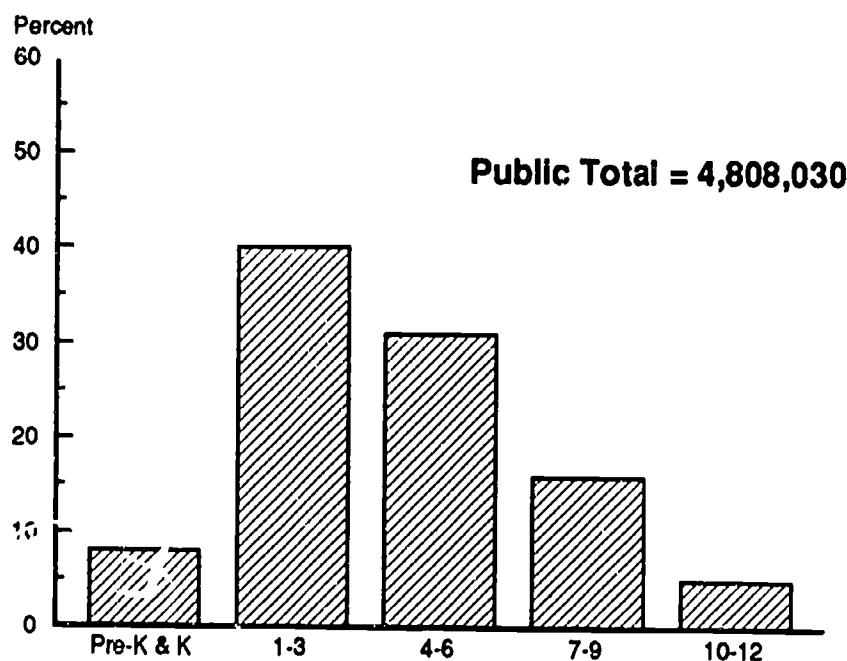
<sup>d/</sup> The nonpublic participation count and the total participation count each include 7,016 participants in 1986-87 and 6,793 participants in 1987-88 in schools with religious affiliation in Puerto Rico who are not included in the counts by grade span.

<sup>e/</sup> The percents by grade span do not add to 100 because of 7,016 nonpublic participants in 1986-87 and 6,793 nonpublic participants in 1987-88 in Puerto Rico in schools with religious affiliation who are not included in the counts by grade span.

**Figure 1.3**

**Chapter 1 Participation by Grade Span**

**Public and Nonpublic - 1987-88**



## CHAPTER 1 SERVICE PATTERNS

### Instructional Services

During 1987-88, nearly three-quarters of Chapter 1 participants received instruction in reading (71 percent, or about 3.5 million students), and almost one-half received instruction in mathematics (44 percent, or nearly 2.2 million students). Eighteen percent each received other language arts and other instructional services. While there was an increase in overall participation, fewer students received reading, other language arts, and mathematics services in 1987-88 than in 1986-87.

#### Patterns in 1987-88

In 1987-88, the majority of students received Chapter 1 instruction in reading. Seventy-one percent of all participants received reading instruction, a total of about 3.5 million students. The second largest area of Chapter 1 instruction was mathematics, where close to 2.2 million students, 44 percent of all participants, received instruction. Other language arts and other instructional services were received by 18 percent of the Chapter 1 participants. Other instructional services include such services as early childhood, preschool, kindergarten, readiness, tutoring, dropout prevention, and English to limited English proficient students. (Table 1.7 and Figure 1.4)

#### Changes from 1986-87 to 1987-88

Participation by subject area remained fairly constant across school years 1986-87 and 1987-88. For example, approximately 75 percent of all participants received reading instruction in both years. (Table 1.7)

From 1986-87 to 1987-88, decreases occurred in all instructional services except those designated as "other instructional" services. The largest decrease, 2 percent, occurred in reading instruction. This decrease was due, in large part, to New York and New Jersey, which reported 95,844 and 14,672 fewer participants receiving reading, respectively. The increase of 19 percent in other instructional services was due

primarily to New York, which reported almost 140,000 more students served in 1987-88 than in 1986-87 in this service area.<sup>8</sup>

#### Nine-Year Trends

During the nine-year period 1979-80 through 1987-88, the area of other instructional services shows the most variation in Chapter 1 participation. In 1979-80, 16 percent of Chapter 1 participants received other instructional services. This decreased to 5 percent the next year, then increased to 18 percent in 1981-82, and dropped again to 9 percent in 1982-83. Over the last four years (1984-85 through 1987-88), however, the proportion has slowly but steadily increased. The increase beginning in 1984-85 was partially due to the elimination of three reporting categories from the form.<sup>9</sup> (Table 1.8)

The proportion of Chapter 1 students receiving reading, other language arts, and mathematics has fluctuated minimally over the nine-year period. The proportion of students receiving reading services fluctuated between a high of 77 percent in 1979-80 to a low of 71 percent in 1981-82 and 1987-88. Other language arts participation shifted between 13 and 20 percent since 1979-80. Finally, the proportion of Chapter 1 students receiving mathematics services decreased slightly from 1979-80 to 1980-81, then rose steadily from 40 to 47 percent by 1986-87, dropping to 44 percent in 1987-88.

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<sup>8</sup>New York's decrease in the number receiving reading and increase in the number receiving other instructional services was explained as a programmatic shift in focus from a strictly reading program to a program encompassing reading along with other components.

<sup>9</sup>Year-to-year changes in the other instructional services category can also be explained, in part, by the rather large fluctuations in the numbers reported by California.

## **Supporting Services**

Fewer participants received supporting services than received instructional services in 1987-88. The number of Chapter 1 students receiving supporting services declined in every category except transportation from 1986-87 to 1987-88.

### **Patterns in 1987-88**

The largest area in which supporting services were provided was in attendance, social work, and guidance, where over 780,000 participants, 16 percent of the total, received services. The next largest service area was health and nutrition, where 8 percent of participants received this service. The smallest service areas were transportation, 4 percent, and other supporting services, 6 percent. Other supporting services include such services as supplemental eye screening, speech therapy, library, field trips, clothing, and medical care. (Table 1.7 and Figure 1.4)

While all states, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs provided instructional services, 12 states and the Bureau of Indian Affairs provided no supporting services.

### **Changes from 1986-87 to 1987-88**

In all areas of supporting services except transportation, decreases occurred in the number of Chapter 1 students receiving services between 1986-87 and 1987-88. Decreases ranged from 32 percent in health and nutrition (due primarily to a reported decline in California of about 202,000 participants); 7 percent in attendance, social work, and guidance; and 5 percent in other supporting services. The only supporting service area to show an increase was transportation (11 percent). (Table 1.7)

### **Nine-Year Trends**

Supporting services participation has varied by category over the last nine years, with no particular trend predominating across all categories. The tendency, however, has been for the proportion of Chapter 1 students receiving these services to remain fairly constant over time. The proportions receiving attendance, social work, and guidance services fluctuated between 15 and 21 percent with no apparent pattern. The proportion of Chapter 1 students receiving other supporting services showed a brief surge in 1980-81 and 1981-82, but in recent years the proportions have remained constant at 5 to 7 percent. Receipt of

transportation services has remained virtually constant over the nine-year period, not fluctuating from a 4 percent participation rate since 1983-84.

One supporting service--health and nutrition--showed a sharp decline in service provision since 1979-80. The proportion of Chapter 1 students receiving health and nutrition services dropped sharply in the first four years of the nine-year period, and continued to decline in the remaining years, with an overall drop from 25 to 8 percent of participants receiving this service. (Table 1.8)

### **Services for Public and Nonpublic Students**

While the numbers of public school students receiving Chapter 1 services in 1987-88 declined modestly in several areas and more notably in only one area (health and nutrition), the numbers of nonpublic Chapter 1 students receiving services declined sharply in several areas.

In 1987-88, 3.3 million public school students received Chapter 1 reading instruction. This represents 69 percent of all public school Chapter 1 participants. Forty-three percent of public school participants, over 2 million, received Chapter 1 mathematics instruction. Seventeen percent each received other language arts and other instructional services. (Table 1.9)

Of the supporting services provided through Chapter 1, 16 percent of the public school participants received attendance, social work, and guidance services, and 9 percent received health and nutrition services. Other supporting services were received by 6 percent of public school Chapter 1 participants, while 4 percent received transportation services. (Table 1.9)

In four categories of instructional and supporting services, there was a decrease in the number of public school Chapter 1 students served from 1986-87 to 1987-88. The largest decrease (31 percent) was in health and nutrition services.<sup>10</sup> Three categories showed an increase in the number of students served. The largest increase was 26 percent in other instructional

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<sup>10</sup>The large decrease in the number receiving health and nutrition (189,807) is due primarily to the reported decrease in California of 193,309 (from 240,429 to 47,120).

services.<sup>11</sup> The number of students receiving other supporting services remained virtually unchanged. (Table 1.9)

Over 87,000 nonpublic school students, 61 percent of all nonpublic participants, received reading instruction in 1987-88. Over 53,000 nonpublic students, 37 percent, received instruction in mathematics. Over 10,000 nonpublic students, 7 percent, received other language arts, and close to 24,000 (17 percent) received other instructional services.<sup>12</sup> (Table 1.10)

In the supporting services, 13 percent of the nonpublic school Chapter 1 students received attendance, social work, and guidance services, and 3 percent received transportation services. Health and nutrition and other supporting services were each provided to 1 percent of the participants. (Table 1.10)

Between 1986-87 and 1987-88, decreases occurred in the numbers of nonpublic school Chapter 1 participants receiving reading (5 percent), other language arts (36 percent), health and nutrition (85 percent),<sup>13</sup> and other supporting services (68 percent). There were increases in the other four categories, the largest occurring in the number of nonpublic students receiving other instructional services (196 percent).<sup>14</sup>

In the nine years since school year 1979-80, more students have received Chapter 1 reading instruction than mathematics instruction in both public and nonpublic schools. Levels of participation have remained relatively stable across the years in both subjects. (Figure 1.5)

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<sup>11</sup>The large increase in the number receiving other instructional services is due primarily to the shift in programmatic focus in New York, as discussed above.

<sup>12</sup>The 1986-87 and 1987-88 total nonpublic school participation counts include 7,016 and 6,793 participants, respectively, in schools with religious affiliation in Puerto Rico who are not included in the counts by service area.

<sup>13</sup>The large decrease in the number receiving health and nutrition is due primarily to the decrease reported by California of 8,833 (from 8,837 to 4).

<sup>14</sup>The large increase in the number receiving other instructional services is due, in large part, to the shift in programmatic focus in New York, as discussed above.

## **Services for Neglected or Delinquent Students**

During 1987-88, nearly three-quarters of Chapter 1 local neglected or delinquent (N or D) students received instruction in reading (72 percent or about 95,000 students), two-thirds received instruction in mathematics (67 percent or almost 90,000 students), and over one-half received instruction in other language arts (51 percent or about 67,000 students). Less than 5 percent of Chapter 1 students received supporting services. Overall, fewer students received reading, mathematics, and other instructional services in 1987-88 than in 1986-87.

### **Patterns in 1987-88**

Almost 75 percent of neglected or delinquent (N or D) students received Chapter 1 instruction in reading in 1987-88. Over two-thirds received Chapter 1 instruction in mathematics. Chapter 1 instruction in other language was received by over one-half of the students while the proportion of students receiving other instructional services was 14 percent. (Table 1.11)

In contrast to instructional services, a small percentage of Chapter 1 students received supporting services. The largest group was in attendance, social work, and guidance, where 5 percent of the students were served. Three percent received other supporting services, 1 percent received health and nutrition services, and less than 1 percent received transportation services.

### **Changes from 1986-87 to 1987-88<sup>15</sup>**

Instructional services for neglected or delinquent students decreased significantly in 1987-88, due, in great part, to decreases in California. The number of local N or D students in California who received reading instruction decreased by 31,030; the number who received mathematics instruction decreased by 19,273; and the number who received other instructional services decreased by 48,462.

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<sup>15</sup>The percent of local N or D participants receiving each service is not included for 1986-87 because complete figures on the total number of local N or D participants were not available in all states.

Fewer N or D students received other supporting services in 1987-88 than in the preceding year, while more students received attendance, social work, and guidance, health and nutrition, and transportation services.

Table 1.7  
Total Chapter I Participants by Service Area --  
1986-87 and 1987-88

	1986-87		1987-88		Percent Change in Number <sup>a/</sup>
	Number	(Percent) (Served)	Number	(Percent) (Served)	
<u>Instructional</u>					
Reading	3,583,135	(76)	3,512,402	(71)	-2
Other Language Arts	924,941	(20)	913,934	(18)	-1
Mathematics	2,204,480	(47)	2,197,316	(44)	*
Other Instructional Services <sup>b/</sup>	733,799	(16)	871,353	(18)	19
<u>Supporting</u>					
Attendance, Social Work, and Guidance	836,256	(18)	781,019	(16)	-7
Health and Nutrition	619,378	(13)	419,857	(8)	-32
Transportation	183,173	(4)	202,916	(4)	11
Other Supporting Services <sup>c/</sup>	302,352	(6)	287,001	(6)	-5
Unduplicated Participant Count <sup>d/</sup>	4,732,661		4,950,522		

\* Less than 1 percent.

<sup>a/</sup> See Tables 1.9 through 1.11 for explanations of year-to-year changes in public, nonpublic, and local neglected or delinquent participant figures.

<sup>b/</sup> Other instructional services include tutoring, oral language development, basic skills, vocational education, pre-school, readiness, and transition, among others.

<sup>c/</sup> Other supporting services include media, supplemental eye screening, speech therapy, library, field trips, clothing, and nurse, among others.

<sup>d/</sup> The total participation counts include 7,016 nonpublic participants in 1986-87 and 6,793 nonpublic participants in 1987-88 in schools with religious affiliation in Puerto Rico who are not included in the counts by service area.

Figure 1.4  
**Percent of Chapter 1 Participants  
Served by Service Area - 1987-88**

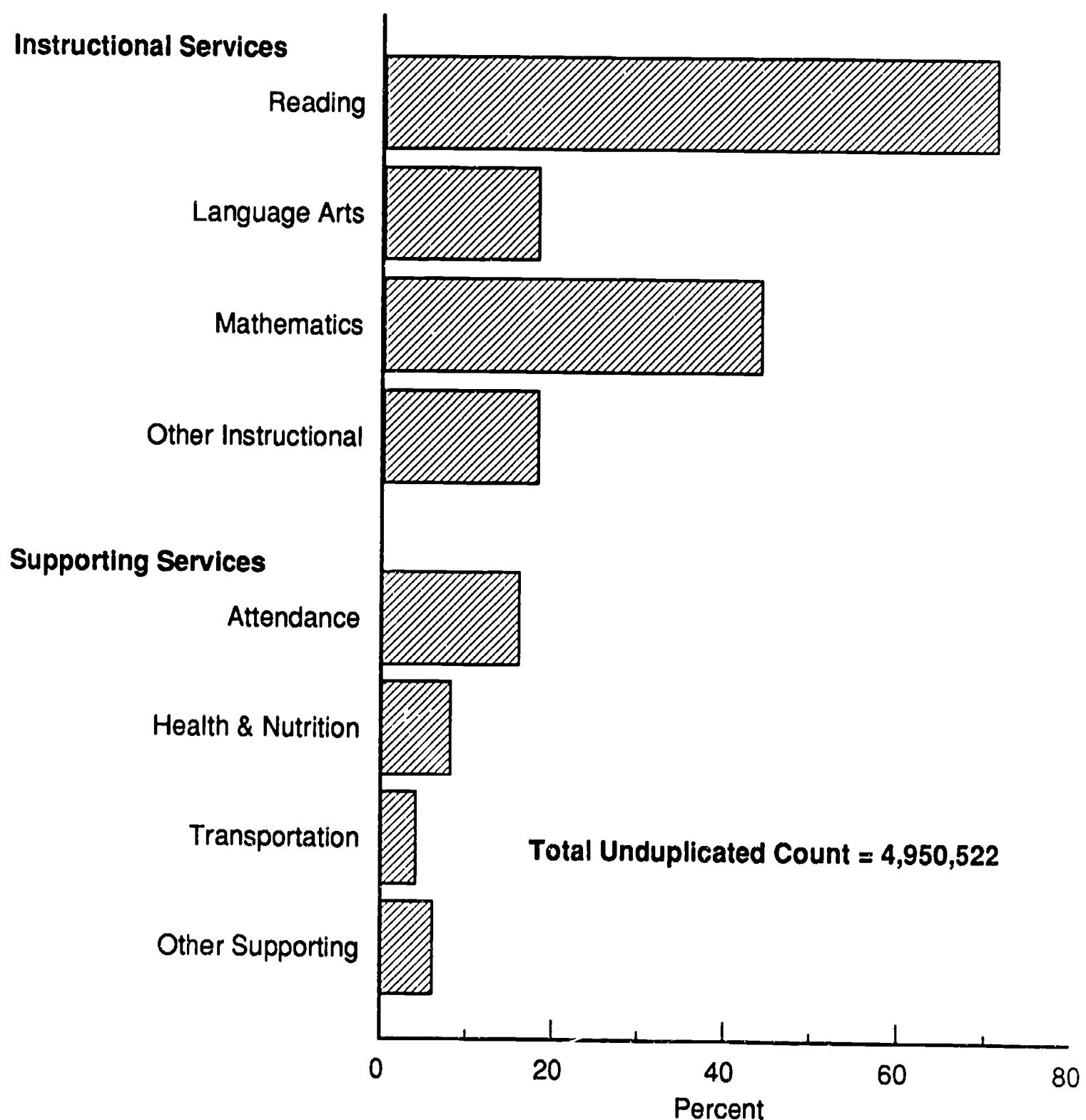


Table 1.8  
Percent of Total Chapter 1 Participants Served, by  
Service Area -- 1979-80 to 1987-88<sup>a/</sup>

<b>Instructional</b>				
<b>Year</b>	<b>Reading</b>	<b>Other Language Arts</b>	<b>Mathematics</b>	<b>Other Instructional</b>
1979-80	77	16	44	16
1980-81	72	13	40	5
1981-82	71	17	41	18
1982-83	74	16	44	9
1983-84	75	19	44	9
1984-85	74	18	45	12
1985-86	74	18	45	15
1986-87	76	20	47	16
1987-88	71	18	44	18

<b>Supporting</b>				
<b>Year</b>	<b>Attendance, Social Work, and Guidance</b>	<b>Health and Nutrition</b>	<b>Transportation</b>	<b>Other Supporting</b>
1979-80	15	25	3	8
1980-81	21	20	5	11
1981-82	20	16	6	13
1982-83	16	14	5	5
1983-84	16	14	4	7
1984-85	15	12	4	6
1985-86	19	13	4	7
1986-87	18	13	4	6
1987-88	16	8	4	6

<sup>a/</sup> Guam reported service area information in 1979-80 and 1980-81; the Trust Territories reported service area information in 1980-81, 1981-82, and 1983-84; and the Virgin Islands reported service area information in 1979-80.

Table 1.9  
Chapter 1 Public School Participants by Service Area --  
1986-87 and 1987-88

	1986-87		1987-88		Percent Change in Number
	Number	(Percent) (Served)	Number	(Percent) (Served)	
<b><u>Instructional</u></b>					
Reading	3,362,060	(73)	3,330,637	(69)	-1
Other Language Arts	842,330	(18)	835,920	(17)	-1
Mathematics	2,043,110	(44)	2,056,111	(43)	1
Other Instructional Services <sup>a/</sup>	659,658	(14)	829,479	(17)	26 <sup>e/</sup>
<b><u>Supporting</u></b>					
Attendance, Social Work, and Guidance	816,410	(18)	755,589	(16)	-7 <sup>c/</sup>
Health and Nutrition	606,497	(13)	416,690	(9)	-31 <sup>d/</sup>
Transportation	179,912	(4)	198,906	(4)	11 <sup>e/</sup>
Other Supporting Services <sup>f/</sup>	282,421	(6)	281,568	(6)	*
Unduplicated Participant Count	4,594,761		4,808,030		

\* Less than 1 percent.

- a/ Other instructional services include tutoring, oral language development, basic skills, vocational education, pre-school, readiness, and transition, among others.
- b/ The decrease in the number receiving reading and the large increase in the number receiving other instructional services is due primarily to changes in New York. The number of New York participants receiving reading services decreased by 88,025 from 210,539 to 122,514 while the number receiving other instructional services increased by 138,544 from 25,867 to 164,411.
- c/ The decrease in the number of participants receiving attendance (60,821) is due primarily to decreases in California, Illinois, and Pennsylvania. California decreased 9,001, from 223,530 to 214,529; Illinois decreased 15,340, from 79,413 to 64,073; and Pennsylvania decreased 18,933, from 78,146 to 59,213.
- d/ The decrease in the number receiving health and nutrition (189,807) is due primarily to California. California decreased 193,309, from 240,429 to 47,120.
- e/ The increase in transportation (18,994) is due primarily to California. California increased 31,973, from 66,228 to 98,201.
- f/ Other supporting services include media, supplemental eye screening, speech therapy, library, field trips, clothing, and nurse, among others.

Table 1.10  
Chapter 1 Nonpublic School Participants by Service Area --  
1986-87 and 1987-88

	1986-87		1987-88		Percent Change in Number
	Number	(Percent Served)	Number	(Percent Served)	
<u>Instructional</u>					
Reading	92,265	(67)	87,448	(61)	-5 <sup>a/</sup>
Other Language Arts	16,563	(12)	10,664	(7)	-36 <sup>b/</sup>
Mathematics	47,899	(35)	53,071	(37)	11 <sup>c/</sup>
Other Instructional Services <sup>d/</sup>	7,952	(6)	23,541	(17)	196
<u>Supporting</u>					
Attendance, Social Work, and Guidance	17,284	(13)	19,124	(13)	11
Health and Nutrition	11,721	(8)	1,733	(1)	-85 <sup>e/</sup>
Transportation	2,948	(2)	3,637	(3)	23
Other Supporting Services <sup>f/</sup>	5,717	(4)	1,856	(1)	-68
Unduplicated Participant Count <sup>g/</sup>	137,900		142,492		

- a/ The moderate decrease in the number receiving reading and the large increase in the number receiving other instructional services is due primarily to changes in New York. The number of New York participants receiving reading decreased by 7,819 from 13,714 to 5,895 while the number receiving other instructional services increased by 8,603 from 2,687 to 11,290.
- b/ The substantial decrease in the number receiving other language arts services (5,899) is due to California. California decreased 7,696, from 12,079 to 4,383.
- c/ The increase in the number receiving mathematic services (5,172) is due primarily to Illinois and Texas. Illinois increased 1,712, from 2,659 to 4,371; and Texas increased 1,065, from 1,075 to 2,140.
- d/ Other instructional services include tutoring, oral language development, basic skills, vocational education, pre-school, readiness, and transition, among others.
- e/ The decrease in the number receiving health and nutrition services (9,988) is due to California. California decreased 8,833, from 8,837 to 4.
- f/ Other supporting services include media, supplemental eye screening, speech therapy, library, field trips, clothing, and nurse, among others.
- g/ The total nonpublic participation count includes 7,016 nonpublic participants in 1986-87 and 6,793 nonpublic participants in 1987-88 in schools with religious affiliation in Puerto Rico who are not included in the counts by service area.

Figure 1.5

**Percent of Chapter 1 Participants Receiving  
Reading and Mathematics, Public and Nonpublic  
1979-80 to 1987-88**

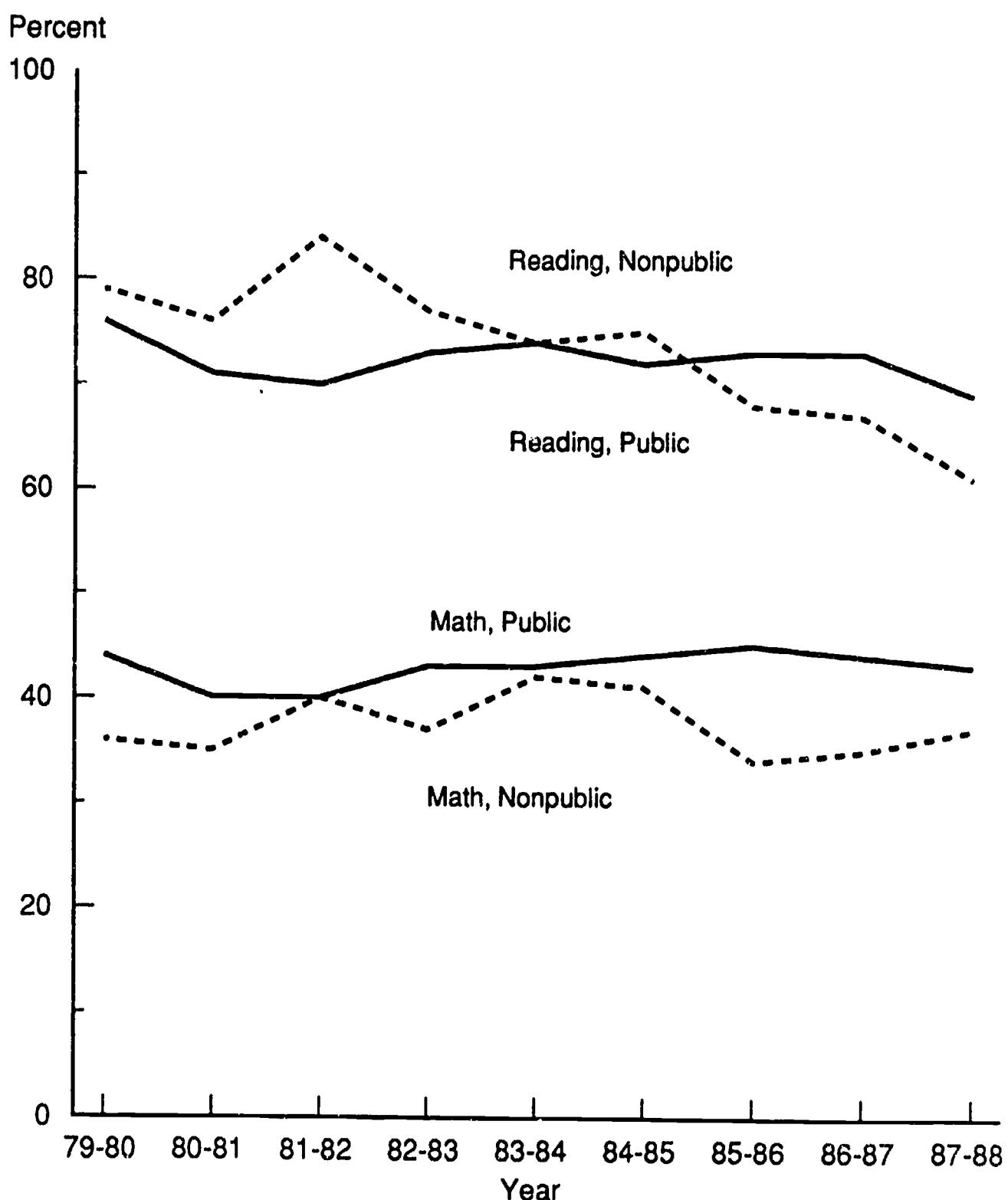


Table 1.11  
Chapter 1 Local Neglected or Delinquent Participants by Service Area -- 1986-87 and 1987-88<sup>a/</sup>

	1986-87 Number	1987-88 Number	(Percent) (Served) (1987-88)	Percent Change in Number
<u>Instructional<sup>b/</sup></u>				
Reading	128,810	94,317	(72)	-27
Other Language Arts	66,048	67,350	(51)	2
Mathematics	113,471	88,134	(67)	-22
Other Instructional Services	66,189	18,333	(14)	-72
<u>Supporting</u>				
Attendance, Social Work, and Guidance	2,562	6,306	(5)	146
Health and Nutrition	1,160	1,434	(1)	24
Transportation	313	373	(*)	19
Other Supporting Services	14,214	3,577	(3)	-75
Unduplicated Participant Count		130,822		

- a/ Percent served is not reported on this table for 1986-87 because complete figures on the total number of local N or D participants were not available. While states reported the number receiving each service, some states did not report the unduplicated number of local N or D participants.
- b/ The large decreases in the number of local N or D students receiving Chapter 1 instructional services were due, for the most part, to decreases found in California. The number of local N or D students in California who received reading instruction decreased by 31,030, the number who received mathematics instruction decreased by 19,273, and the number who received other instructional services decreased by 48,462.

## CHAPTER 1 STAFFING PATTERNS

### Staffing Composition

Approximately one-half of the staff funded by Chapter 1 in 1987-88 were teachers. Teachers and teacher aides constituted 85 percent of the total staff funded by Chapter 1 dollars.

In 1987-88, there were 143,616 full-time equivalent (FTE) staff reported by the 50 states, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs. The largest staff category funded by Chapter 1 in 1987-88 was that of teachers, who represented 46 percent of the total Chapter 1 FTE staff. They were followed closely by teacher aides with 39 percent of the total Chapter 1 FTE staff. Together, these two staff categories constituted 85 percent of the total Chapter 1 FTE staff. Each of the remaining staff categories, administrative, curriculum specialists, supporting, clerical, and other made up no more than 4 percent of the total. (Table 1.12 and Figure 1.6)

By state, the percentage of total Chapter 1 FTE staff reported as teachers varied from a low of 12 percent in Utah to a high of 84 percent in Iowa. The percentage of staff reported as teacher aides varied from 10 percent in Rhode Island to 82 percent in Utah. Eleven states reported that between 41 and 50 percent of their Chapter 1 staff were teachers. In addition, 16 states reported that between 41 and 50 percent of their staff were teacher aides. (Table 1.13 and Appendix Table C.3)

### Changes in Staff Composition

The number of total staff increased by 2 percent from 1986-87 to 1987-88. The only decrease occurred in the category of curriculum specialists.

Total staff increased by 2 percent from 1986-87 to 1987-88; the distribution of staff by category remained virtually the same across both years.

The numbers of FTE staff increased in every category except curriculum specialists. The increases ranged from 1 percent for teacher aides to 9 percent for supporting staff. The FTE curriculum specialists decreased by 5 percent from 1986-87 to 1987-88. (Table 1.12)

Over the nine-year period from 1979-80 through 1987-88, there has been an overall decline in the number of total FTE staff. For only three years did the numbers increase, 1983-84,

1984-85, and 1987-88. Participation counts increased during these same years. (Table 1.14)

The percentage of total Chapter 1 FTE staff composed of teachers increased between 1979-80 and 1982-83, but has remained steady at approximately 46 percent of the total since 1982-83. In contrast, the percentage of total staff composed of teacher aides has decreased over the years, from 45 percent in 1979-80 to 39 percent since 1984-85. (Table 1.14)

Although nationwide, teachers constitute a greater proportion of total Chapter 1 FTE staff than do teacher aides, teacher aides constitute a greater proportion of staff in 19 states, the District of Columbia, and the Bureau of Indian Affairs. (Appendix Table C.3)

Table 1.12  
Chapter 1 FTE Staff by Classification -- 1986-87 and 1987-88

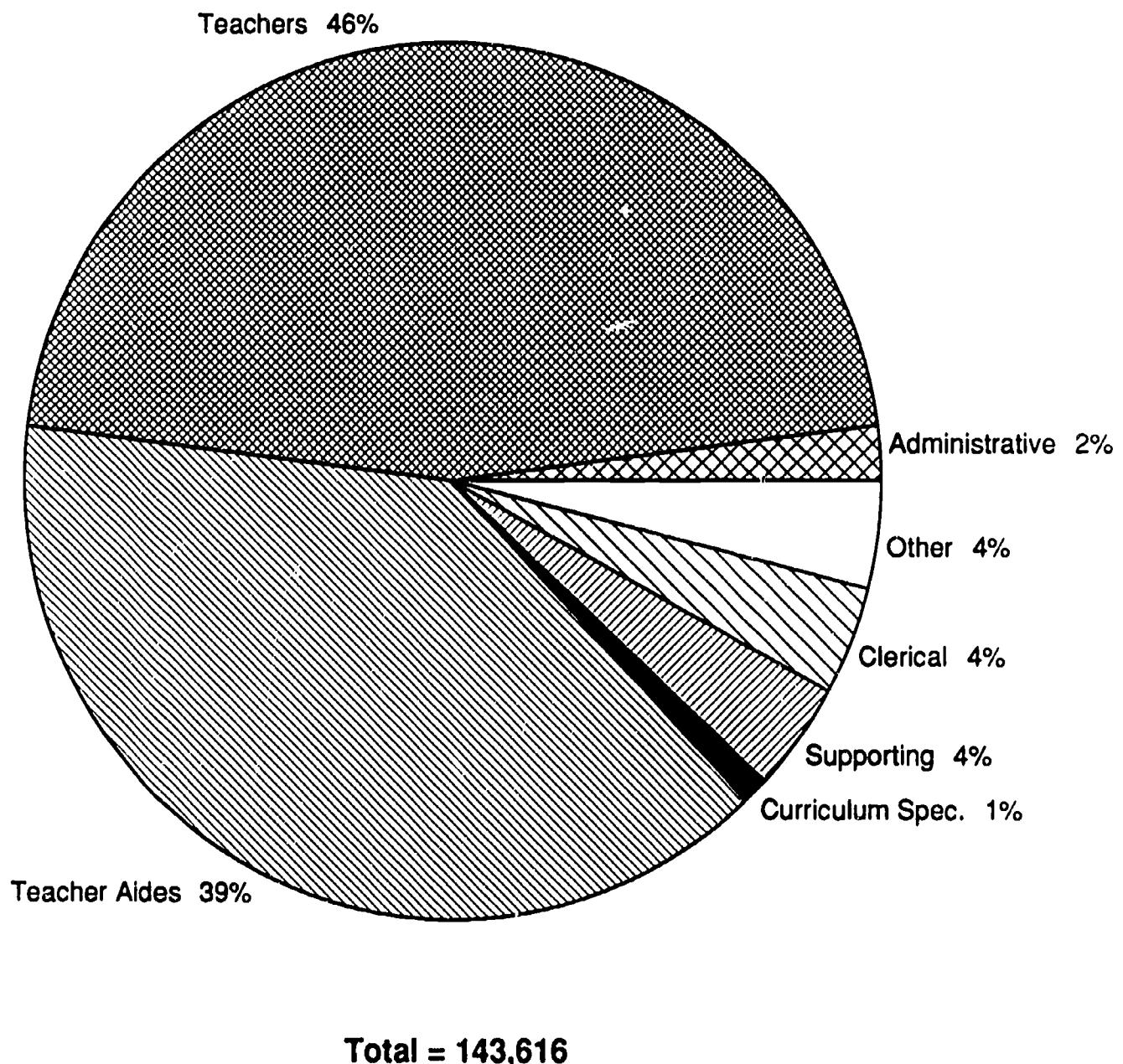
Staff Classification	1986-87		1987-88		Percent Change in Number
	Number	(Percent) <sup>a/</sup>	Number	(Percent) <sup>a/</sup>	
Administrative	3,332	(2)	3,414	(2)	2
Teachers	64,143	(46)	65,668	(46)	2
Teacher Aides	55,530	(39)	56,019	(39)	1
Curriculum Specialists	1,795	(1)	1,697	(1)	-5
Supporting	4,941	(4)	5,384	(4)	9
Clerical	4,850	(3)	5,185	(4)	7
Other <sup>b/</sup>	6,099	(4)	6,249	(4)	2
Total	140,690	(100)	143,616	(100)	2

a/ Percents may not add to 100 due to rounding.

b/ The other FTE staff category includes such positions as parent coordinator, tutor, consultant, language specialist, bookkeeper, parent consultant, warehouse keeper, and social worker.

Figure 1.6

## Chapter 1 FTE Staff by Classification 1987-88



Percents may not add to 100 due to rounding.

**Table 1.13**  
**Percent of Total Chapter 1 FTE Staff Reported  
 as Teachers and Teacher Aides -- 1987-88**

Percent of Total Staff	Number of States	
	Teachers	Teacher Aides
0 - 10	0	1
11 - 20	3	7
21 - 30	4	8
31 - 40	12	8
41 - 50	11	16
51 - 60	12	6
61 - 70	4	5
71 - 80	6	1
81 - 90	1	1

Table 1.14  
Chapter 1 FTE Teachers and Teacher Aides --  
1979-80 to 1987-88<sup>a/</sup>

Year	Teachers		Teacher Aides		
	Number	Percent of Total Staff	Number	Percent of Total Staff	Number of Total Staff <sup>b/</sup>
1979-80	77,782	40	86,826	45	194,403
1980-81	80,078	43	80,938	44	185,925
1981-82	74,786	45	67,536	40	167,748
1982-83	68,590	46	58,093	39	149,220
1983-84	68,627	46	57,479	38	150,277
1984-85	72,797	46	61,380	39	158,967
1985-86	69,014	45	59,058	39	151,936
1986-87	64,143	46	55,530	39	140,690
1987-88	65,668	46	56,019	39	143,616

- a/ Guam reported staff information in 1979-80 and 1980-81; the Trust Territories reported staff information in 1979-80, 1980-81, 1981-82, and 1983-84; and the Virgin Islands reported staff information in 1979-80.
- b/ Total staff includes teachers, teacher aides, administrators, curriculum specialists, supporting staff, clerical staff, and other staff.

## CHARACTERISTICS OF CHAPTER 1 STUDENTS

### Racial/Ethnic Classification

In 1987-88, 28 percent of Chapter 1 participants were black, 25 percent were Hispanic, 3 percent were Asian or Pacific Islander, and 2 percent were American Indian or Alaskan Native. White Chapter 1 students made up 43 percent of the total.<sup>16</sup> (Table 1.15 and Figure 1.7)

### Year of Birth

Sixty-six percent of 1987-88 Chapter 1 participants were born between 1976 and 1981, the years during which children of elementary school age were born. The years during which children of secondary school age were born, 1970 through 1975, constituted the year of birth for 26 percent of the 1987-88 Chapter 1 participants. Seven percent of the 1987-88 Chapter 1 participants were born in 1982 through 1986, the years during which children of kindergarten age or younger were born. One percent of Chapter 1 participants were born in the years between 1965 and 1969.<sup>17</sup> (Table 1.16)

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<sup>16</sup>In 1987-88, the total number of Chapter 1 participants on Table 1.15 will not correspond to the total on Table 1.1. In 12 states, the total number of participants reported by racial/ethnic classification was not the same as the total number reported by grade. Eight states reported more participants by grade than by racial/ethnic classification. California, for example, reported 4,700 more participants by grade than by race. Four states reported more participants by racial/ethnic classification than by grade. The largest difference was in New York, where 11,453 more participants were reported by race than by grade.

<sup>17</sup>The total number of Chapter 1 participants reported on Table 1.16 will not correspond to the total on Table 1.1. In 15 states, the total number reported by year of birth was not the same as the total number reported by grade. The largest differences were found in California, which reported 10,025 fewer participants by year of birth than by grade, and Kansas, which reported 6,117 fewer participants by year of birth than by grade.

## Gender

In 1987-88, states reported that 55 percent of Chapter 1 participants were male and 45 percent were female. These percentages have remained stable since 1984-85 when the data were first collected.<sup>18</sup> (Table 1.17)

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<sup>18</sup>The total number of Chapter 1 participants on Table 1.17 will not correspond to the total on Table 1.1. In 11 states, the total number reported by gender was not the same as the total number reported by grade. The largest differences were found in California, which reported 9,643 fewer participants by gender than by grade, and Kansas, which reported 6,528 fewer participants by gender than by grade.

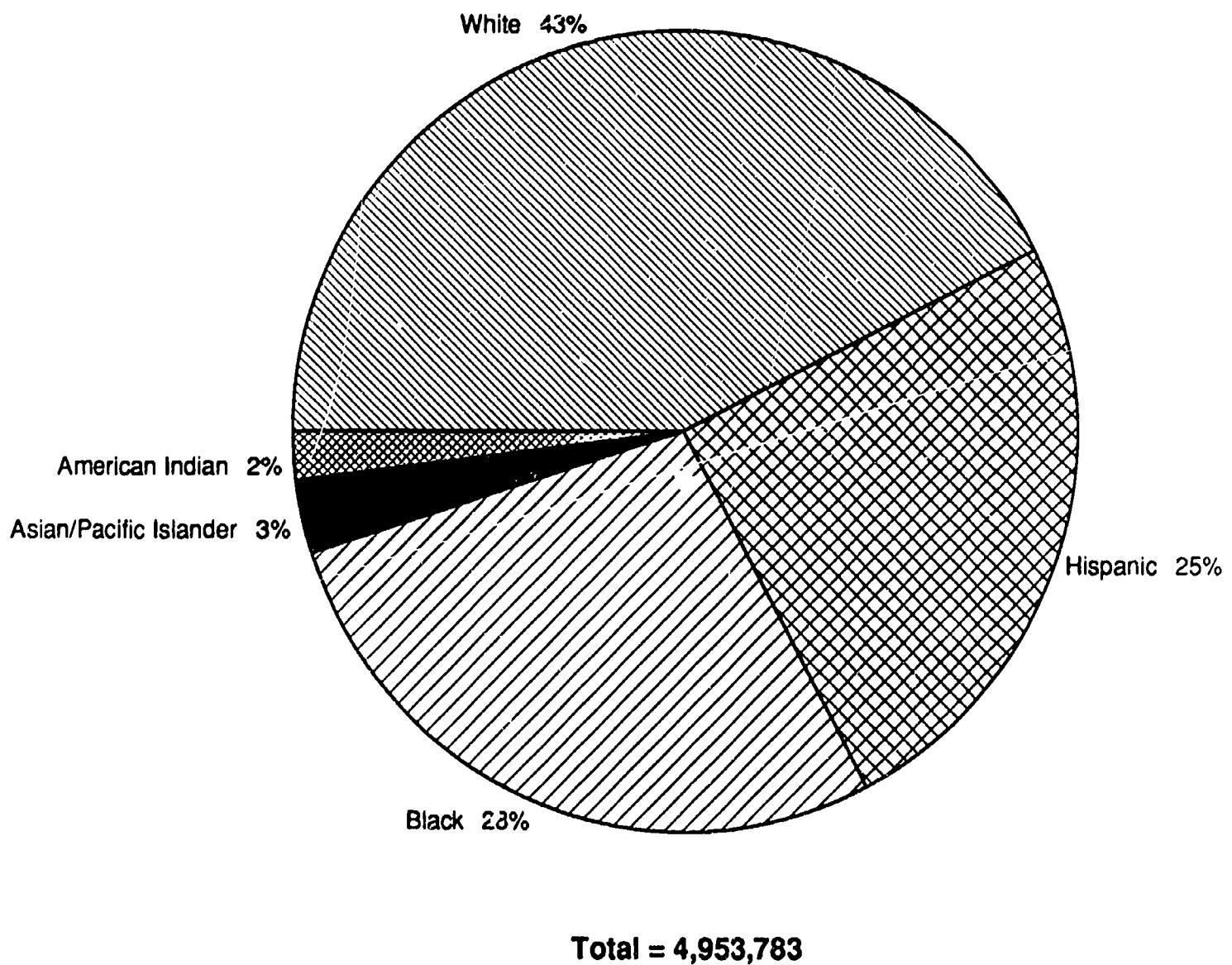
Table 1.15  
Chapter 1 Participants by Racial/Ethnic Classification -- 1986-87 and 1987-88

Racial/Ethnic Classification	1986-87		1987-88		Percent Change in Number
	Number	(Percent) <sup>a/</sup>	Number	(Percent) <sup>a/</sup>	
American Indian or Alaskan Native	70,894	(2)	81,547	(2)	15 <sup>b/</sup>
Asian or Pacific Islander	128,691	(3)	144,944	(3)	13 <sup>c/</sup>
Black, not Hispanic	1,301,106	(28)	1,367,197	(28)	5
Hispanic	1,144,865	(24)	1,238,667	(25)	8
White, not Hispanic	2,054,558	(44)	2,121,428	(43)	3
Total <sup>d/</sup>	4,700,114	(100)	4,953,783	(100)	5

- a/ Percent may not add to 100 due to rounding.
- b/ The increase in the number reported as American Indian or Alaskan Native is due primarily to Arizona, which reported 7,445 more students in this category in 1987-88 than in 1986-87. In 1986-87 and 1987-88, Arizona reported State Performance Report participation information based on a sample of school districts.
- c/ The increase in the number reported as Asian or Pacific Islander is due primarily to California, which reported 13,587 more Asian or Pacific Islander participants, from 70,355 to 83,942.
- d/ In 1987-88, the total number on this table will not correspond to the total on Table 1.1 because in 12 states, the total number reported by racial/ethnic classification was not the same as the total number reported by grade. Eight states reported more participants by grade than by racial/ethnic classification. (The largest difference was in California, which reported 4,700 more by grade than by race.) Four states reported more participants by racial/ethnic classification than by grade. (The largest difference was in New York, which reported 11,453 more by race than by grade.)

Figure 1.7

## Chapter 1 Participants by Racial/Ethnic Classification, 1987-88



Note: The total represents the total number of participants for which data were reported.

Percents may not add to 100 due to rounding.

Table 1.16  
Chapter 1 Participants by Year of Birth -- 1987-88

Year of Birth	Number	Percent
Born 1986-82 (preschool)	348,417	7
Born 1981-76 (elementary)	3,258,284	66
Born 1975-73 (junior high)	940,520	19
Born 1972-70 (high school)	339,390	7
Born 1969-65 (> 18 years old)	36,186	1
Total <sup>a/</sup>	4,929,590 <sup>b/</sup>	100

- a/ The total number on this table will not correspond to the total on Table 1.1 because in 15 states, the total number reported by year of birth was not the same as the total number reported by grade. The largest differences were found in California, which reported 10,025 fewer participants by year of birth than by grade, and Kansas, which reported 6,117 fewer participants by year of birth than by grade.
- b/ The total includes of 6,793 nonpublic participants in schools with religious affiliation in Puerto Rico who are not included in the counts by individual years of birth.

Table 1.17  
Chapter 1 Participants by Gender -- 1987-88

Gender	Number	Percent
Male	2,715,543	55
Female	2,211,554	45
Total <sup>a/</sup>	4,927,097	100

a/ The total number on this table will not correspond to the total on Table 1.1 because in 11 states, the total number reported by gender was not the same as the total number reported by grade. The largest differences were found in California, which reported 9,643 fewer participants by gender than by grade, and Kansas, which reported 6,528 fewer participants by gender than by grade.

## CHAPTER 2

### ACHIEVEMENT INFORMATION FOR CHAPTER 1 LEA PROGRAMS

This chapter provides information on achievement data submitted by the Chapter 1 LEA programs. Achievement data are presented for 1987-88 participants as well as trends for the years 1979-80 through 1987-88.

#### NUMBER OF STATES REPORTING

Forty-six states, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs reported achievement data in 1987-88 using the standard format required under ESEA Title I.<sup>19</sup>

The standard Title I reporting format includes membership, number tested, posttest scores, normal curve equivalent (NCE) scores, and NCE gain scores.<sup>20</sup> Although NCEs are collected on the State Performance Reports, percentiles are displayed in this chapter as a more generally understood measure of achievement. NCE information is presented in Appendices D and F. The reader should note that changes in percentiles are not the same as changes in NCEs. See Appendix F for an explanation of the relationship between NCEs and percentiles.

Forty-one states and the District of Columbia reported scores from an annual test cycle. Only those states and the District of Columbia that reported scores from an annual testing cycle are included in this section of the report. Achievement information reported from a fall-spring testing cycle is included in Appendices D through F.

Achievement data for reading and mathematics were reported for grades 2 through 12, although states did not necessarily report for all grades. Annual testing cycle data consists of

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<sup>19</sup>Alaska, Missouri, New Hampshire, and Tennessee did not submit achievement data for 1987-88. Due to the nature of the tests given by Puerto Rico, its achievement data were not comparable to that provided by the states and the Bureau of Indian Affairs.

<sup>20</sup>The NCE is a standard score resulting from the division of the normal curve into 99 equal units, and is derived from the percentile rank. The 50th percentile (i.e., an NCE of 50) is the national norm.

fall-fall testing, spring-spring testing, or a combination of the two.

There were 1,045,104 Chapter 1 students tested in reading on an annual cycle, and 630,592 Chapter 1 students tested in mathematics on an annual cycle. (Table 2.1)

Compared to the number of elementary students tested, a relatively small number of Chapter 1 secondary students were tested. For both reading and mathematics, over 75 percent of Chapter 1 students tested were in grades 2 through 6, while over 90 percent were in grades 2 through 8. Less than 10 percent of the Chapter 1 students tested were in grades 9 through 12.

#### ACHIEVEMENT RESULTS IN READING, 1987-88

For Chapter 1 students tested in reading, posttest scores increased at every grade level except grade 12, where pre- and posttest percentiles remained the same.

Pretest to posttest percentile increases in reading for 1987-88 ranged from 2 to 5, with the highest increases for Chapter 1 students in grades 2 through 8 (gains of 4 or 5 in each grade).

Pretest percentiles ranged from 19 in grade 9 to 23 in grade 2. Posttest percentiles ranged from 21 in grade 12 to 27 in grades 2, 4, and 6. (Table 2.1)

#### ACHIEVEMENT RESULTS IN MATHEMATICS, 1987-88

For Chapter 1 students tested in mathematics, posttest scores increased for students at every grade level except grade 12, where scores decreased.

In mathematics for 1987-88, pretest to posttest percentile increases ranged from 3 in grade 11 to 11 in grade 2. The largest increases (from 7 to 11 percentiles) occurred in grades 2 through 6. Students in grade 12 decreased one percentile rank. Pretest percentiles ranged from 23 in grade 9 to 32 in grade 12, while posttest percentiles ranged from 27 in grade 9 to 38 in grade 2. (Table 2.2)

## TRENDS IN ACHIEVEMENT FROM 1979-80 TO 1987-88

Across nearly all grades, both reading and mathematics achievement results for Chapter 1 students on an annual cycle show gains in percentile ranks from 1979-80 to 1987-88.

Over the nine-year period from 1979-80 to 1987-88, the size of the changes in percentile ranks from the pretest to the posttest have remained about the same for Chapter 1 students tested in reading on an annual cycle. In most cases, the changes have been positive.

In mathematics, positive changes have been reported (with only two exceptions), and moreover, the size of the gains in percentile ranks has generally increased over the nine-year period. (Tables 2.3 and 2.4. See also Figures 2.1 through 2.11 for a graphic depiction of the changes in percentile ranks for each year for both reading and mathematics in each of grades 2 through 12.)

From 1979-80 to 1987-88, pretest percentiles, an indicator of the achievement level at which Chapter 1 students begin, have not changed notably for students at most grade levels and have been well below the norm. With regard to reading, pretest percentiles in 1987-88 were either the same or below those in 1979-80 in grades 2-9. In mathematics, pretest percentiles in 1987-88 were higher than those in 1979-80 in grades 6-12. (Figures 2.5 and 2.6)

**Table 2.1**  
**Reading Achievement Results for Chapter 1 Students**  
**Tested on an Annual Cycle -- 1987-88**

Grade	Weighted Number Tested	Number of States Reporting	Percentile		
			Pretest	Posttest	Change
2	170,213	41	23	27	4
3	186,187	42	21	26	5
4	176,207	42	22	27	5
5	157,558	42	22	26	4
6	130,105	42	22	27	5
7	86,392	41	21	25	4
8	73,778	41	20	24	4
9	28,702	36	19	22	3
10	19,654	34	21	23	2
11	10,969	32	20	22	2
12	5,339	28	21	21	0
Total	1,045,104	42	22	26	4

**Table 2.2**  
**Mathematics Achievement Results for Chapter 1 Students**  
**Tested on an Annual Cycle -- 1987-88**

Grade	Weighted Number Tested	Number of States Reporting	Percentile		
			Pretest	Posttest	Change
2	83,972	41	27	38	11
3	100,156	42	27	34	7
4	107,891	42	25	33	8
5	103,516	42	25	32	7
6	83,461	42	25	32	7
7	59,074	41	26	30	4
8	52,396	42	25	30	5
9	19,748	34	23	27	4
10	11,390	30	24	28	4
11	6,023	27	27	30	3
12	2,965	20	32	31	-1
Total	61,592	42	26	33	7

**Table 2.3**

**Reading Achievement Posttest Percentiles and Percentile Gains  
for Chapter 1 Students Tested on an Annual Cycle --  
1979-80 to 1987-88**

Grade	Posttest Percentile								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	29	29	29	32	31	30	30	28	27
3	26	28	25	29	28	27	28	26	26
4	26	26	26	28	28	27	29	28	27
5	25	27	27	28	28	27	28	27	27
6	26	28	28	29	28	26	28	27	26
7	24	25	26	27	27	27	26	26	25
8	24	25	27	26	26	25	25	25	24
9	21	23	24	25	25	22	24	24	22
10	16	19	18	20	19	20	21	24	23
11	11	20	18	18	17	20	22	22	22
12	13	16	17	16	16	17	20	18	21

Grade	Changes in Percentile Ranks								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	2	2	2	2	2	3	2	4	4
3	4	5	3	4	4	4	4	5	5
4	3	4	4	4	4	5	5	6	5
5	3	5	5	5	5	6	5	4	4
6	4	6	5	6	5	5	5	5	5
7	2	3	4	3	4	6	4	3	4
8	3	4	5	4	4	4	4	3	4
9	2	4	4	4	3	2	3	2	3
10	-1	2	1	2	1	2	2	2	2
11	-3	3	1	-1	0	2	3	3	2
12	2	0	2	0	1	0	0	2	0

Table 2.4

Mathematics Achievement Posttest Percentiles and Percentile Gains  
for Chapter 1 Students Tested on an Annual Cycle --  
1979-80 to 1987-88

Grade	Posttest Percentile								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	36	39	35	41	40	38	39	38	38
3	31	33	31	37	36	34	35	33	34
4	30	33	32	33	33	33	33	33	33
5	29	32	33	35	34	34	35	33	32
6	30	33	33	35	34	33	36	33	32
7	26	28	29	32	30	30	32	32	30
8	26	29	30	32	32	32	32	30	30
9	23	26	27	31	31	29	30	34	27
10	18	22	22	27	24	27	32	32	28
11	23	23	25	28	26	30	36	33	30
12	23	22	22	26	24	29	35	29	31

Grade	Changes in Percentile Ranks								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	2	5	5	3	6	6	9	10	11
3	1	3	5	5	6	4	6	7	7
4	3	6	5	4	5	6	6	8	8
5	4	4	6	8	7	7	9	7	7
6	6	8	6	8	7	6	7	7	7
7	4	3	5	7	5	6	6	5	4
8	4	5	5	6	5	5	4	4	5
9	1	1	2	3	1	2	2	5	4
10	-2	1	0	2	1	2	4	3	4
11	1	2	1	1	2	3	4	3	3
12	2	0	1	0	3	2	2	4	-1

Figure 2.1  
**Changes in Percentile Ranks**  
Grade 2 - Annual Test Cycle

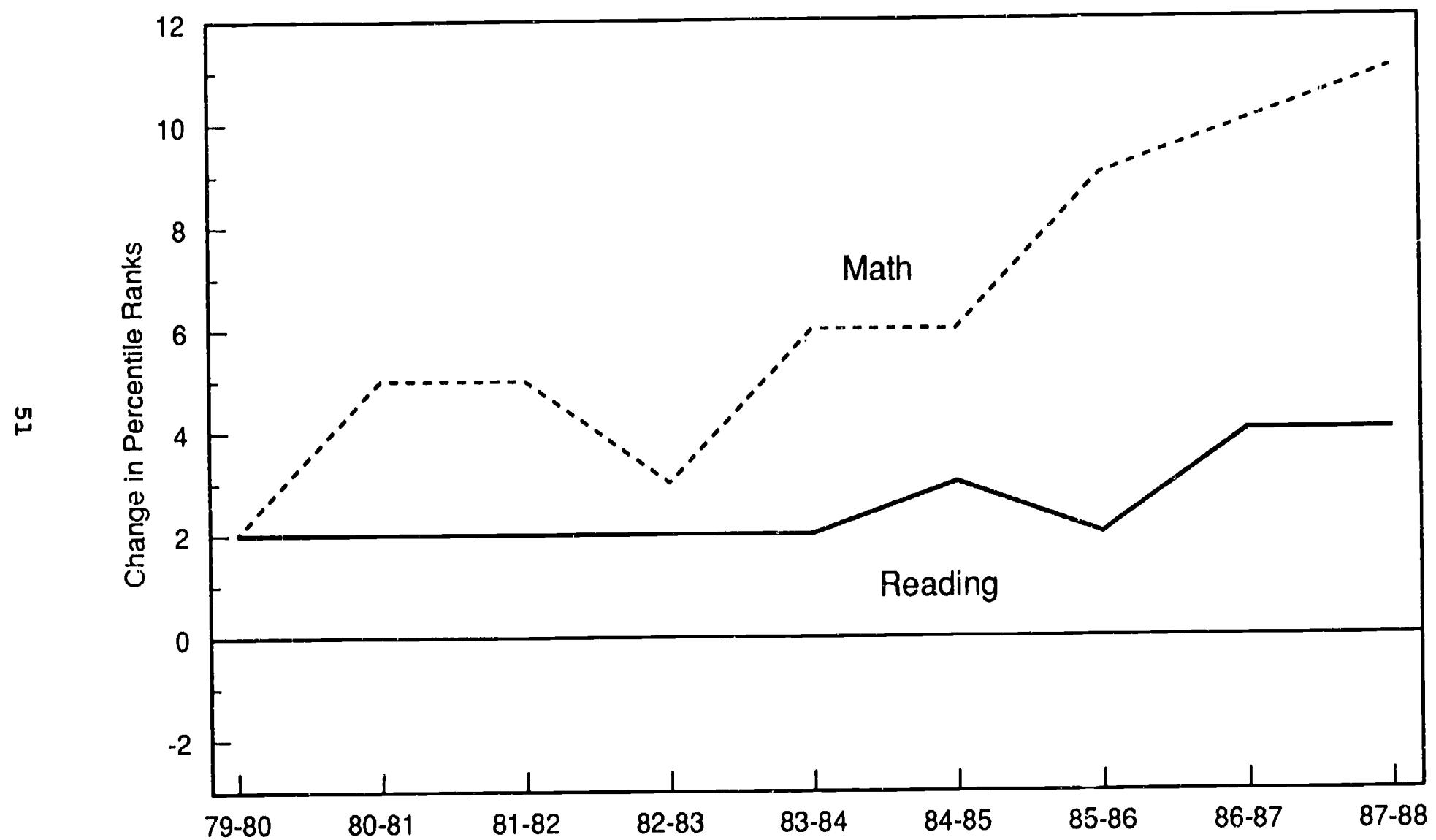


Figure 2.2  
**Changes in Percentile Ranks**  
Grade 3 - Annual Test Cycle

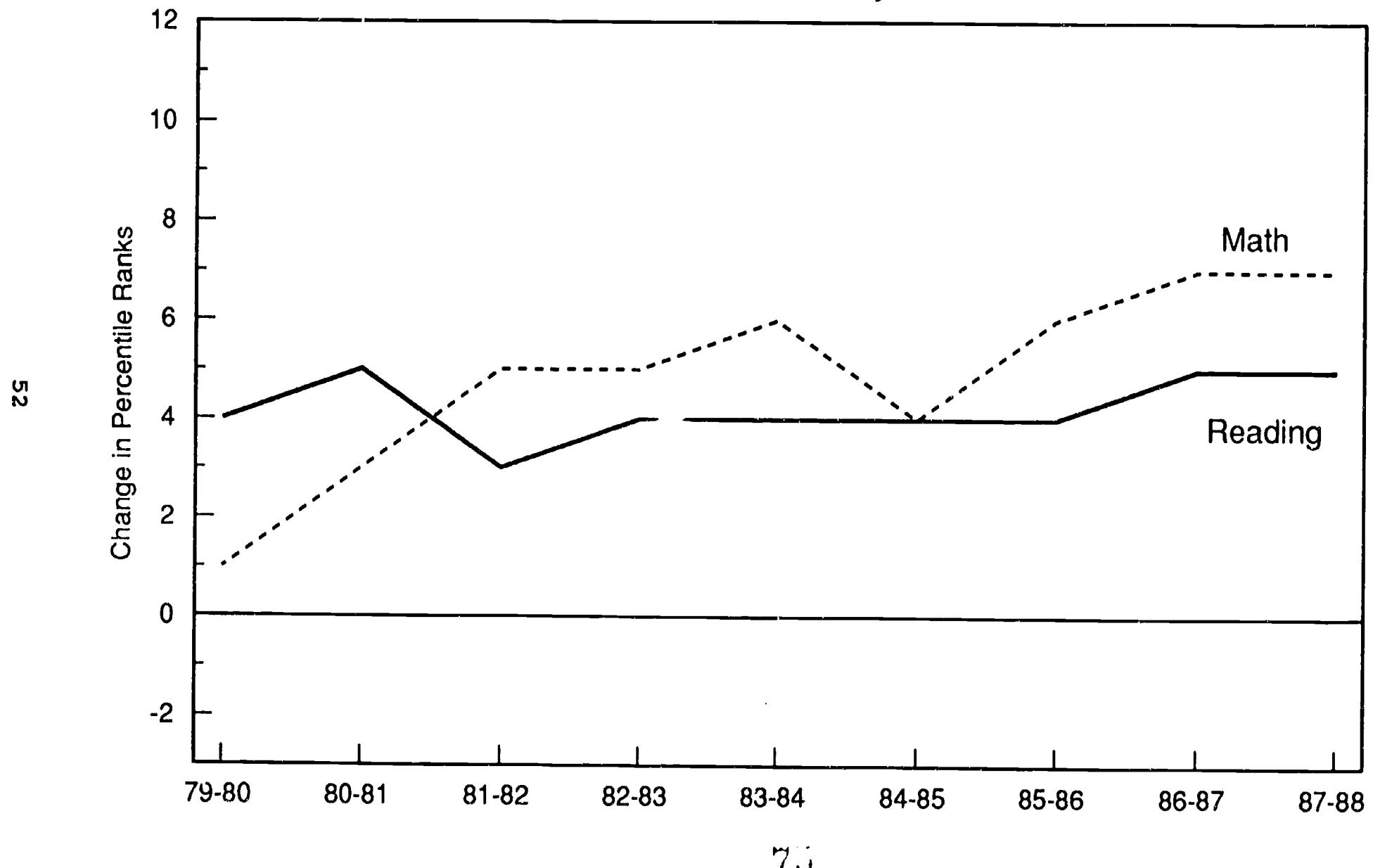


Figure 2.3  
**Changes in Percentile Ranks**  
Grade 4 - Annual Test Cycle

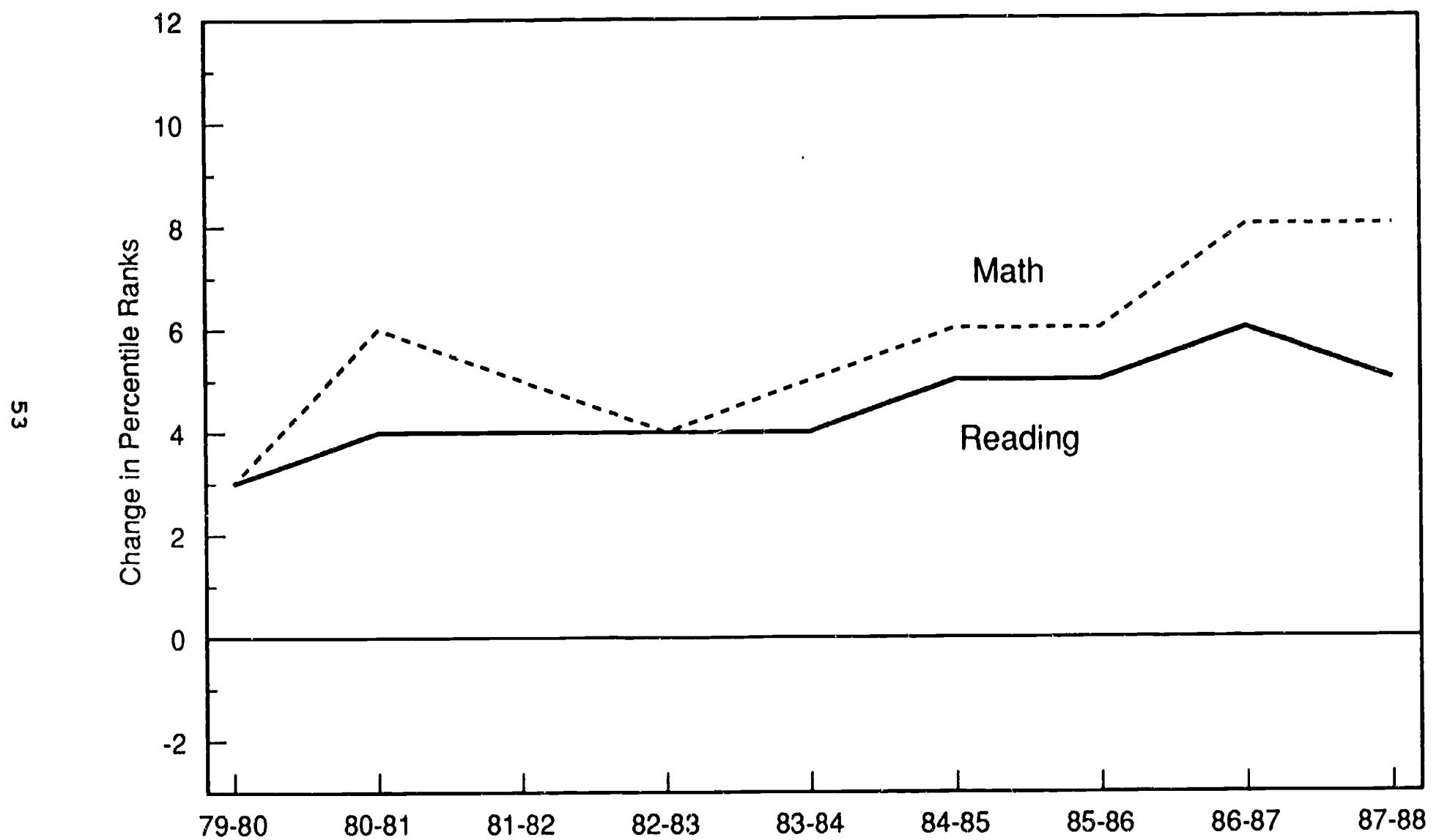


Figure 2.4  
**Changes in Percentile Ranks**  
Grade 5 - Annual Test Cycle

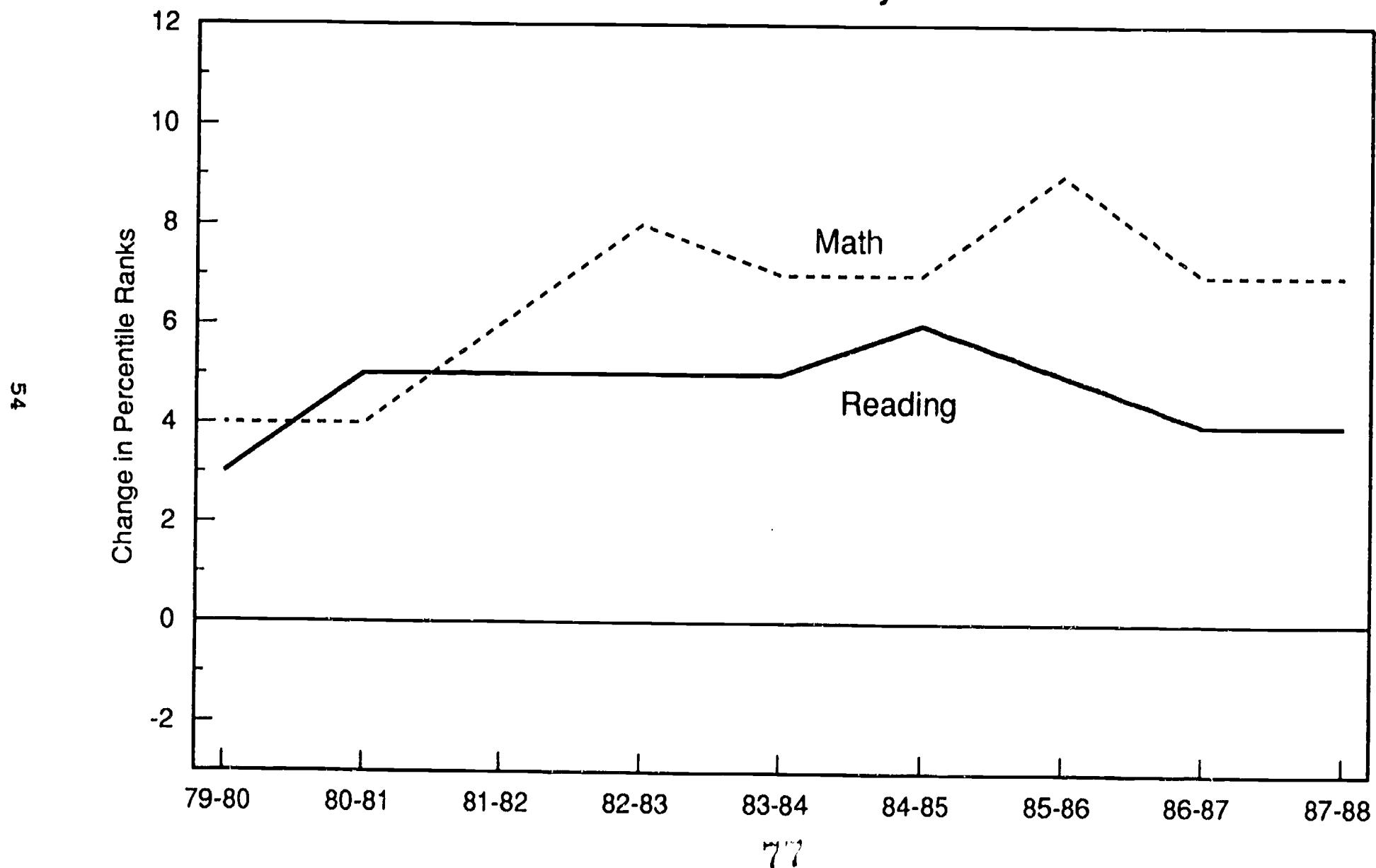


Figure 2.5  
**Changes in Percentile Ranks**  
Grade 6 - Annual Test Cycle

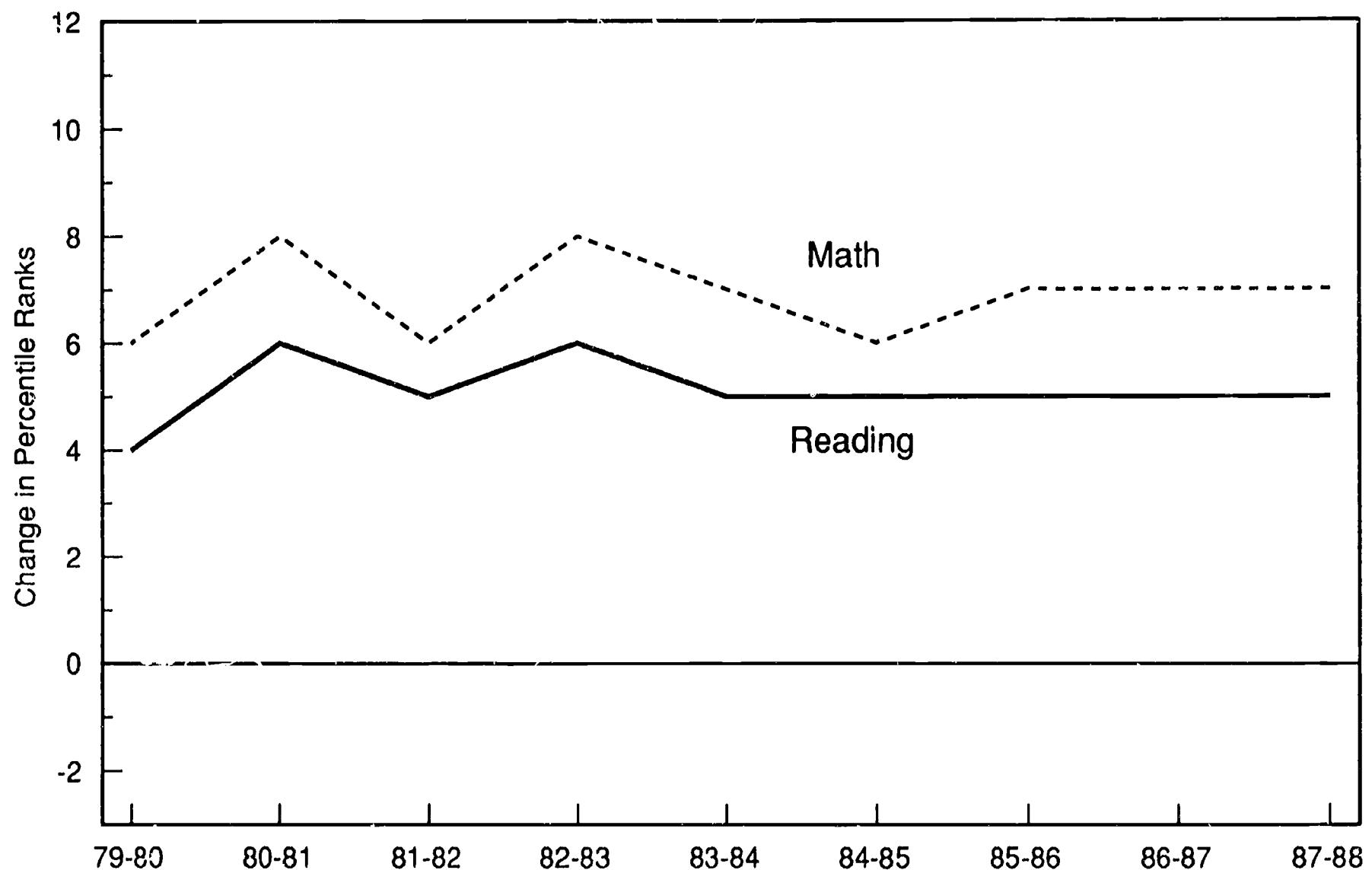


Figure 2.6  
**Changes in Percentile Ranks**  
Grade 7 - Annual Test Cycle

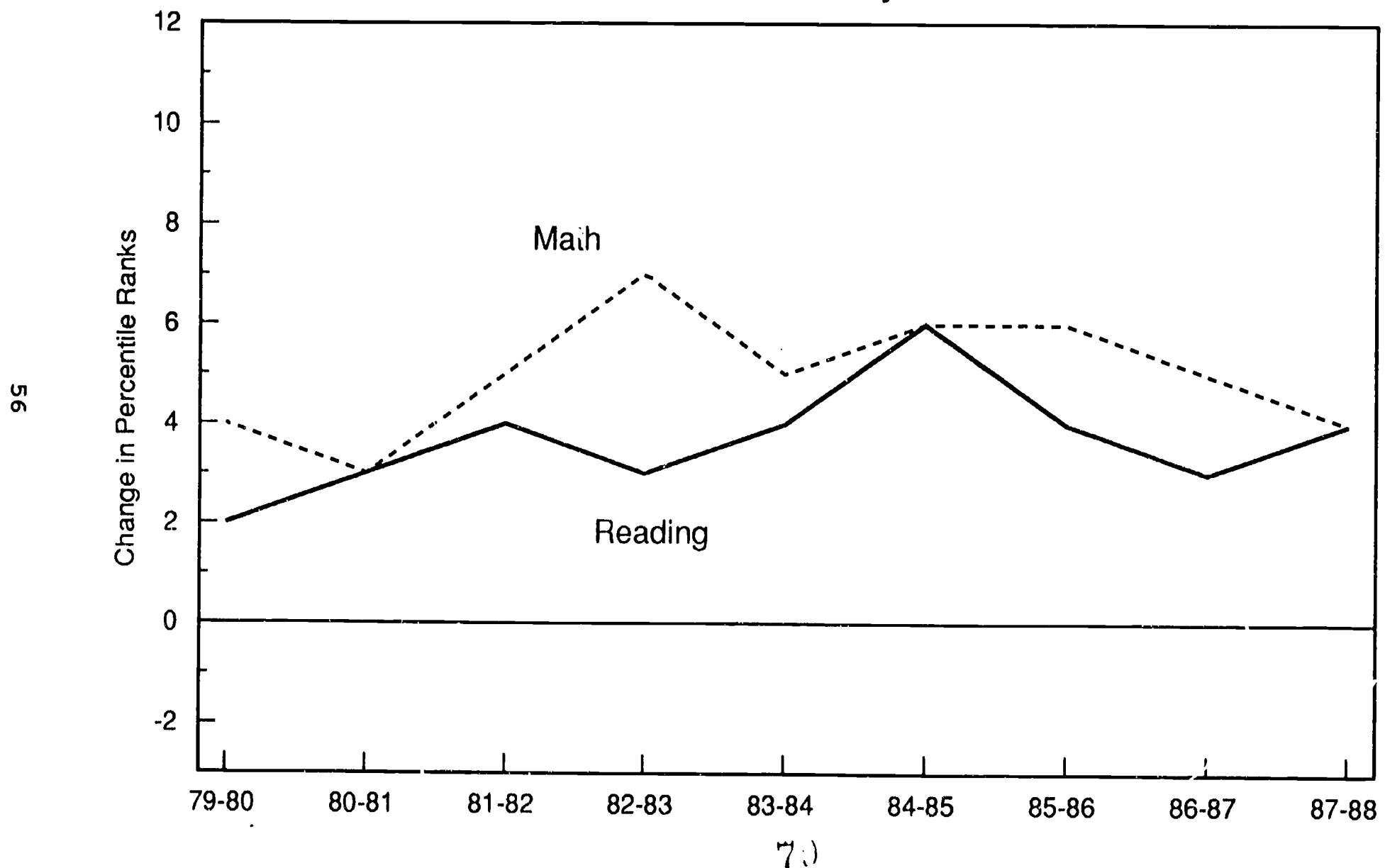


Figure 2.7  
**Changes in Percentile Ranks**  
Grade 8 - Annual Test Cycle

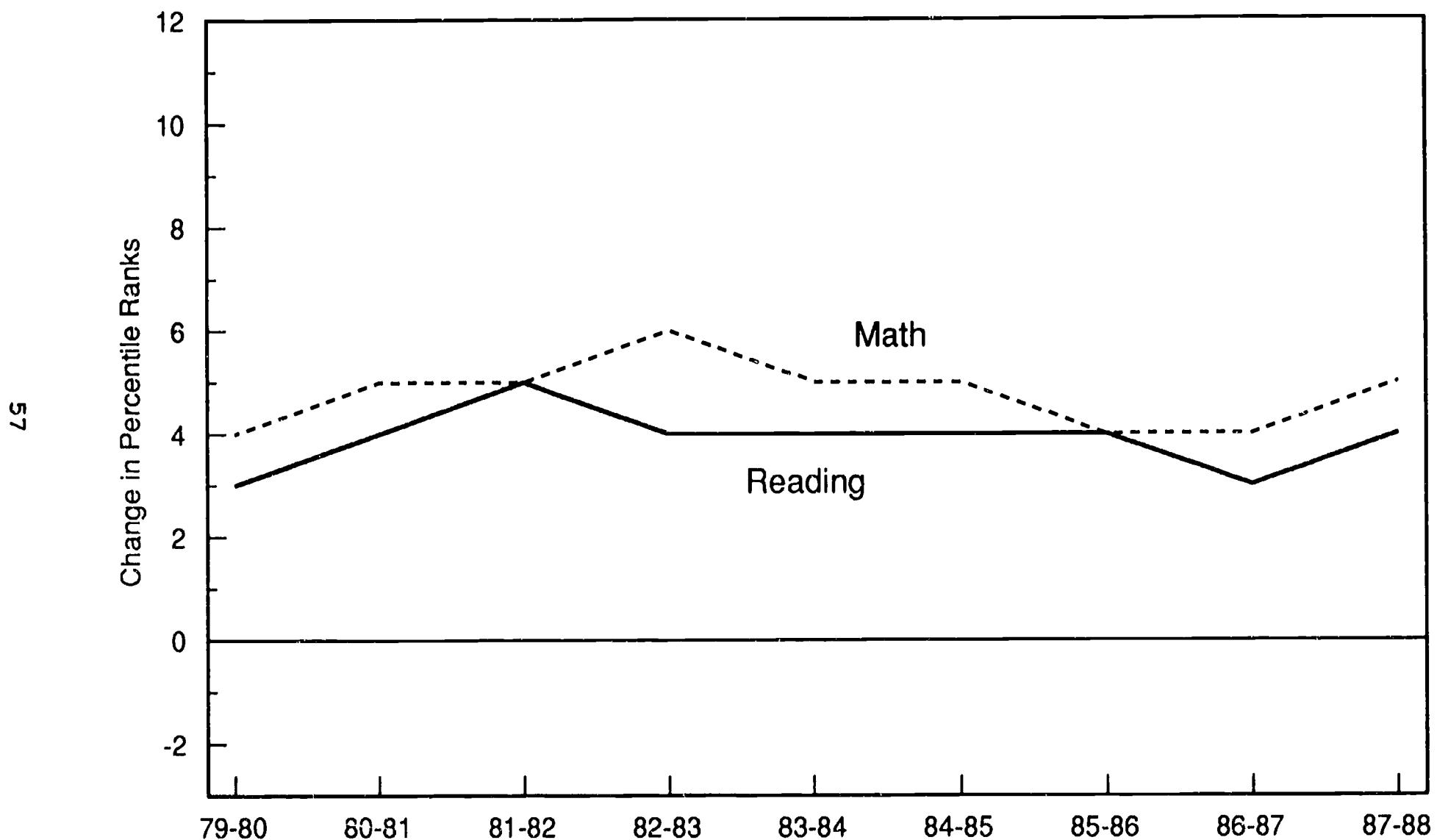


Figure 2.8  
**Changes in Percentile Ranks**  
Grade 9 - Annual Test Cycle

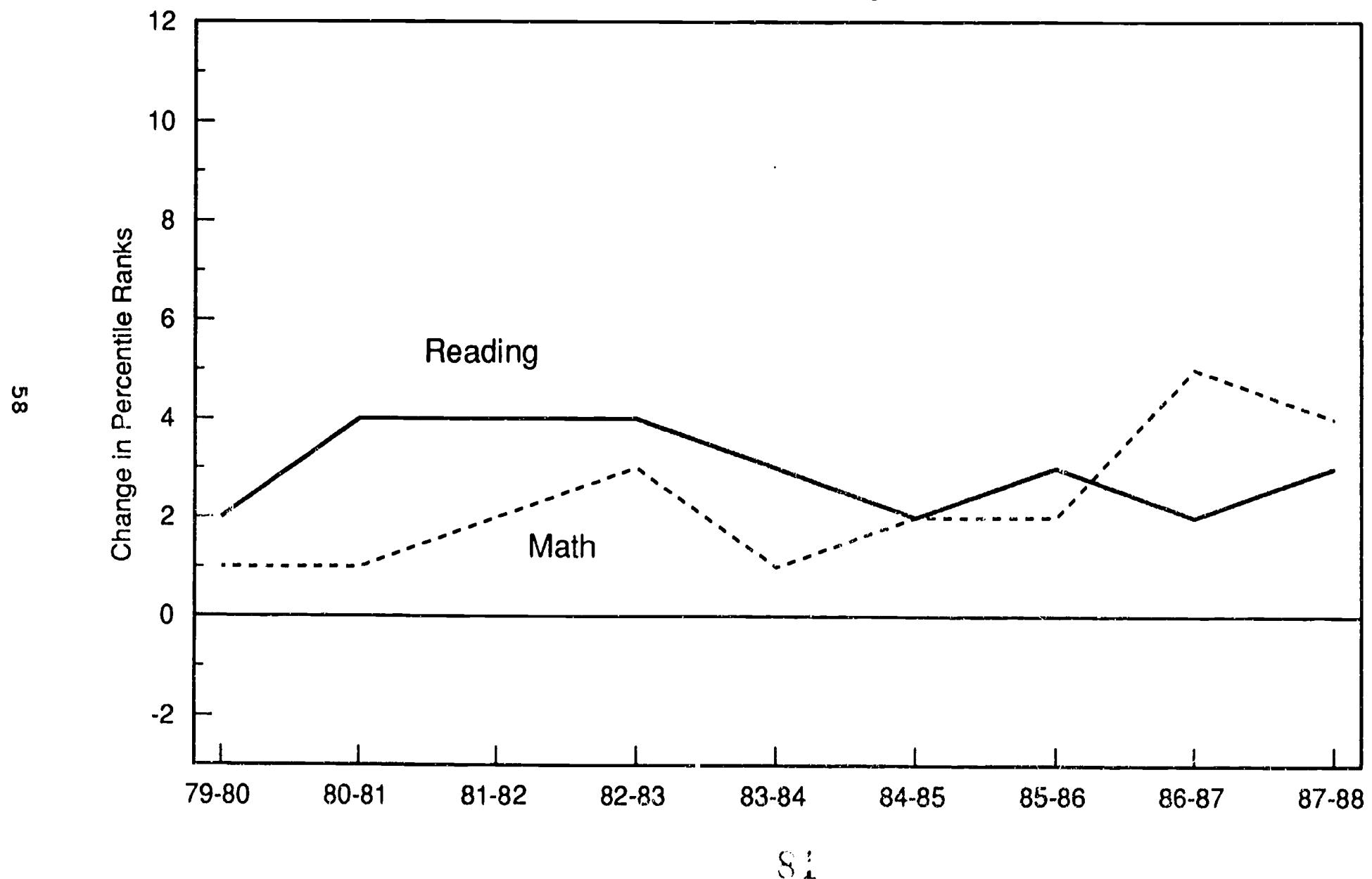


Figure 2.9  
**Changes in Percentile Ranks**  
Grade 10 - Annual Test Cycle

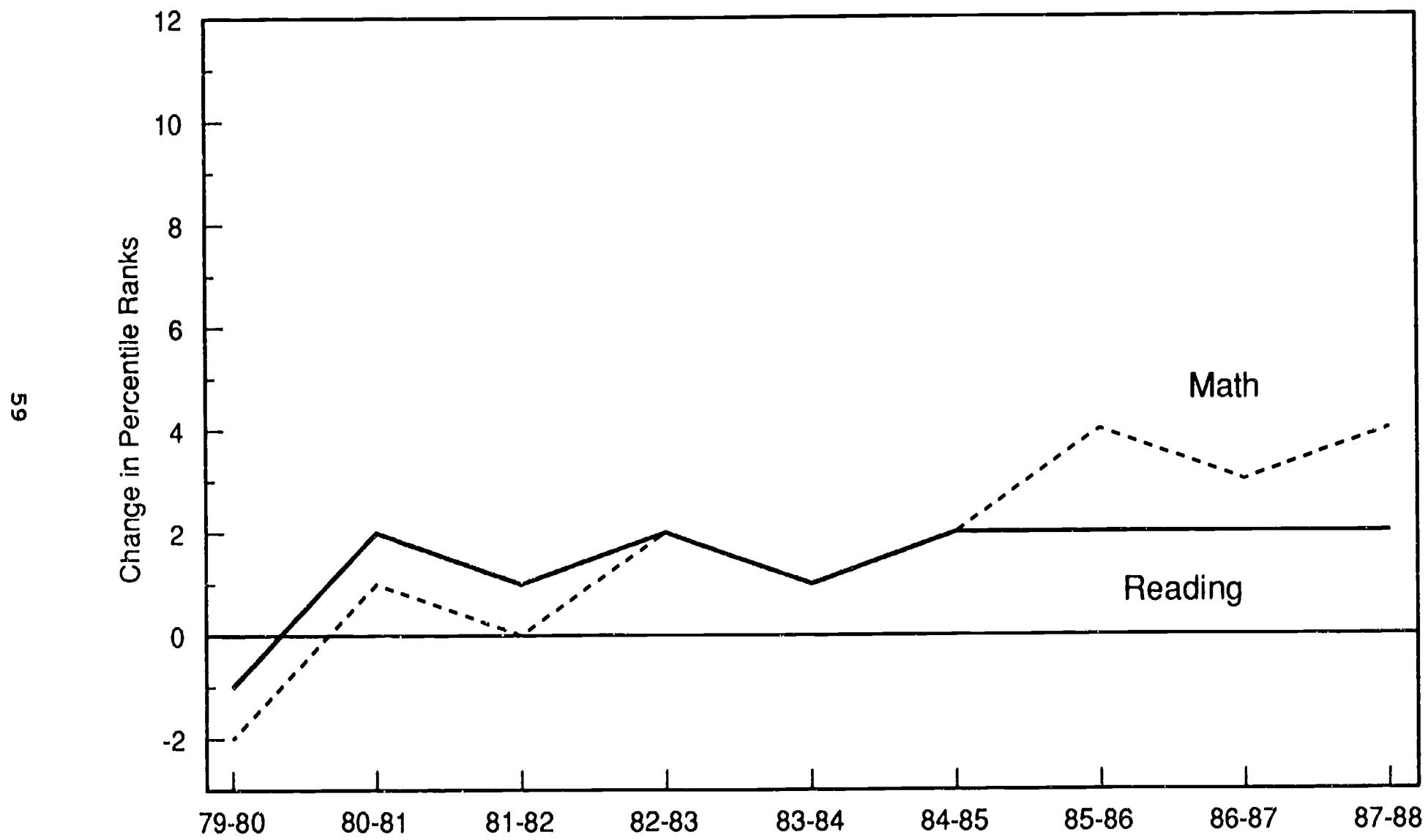


Figure 2.10  
**Changes in Percentile Ranks**  
Grade 11 - Annual Test Cycle

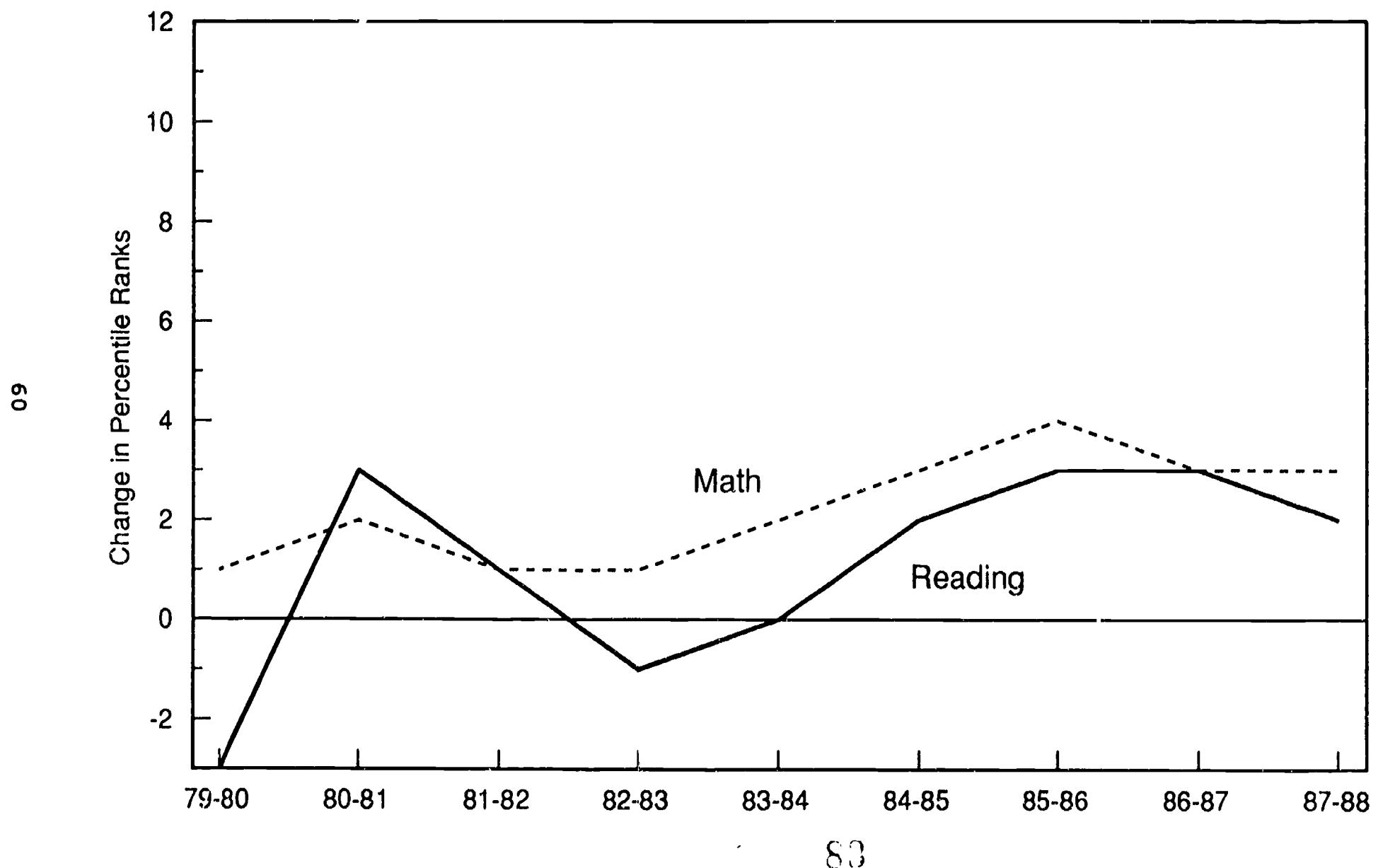


Figure 2.11  
**Changes in Percentile Ranks**  
Grade 12 - Annual Test Cycle

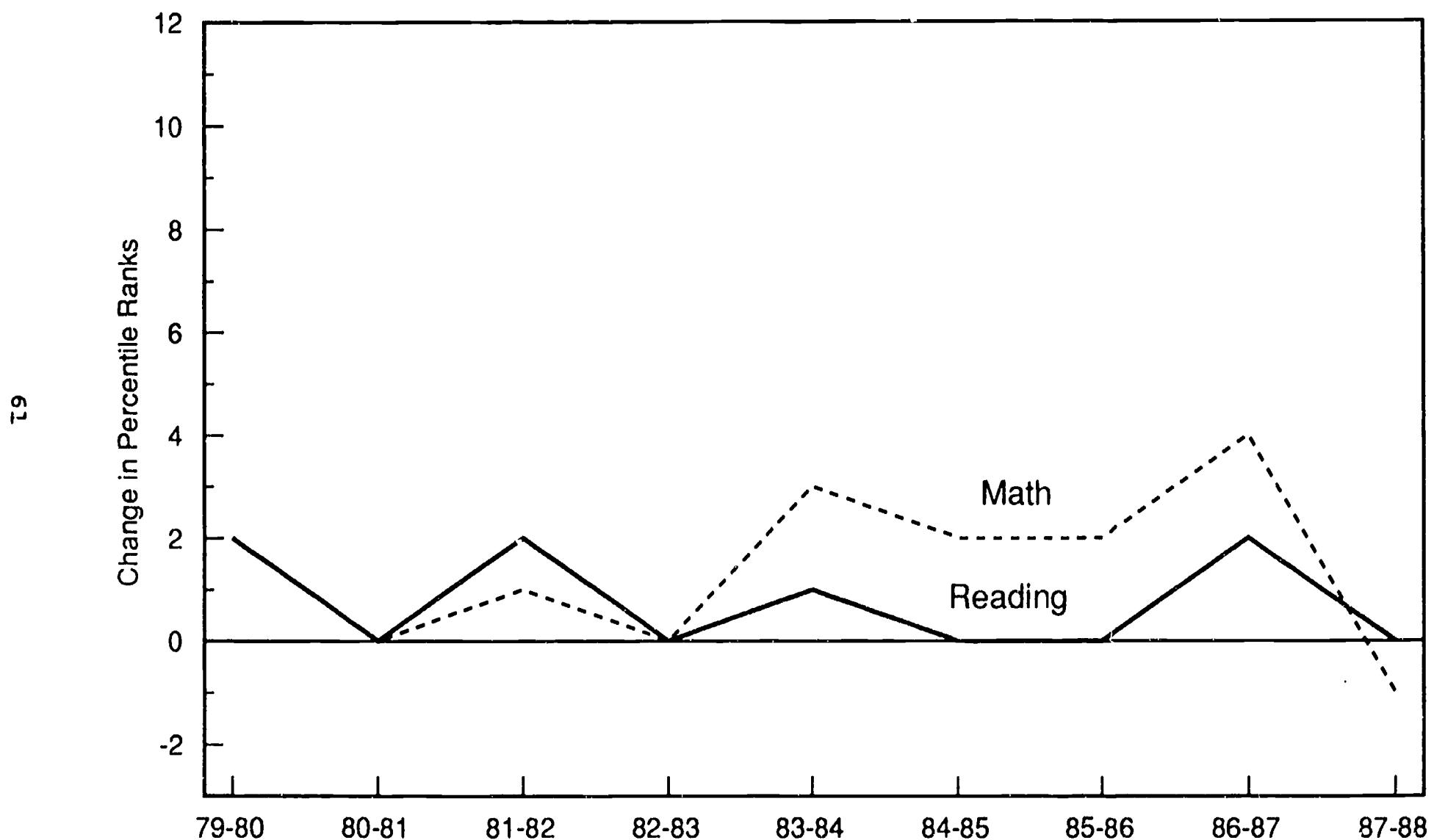


Table 2.5

**Reading Achievement Pretest Percentiles for Chapter 1  
Students Tested on an Annual Cycle -- 1979-80 to 1987-88**

Grade	Pretest Percentiles <sup>a/</sup>								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	27	27	27	30	29	27	28	24	23
3	22	23	22	25	24	23	24	21	21
4	23	22	22	24	24	22	24	22	22
5	22	22	22	23	23	21	23	23	22
6	22	22	23	23	23	21	23	22	22
7	22	22	22	24	23	21	22	23	21
8	21	21	22	22	22	21	21	22	20
9	19	19	20	21	22	20	21	22	20
10	17	17	17	18	18	18	19	22	19
11	14	17	17	19	17	18	19	19	20
12	11	16	15	16	15	17	20	16	21

Table 2.6

**Mathematics Achievement Pretest Percentiles for Chapter 1  
Students Tested on an Annual Cycle -- 1979-80 to 1987-88**

Grade	Pretest Percentiles <sup>a/</sup>								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	34	34	30	38	34	32	30	27	27
3	30	30	26	32	30	30	29	26	27
4	27	27	27	29	28	27	27	25	25
5	25	28	27	27	27	27	26	26	25
6	24	25	26	27	27	27	29	26	25
7	22	25	24	25	25	24	26	27	25
8	22	24	25	26	27	27	28	26	26
9	22	25	25	28	30	27	28	26	25
10	20	21	22	25	23	25	28	29	23
11	22	21	24	27	24	27	32	30	24
12	21	22	21	26	21	27	33	25	32

a/ As can be seen in Appendix Table E.2, the number of students tested on an annual cycle has increased since 1979-80. Differences in pretest percentiles may be due in part to this increase.

## CHAPTER 3

### ALLOCATION AND COST INFORMATION FOR CHAPTER 1 LEA PROGRAMS

This chapter presents national and state-by-state information on the 1987-88 funding for Chapter 1 LEA programs for the 50 states, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs. Information on both total allocations and per-participant Chapter 1 funding is presented.

#### CHAPTER 1 ALLOCATIONS

Chapter 1 funding for 1987-88 was approximately \$3.4 billion, a 13 percent increase from the 1986-87 allocations.

Chapter 1 allocations to the 50 states, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs for 1987-88 totaled approximately \$3.4 billion, a 13 percent increase from the 1986-87 allocations of just over \$3.0 billion.<sup>21</sup>

State Chapter 1 allocations for 1987-88 ranged from \$4.3 million in Wyoming to \$360 million in New York. All states received an increased allocation from 1986-87 to 1987-88, ranging from 2 percent in Oklahoma and Puerto Rico to 21 percent in Vermont. (Table 3.1)

Nine states and Puerto Rico received grants of over \$100 million, and 8 states received grants of under \$10 million.

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<sup>21</sup>The total 1987-88 Chapter 1 allocations also included \$14.1 million for American Samoa, Guam, the Trust Territories, Northern Marianas, and the Virgin Islands. These territories are not included in this report, and their funds are not included in the total reported.

## CHAPTER 1 ALLOCATIONS PER PARTICIPANT

The Chapter 1 allocations per participant for LEA programs was \$696 in 1987-88, an 8 percent increase from the previous year's figure of \$645 per participant.

In 1987-88, for the nation as a whole, Chapter 1 allocations per participant equalled \$696. In individual states, allocations per participant ranged from a low of \$380 in California, to a high of \$1,478 per participant in the Bureau of Indian Affairs. Only six states and Puerto Rico had Chapter 1 allocations per participant of less than \$600. Six states and the Bureau of Indian Affairs had Chapter 1 allocations per participant of \$1,000 or more.<sup>22</sup> (Table 3.2)

Overall, there was an 8 percent increase in Chapter 1 allocations per participant from 1986-87 to 1987-88. Individually the differences ranged from a 5 percent decrease in Nevada to a 24 percent increase in Maine. Four states experienced decreases between 1986-87 and 1987-88. Forty-five states, the District of Columbia, and Puerto Rico had increases between 1986-87 and 1987-88. Chapter 1 allocations per participant in Rhode Island and the Bureau of Indian Affairs remained virtually unchanged. (Table 3.2)

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<sup>22</sup>The Chapter 1 allocations per participant figures were computed in the following way: the allocation to the state for a given year was divided by the number of Chapter 1 participants the state reported during that year. The allocation information was obtained from the ED Budget Office. This calculation does not take into account funds that may have been held over from the previous year.

Table 3.1

Chapter 1 Allocations for LEA Programs --  
1986-87 and 1987-88

State	1986-87 LEA Grants	1987-88 LEA Grants	% Change 86-87 to 87-88
Alabama	62,715,845	69,979,432	12
Alaska	5,015,560	5,575,106	11
Arizona	31,534,906	34,398,311	9
Arkansas	36,252,986	41,003,145	13
California	287,891,034	328,980,805	14
Colorado	28,887,092	32,549,408	13
Connecticut	33,438,207	37,731,591	13
Delaware	8,855,741	9,927,070	12
District of Columbia	13,825,197	15,475,830	12
Florida	126,830,704	145,714,734	15
Georgia	81,565,310	92,033,065	13
Hawaii	9,890,327	10,550,433	7
Idaho	8,856,541	9,932,077	12
Illinois	144,481,176	160,259,570	11
Indiana	46,229,392	53,484,252	16
Iowa	27,293,094	29,937,454	10
Kansas	21,366,883	23,794,096	11
Kentucky	54,398,710	61,206,973	13
Louisiana	74,544,409	85,371,120	15
Maine	13,025,103	15,231,892	17
Maryland	52,844,185	59,447,701	12
Massachusetts	67,788,722	79,084,341	17
Michigan	122,975,435	134,616,894	9
Minnesota	37,662,572	42,299,818	12
Mississippi	57,447,668	64,700,722	13
Missouri	49,642,585	55,511,550	12
Montana	10,071,157	11,125,472	10
Nebraska	15,948,150	17,829,193	12
Nevada	5,442,706	5,880,822	8
New Hampshire	7,161,390	8,145,018	14
New Jersey	101,627,361	114,164,408	12
New Mexico	24,358,688	27,057,777	11
New York	321,529,318	360,700,967	12
North Carolina	72,399,812	81,753,427	13
North Dakota	7,071,194	8,011,530	13
Ohio	109,122,668	124,756,042	14
Oklahoma	34,645,546	35,186,467	2
Oregon	26,950,191	29,395,753	9
Pennsylvania	148,850,157	176,987,352	19
Rhode Island	11,747,508	13,171,601	12
South Carolina	47,254,856	53,351,457	13
South Dakota	9,204,233	10,091,582	10
Tennessee	64,077,628	72,745,604	14
Texas	201,060,728	234,597,629	17
Utah	10,574,087	11,794,375	12
Vermont	6,286,218	7,637,091	21
Virginia	58,768,834	66,643,072	13
Washington	40,231,816	44,298,615	10
West Virginia	28,017,814	31,905,548	14
Wisconsin	46,815,897	52,413,866	12
Wyoming	3,830,680	4,287,286	12
Puerto Rico	109,268,447	111,858,650	2
Bureau of Indian Affairs	22,225,768	24,835,195	12
Nation	3,049,802,236	3,439,423,189	13

Table 3.2  
Chapter 1 Allocations Per Participant for LEA Programs --  
1986-87 and 1987-88

State	1986-87 Allocations Per Participant	1987-88 Allocations Per Participant	% Change 86-87 to 87-88
Alabama	\$546	\$578	6
Alaska	1,058	1,107	5
Arizona	617	628	2
Arkansas	580	647	11
California	368	380	3
Colorado	800	895	12
Connecticut	614	683	11
Delaware	824	927	12
District of Columbia	865	951	10
Florida	936	1,070	14
Georgia	601	660	10
Hawaii	693	737	6
Idaho	496	524	6
Illinois	906	1,001	10
Indiana	452	534	18
Iowa	745	729	-2
Kansas	625	680	9
Kentucky	590	693	17
Louisiana	700	794	13
Maine	501	622	24
Maryland	916	975	7
Massachusetts	854	1,016	19
Michigan	845	903	7
Minnesota	636	693	9
Mississippi	607	640	5
Missouri	668	677	1
Montana	727	886	22
Nebraska	598	675	13
Nevada	668	632	-5
New Hampshire	712	691	-3
New Jersey	554	597	8
New Mexico	837	868	4
New York	1,000	1,045	5
North Carolina	636	717	13
North Dakota	774	851	10
Ohio	835	919	10
Oklahoma	591	611	3
Oregon	632	663	5
Pennsylvania	703	784	12
Rhode Island	860	863	*
South Carolina	920	992	8
South Dakota	719	760	6
Tennessee	625	713	14
Texas	567	616	9
Utah	479	467	-3
Vermont	683	777	14
Virginia	799	915	15
Washington	644	691	7
West Virginia	883	987	12
Wisconsin	703	795	13
Wyoming	953	1,172	23
Puerto Rico	437	454	4
Bureau of Indian Affairs	1,473	1,478	*
Nation	\$645	\$696	8

\* Less than 1 percent.

## CHAPTER 4

### INFORMATION ON STATE AGENCY NEGLECTED OR DELINQUENT PROGRAMS FOR 1987-88

This chapter provides an overview of Chapter 1 state agency neglected or delinquent (N or D) programs for 1987-88. The information that is provided is similar to that found earlier for Chapter 1 LEA grants. Participation counts are detailed by institutional designation (neglected, delinquent, and adult correctional), age span, service area, gender, and race/ethnicity. The chapter concludes with a discussion of the state allocations for this program.

Because these participants were housed in state institutions, the Chapter 1 programs through which they were served were often not administered by the State Department of Education. The Chapter 1 state agency N or D programs could be administered, for example, through the State Department of Corrections or the State Bureau of Prisons.

All of the states, the District of Columbia, and Puerto Rico reported individuals receiving services through State Agency N or D programs. The Bureau of Indian Affairs reported no participants in these programs.

#### PARTICIPATION BY INSTITUTIONAL DESIGNATION

Sixty percent of the state agency N or D participants were classified as delinquent, and 37 percent were classified as adult correctional.

The total number of participants in Chapter 1 state agency N or D programs in 1987-88 was 52,370. Sixty percent of these participants were classified as delinquent, 37 percent were classified as adult correctional, and 4 percent were classified as neglected.<sup>23</sup> (Table 4.1) The total number of participants in 1987-88 represented an 7 percent decrease over the number of participants in 1986-87; however, the distribution by institutional designation remained about the same.<sup>24</sup>

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<sup>23</sup>The percents do not add to 100 due to rounding.

<sup>24</sup>There were 56,236 participants in Chapter 1 state agency N or D programs in 1986-87. Sixty-two percent were classified as delinquent, 32 percent were classified as adult correctional, and 6 percent were classified as neglected.

## PARTICIPATION BY AGE SPAN

Fifty-seven percent of the state agency N or D participants were 17 through 21 years old.

The largest age group, 57 percent of the participants in Chapter 1 state agency N or D programs in 1987-88, were those participants who were 17 through 21 years old. Thirty-eight percent were 14 through 16 years old, and 5 percent were 13 years or younger. (Table 4.1)

Among participants in the 0 through 9 age span, virtually all were classified as neglected or delinquent. In the 10 through 13 age span, 79 percent were classified as delinquent and 19 percent were classified as neglected. Over 90 percent of the participants in the 14 through 16 year old age span were classified as delinquent. The final age span, 17 through 21 years old, consisted of 37 percent delinquent and 62 percent adult correctional. (Table 4.1)

## PARTICIPATION BY SERVICE AREA

Seventy-one percent of the state agency N or D participants received reading instruction and 68 percent received mathematics instruction.

Most of the participants in Chapter 1 state agency N or D programs in 1987-88 received reading instruction (71 percent). Those receiving mathematics instruction totaled 68 percent of all participants. The overall distributions of instructional services was fairly comparable to the individual distributions by type of institutional designation. For example, over 25 percent of the participants, overall and by institutional designation, received other language arts instruction. For mathematics instruction, a larger proportion of delinquent participants (74 percent) received mathematics instruction than neglected participants (68 percent), adult correctional participants (58 percent), or overall. (Table 4.2)

While the distribution of instructional services remained fairly constant regardless of the institutional designation, there were differences in the distribution of support services. Few neglected participants received any support services. There were delinquent participants in each category of support services, although the percentages were low. Only among adult correctional participants was there a large percentage receiving support services. Twenty-four percent of the adult correctional participants received attendance, social work, and guidance services. (Table 4.2)

As with Chapter 1 LEA programs, some states did not provide supporting services, while all states provided instructional services. Thirty-four states did not provide supporting services to state agency N or D participants.

#### PARTICIPATION BY GENDER

Eighty-eight percent of the state agency N or D participants were male and 12 percent were female.

There were 52,233 participants reported by gender in Chapter 1 state agency N or D programs in 1987-88. Eighty-eight percent were male, and 12 percent were female.<sup>25</sup>

#### PARTICIPATION BY RACIAL/ETHNIC CLASSIFICATION

Forty-five percent of the state agency N or D participants were black.

There were 51,871 participants reported by racial/ethnic classification. Forty-five percent were black and 37 percent were white. Sixteen percent were Hispanic, and 2 percent were American Indian or Alaskan Native, and Asian or Pacific Islander.<sup>26</sup> (Table 4.3)

#### CHAPTER 1 STATE AGENCY N OR D ALLOCATIONS

The allocation for Chapter 1 state agency N or D programs in 1987-88 was \$32.6 million.

The 1987-88 allocation for Chapter 1 state agency N or D programs for the 50 states, the District of Columbia, and Puerto Rico was \$32.6 million, an increase of 4 percent from the

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<sup>25</sup>The total reported by gender is not the same as the total reported by age span because Arkansas did not report the same number of participants by gender as by age span.

<sup>26</sup>The total reported by racial/ethnic classification is not the same as the total reported by age span because in four states, Arkansas, California, Vermont, and Washington, the total number reported by racial/ethnic classification was not the same as the total number reported by age span. The largest difference was found in Vermont, where 224 participants were not reported by racial/ethnic classification.

1986-87 funding.<sup>27</sup> Levels of funding ranged from \$8,267 in Rhode Island to \$3.5 million in New York. (Table 4.4)

Eleven states received over \$1 million each for their Chapter 1 state agency N or D program. Nine of these states (California, Florida, Illinois, Michigan, New Jersey, New York, Ohio, Pennsylvania, and Texas) were also among the states receiving the largest Chapter 1 LEA grants. In addition, seven states received less than \$100,000. (Table 4.4)

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<sup>27</sup>The 1986-87 Chapter 1 state agency N or D allocation was \$31,214,000 for the 50 states, the District of Columbia, and Puerto Rico.

Table 4.1

**Chapter 1 State Agency Neglected or Delinquent Students by Age Span,  
Neglected, Delinquent, Adult Correctional, and Total -- 1987-88**

<b>Age Span (Years)</b>	<b>Neglected</b>		<b>Delinquent</b>		<b>Adult Correctional</b>		<b>Total</b>	
	<b>Number</b>	<b>(Percent<sup>a/</sup>)</b>	<b>Number</b>	<b>(Percent<sup>a/</sup>)</b>	<b>Number</b>	<b>(Percent<sup>a/</sup>)</b>	<b>Number</b>	<b>(Percent<sup>a/</sup>)</b>
0-9	97	(5)	154	(*)	17	(*)	268	(1)
10-13	440	(23)	1,844	(6)	38	(*)	2,322	(4)
14-16	1,086	(57)	18,074	(58)	493	(3)	19,653	(38)
17-21	273	(14)	11,182	(36)	18,535	(96)	29,990	(57)
<b>Total</b>	<b>1,896</b>	<b>(100)</b>	<b>31,254</b>	<b>(100)</b>	<b>19,220</b>	<b>(100)</b>	<b>52,370</b>	<b>(100)</b>

\* Less than 1 percent.

a/ Percents may not add to 100 due to rounding.

Table 4.2

Chapter 1 State Agency Neglected or Delinquent Students Receiving Chapter 1 Services  
by Service Area, Neglected, Delinquent, Adult Correctional, and Total -- 1987-88

	Neglected	Delinquent		Adult Correctional		Total		
	Number (Percent) (Served)							
<b><u>Instructional</u></b>								
Reading	1,325	(70)	23,674	(76)	12,348	(64)	37,347	(71)
Other Language Arts	527	(28)	8,152	(26)	5,456	(28)	14,135	(27)
Mathematics	1,292	(68)	23,153	(74)	11,114	(58)	35,559	(68)
Other Instructional	144	(8)	2,764	(9)	1,426	(7)	4,334	(8)
Participant Count <sup>a/</sup>	1,896		31,254		19,220		52,370	
<b><u>Supporting</u></b>								
Attendance, Social Work, and Guidance	156	(8)	3,616	(12)	4,630	(24)	8,402	(16)
Health and Nutrition	0	(0)	860	(3)	443	(2)	1,303	(2)
Transportation	110	(6)	206	(1)	0	(0)	316	(1)
Other Supporting	138	(7)	235	(1)	1,471	(8)	1,844	(4)
Participant Count <sup>a/</sup>	1,896		31,254		19,220		52,370	

<sup>a/</sup> Less than 1 percent.

<sup>a/</sup> These figures represent the number of participants reported by age span and by institutional designation (see Table 4.1).

**Table 4.3**  
**Chapter I State Agency Neglected or Delinquent Students**  
**by Racial/Ethnic Classification -- 1987-88**

Racial/Ethnic Classification	Number	Percent
American Indian or Alaskan Native	771	1
Asian or Pacific Islander	367	1
Black, not Hispanic	23,376	45
Hispanic	8,089	16
White, not Hispanic	19,268	37
<b>Total<sup>a/</sup></b>	<b>51,871</b>	<b>100</b>

a/ The total on this table will not correspond to the total on Table 4.1 because in four states, Arkansas, California, Vermont, and Washington, the total number reported by racial/ethnic classification was not the same as the total number reported by age span. The largest difference was found in Vermont, where 224 participants were not reported by racial/ethnic classification.

Table 4.4

Chapter 1 Allocations for the  
State Agency Neglected or Delinquent Program --  
1987-88

State	1987-88 N or D Allocation
Alabama	367,404
Alaska	189,213
Arizona	524,844
Arkansas	280,452
California	3,042,833
Colorado	370,379
Connecticut	531,818
Delaware	155,228
District of Columbia	582,336
Florida	1,382,423
Georgia	785,633
Hawaii	97,959
Idaho	88,789
Illinois	1,120,081
Indiana	872,439
Iowa	357,755
Kansas	616,606
Kentucky	435,987
Louisiana	618,043
Maine	185,363
Maryland	1,135,990
Massachusetts	572,244
Michigan	1,332,099
Minnesota	210,482
Mississippi	330,052
Missouri	251,212
Montana	171,063
Nebraska	119,485
Nevada	196,025
New Hampshire	82,030
New Jersey	1,408,077
New Mexico	322,844
New York	3,524,327
North Carolina	1,070,372
North Dakota	65,678
Ohio	1,656,918
Oklahoma	161,829
Oregon	794,379
Pennsylvania	1,157,324
Rhode Island	8,267
South Carolina	754,404
South Dakota	93,697
Tennessee	816,260
Texas	1,446,750
Utah	198,398
Vermont	134,915
Virginia	644,883
Washington	76,948
West Virginia	196,043
Wisconsin	625,851
Wyoming	165,332
Puerto Rico	226,237
 Nation	 \$32,616,000

## APPENDIX A

### METHODOLOGY

State Performance Reports for ECIA Chapter 1 Local Education Agency and State Agency Neglected or Delinquent programs funded in school year 1987-88 were submitted to the U.S. Department of Education (ED) in the winter and early spring of 1988. These reports consisted of participation data and achievement data. Upon receipt, personnel at ED entered the participation data into Lotus 1-2-3 files and performed preliminary internal consistency checks on the data. These checks consisted of verifying that the totals for gender, year of birth, grade, and racial/ethnic group equalled the sum of their parts. In addition, comparisons were made between the 1987-88 data and the 1986-87 data. When discrepancies were found, the reporting offices were contacted for additional information and initial updates were made to the files.

Decision Resources Corporation (DRC) was contracted by the Office of Planning, Budget, and Evaluation (OPBE) to review, correct, and summarize the State Performance Reports. DRC received the performance data, which were already in Lotus 1-2-3 files, and the achievement data, which had not been computerized, from ED.

The achievement data were entered into Lotus 1-2-3 files by DRC. This involved creating files for each testing cycle (annual and fall-spring) for students tested in reading and mathematics. The annual cycle consisted of both fall-fall and spring-spring testing, and in some cases the two were combined into one overall annual achievement figure.

After all of the participation and achievement data were entered, data checks were conducted. The purpose of the data checks was to flag potential problems, not to claim that the information was necessarily in error. In the case of the participation data, particular emphasis was placed on changes from 1986-87 to 1987-88 that appeared to be very high, taking into account both the absolute numbers and the percents involved. No specific percentage was targeted, but any shifts that might indicate a new trend in services was noted. These changes were highlighted on state-by-state listings of the reported data.

For the achievement data, any 1987-88 gain in a state that differed by more than two standard deviations from the 1986-87 national overall gain for each grade and test cycle was highlighted. For example, the 1986-87 national NCE gain score for grade 2 reading on an annual test cycle was 2.8. State NCE

gain scores for grade 2 reading on an annual cycle in 1987-88 that were above 8.3 or below -2.7 were more than two standard deviations from the national overall gain score from the previous year, and would have been highlighted by the edit check process. An additional check on the achievement data was to compare the total number of students tested, combining both cycles, to the total number of students receiving services.

The highlighted state-by-state listings were then sent to the state Chapter 1 coordinators with a letter explaining the edit check process. One week later DRC began contacting the Chapter 1 coordinators by telephone to verify that highlighted items were correct or to receive explanations for reported year to year changes.

In several instances, states provided revisions to their 1986-87 data and their 1987-88 data.<sup>28</sup> In most cases, the information was correct, and explanations were provided for the highlighted items. Additional revisions were made by DRC to distribute participants with unknown demographic characteristics.

At the conclusion of this process, DRC entered the revisions into the Chapter 1 data bases, and produced two documents for ED. These documents were a State Feedback Report for each State Education Agency, and this summary report entitled A Summary of State Chapter 1 Participation and Achievement Information for 1987-88.

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<sup>28</sup>To the extent that states revised their figures for 1986-87, the numbers found in this report will not correspond to those found in previous documents displaying State Performance Report information.

**APPENDIX B**  
**CHAPTER 1 PARTICIPANTS BY GRADE**

This appendix presents national tables of Chapter 1 participants by grade. The tables include participation counts for 1986-87 and 1987-88, and the percent change in number for each grade. Tables are included for public participants, nonpublic participants, and total participants.

**Table B.1**  
**Chapter 1 Public Participants by Grade --**  
**1986-87 and 1987-88**

Grade	1986-87		1987-88		Percent Change in Number
	Number	Percent <sup>a/</sup>	Number	Percent <sup>a/</sup>	
Pre-Kindergarten	57,223	1	68,236	1	19
Kindergarten	290,864	6	312,433	6	7
1	628,123	14	679,419	14	8
2	612,045	13	646,427	13	6
3	582,712	13	608,604	13	4
4	539,235	12	557,744	12	3
5	484,753	11	503,993	10	4
6	403,261	9	415,173	9	3
7	311,398	7	313,299	7	1
8	273,480	6	272,994	6	*
9	190,951	4	200,123	4	5
10	116,648	3	117,723	2	1
11	62,201	1	66,965	1	8
12	35,830	1	43,185	1	21
Ungraded <sup>b/</sup>	6,037	*	1,712	*	-72
Total	4,594,761 <sup>c/</sup>	100	4,808,030 <sup>c/</sup>	100	5

\* Less than 1 percent.

a/ Percents may not add to 100 due to rounding.

b/ Six states (Colorado, Connecticut, Michigan, Mississippi, Rhode Island, and Vermont) reported public ungraded participants in 1986-87, and four states (Connecticut, Louisiana, Michigan, and Rhode Island) in 1987-88.

c/ The total nonpublic participation count includes 7,016 participants in 1986-87 and 6,793 participants in 1987-88 in schools with religious affiliation in Puerto Rico who are not included in the counts by grade.

Table B.2  
Chapter 1 Nonpublic Participants by Grade --  
1986-87 and 1987-88

Grade	1986-87		1987-88		Percent Change in Number
	Number	Percent	Number	Percent	
Pre-Kindergarten	588	*	302	*	-49
Kindergarten	4,000	3	4,505	3	13
1	15,321	11	17,164	12	12
2	19,523	14	20,924	15	7
3	19,574	14	20,873	15	7
4	17,069	12	18,824	13	10
5	14,722	11	16,448	12	12
6	12,554	9	13,576	10	8
7	9,030	7	9,153	6	1
8	7,638	6	7,255	5	-5
9	5,046	4	3,129	2	-38
10	3,069	2	1,692	1	-45
11	1,661	1	1,032	1	-38
12	851	1	577	*	-32
Ungraded <sup>a/</sup>	238	*	245	*	3
Total	137,900 <sup>b/</sup>	100 <sup>c/</sup>	142,492 <sup>b/</sup>	100 <sup>c/</sup>	3

\* Less than 1 percent.

- <sup>a/</sup> Four states (Connecticut, Michigan, Mississippi, and Wisconsin) reported nonpublic ungraded participants in 1986-87 and three states (Connecticut, Michigan, and Wisconsin) in 1987-88.
- <sup>b/</sup> The total nonpublic participation count includes 7,016 participants in 1986-87 and 6,793 participants in 1987-88 in schools with religious affiliation in Puerto Rico who are not included in the counts by grade.
- <sup>c/</sup> The percents by grade do not add to 100 because of 7,016 nonpublic participants in 1986-87 and 6,793 nonpublic participants in 1987-88 in religiously affiliated schools in Puerto Rico who are not included in the counts by grade.

Table B.3  
Chapter I Total Participants by Grade --  
1986-87 and 1987-88

Grade	1986-87		1987-88		Percent Change in Number
	Number	Percent	Number	Percent	
Pre-Kindergarten	57,811	1	68,538	1	19
Kindergarten	294,864	6	316,938	6	7
1	643,444	14	696,583	14	8
2	631,568	13	667,351	13	6
3	602,286	13	629,477	13	5
4	556,304	12	576,568	12	4
5	499,475	11	520,441	11	4
6	415,815	9	428,749	9	3
7	320,428	7	322,452	7	1
8	281,118	6	280,249	6	*
9	195,997	4	203,252	4	4
10	119,717	3	119,415	2	*
11	63,862	1	67,997	1	6
12	36,681	1	43,762	1	19
Ungraded <sup>a/</sup>	6,275	*	1,957	*	-69
Total	4,732,661 <sup>b/</sup>	100 <sup>c/</sup>	4,950,522 <sup>b/</sup>	100 <sup>c/</sup>	5

\* Less than 1 percent.

- a/ Seven states (Colorado, Connecticut, Michigan, Mississippi, Rhode Island, Vermont, and Wisconsin) reported ungraded counts in 1986-87 and five states (Connecticut, Louisiana, Michigan, Rhode Island, and Wisconsin) in 1987-88.
- b/ The total participation count includes 7,016 nonpublic participants in 1986-87 and 6,793 nonpublic participants in 1987-88 in schools with religious affiliation in Puerto Rico who are not included in the counts by grade.
- c/ The percents by grade do not add to 100 because of 7,016 nonpublic participants in 1986-87 and 6,793 nonpublic participants in 1987-88 in religiously affiliated schools in Puerto Rico who are not included in the counts by grade.

## **APPENDIX C**

### **SELECTED PARTICIPATION INFORMATION BY STATE FOR 1979-80 TO 1987-88**

This appendix presents state-by-state tables of selected participation information for 1979-80 to 1987-88. The tables are provided in the following order:

- o **Table C.1 --** the number and percent of public and nonpublic participants, as well as the number of total participants;
- o **Table C.2 --** the number and percent of public and nonpublic participants who received reading and mathematics;
- o **Table C.3 --** the number and percent of total FTE staff who were teachers and teacher aides in 1987-88; and
- o **Table C.4 --** the number and percent of total FTE staff who were administrators, teachers, or teacher aides.

Table C.1  
Number and Percent of Public and Nonpublic School  
Participants, by State -- 1979-80 to 1987-88

Nation		TOTAL PUBLIC PARTICIPANTS	%	TOTAL NONPUBLIC PARTICIPANTS	%	TOTAL PARTICIPANTS
	1979-80	4,973,708	96	189,114	4	5,162,822
	1980-81	4,862,308	96	213,499	4	5,075,807
	1981-82	4,434,447	96	184,084	4	4,618,531
	1982-83	4,270,424	96	177,210	4	4,447,634
	1983-84	4,381,975	96	190,660	4	4,572,635
	1984-85	4,528,177	96	184,532	4	4,712,709
	1985-86	4,611,948	97	127,922	3	4,739,870
	1986-87	4,594,761	97	137,900	3	4,732,661
	1987-88	4,808,030	97	142,492	3	4,950,522
Alabama	1979-80	129,628	99	1,221	1	130,849
	1980-81	130,523	99	1,103	1	131,626
	1981-82	121,092	99	1,039	1	122,131
	1982-83	109,958	99	985	1	110,943
	1983-84	103,399	99	825	1	104,224
	1984-85	115,107	99	780	1	115,887
	1985-86	117,556	100	99	0	117,555
	1986-87	114,653	100	125	0	114,778
	1987-88	120,093	99	966	1	121,059
Alaska	1979-80	5,395	98	87	2	5,482
	1980-81	4,585	98	103	2	4,688
	1981-82	4,689	98	86	2	4,775
	1982-83	4,471	98	93	2	4,564
	1983-84	4,299	98	91	2	4,390
	1984-85	4,103	97	114	3	4,217
	1985-86	4,212	98	89	2	4,301
	1986-87	4,701	99	39	1	4,740
	1987-88	4,810	96	226	4	5,036
Arizona	1979-80	65,661	98	1,536	2	67,197
	1980-81	69,672	98	1,344	2	71,016
	1981-82	41,522	95	2,049	5	43,581
	1982-83	40,356	98	651	2	41,007
	1983-84	42,147	99	630	1	42,777
	1984-85	44,415	98	1,038	2	45,453
	1985-86	62,283	99	543	1	62,826
	1986-87	49,905	98	1,200	2	51,105
	1987-88	54,009	99	773	1	54,782
Arkansas	1979-80	83,601	99	970	1	84,571
	1980-81	81,188	99	1,159	1	82,347
	1981-82	70,893	99	542	1	71,435
	1982-83	66,605	99	542	1	67,147
	1983-84	66,549	99	506	1	67,055
	1984-85	66,286	99	573	1	66,859
	1985-86	65,653	100	75	0	65,728
	1986-87	62,108	99	352	1	62,460
	1987-88	63,053	99	367	1	63,420
California	1979-80	572,255	98	14,239	2	586,494
	1980-81	521,627	98	11,048	2	532,675
	1981-82	517,900	97	14,077	3	531,977
	1982-83	569,489	97	20,398	3	589,887
	1983-84	605,399	97	20,502	3	625,901
	1984-85	636,837	97	20,606	3	657,443
	1985-86	647,107	98	11,844	2	658,951
	1986-87	765,795	98	16,126	2	781,921
	1987-88	848,999	98	17,877	2	866,876
Colorado	1979-80	38,952	97	1,032	3	39,984
	1980-81	37,613	97	1,060	3	38,673
	1981-82	33,563	95	1,868	5	35,431
	1982-83	32,928	98	799	2	33,727
	1983-84	33,432	97	981	3	34,413
	1984-85	37,512	98	662	2	38,174
	1985-86	38,742	99	354	1	39,096
	1986-87	35,750	99	338	1	36,088
	1987-88	36,088	99	276	1	36,364
Connecticut	1979-80	55,630	92	4,873	8	60,503
	1980-81	57,270	93	4,043	7	61,313
	1981-82	45,368	94	2,848	6	48,216
	1982-83	30,752	94	1,968	6	31,720
	1983-84	48,399	95	2,560	5	50,959
	1984-85	52,511	94	3,135	6	55,646
	1985-86	51,593	96	2,297	4	53,890
	1986-87	51,048	94	3,426	6	54,474
	1987-88	52,113	94	3,168	6	55,281

Table C.1 (contd.)

	TOTAL PUBLIC PARTICIPANTS	%	TOTAL NONPUBLIC PARTICIPANTS	%	TOTAL PARTICIPANTS
<b>Delaware</b>	1979-80	11,105	91	1,062	9
	1980-81	9,921	92	921	8
	1981-82	8,148	92	690	8
	1982-83	8,156	94	508	6
	1983-84	8,225	94	570	6
	1984-85	9,880	94	588	6
	1985-86	9,143	95	524	5
	1986-87	10,238	95	507	5
	1987-88	10,167	95	540	5
<b>D. C.</b>	1979-80	15,905	94	981	6
	1980-81	17,088	95	944	5
	1981-82	13,765	94	875	6
	1982-83	14,780	95	809	5
	1983-84	12,502	96	573	4
	1984-85	15,243	96	565	4
	1985-86	15,776	97	437	3
	1986-87	15,541	97	440	3
	1987-88	15,725	97	540	3
<b>Florida</b>	1979-80	353,493	97	4,390	2
	1980-81	147,354	96	5,865	4
	1981-82	126,707	97	3,724	3
	1982-83	139,718	98	3,573	2
	1983-84	145,459	98	3,178	2
	1984-85	153,881	98	2,995	2
	1985-86	149,889	99	1,710	1
	1986-87	132,741	98	2,714	2
	1987-88	133,738	98	2,404	2
<b>Georgia</b>	1979-80	158,530	99	1,116	1
	1980-81	157,419	99	1,716	1
	1981-82	170,538	99	1,098	1
	1982-83	113,673	100	300	0
	1983-84	132,201	99	1,404	1
	1984-85	169,311	99	1,083	1
	1985-86	122,250	100	354	0
	1986-87	135,467	100	357	0
	1987-88	139,000	100	356	0
<b>Hawaii</b>	1979-80	15,301	98	326	2
	1980-81	15,336	98	336	2
	1981-82	11,195	98	287	2
	1982-83	10,044	98	234	2
	1983-84	9,878	98	214	2
	1984-85	12,080	98	198	2
	1985-86	14,110	100	48	0
	1986-87	14,212	100	68	0
	1987-88	14,223	99	85	1
<b>Idaho</b>	1979-80	16,010	99	187	1
	1980-81	15,699	99	227	1
	1981-82	14,286	99	177	1
	1982-83	13,869	99	129	1
	1983-84	15,637	99	208	1
	1984-85	15,604	99	163	1
	1985-86	16,747	100	82	0
	1986-87	17,739	99	118	1
	1987-88	18,864	99	105	1
<b>Illinois</b>	1979-80	158,203	95	8,036	5
	1980-81	157,217	95	8,001	5
	1981-82	136,230	95	6,538	5
	1982-83	128,201	95	6,850	5
	1983-84	139,340	95	7,031	5
	1984-85	142,064	95	6,809	5
	1985-86	156,167	96	6,448	4
	1986-87	153,267	96	6,195	4
	1987-88	154,509	97	5,596	3
<b>Indiana</b>	1979-80	100,769	96	3,655	4
	1980-81	88,787	97	3,093	3
	1981-82	35,028	96	3,391	4
	1982-83	89,036	96	3,889	4
	1983-84	92,608	97	3,268	3
	1984-85	96,726	96	3,659	4
	1985-86	105,491	99	1,502	1
	1986-87	100,058	98	2,144	2
	1987-88	98,034	98	2,100	2

Table C.1 (contd.)

		TOTAL PUBLIC PARTICIPANTS	%	TOTAL NONPUBLIC PARTICIPANTS	%	TOTAL PARTICIPANTS
Iowa	1979-80	42,688	92	3,919	8	46,607
	1980-81	40,043	92	3,675	8	43,718
	1981-82	36,808	92	3,319	8	40,127
	1982-83	36,956	92	3,269	8	40,225
	1983-84	27,288	93	2,153	7	29,441
	1984-85	23,984	91	2,303	9	26,287
	1985-86	23,516	92	1,944	8	25,460
	1986-87	34,253	93	2,384	7	36,637
Kansas	1987-88	38,723	94	2,327	6	41,050
	1979-80	38,741	95	2,143	5	40,884
	1980-81	40,309	95	1,935	5	42,244
	1981-82	38,439	95	1,848	5	40,287
	1982-83	36,936	96	1,557	4	38,493
	1983-84	33,885	96	1,320	4	35,205
	1984-85	37,290	97	1,303	3	38,593
	1985-86	34,920	98	586	2	35,506
Kentucky	1986-87	33,444	98	762	2	34,206
	1987-88	34,224	98	784	2	35,008
	1979-80	111,914	97	2,967	3	114,881
	1980-81	110,650	97	3,156	3	113,806
	1981-82	104,355	97	2,848	3	107,203
	1982-83	100,129	98	2,496	2	102,625
	1983-84	95,589	97	2,625	3	98,214
	1984-85	101,204	97	3,036	3	104,240
Louisiana	1985-86	99,166	98	2,326	2	101,492
	1986-87	90,153	98	2,014	2	92,167
	1987-88	86,563	98	1,803	2	88,366
	1979-80	155,781	96	7,327	4	163,108
	1980-81	134,285	95	7,577	5	141,862
	1981-82	103,405	95	5,676	5	109,081
	1982-83	95,701	95	5,342	5	101,043
	1983-84	93,646	95	5,263	5	98,909
Maine	1984-85	103,556	95	6,016	5	109,572
	1985-86	106,559	98	1,706	2	108,265
	1986-87	103,755	97	2,709	3	106,464
	1987-88	104,033	97	3,503	3	107,536
	1979-80	25,642	97	838	3	26,480
	1980-81	22,153	96	833	4	22,986
	1981-82	21,936	97	638	3	22,574
	1982-83	21,829	97	745	3	22,574
Maryland	1983-84	21,494	96	783	4	22,277
	1984-85	23,941	97	666	3	24,607
	1985-86	21,561	99	192	1	21,753
	1986-87	25,701	99	305	1	26,006
	1987-88	24,181	99	303	1	24,486
	1979-80	60,803	96	2,481	4	63,284
	1980-81	66,713	96	2,559	4	69,272
	1981-82	56,844	95	2,735	5	59,579
Massachusetts	1982-83	54,840	98	1,197	2	56,037
	1983-84	56,972	98	1,166	2	58,138
	1984-85	66,168	97	1,839	3	68,007
	1985-86	70,101	99	752	1	70,852
	1986-87	55,687	96	2,020	4	57,707
	1987-88	58,580	96	2,376	4	60,956
	1979-80	73,398	90	8,181	10	81,579
	1980-81	83,905	90	9,648	10	93,553
Michigan	1981-82	73,403	90	7,903	10	81,306
	1982-83	65,290	90	7,205	10	72,501
	1983-84	88,827	91	9,207	9	98,034
	1984-85	81,799	92	6,819	8	88,618
	1985-86	81,207	96	3,615	4	84,822
	1986-87	74,963	94	4,392	6	79,355
	1987-88	73,146	94	4,684	6	77,830
	1979-80	164,631	97	4,818	3	169,449
.	1980-81	153,930	97	5,115	3	159,045
	1981-82	138,603	97	4,668	3	143,271
	1982-83	126,037	98	2,871	2	128,908
	1983-84	134,711	97	4,179	3	138,890
	1984-85	137,584	97	3,813	3	141,397
	1985-86	152,556	98	3,187	2	155,743
	1986-87	142,689	98	2,812	2	145,501
	1987-88	146,494	98	2,651	2	149,145

Table C.1 (contd.)

		TOTAL PUBLIC PARTICIPANTS		TOTAL NONPUBLIC PARTICIPANTS		TOTAL PARTICIPANTS
Minnesota	1979-80	65,308	90	6,919	10	72,227
	1980-81	56,713	90	5,987	10	62,700
	1981-82	52,048	90	5,670	10	57,710
	1982-83	50,147	90	5,388	10	55,535
	1983-84	49,091	90	5,294	10	54,385
	1984-85	54,067	91	5,302	9	59,369
	1985-86	53,355	95	3,023	5	56,378
	1986-87	56,330	95	2,843	5	59,173
	1987-88	58,231	95	2,771	5	61,002
Mississippi	1979-80	129,902	99	1,909	1	131,811
	1980-81	129,604	99	1,804	1	131,408
	1981-82	117,934	99	1,732	1	119,666
	1982-83	112,612	98	1,773	2	114,385
	1983-84	98,231	98	1,840	2	100,071
	1984-85	99,270	98	1,996	2	101,266
	1985-86	92,343	99	617	1	92,960
	1986-87	92,996	98	1,687	2	94,683
	1987-88	99,338	98	1,784	2	101,122
Missouri	1979-80	87,216	100	192	0	87,408
	1980-81	95,286	100	201	0	95,487
	1981-82	86,334	100	208	0	86,542
	1982-83	85,689	100	260	0	85,949
	1983-84	83,299	95	3,965	5	87,264
	1984-85	77,351	95	4,021	5	81,372
	1985-86	71,023	96	3,004	4	74,027
	1986-87	71,496	96	2,833	4	74,329
	1987-88	79,563	97	2,458	3	82,021
Montana	1979-80	12,557	97	434	3	12,991
	1980-81	13,504	97	450	3	13,954
	1981-82	11,765	96	459	4	12,224
	1982-83	11,135	96	442	4	11,577
	1983-84	11,338	96	426	4	11,764
	1984-85	12,345	98	268	2	12,613
	1985-86	13,103	98	239	2	13,342
	1986-87	13,665	99	191	1	13,856
	1987-88	12,379	99	177	1	12,556
Nebraska	1979-80	26,201	90	2,905	10	29,106
	1980-81	23,748	90	2,555	10	26,303
	1981-82	26,783	90	3,064	10	29,847
	1982-83	19,366	90	2,046	10	21,412
	1983-84	19,958	90	2,218	10	22,176
	1984-85	18,579	92	1,552	8	20,131
	1985-86	24,060	96	911	4	24,971
	1986-87	25,231	95	1,422	5	26,653
	1987-88	25,131	95	1,281	5	26,412
Nevada	1979-80	5,891	99	87	1	5,978
	1980-81	5,490	98	98	2	5,588
	1981-82	6,692	98	118	2	6,810
	1982-83	7,020	99	61	1	7,081
	1983-84	7,827	99	91	1	7,918
	1984-85	8,479	99	113	1	8,592
	1985-86	9,353	100	39	0	9,392
	1986-87	8,000	98	143	2	8,143
	1987-88	9,228	99	77	1	9,305
New Hampshire	1979-80	7,855	94	479	6	8,334
	1980-81	9,046	95	520	5	9,566
	1981-82	6,687	94	399	6	7,086
	1982-83	7,481	95	395	5	7,876
	1983-84	8,544	95	428	5	8,972
	1984-85	9,687	95	547	5	10,234
	1985-86	11,429	97	411	3	11,840
	1986-87	9,759	97	301	3	10,060
	1987-88	11,445	97	338	3	11,783
New Jersey	1979-80	108,925	90	12,454	10	121,379
	1980-81	115,545	90	12,429	10	127,974
	1981-82	122,785	92	10,981	8	133,766
	1982-83	138,088	93	10,956	7	149,044
	1983-84	132,201	93	9,809	7	142,010
	1984-85	148,538	93	11,962	7	160,500
	1985-86	158,842	96	7,364	4	166,206
	1986-87	176,489	96	6,819	4	183,308
	1987-88	184,845	97	6,367	3	191,212

Table C.1 (contd.)

	TOTAL PUBLIC PARTICIPANTS	%	TOTAL NONPUBLIC PARTICIPANTS	%	TOTAL PARTICIPANTS
New Mexico					
1979-80	31,012	96	1,373	4	32,385
1980-81	30,343	96	1,302	4	33,645
1981-82	28,748	96	1,314	4	30,062
1982-83	26,414	96	1,241	4	27,655
1983-84	27,074	96	1,122	4	28,196
1984-85	28,114	96	1,224	4	29,338
1985-86	30,838	97	877	3	31,715
1986-87	28,036	96	1,070	4	29,106
1987-88	29,821	96	1,344	4	31,165
New York					
1979-80	320,885	92	26,816	8	347,701
1980-81	329,780	86	55,580	14	385,360
1981-82	328,030	89	38,767	11	366,797
1982-83	261,062	87	37,590	13	298,652
1983-84	301,750	88	41,931	12	343,681
1984-85	335,153	69	39,663	11	374,816
1985-86	311,118	91	31,520	9	342,638
1986-87	301,175	94	20,319	6	321,494
1987-88	323,950	94	21,071	6	345,021
North Carolina					
1979-80	146,821	100	726	0	149,547
1980-81	144,649	100	683	0	145,332
1981-82	135,456	100	572	0	136,028
1982-83	133,371	100	517	0	133,889
1983-84	131,588	100	492	0	132,080
1984-85	129,041	100	454	0	129,495
1985-86	126,908	100	447	0	125,355
1986-87	113,511	100	372	0	113,883
1987-88	113,567	100	478	0	114,045
North Dakota					
1979-80	9,703	95	536	5	10,239
1980-81	9,522	95	463	5	9,985
1981-82	7,018	95	347	5	7,365
1982-83	9,962	95	518	5	10,480
1983-84	6,452	95	484	5	8,936
1984-85	8,640	95	491	5	9,131
1985-86	8,804	97	308	3	9,112
1986-87	8,816	97	315	3	9,131
1987-88	9,110	97	300	3	9,410
Ohio					
1979-80	138,214	96	6,040	4	144,254
1980-81	135,895	95	7,861	5	143,756
1981-82	119,042	94	7,332	6	126,374
1982-83	114,124	95	5,46	5	119,640
1983-84	126,552	96	5,830	4	132,382
1984-85	133,646	96	5,925	4	139,571
1985-86	130,924	96	5,737	4	136,661
1986-87	122,692	94	7,997	6	130,689
1987-88	129,680	96	6,012	4	135,692
Oklahoma					
1979-80	79,175	100	273	0	79,448
1980-81	80,231	100	343	0	80,574
1981-82	68,834	100	260	0	69,094
1982-83	61,387	99	312	1	61,699
1983-84	59,896	100	228	0	60,124
1984-85	62,604	99	358	1	62,962
1985-86	61,868	100	213	0	62,081
1986-87	58,371	100	204	0	58,575
1987-88	57,407	100	170	0	57,577
Oregon					
1979-80	46,476	98	850	2	47,326
1980-81	30,545	98	545	2	31,090
1981-82	29,212	98	606	2	29,818
1982-83	35,497	98	840	2	36,337
1983-84	34,616	98	580	2	35,196
1984-85	36,968	98	620	2	37,588
1985-86	42,148	99	538	1	42,686
1986-87	42,096	99	513	1	42,609
1987-88	44,096	100	218	0	44,314
Pennsylvania					
1979-80	242,703	90	25,947	10	268,650
1980-81	240,451	91	24,959	9	265,410
1981-82	218,418	91	22,399	9	240,817
1982-83	204,818	90	22,236	10	227,054
1983-84	204,544	90	21,656	10	226,200
1984-85	206,769	91	21,564	9	228,333
1985-86	199,845	92	17,749	8	217,594
1986-87	198,155	93	13,697	5	211,852
1987-88	209,346	93	16,415	7	225,761

Table C.1 (contd.)

		TOTAL PUBLIC PARTICIPANTS	%	TOTAL NONPUBLIC PARTICIPANTS	%	TOTAL PARTICIPANTS
Rhode Island	1979-80	17,624	95	921	5	18,745
	1980-81	16,073	93	1,138	7	17,211
	1981-82	12,076	93	906	7	12,982
	1982-83	11,196	93	849	7	12,045
	1983-84	11,939	93	928	7	12,867
	1984-85	12,720	95	723	5	13,443
	1985-86	12,285	96	520	4	12,805
	1986-87	13,212	97	443	3	13,655
	1987-88	14,838	97	420	3	15,258
South Carolina	1979-80	97,363	99	597	1	97,960
	1980-81	90,471	99	637	1	91,108
	1981-82	71,439	99	571	1	72,010
	1982-83	61,528	99	533	1	61,061
	1983-84	57,581	99	444	1	58,225
	1984-85	51,527	99	295	1	51,822
	1985-86	52,588	100	97	0	52,685
	1986-87	51,285	100	89	0	51,374
	1987-88	53,677	100	130	0	53,807
South Dakota	1979-80	14,373	94	899	6	15,272
	1980-81	14,030	95	756	5	14,786
	1981-82	13,016	94	800	6	13,816
	1982-83	12,070	95	670	5	12,740
	1983-84	11,921	94	819	6	12,740
	1984-85	12,077	94	800	6	12,877
	1985-86	12,350	95	652	5	13,002
	1986-87	12,312	96	494	4	12,806
	1987-88	12,791	96	480	4	13,271
Tennessee	1979-80	150,306	99	933	1	151,239
	1980-81	101,295	99	726	1	102,021
	1981-82	88,794	100	48	0	88,842
	1982-83	137,223	99	822	1	138,045
	1983-84	91,377	99	600	1	91,977
	1984-85	99,144	100	460	0	99,604
	1985-86	103,135	100	193	0	103,328
	1986-87	102,121	100	390	0	102,511
	1987-88	101,062	99	694	1	101,956
Texas	1979-80	415,815	99	5,185	1	421,000
	1980-81	410,372	99	5,613	1	415,985
	1981-82	345,214	98	5,636	2	350,850
	1982-83	309,292	98	6,549	2	315,841
	1983-84	301,451	98	4,779	2	306,230
	1984-85	292,726	98	5,022	2	297,748
	1985-86	362,695	99	2,883	1	365,578
	1986-87	345,147	97	9,472	3	354,619
	1987-88	376,780	99	4,183	1	380,963
Utah	1979-80	21,511	99	178	1	21,689
	1980-81	18,903	100	50	0	18,953
	1981-82	17,862	99	112	1	17,974
	1982-83	16,770	100	69	0	16,839
	1983-84	19,053	100	66	0	19,119
	1984-85	22,759	100	94	0	22,853
	1985-86	24,378	100	116	0	24,494
	1986-87	21,971	100	91	0	22,062
	1987-88	25,242	100	33	0	25,275
Vermont	1979-80	10,462	96	421	4	10,883
	1980-81	10,307	97	358	3	10,665
	1981-82	8,376	96	388	4	8,764
	1982-83	7,574	96	309	4	7,883
	1983-84	6,387	96	342	4	6,729
	1984-85	9,191	97	328	3	9,519
	1985-86	9,610	98	231	2	9,841
	1986-87	8,975	97	234	3	9,209
	1987-88	9,625	98	203	2	9,828
Virginia	1979-80	111,772	100	9	0	111,781
	1980-81	104,111	100	46	0	104,157
	1981-82	88,805	100	16	0	88,821
	1982-83	83,389	100	0	0	83,389
	1983-84	82,547	99	552	1	83,099
	1984-85	82,788	99	600	1	83,388
	1985-86	76,598	99	705	1	77,303
	1986-87	73,020	99	568	1	73,588
	1987-88	72,197	99	613	1	72,810

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Table C.1 (contd.)

	TOTAL PUBLIC PARTICIPANTS	%	TOTAL NONPUBLIC PARTICIPANTS	%	TOTAL PARTICIPANTS
Washington	1979-80 59,767 1980-81 60,292 1981-82 55,229 1982-83 58,312 1983-84 59,562 1984-85 59,734 1985-86 64,917 1986-87 61,794 1987-88 63,285	98 98 98 98 98 98 99 99 99	1,251 1,026 981 934 990 1,088 350 668 806	2 2 2 2 2 2 1 1 1	61,058 61,318 56,210 59,246 60,552 60,822 65,267 62,462 64,091
West Virginia	1979-80 43,370 1980-81 41,141 1981-82 40,564 1982-83 31,912 1983-84 31,305 1984-85 33,100 1985-86 33,467 1986-87 31,528 1987-88 32,172	99 99 99 99 99 99 100 99 100	412 367 320 235 213 284 147 202 160	1 1 1 1 1 1 0 1 0	43,782 41,508 40,884 32,147 31,518 33,384 33,614 31,730 32,332
Wisconsin	1979-80 67,439 1980-81 67,107 1981-82 60,693 1982-83 52,926 1983-84 60,257 1984-85 60,238 1985-86 65,950 1986-87 63,633 1987-88 63,050	94 94 94 92 94 95 95 96 96	4,226 4,055 3,704 4,382 4,018 3,090 3,458 2,926 2,920	6 6 6 8 6 5 5 4 4	71,665 71,162 64,397 57,308 64,275 63,328 69,408 66,559 65,970
Wyoming	1979-80 4,642 1980-81 5,398 1981-82 4,642 1982-83 3,761 1983-84 4,252 1984-85 4,325 1985-86 4,047 1986-87 3,984 1987-88 3,608	98 98 98 98 98 99 98 99 99	93 86 79 80 84 48 76 37 51	2 2 2 2 2 1 2 1 1	4,735 5,484 4,721 3,841 4,336 4,373 4,123 4,021 3,659
Guam	1979-80 1,188 1980-81 1,090 1981-82 0 1982-83 0 1983-84 0 1984-85 0 1985-86 0 1986-87 0 1987-88 0	94 91 0 0 0 0 0 0 0	77 112 0 0 0 0 0 0 0	6 9 0 0 0 0 0 0 0	1,265 1,202 0 0 0 0 0 0 0
Puerto Rico	1979-80 204,714 1980-81 256,785 1981-82 242,164 1982-83 272,754 1983-84 269,229 1984-85 253,354 1985-86 264,166 1986-87 240,005 1987-88 236,394	96 98 98 98 97 97 98 96 96	7,937 5,250 4,931 5,277 7,488 6,877 4,783 10,013 16,528	4 2 2 2 3 3 2 4 4	212,651 262,035 247,095 278,031 276,717 260,231 268,949 250,018 252,922
Trust Terr PI	1979-80 12,257 1980-81 16,603 1981-82 21,515 1982-83 0 1983-84 34,899 1984-85 0 1985-86 0 1986-87 0 1987-88 0	92 89 90 0 90 0 0 0 0	1,127 2,038 2,440 0 3,706 0 0 0 0	8 11 10 0 10 0 0 0 0	13,384 18,641 23,955 0 38,605 0 0 0 0
Virgin Islands	1979-80 1,711 1980-81 0 1981-82 0 1982-83 0 1983-84 0 1984-85 0 1985-86 0 1986-87 0 1987-88 0	78 0 0 0 0 0 0 0 0	483 0 0 0 0 0 0 0 0	22 0 0 0 0 0 0 0 0	2,194 0 0 0 0 0 0 0 0

Table C.1 (contd.)

	TOTAL PUBLIC PARTICIPANTS	%	TOTAL NONPUBLIC PARTICIPANTS	%	TOTAL PARTICIPANTS
BIA					
1979-80	24,314	100	0	0	24,314
1980-81	32,691	100	0	0	32,691
1981-82	23,545	100	0	0	23,545
1982-83	23,781	100	0	0	23,781
1983-84	21,368	100	0	0	21,368
1984-85	18,157	100	0	0	18,157
1985-86	15,497	100	0	0	15,497
1986-87	15,088	100	0	0	15,088
1987-88	16,801	100	0	0	16,801

Table C.2  
Number and Percent of Public and Nonpublic Participants Who Received  
Reading and Mathematics, by State -- 1979-80 to 1987-88

Nation		TOTAL PUBLIC PARTICIPANTS	PUBLIC READING	%	PUBLIC MATHEMATICS	%	TOTAL NONPUBLIC PARTICIPANTS	NONPUBLIC READING	%	NONPUBLIC MATHEMATICS	%
Alabama	1979-80	4,973,708	3,777,691	76	2,165,148	44	189,114	148,972	79	68,875	36
	1980-81	4,862,308	3,439,338	71	1,928,810	40	213,499	162,218	76	75,778	35
	1981-82	4,434,447	3,105,872	70	1,781,757	40	184,084	154,491	84	73,034	40
	1982-83	4,270,424	3,120,702	73	1,843,275	43	177,210	137,191	77	66,207	37
	1983-84	4,181,975	3,222,066	74	1,893,630	43	190,660	141,292	74	79,153	42
	1984-85	4,528,177	3,268,470	72	1,970,617	44	184,532	137,905	75	76,174	41
	1985-86	4,611,948	3,382,410	73	2,057,781	45	127,922	87,233	68	43,450	34
	1986-87	4,594,761	3,362,060	73	2,043,110	44	137,900	92,265	67	47,899	35
	1987-88	4,808,030	3,330,637	69	2,056,111	43	142,492	87,448	61	53,071	37
	1979-80	129,628	106,840	82	41,630	32	1,221	1,058	87	305	25
Alaska	1980-81	130,523	110,021	84	45,448	35	1,103	1,042	94	125	11
	1981-82	121,092	102,211	84	37,142	31	1,039	1,028	99	131	13
	1982-83	109,958	91,316	83	31,439	29	985	938	95	76	8
	1983-84	103,399	81,862	81	32,794	32	825	730	88	89	11
	1984-85	115,107	96,845	84	45,391	39	780	695	89	103	13
	1985-86	117,556	97,184	83	51,584	44	99	96	97	21	21
	1986-87	114,653	95,726	83	50,717	44	125	121	97	58	46
	1987-88	120,093	97,757	81	53,249	44	966	193	20	95	10
	1979-80	5,395	3,598	67	2,692	50	87	88	101	18	21
	1980-81	4,585	3,301	72	1,884	41	103	70	68	0	0
Arizona	1981-82	4,609	3,575	76	1,772	38	86	66	77	8	9
	1982-83	4,471	3,216	72	1,510	34	93	59	63	24	26
	1983-84	4,299	3,055	71	1,297	30	91	0	0	0	0
	1984-85	4,101	3,005	73	1,056	26	114	41	36	1	1
	1985-86	4,212	3,012	72	1,267	30	89	49	55	2	2
	1986-87	4,701	3,357	71	1,279	27	39	39	100	0	0
	1987-88	4,810	3,743	78	1,415	29	226	55	24	15	7
	1979-80	65,661	54,876	84	13,680	21	1,536	1,644	107	108	7
	1980-81	69,672	58,272	84	18,330	26	1,344	1,305	97	144	11
	1981-82	41,532	30,873	74	13,224	32	2,049	969	47	438	21
Arkansas	1982-83	40,356	31,416	78	3,396	8	651	3,519	541	1	0
	1983-84	42,147	31,290	74	11,187	27	630	537	85	18	3
	1984-85	44,415	34,674	78	13,800	31	1,038	627	60	120	12
	1985-86	62,283	47,427	76	17,520	28	543	465	86	195	36
	1986-87	49,905	43,935	88	15,603	31	1,200	1,161	97	6	1
	1987-88	54,009	39,491	73	18,744	35	773	565	73	510	66
	1979-80	83,601	46,756	56	17,013	20	970	658	68	0	0
	1980-81	81,188	42,380	52	15,993	20	1,159	681	59	22	2
	1981-82	70,893	37,413	53	14,029	20	542	542	100	75	14
	1982-83	66,605	49,850	75	24,396	37	542	542	100	70	13
California	1983-84	66,549	33,735	51	12,249	18	506	319	63	118	23
	1984-85	66,286	31,904	48	12,000	18	573	342	60	60	10
	1985-86	65,653	32,984	50	11,310	17	75	62	83	6	8
	1986-87	62,108	28,952	47	9,682	16	352	181	52	6	2
	1987-88	63,053	30,866	49	8,319	13	367	188	106	77	21
	1979-80	572,255	553,266	97	534,861	93	14,239	11,270	79	9,968	70
	1980-81	521,627	437,767	84	419,714	80	11,048	16,453	149	13,948	126
	1981-82	517,900	390,115	75	375,655	73	14,077	16,141	115	13,834	98
	1982-83	569,489	483,992	85	456,079	80	20,398	14,977	73	15,295	75
	1983-84	605,399	506,517	84	468,155	77	20,502	15,675	76	14,114	69
	1984-85	636,837	555,493	87	506,191	79	20,606	17,182	84	13,989	68
	1985-86	647,107	565,903	87	511,338	79	11,844	2,346	20	2,117	18
	1986-87	765,795	671,112	88	600,202	78	16,126	13,474	84	9,938	62
	1987-88	848,999	659,113	78	576,170	68	17,877	14,262	84	114	14

Table C.2 (contd.)

		TOTAL PUBLIC PARTICIPANTS	PUBLIC READING		PUBLIC MATHEMATICS		TOTAL NONPUBLIC PARTICIPANTS		NONPUBLIC READING		NONPUBLIC MATHEMATICS	
Colorado	1979-80	38,952	30,369	78	11,162	29	1,032	683	66	366	35	
	1980-81	37,613	29,149	77	11,385	30	1,060	788	74	362	34	
	1981-82	33,563	25,543	76	9,203	27	1,868	602	32	245	13	
	1982-83	32,928	26,037	79	8,471	26	799	577	72	294	37	
	1983-84	33,432	25,856	77	7,326	22	981	549	56	281	29	
	1984-85	37,512	30,844	82	6,534	17	662	561	85	257	39	
	1985-86	38,742	28,973	75	5,019	15	354	369	104	31	9	
	1986-87	35,750	25,633	72	5,417	15	338	289	86	18	5	
	1987-88	36,088	24,822	69	5,556	15	276	253	92	13	5	
Connecticut	1979-80	55,630	27,597	50	17,030	31	4,873	3,949	81	2,979	61	
	1980-81	57,270	24,964	44	10,291	18	4,043	1,421	35	104	3	
	1981-82	45,368	10,851	24	1,427	3	2,848	1,567	55	1,110	39	
	1982-83	30,752	21,934	71	17,914	58	1,968	1,968	100	0	0	
	1983-84	48,399	24,195	50	20,932	43	2,560	2,560	100	2,560	100	
	1984-85	52,511	31,319	60	28,728	55	3,135	2,983	95	2,803	89	
	1985-86	51,593	44,005	85	42,297	82	2,297	2,292	100	2,105	92	
	1986-87	51,048	25,202	49	18,746	37	3,426	1,369	40	728	21	
	1987-88	52,113	25,398	49	20,686	40	3,168	2,043	64	1,307	41	
Delaware	1979-80	11,105	10,357	93	3,703	34	1,062	573	54	432	41	
	1980-81	9,921	8,159	82	3,355	34	921	697	76	483	52	
	1981-82	8,148	5,417	66	4,440	54	690	621	90	214	31	
	1982-83	8,156	6,665	82	2,766	34	508	478	94	136	27	
	1983-84	8,225	6,837	83	2,570	31	570	484	85	173	30	
	1984-85	9,880	7,406	75	2,576	26	588	500	85	167	28	
	1985-86	9,143	7,127	78	2,756	30	524	393	75	231	44	
	1986-87	10,238	7,983	78	3,110	30	507	458	90	49	10	
	1987-88	10,167	8,390	83	2,937	29	540	479	89	47	9	
D. C.	1979-80	15,905	9,543	60	6,362	40	981	590	60	391	40	
	1980-81	17,088	10,953	64	6,135	36	944	603	64	341	36	
	1981-82	13,765	7,980	58	5,785	42	875	550	63	325	37	
	1982-83	14,780	10,373	70	4,407	30	809	653	81	136	17	
	1983-84	12,502	8,600	69	6,400	51	573	400	70	173	30	
	1984-85	15,243	14,148	93	11,599	76	565	346	61	219	39	
	1985-86	15,776	13,972	89	11,165	71	437	322	74	1/6	40	
	1986-87	15,541	14,061	90	11,360	73	440	391	89	199	45	
	1987-88	15,725	15,725	100	12,380	79	540	540	100	327	61	
Florida	1979-80	153,493	126,622	82	46,961	31	4,390	3,482	79	1,831	42	
	1980-81	147,354	126,180	86	42,902	29	5,865	3,368	57	1,743	30	
	1981-82	126,707	104,912	83	36,671	29	3,724	3,022	81	1,588	43	
	1982-83	139,718	109,262	78	47,055	34	3,573	2,832	79	1,654	46	
	1983-84	145,459	123,720	85	62,672	43	3,178	2,323	73	1,326	42	
	1984-85	153,881	125,686	82	66,419	43	2,995	2,555	05	1,574	53	
	1985-86	149,889	124,266	83	70,325	47	1,710	1,363	80	1,062	62	
	1986-87	132,741	116,384	88	58,222	44	2,714	2,276	84	1,092	40	
	1987-88	133,738	114,215	85	60,553	45	2,404	1,959	81	1,208	50	
Georgia	1979-80	158,530	125,485	79	87,239	55	1,116	986	88	398	36	
	1980-81	157,419	116,925	74	87,198	55	1,716	1,524	89	1,167	68	
	1981-82	170,538	138,807	81	106,860	63	1,098	1,095	100	489	45	
	1982-83	113,673	89,661	79	65,637	58	300	273	91	72	24	
	1983-84	132,201	92,991	70	77,571	59	1,404	969	69	846	60	
	1984-85	169,311	101,610	60	81,276	48	1,083	984	91	771	71	
	1985-86	122,250	95,163	78	69,699	57	354	274	77	201	57	
	1986-87	135,467	104,272	77	81,817	60	357	294	82	247	69	
	1987-88	139,000	107,445	77	83,303	60	356	247	69	246	69	

Table C.2 (contd.)

		TOTAL PUBLIC PARTICIPANTS	PUBLIC READING	%	PUBLIC MATHEMATICS	%	TOTAL NONPUBLIC PARTICIPANTS	NONPUBLIC READING	%	NONPUBLIC MATHEMATICS	%
Hawaii	1979-80	15,301	14,544	95	757	5	326	285	87	41	13
	1980-81	15,336	14,062	92	1,274	8	336	304	90	32	10
	1981-82	11,195	11,338	101	1,014	9	287	271	94	24	8
	1982-83	10,044	9,435	94	418	4	234	192	82	42	18
	1983-84	9,878	9,398	95	480	5	214	193	90	21	10
	1984-85	12,080	10,985	91	1,095	9	198	186	94	12	6
	1985-86	14,110	11,862	84	2,248	16	48	42	88	6	13
	1986-87	14,212	11,738	83	2,474	17	68	61	90	7	10
	1987-88	14,223	11,939	84	2,284	16	85	70	82	15	18
Idaho	1979-80	16,010	12,823	80	5,133	32	187	153	82	58	31
	1980-81	15,699	12,522	80	5,329	34	227	89	39	70	31
	1981-82	14,286	11,007	77	3,875	27	177	144	81	58	33
	1982-83	13,869	11,061	80	4,163	30	129	88	68	39	30
	1983-84	15,637	11,798	75	5,247	34	208	161	78	145	70
	1984-85	15,604	11,411	73	5,806	37	163	127	78	85	52
	1985-86	16,747	11,790	70	6,879	41	82	84	102	92	112
	1986-87	17,739	12,676	71	7,510	42	118	95	81	84	71
	1987-88	18,864	13,871	74	7,879	42	105	117	111	82	78
Illinois	1979-80	158,203	133,022	84	51,050	34	8,036	7,247	90	1,134	14
	1980-81	157,217	131,496	84	53,066	34	8,001	7,165	90	1,172	15
	1981-82	136,230	114,274	84	42,857	31	6,518	6,065	93	710	11
	1982-83	128,201	101,797	79	40,597	32	6,850	6,044	88	842	12
	1983-84	139,340	106,204	76	44,968	32	7,031	6,012	86	783	11
	1984-85	142,064	115,582	81	54,560	38	6,809	6,470	95	1,395	20
	1985-86	156,167	118,041	76	68,657	44	6,448	6,099	95	1,678	26
	1986-87	153,267	117,402	77	54,633	36	6,195	5,144	83	2,659	43
	1987-88	154,509	127,443	82	58,526	38	5,596	5,475	98	4,371	78
Indiana	1979-80	100,769	90,857	90	26,006	26	3,655	3,080	84	1,231	14
	1980-81	88,787	77,145	87	19,906	22	3,093	2,579	83	1,076	15
	1981-82	85,028	70,036	82	18,059	21	3,391	2,800	83	903	27
	1982-83	89,038	75,317	85	25,339	28	3,889	2,954	76	1,605	41
	1983-84	92,608	80,439	87	28,107	30	3,268	2,907	89	1,257	38
	1984-85	96,726	83,642	86	27,933	29	3,659	3,101	85	1,144	11
	1985-86	105,491	87,770	83	33,326	32	1,502	1,306	87	439	29
	1986-87	100,058	83,250	83	31,763	32	2,144	1,772	83	734	14
	1987-88	98,034	81,124	83	33,360	34	2,100	1,810	86	930	44
Iowa	1979-80	42,688	36,529	86	8,021	19	3,919	3,527	90	573	15
	1980-81	40,043	34,048	85	8,177	20	3,675	3,339	91	513	14
	1981-82	36,808	31,650	86	7,198	20	3,319	3,002	90	539	16
	1982-83	36,956	31,347	85	15,309	41	3,269	3,243	99	1,079	11
	1983-84	27,288	22,863	84	5,506	20	2,153	1,812	84	598	28
	1984-85	23,984	23,420	98	5,700	24	2,303	2,303	100	447	19
	1985-86	23,516	22,814	97	5,415	23	1,944	1,944	100	318	16
	1986-87	14,253	27,121	79	6,630	19	2,384	2,086	88	298	13
	1987-88	18,723	30,451	79	8,272	21	2,327	2,092	90	235	10
Kansas	1979-80	18,741	28,687	74	13,383	35	2,143	1,544	72	821	38
	1980-81	40,309	26,913	72	14,549	16	1,935	1,351	70	747	-9
	1981-82	38,439	28,465	74	13,733	36	1,848	1,305	71	741	40
	1982-83	36,936	25,799	70	12,44	14	1,557	882	57	503	32
	1983-84	33,885	22,902	68	11,581	14	1,320	898	68	593	45
	1984-85	37,290	23,684	64	13,419	36	1,303	762	58	554	43
	1985-86	34,920	23,162	66	12,137	35	586	435	74	187	32
	1986-87	33,444	21,825	65	11,324	14	762	470	62	290	38
	1987-88	34,224	21,794	64	11,768	14	784	532	68	315	40

Table C.2 (contd.)

		TOTAL PUBLIC PARTICIPANTS	PUBLIC READING	%	PUBLIC MATHEMATICS	%	TOTAL NONPUBLIC PARTICIPANTS	NONPUBLIC READING	%	NONPUBLIC MATHEMATICS	%
Kentucky	1979-80	111,914	97,344	87	26,575	24	2,967	2,720	92	187	6
	1980-81	110,650	96,650	87	28,702	26	3,156	2,733	87	174	6
	1981-82	104,355	91,102	87	27,533	26	2,848	2,266	80	242	8
	1982-83	100,129	88,441	88	22,971	23	2,496	2,162	87	184	7
	1983-84	95,589	83,919	88	21,586	23	2,625	2,457	94	170	6
	1984-85	101,204	88,170	87	23,562	23	3,036	2,105	69	187	6
	1985-86	99,166	87,103	88	23,746	24	2,326	1,415	61	145	6
	1986-87	90,153	79,625	88	20,846	23	2,014	1,336	66	73	4
	1987-88	86,563	77,185	89	20,600	24	1,803	1,308	73	111	6
Louisiana	1979-80	155,781	100,261	64	69,609	45	7,327	4,560	62	2,406	33
	1980-81	134,205	75,187	56	48,818	36	7,577	3,438	45	2,001	26
	1981-82	103,405	81,201	79	48,775	47	5,676	5,089	90	2,389	42
	1982-83	95,701	65,050	68	37,444	39	5,142	4,516	85	1,982	27
	1983-84	93,646	74,366	79	44,613	48	5,263	4,460	85	2,560	49
	1984-85	103,556	75,624	71	43,081	42	6,016	4,848	81	2,391	40
	1985-86	106,559	82,780	78	49,246	46	1,706	1,059	179	1,285	75
	1986-87	103,755	65,592	63	38,799	37	2,709	2,284	84	1,280	47
	1987-88	104,033	77,682	75	46,493	45	1,503	1,157	90	1,118	32
Maine	1979-80	25,642	20,046	78	9,132	36	838	816	100	386	46
	1980-81	22,153	19,712	89	9,233	42	833	609	73	285	34
	1981-82	21,936	17,797	81	8,510	39	638	489	77	234	37
	1982-83	21,829	17,644	81	8,138	37	745	602	81	278	37
	1983-84	21,494	16,169	75	6,553	30	781	781	100	781	100
	1984-85	23,941	18,729	78	9,199	38	666	531	80	138	21
	1985-86	21,561	16,406	76	8,108	38	192	15	8	18	9
	1986-87	25,701	20,739	81	10,040	39	305	219	72	117	38
	1987-88	24,183	18,503	77	8,299	34	303	237	78	114	38
Maryland	1979-80	60,803	51,653	85	35,015	58	2,481	1,972	79	1,554	61
	1980-81	66,713	49,386	74	43,075	65	2,559	1,772	69	1,636	64
	1981-82	56,844	48,098	85	30,345	53	2,735	1,799	66	1,126	41
	1982-83	54,840	45,649	83	32,360	59	1,197	1,062	89	543	45
	1983-84	56,972	46,228	81	30,683	54	1,166	881	76	479	41
	1984-85	66,168	50,624	77	34,409	52	1,839	1,058	58	678	37
	1985-86	70,100	57,633	82	46,764	67	752	616	82	377	50
	1986-87	55,687	45,469	82	32,785	59	2,020	1,380	68	1,072	53
	1987-88	58,580	48,614	83	34,321	59	2,376	1,890	80	1,661	70
Massachusetts	1979-80	73,398	52,827	72	21,165	29	8,181	6,042	74	1,810	22
	1980-81	83,905	66,009	79	18,734	22	9,648	8,501	88	2,112	22
	1981-82	73,403	53,883	73	23,950	33	7,903	6,687	85	1,209	15
	1982-83	65,296	49,410	76	16,694	26	7,205	6,042	84	991	14
	1983-84	68,827	66,886	75	21,672	24	9,207	7,447	81	1,400	15
	1984-85	81,799	48,117	59	25,074	31	6,819	5,032	74	1,322	19
	1985-86	81,207	44,888	55	22,699	28	1,615	2,051	57	639	18
	1986-87	74,963	42,022	56	23,021	31	4,392	3,048	69	721	16
	1987-88	73,146	39,365	54	20,106	27	4,684	2,526	54	1,351	29
Michigan	1979-80	164,631	147,819	90	92,943	56	4,818	4,026	84	1,989	41
	1980-81	153,930	136,062	88	75,264	49	5,115	4,362	85	1,524	30
	1981-82	138,603	122,790	89	71,193	51	4,668	4,167	89	2,091	45
	1982-83	126,037	112,903	90	61,742	49	2,871	2,664	93	784	27
	1983-84	134,711	110,358	82	56,750	42	4,179	3,809	91	1,166	28
	1984-85	137,584	122,259	89	74,317	54	3,813	3,434	90	964	25
	1985-86	152,556	130,498	86	80,159	53	3,187	2,714	85	1,094	34
	1986-87	142,689	115,996	81	61,947	43	2,812	2,579	92	869	31
	1987-88	146,494	118,707	81	64,370	44	2,651	2,374	90	1,146	43

Table C.2 (contd.)

		TOTAL PUBLIC PARTICIPANTS	PUBLIC READING	PUBLIC MATHEMATICS	TOTAL NONPUBLIC PARTICIPANTS	NONPUBLIC READING	NONPUBLIC MATHEMATICS
Minnesota	1979-80	65,108	51,780	45,716	6,919	6,093	5,291
	1980-81	56,713	47,056	37,408	5,987	5,034	3,883
	1981-82	52,048	41,846	35,332	5,670	4,836	3,967
	1982-83	50,147	40,041	33,892	5,388	4,376	3,652
	1983-84	49,091	38,154	30,681	5,294	4,266	3,442
	1984-85	54,067	44,685	37,284	5,302	4,345	3,676
	1985-86	53,355	42,271	34,571	5,023	4,437	3,1905
	1986-87	56,330	40,394	32,526	5,843	2,295	1,830
	1987-88	58,231	42,525	35,980	2,771	2,191	1,760
Mississippi	1979-80	129,902	103,336	80	1,909	1,578	952
	1980-81	129,604	98,348	66,580	1,804	1,517	50
	1981-82	117,934	80,906	55,844	1,732	903	709
	1982-83	112,612	81,595	51,871	1,773	1,160	884
	1983-84	98,231	67,662	44,465	1,840	1,178	798
	1984-85	99,270	59,795	49,905	1,996	1,173	1,019
	1985-86	92,343	51,462	44,778	617	151	51
	1986-87	92,996	57,279	52,257	1,687	977	126
	1987-88	99,338	60,657	55,045	1,784	973	1,018
Missouri	1979-80	87,216	54,005	30,875	192	165	65
	1980-81	95,286	61,754	33,707	201	109	62
	1981-82	86,334	57,920	30,800	208	113	71
	1982-83	85,689	56,710	30,910	260	151	58
	1983-84	83,299	56,297	29,984	3,965	2,387	48
	1984-85	77,351	50,458	27,914	4,021	2,411	1,511
	1985-86	71,023	47,265	26,501	3,004	1,967	1,438
	1986-87	71,496	46,018	25,165	2,833	1,880	1,036
	1987-88	79,563	42,543	22,226	2,458	2,153	832
Montana	1979-80	12,557	10,610	84	434	292	1,008
	1980-81	13,504	8,735	65	4996	37	41
	1981-82	11,765	6,405	71	4,616	39	249
	1982-83	11,135	7,486	67	4,605	41	55
	1983-84	11,338	6,114	72	4,623	41	219
	1984-85	12,345	8,436	68	4,607	37	48
	1985-86	13,103	8,492	65	5,510	42	204
	1986-87	13,665	8,136	60	6,035	44	46
	1987-88	12,379	7,588	61	5,929	48	174
Nebraska	1979-80	26,201	19,777	75	9,080	35	75
	1980-81	23,748	18,441	78	9,483	40	157
	1981-82	26,783	19,657	73	9,341	35	112
	1982-83	19,366	15,542	80	7,256	37	249
	1983-84	19,958	16,537	83	6,794	34	55
	1984-85	18,579	14,790	80	7,199	39	476
	1985-86	24,060	15,130	63	7,504	31	16
	1986-87	25,231	16,945	67	7,853	31	738
	1987-88	25,131	16,892	67	7,897	31	36
Nevada	1979-80	5,891	4,846	82	3,270	56	41
	1980-81	5,490	2,597	47	2,996	55	49
	1981-82	6,692	3,566	53	3,827	57	52
	1982-83	7,020	1,941	28	3,655	52	53
	1983-84	7,827	2,874	37	4,704	60	32
	1984-85	8,479	3,581	42	4,033	48	44
	1985-86	9,153	5,248	56	5,181	55	36
	1986-87	8,000	6,513	81	2,213	28	59
	1987-88	9,228	6,762	73	1,940	21	61

Table C.2 (contd.)

		TOTAL PUBLIC PARTICIPANTS	PUBLIC READING		PUBLIC MATHEMATICS		TOTAL NONPUBLIC PARTICIPANTS		PUBLIC READING		NONPUBLIC MATHEMATICS
New Hampshire	1979-80	7,855	6,043	77	809	10	479	380	79	43	9
	1980-81	9,046	6,777	75	896	10	520	424	82	48	9
	1981-82	6,687	4,420	66	572	9	399	228	57	54	14
	1982-83	7,481	6,041	81	817	12	395	251	64	42	11
	1983-84	8,544	6,762	79	1,494	17	428	316	74	64	15
	1984-85	9,687	7,876	81	1,986	21	54	319	62	107	20
	1985-86	11,429	8,248	72	2,555	22	411	205	50	34	8
	1986-87	9,759	7,698	79	2,437	25	301	301	100	67	22
	1987-88	11,446	8,797	77	2,938	26	338	205	61	22	7
New Jersey	1979-80	108,925	64,315	59	45,069	41	12,454	8,261	66	5,126	41
	1980-81	115,545	78,133	68	53,711	46	12,429	8,983	72	5,747	46
	1981-82	122,785	82,628	67	64,611	53	10,981	7,479	68	4,711	43
	1982-83	138,088	106,258	77	92,899	67	10,956	8,431	77	6,831	62
	1983-84	132,201	104,044	79	88,417	67	9,809	7,815	80	6,015	61
	1984-85	148,538	114,794	77	97,841	66	11,962	9,959	83	7,676	64
	1985-86	158,842	125,035	79	101,207	64	7,364	5,634	77	4,576	62
	1986-87	176,489	144,575	82	119,585	68	6,819	5,469	80	4,443	65
	1987-88	184,845	130,418	71	123,257	67	6,367	4,954	78	3,706	58
New Mexico	1979-80	31,012	16,741	54	6,091	20	1,373	948	69	248	18
	1980-81	32,343	15,537	48	6,592	20	1,302	845	65	98	8
	1981-82	28,748	15,539	54	5,452	19	1,314	766	58	157	12
	1982-83	26,414	13,715	52	3,545	13	1,241	550	44	135	11
	1983-84	27,074	12,791	47	3,883	14	1,122	561	50	194	17
	1984-85	28,114	13,779	49	3,452	12	1,224	459	38	108	9
	1985-86	30,838	17,037	55	3,167	10	877	546	62	21	2
	1986-87	28,036	11,945	43	4,501	16	1,070	665	62	205	19
	1987-88	29,821	12,384	42	4,721	16	1,344	770	57	189	14
New York	1979-80	320,885	260,053	81	109,923	34	26,816	25,941	97	13,500	50
	1980-81	329,780	189,319	57	82,380	25	55,580	40,120	72	21,027	38
	1981-82	328,030	187,469	57	80,120	24	38,767	38,100	98	19,320	50
	1982-83	261,062	190,433	71	91,840	35	37,590	25,807	69	14,265	38
	1983-84	301,750	239,456	79	108,417	36	41,931	27,955	67	15,168	36
	1984-85	335,153	230,238	69	117,058	35	39,663	26,831	68	15,647	39
	1985-86	311,118	225,944	73	88,490	28	31,520	21,041	67	11,038	35
	1986-87	301,175	210,539	70	89,674	30	20,319	13,714	67	7,956	39
	1987-88	323,950	122,514	38	84,786	26	21,071	5,895	28	8,223	39
North Carolina	1979-80	148,821	130,011	87	28,220	19	726	528	73	119	16
	1980-81	144,649	122,174	84	31,852	22	683	532	78	167	24
	1981-82	135,456	111,409	82	30,734	23	572	2,182	381	142	25
	1982-83	133,172	107,913	81	32,498	24	517	403	78	105	20
	1983-84	131,508	119,109	91	35,667	27	492	448	91	145	29
	1984-85	129,041	104,643	81	31,633	25	454	307	68	153	14
	1985-86	124,908	123,070	99	32,537	26	447	328	73	119	27
	1986-87	113,511	97,801	86	26,792	24	372	292	78	84	23
	1987-88	113,567	93,032	82	27,532	24	478	409	86	292	61
North Dakota	1979-80	9,703	7,663	79	2,784	29	536	509	95	100	19
	1980-81	9,522	7,515	79	2,410	26	463	389	84	115	25
	1981-82	7,018	5,515	79	2,249	32	347	265	76	104	30
	1982-83	9,962	8,175	82	2,424	24	518	415	80	92	18
	1983-84	8,452	6,929	82	2,322	27	484	423	87	73	15
	1984-85	8,640	7,115	82	2,505	29	491	380	77	110	22
	1985-86	8,804	7,214	82	2,476	28	308	279	91	62	20
	1986-87	8,816	7,081	80	2,814	32	315	269	85	67	28
	1987-88	9,110	7,290	80	2,875	32	300	251	84	74	25

Table C.2 (contd.)

		TOTAL PUBLIC PARTICIPANTS	PUBLIC READING	%	PUBLIC MATHEMATICS	%	TOTAL NONPUBLIC PARTICIPANTS	NONPUBLIC READING	%	NONPUBLIC MATHEMATICS	%
Ohio	1979-80	138,214	121,123	88	13,441	10	6,040	5,147	85	958	16
	1980-81	135,895	120,048	88	13,832	10	7,861	5,538	70	1,330	17
	1981-82	119,042	105,274	88	10,419	9	7,332	5,183	71	1,042	14
	1982-83	114,124	101,015	89	9,467	8	5,516	4,631	84	1,209	22
	1983-84	126,552	113,387	90	14,260	11	5,830	4,891	84	1,469	25
	1984-85	133,646	117,982	88	15,220	11	5,925	5,189	88	1,281	22
	1985-86	130,924	115,440	88	14,389	11	5,737	4,693	82	1,176	20
	1986-87	122,692	109,834	90	12,850	10	7,997	4,693	59	1,620	20
	1987-88	129,600	112,169	86	14,758	11	6,012	4,627	77	1,307	22
Oklahoma	1979-80	79,175	57,698	73	26,819	34	273	252	92	81	30
	1980-81	80,231	53,625	67	26,911	34	343	294	86	125	36
	1981-82	68,834	49,464	72	25,226	37	260	221	85	98	38
	1982-83	61,387	44,519	73	20,420	33	312	236	76	319	102
	1983-84	59,896	40,550	68	18,730	31	228	212	93	119	52
	1984-85	62,604	42,565	68	22,459	36	358	215	60	175	49
	1985-86	61,868	42,537	69	20,842	34	213	170	80	123	58
	1986-87	58,371	41,553	71	19,628	34	204	167	82	101	50
	1987-88	57,407	40,650	71	20,439	36	170	144	85	73	43
Oregon	1979-80	46,476	37,661	81	14,673	32	850	680	80	164	19
	1980-81	30,545	25,068	82	11,299	37	545	467	86	148	27
	1981-82	29,212	24,603	84	9,276	32	606	501	83	145	24
	1982-83	35,497	28,944	82	11,509	32	840	825	98	335	40
	1983-84	34,616	29,164	84	11,197	32	580	475	82	186	32
	1984-85	36,968	29,745	80	11,479	31	620	537	87	200	32
	1985-86	42,148	32,888	78	11,871	28	538	368	68	125	23
	1986-87	42,096	31,610	75	12,227	29	510	482	94	160	31
	1987-88	44,096	34,243	78	14,052	32	218	292	134	91	42
Pennsylvania	1979-80	242,703	206,970	85	105,905	44	25,947	24,419	94	4,508	17
	1980-81	240,451	208,124	87	103,334	43	24,959	22,347	90	4,064	16
	1981-82	218,410	194,014	89	96,069	44	22,399	19,861	89	3,461	15
	1982-83	204,818	184,438	90	88,748	43	22,236	19,423	87	3,677	17
	1983-84	204,544	199,421	97	88,266	43	21,656	18,639	86	7,708	36
	1984-85	206,769	174,393	84	66,543	32	21,564	18,577	86	7,970	37
	1985-86	199,845	181,932	91	77,167	39	17,749	14,935	84	5,066	29
	1986-87	198,155	173,828	88	63,779	32	13,697	11,593	85	3,773	28
	1987-88	209,346	163,819	78	61,026	29	16,415	13,469	82	2,937	18
Rhode Island	1979-80	17,824	7,772	44	2,708	15	921	584	63	288	31
	1980-81	16,073	8,607	54	2,469	15	1,138	673	59	286	25
	1981-82	12,076	9,670	80	2,279	19	906	520	57	150	17
	1982-83	11,196	8,513	76	1,682	15	840	610	72	141	17
	1983-84	11,939	9,066	76	1,791	15	928	650	70	150	16
	1984-85	12,720	9,359	74	2,178	17	723	460	64	182	25
	1985-86	12,285	9,240	75	1,940	16	520	325	63	88	17
	1986-87	13,212	10,370	78	1,548	12	443	334	75	86	19
	1987-88	14,838	11,673	79	1,885	13	420	266	63	96	23
South Carolina	1979-80	97,363	62,299	64	40,875	42	597	286	48	194	32
	1980-81	90,471	56,922	63	40,359	45	637	283	44	242	38
	1981-82	71,439	41,944	59	32,990	46	571	239	42	243	43
	1982-83	61,528	35,981	58	29,560	48	533	237	44	225	42
	1983-84	57,581	34,120	59	28,161	49	444	170	38	182	41
	1984-85	51,527	31,179	61	25,135	49	295	145	49	139	47
	1985-86	52,588	30,766	59	26,683	51	97	76	78	68	70
	1986-87	51,285	29,197	57	25,153	49	89	66	59	58	65
	1987-88	53,677	34,391	64	26,609	50	130	105	81	101	78

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Table C.2 (contd.)

		TOTAL PUBLIC PARTICIPANTS	PUBLIC READING		PUBLIC MATHEMATICS		TOTAL NONPUBLIC PARTICIPANTS		NONPUBLIC READING		NONPUBLIC MATHEMATICS	
South Dakota	1979-80	14,373	10,952	76	8,553	60	899	492	55	377	42	
	1980-81	14,030	11,036	79	7,660	55	756	427	56	291	38	
	1981-82	13,016	10,223	79	7,029	54	800	526	66	364	46	
	1982-83	12,070	9,215	76	6,434	53	670	477	71	319	48	
	1983-84	11,921	9,114	76	6,517	55	819	514	63	335	41	
	1984-85	12,077	9,223	76	6,571	54	800	513	64	310	39	
	1985-86	12,350	9,566	77	7,126	58	652	368	56	242	37	
	1986-87	12,312	9,239	75	6,943	56	494	367	74	197	40	
	1987-88	12,791	9,346	73	7,535	59	480	289	60	196	41	
Tennessee	1979-80	150,306	110,478	74	58,332	39	933	528	57	405	43	
	1980-81	101,295	79,395	78	42,615	42	726	480	66	246	34	
	1981-82	88,794	67,560	76	34,221	39	48	39	81	21	44	
	1982-83	137,223	104,346	76	60,735	44	822	517	65	327	40	
	1983-84	91,377	63,531	70	28,344	31	600	423	71	177	30	
	1984-85	99,144	77,069	78	42,159	43	460	287	62	225	49	
	1985-86	103,135	77,689	75	46,204	45	193	169	88	161	83	
	1986-87	102,121	75,920	74	42,825	42	390	329	84	332	85	
	1987-88	101,062	74,762	74	43,973	44	894	594	66	593	66	
Texas	1979-80	415,815	317,867	76	180,653	43	5,185	4,203	81	1,823	35	
	1980-81	410,372	290,092	71	125,168	31	5,613	2,327	41	1,020	18	
	1981-82	345,214	237,312	69	93,248	27	5,636	6,008	107	2,465	44	
	1982-83	309,292	212,588	69	83,533	27	6,549	6,981	107	2,864	44	
	1983-84	301,451	217,937	72	82,478	27	4,779	3,617	76	1,130	24	
	1984-85	292,726	204,789	70	70,902	24	5,022	3,897	78	827	16	
	1985-86	362,695	253,173	70	92,188	25	2,883	2,035	71	792	27	
	1986-87	345,147	255,129	74	107,089	31	9,472	3,462	37	1,075	11	
	1987-88	376,780	307,122	62	113,108	30	4,183	3,441	82	2,140	51	
Utah	1979-80	21,511	18,972	88	10,174	47	178	169	95	51	29	
	1980-81	18,903	16,033	85	7,254	39	50	38	76	18	36	
	1981-82	17,862	14,257	80	5,704	32	112	55	49	46	41	
	1982-83	16,770	14,361	86	5,158	31	69	20	29	0	0	
	1983-84	19,053	15,706	82	6,065	32	66	58	88	35	53	
	1984-85	22,759	19,719	87	7,509	33	94	94	100	64	68	
	1985-86	24,378	20,933	86	8,767	36	116	105	91	100	86	
	1986-87	21,971	17,862	81	8,293	38	91	86	95	85	93	
	1987-88	25,242	19,992	79	10,326	41	33	30	91	27	82	
Vermont	1979-80	10,462	7,402	71	2,941	28	421	262	62	32	8	
	1980-81	10,107	7,634	74	2,717	26	358	333	93	21	6	
	1981-82	8,376	6,643	79	1,956	23	388	296	76	20	5	
	1982-83	7,574	5,755	76	1,871	25	309	235	76	1	1	
	1983-84	8,387	6,388	76	2,389	28	342	193	56	16	5	
	1984-85	9,191	6,812	74	2,948	32	328	218	66	36	11	
	1985-86	9,610	7,235	75	3,183	33	231	155	67	11	5	
	1986-87	8,975	6,545	73	2,865	32	234	96	41	18	8	
	1987-88	9,625	6,978	72	3,013	31	203	100	49	8	4	
Virginia	1979-80	111,772	86,377	77	51,147	46	9	9	100	0	0	
	1980-81	104,111	80,681	77	47,355	45	46	8	17	1	2	
	1981-82	68,805	68,053	77	36,613	41	16	963	6,019	451	2,819	
	1982-83	83,389	65,037	78	36,279	44	0	0	0	0	0	
	1983-84	82,547	62,646	76	34,299	42	552	397	72	300	54	
	1984-85	82,788	61,762	75	32,362	39	600	337	56	263	44	
	1985-86	76,598	54,620	71	29,266	38	705	412	58	282	40	
	1986-87	73,020	54,068	74	28,507	39	568	415	73	241	42	
	1987-88	72,197	57,337	79	24,278	34	613	423	69	277	45	

Table C.2 (contd.)

		TOTAL PUBLIC PARTICIPANTS	PUBLIC READING	%	PUBLIC MATHEMATICS	%	TOTAL NONPUBLIC PARTICIPANTS	NONPUBLIC READING	%	NONPUBLIC MATHEMATICS	%
Washington	1979-80	59,767	45,527	76	16,125	27	1,291	990	77	409	32
	1980-81	60,292	46,547	77	16,622	28	1,026	772	75	414	40
	1981-82	55,229	43,502	79	15,569	28	981	752	77	377	38
	1982-83	58,312	45,858	79	15,071	26	934	754	81	237	25
	1983-84	59,562	45,624	77	16,249	27	990	790	80	404	41
	1984-85	59,734	44,712	75	16,245	27	1,088	818	75	518	48
	1985-86	64,917	46,209	71	16,183	25	150	304	87	104	30
	1986-87	61,794	43,236	70	14,150	23	658	620	93	316	47
	1987-88	63,285	43,915	69	14,243	23	806	593	74	420	52
West Virginia	1979-80	43,370	36,953	85	13,971	32	412	373	91	66	16
	1980-81	41,141	34,766	85	14,654	36	367	335	91	49	13
	1981-82	40,564	29,291	72	14,249	35	120	105	95	68	21
	1982-83	31,912	25,237	79	12,364	39	235	235	100	80	34
	1983-84	31,305	24,661	79	12,325	39	213	210	99	68	12
	1984-85	31,100	25,279	76	11,771	36	284	274	96	56	20
	1985-86	33,167	25,974	78	11,940	36	147	0	0	0	0
	1986-87	31,528	23,420	74	12,695	40	202	194	96	30	15
	1987-88	32,172	25,180	78	13,678	43	160	0	0	0	0
Wisconsin	1979-80	67,439	32,627	48	21,818	32	4,226	1,855	44	1,766	42
	1980-81	67,107	18,616	28	23,577	35	4,055	1,470	36	1,695	42
	1981-82	60,693	18,413	30	21,891	36	3,704	1,314	15	1,493	40
	1982-83	52,926	26,088	51	16,260	31	4,382	914	21	510	12
	1983-84	60,257	29,102	48	20,611	34	4,018	1,749	44	1,202	30
	1984-85	60,238	35,489	59	21,759	36	1,090	1,715	56	1,048	34
	1985-86	65,950	30,720	47	23,739	36	3,458	1,899	55	936	27
	1986-87	63,633	31,897	50	26,853	42	2,926	1,848	63	945	12
	1987-88	63,050	29,921	47	21,536	14	2,920	1,726	59	927	32
Wyoming	1979-80	4,642	3,730	80	1,101	24	93	50	54	12	13
	1980-81	5,398	3,449	64	1,078	20	86	72	84	13	18
	1981-82	4,642	2,849	61	838	18	79	57	72	9	11
	1982-83	3,761	3,290	87	686	18	80	50	63	17	21
	1983-84	4,252	3,409	80	1,122	26	84	77	92	20	24
	1984-85	4,325	3,549	82	1,052	24	48	50	104	11	23
	1985-86	4,047	3,281	81	1,164	29	76	33	43	17	22
	1986-87	3,984	3,337	84	1,043	26	37	30	81	14	38
	1987-88	3,608	2,971	82	1,180	13	51	29	57	14	27
Guam	1979-80	1,188	663	56	292	25	77	77	100	0	0
	1980-81	1,090	680	62	205	19	112	86	77	40	36
	1981-82	0	0	0	0	0	0	0	0	0	0
	1982-83	0	0	0	0	0	0	0	0	0	0
	1983-84	0	0	0	0	0	0	0	0	0	0
	1984-85	0	0	0	0	0	0	0	0	0	0
	1985-86	0	0	0	0	0	0	0	0	0	0
	1986-87	0	0	0	0	0	0	0	0	0	0
	1987-88	0	0	0	0	0	0	0	0	0	0
Puerto Rico	1979-80	204,714	0	0	98,983	48	7,937	0	0	2,319	29
	1980-81	256,785	0	0	111,139	43	5,250	0	0	2,410	46
	1981-82	242,164	0	0	126,771	52	4,931	0	0	2,762	56
	1982-83	272,754	0	0	139,879	51	5,277	0	0	2,366	45
	1983-84	269,229	0	0	136,372	51	7,488	0	0	3,212	43
	1984-85	253,154	0	0	126,860	50	6,877	0	0	2,781	40
	1985-86	264,166	0	0	146,270	55	4,783	0	0	2,156	45
	1986-87	240,005	0	0	118,124	49	10,013	0	0	1,011	10
	1987-88	236,394	0	0	119,711	51	16,528	0	0	4,376	26

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Table C.2 (contd.)

		TOTAL PUBLIC PARTICIPANTS	PUBLIC READING		PUBLIC MATHEMATICS		TOTAL NONPUBLIC PARTICIPANTS		NONPUBLIC READING		NONPUBLIC MATHEMATICS	
Trust Terr PI	1979-80	12,257	0	0	0	0	1,127	0	0	0	0	0
	1980-81	16,603	12,146	73	8,721	53	2,038	1,535	75	375	18	
	1981-82	21,515	11,133	52	10,260	48	2,440	1,047	43	945	39	
	1982-83	0	0	0	0	0	0	0	0	0	0	
	1983-84	34,899	37,492	107	13,509	96	1,706	4,343	117	4,343	117	
	1984-85	0	0	0	0	0	0	0	0	0	0	
	1985-86	0	0	0	0	0	0	0	0	0	0	
	1986-87	0	0	0	0	0	0	0	0	0	0	
	1987-88	0	0	0	0	0	0	0	0	0	0	
Virgin Islands	1979-80	1,711	1,711	100	0	0	483	483	100	0	0	
	1980-81	0	0	0	0	0	0	0	0	0	0	
	1981-82	0	0	0	0	0	0	0	0	0	0	
	1982-83	0	0	0	0	0	0	0	0	0	0	
	1983-84	0	0	0	0	0	0	0	0	0	0	
	1984-85	0	0	0	0	0	0	0	0	0	0	
	1985-86	0	0	0	0	0	0	0	0	0	0	
	1986-87	0	0	0	0	0	0	0	0	0	0	
	1987-88	0	0	0	0	0	0	0	0	0	0	
BIA	1979-80	24,314	0	0	0	0	0	0	0	0	0	
	1980-81	32,691	0	0	0	0	0	0	0	0	0	
	1981-82	23,545	13,001	55	10,401	44	0	0	0	0	0	
	1982-83	23,781	11,292	47	6,618	28	0	0	0	0	0	
	1983-84	21,368	10,231	48	8,595	40	0	0	0	0	0	
	1984-85	18,157	9,471	52	8,299	46	0	0	0	0	0	
	1985-86	15,497	9,028	58	9,894	64	0	0	0	0	0	
	1986-87	15,088	10,011	66	8,759	58	0	0	0	0	0	
	1987-88	16,801	11,095	66	10,045	60	0	0	0	0	0	

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Table C.3  
Teacher and Teacher Aide FTE Staff  
1987-88

	TOTAL FTE STAFF 1987-88	FTE TEACHERS 1987-88	PERCENT	FTE TEACHER AIDES 1987-88	PERCENT
Alabama	2,902	1,534	53	980	34
Alaska	187	62	33	108	57
Arizona	1,226	487	40	594	48
Arkansas	2,518	864	34	1,519	60
California	13,854	2,105	15	9,300	67
Colorado	1,173	750	64	310	26
Connecticut	1,642	742	45	614	37
Delaware	396	100	25	264	67
D. C.	436	148	34	216	50
Florida	5,211	2,649	51	2,132	41
Georgia	3,318	2,384	72	765	23
Hawaii	434	156	36	110	25
Idaho	652	232	36	395	61
Illinois	5,286	3,126	59	958	18
Indiana	3,982	735	18	3,008	76
Iowa	1,568	1,323	84	245	16
Kansas	1,069	638	60	329	31
Kentucky	2,801	1,582	56	983	35
Louisiana	4,427	1,248	28	2,605	59
Maine	1,102	278	25	747	68
Maryland	2,485	588	24	1,529	62
Massachusetts	3,241	1,861	57	966	30
Michigan	5,156	1,837	36	2,524	49
Minnesota	2,191	857	39	1,184	54
Mississippi	3,442	1,260	37	1,676	49
Missouri	2,265	1,811	80	391	17
Montana	534	286	53	225	42
Nebraska	747	484	65	203	27
Nevada	275	137	50	120	44
New Hampshire	593	195	33	248	42
New Jersey	5,179	2,993	58	1,423	27
New Mexico	1,194	544	46	518	43
New York	10,176	4,472	44	1,166	11
North Carolina	2,782	1,969	71	531	19
North Dakota	443	274	62	164	37
Ohio	4,011	3,104	77	646	16
Oklahoma	1,690	1,263	75	383	23
Oregon	1,338	589	44	645	48
Pennsylvania	5,676	2,979	52	1,793	32
Rhode Island	306	239	78	30	10
South Carolina	2,277	920	40	1,074	47
South Dakota	669	299	45	359	54
Tennessee	2,984	1,712	57	1,055	35
Texas	11,001	4,672	42	5,254	48
Utah	812	100	12	666	82
Vermont	419	196	47	196	47
Virginia	2,481	1,302	52	898	36
Washington	1,321	648	49	580	44
West Virginia	1,242	569	46	571	46
Wisconsin	1,870	1,285	69	478	26
Wyoming	179	98	55	75	42
Puerto Rico	9,485	4,654	49	1,709	18
BIA	969	331	34	561	58
NATION	143,616	65,668	46	56,019	39

Table C.6

Number and Percent of Total FTE Staff Who Were Administrators,  
Teachers, or Teacher Aides, by State -- 1979-80 to 1987-88

Nation		ADMINIS- TRATIVE	%	TEACHERS	%	TEACHER AIDES	%	TOTAL STAFF
	1979-80	6,267	3	77,782	40	86,826	45	194,403
	1980-81	4,321	2	80,078	40	80,938	44	185,925
	1981-82	4,655	3	74,786	45	67,536	40	167,748
	1982-83	3,937	3	68,590	46	58,093	39	149,220
	1983-84	4,118	3	68,627	46	57,479	38	150,277
	1984-85	4,764	3	72,797	46	61,380	39	158,967
	1985-86	3,775	2	69,014	45	59,058	39	151,936
	1986-87	3,332	2	64,143	46	55,530	39	140,690
	1987-88	3,414	2	65,668	46	56,019	39	143,616
Alabama	1979-80	107	3	2,555	81	146	5	3,146
	1980-81	106	2	2,605	55	1,513	32	4,730
	1981-82	97	2	2,405	56	1,387	32	4,330
	1982-83	93	3	2,087	61	917	27	3,445
	1983-84	86	3	1,905	61	803	26	3,105
	1984-85	86	3	1,521	52	1,016	35	2,933
	1985-86	75	3	1,541	52	1,036	35	2,950
	1986-87	68	2	1,468	53	902	33	2,750
	1987-88	69	2	1,534	53	980	34	2,902
Alaska	1979-80	8	3	84	34	139	57	244
	1980-81	6	3	65	33	113	58	195
	1981-82	6	3	78	38	113	55	206
	1982-83	6	3	57	33	85	49	173
	1983-84	6	2	108	45	112	46	242
	1984-85	8	6	50	28	85	49	175
	1985-86	7	6	29	26	71	64	112
	1986-87	6	3	82	40	104	50	207
	1987-88	5	3	62	33	108	57	187
Arizona	1979-80	73	3	753	28	1,632	62	2,653
	1980-81	57	2	711	28	1,488	59	2,512
	1981-82	72	5	531	34	744	48	1,566
	1982-83	53	4	588	39	755	51	1,490
	1983-84	34	3	560	43	548	42	1,314
	1984-85	37	2	544	35	837	54	1,561
	1985-86	40	2	735	40	934	51	1,847
	1986-87	46	1	725	50	561	39	1,441
	1987-88	47	4	487	40	594	48	1,226
Arkansas	1979-80	71	2	1,341	34	2,216	56	3,941
	1980-81	78	2	1,311	35	2,094	56	3,759
	1981-82	75	2	1,147	36	1,773	55	3,222
	1982-83	65	2	1,051	37	1,577	56	2,830
	1983-84	61	2	1,000	37	1,517	56	2,723
	1984-85	50	2	923	37	1,406	57	2,470
	1985-86	46	2	857	35	1,445	59	2,437
	1986-87	49	2	781	34	1,378	60	2,286
	1987-88	49	2	864	34	1,519	60	2,518
California	1979-80	108	1	1,704	15	7,934	70	11,412
	1980-81	108	1	2,184	18	6,894	58	11,819
	1981-82	354	3	1,599	13	8,683	73	11,885
	1982-83	86	1	2,343	22	6,270	60	10,460
	1983-84	234	1	2,436	15	11,580	69	16,703
	1984-85	363	2	2,571	17	9,595	63	15,172
	1985-86	325	3	2,013	16	8,328	65	12,884
	1986-87	379	3	2,231	15	9,896	66	14,988
	1987-88	351	3	2,105	15	9,300	67	13,854
Colorado	1979-80	41	2	861	50	680	40	1,719
	1980-81	34	2	887	52	574	33	1,719
	1981-82	35	2	771	53	446	31	1,441
	1982-83	29	2	724	50	353	28	1,248
	1983-84	26	2	787	61	321	25	1,290
	1984-85	34	3	833	62	334	25	1,338
	1985-86	33	3	799	60	421	32	1,321
	1986-87	31	3	730	66	272	24	1,111
	1987-88	45	4	750	64	310	26	1,173
Connecticut	1979-80	0	0	1,174	44	1,146	43	2,683
	1980-81	53	3	835	44	817	43	1,883
	1981-82	65	4	870	48	738	41	1,803
	1982-83	65	4	870	48	738	41	1,803
	1983-84	4d	3	746	49	553	36	1,535
	1984-85	56	3	901	48	787	42	1,879
	1985-86	38	2	715	42	767	45	1,694
	1986-87	45	3	696	44	617	39	1,598
	1987-88	44	3	742	45	614	37	1,642

Table C.4 (contd.)

	ADMINIS- TRATIVE	TEACHERS	TEACHER AIDES	TOTAL STAFF				
<b>Delaware</b>	1979-80	12	129	26	323	65	494	
	1980-81	16	128	25	318	63	506	
	1981-82	14	147	29	276	54	516	
	1982-83	12	103	28	222	60	369	
	1983-84	12	116	30	232	61	382	
	1984-85	12	123	31	235	59	400	
	1985-86	13	133	32	241	59	411	
	1986-87	10	106	26	263	66	401	
	1987-88	9	100	25	264	67	396	
<b>D. C.</b>	1979-80	19	282	36	337	43	778	
	1980-81	17	259	35	331	44	748	
	1981-82	15	205	33	290	47	621	
	1982-83	11	126	24	309	60	518	
	1983-84	17	116	21	273	49	556	
	1984-85	14	110	24	271	59	457	
	1985-86	12	103	26	229	57	399	
	1986-87	16	111	27	231	56	414	
	1987-88	16	148	34	216	50	436	
<b>Florida</b>	1979-80	77	1	2,610	38	3,304	49	6,803
	1980-81	78	1	3,416	49	3,028	43	6,990
	1981-82	85	2	1,898	39	2,283	47	4,876
	1982-83	67	1	1,919	40	2,468	51	4,794
	1983-84	71	1	2,505	46	2,333	43	5,486
	1984-85	84	1	2,452	42	3,008	51	5,847
	1985-86	80	1	2,598	45	2,786	48	5,832
	1986-87	74	1	2,527	48	2,322	44	5,272
	1987-88	76	1	2,649	51	2,132	41	5,211
<b>Georgia</b>	1979-80	131	2	3,193	52	2,608	42	6,138
	1980-81	105	2	2,786	55	1,977	39	5,048
	1981-82	109	2	3,212	60	1,781	33	5,346
	1982-83	117	3	2,451	61	1,332	33	4,041
	1983-84	93	3	2,361	66	1,005	28	3,579
	1984-85	156	4	2,340	67	825	24	3,498
	1985-86	87	3	2,193	64	1,047	30	3,453
	1986-87	71	2	2,288	71	781	24	3,232
	1987-88	70	2	2,384	72	765	23	3,318
<b>Hawaii</b>	1979-80	3	1	355	64	194	35	552
	1980-81	0	0	378	70	93	17	541
	1981-82	0	0	266	70	65	17	382
	1982-83	4	1	206	70	32	11	294
	1983-84	3	1	226	55	43	11	407
	1984-85	3	1	164	42	49	13	391
	1985-86	2	0	167	39	58	14	424
	1986-87	2	0	152	33	55	12	461
	1987-88	2	0	156	36	110	25	434
<b>Idaho</b>	1979-80	25	3	225	28	341	42	817
	1980-81	19	3	232	36	345	53	649
	1981-82	17	3	200	34	312	54	581
	1982-83	17	3	202	37	275	50	548
	1983-84	16	3	224	37	261	44	597
	1984-85	20	3	232	36	362	55	652
	1985-86	22	3	207	33	373	60	619
	1986-87	17	3	218	35	370	60	615
	1987-88	16	2	232	36	395	61	652
<b>Illinois</b>	1979-80	127	2	3,477	59	1,539	26	5,934
	1980-81	140	2	3,349	58	1,465	25	5,750
	1981-82	224	5	3,075	63	960	20	4,878
	1982-83	211	5	2,850	65	757	17	4,390
	1983-84	214	5	3,054	65	842	18	4,725
	1984-85	237	4	4,162	71	852	15	5,853
	1985-86	223	4	3,334	65	897	18	5,099
	1986-87	245	5	3,222	65	918	19	4,948
	1987-88	307	6	3,126	59	958	18	5,286
<b>Indiana</b>	1979-80	74	2	767	19	2,620	65	4,019
	1980-81	48	1	628	18	2,624	74	3,526
	1981-82	43	1	548	15	2,780	78	3,546
	1982-83	41	1	525	17	2,378	77	3,075
	1983-84	63	2	569	19	2,301	76	3,024
	1984-85	80	2	693	18	3,014	78	3,880
	1985-86	67	2	691	17	3,259	79	4,143
	1986-87	59	1	693	17	3,181	78	4,058
	1987-88	74	2	735	18	3,008	76	3,982

Table C.4 (contd.)

	ADMINIS- TRATIVE		TEACHERS		TEACHER AIDES		TOTAL STAFF
Iowa	1979-80	0	1,588	81	231	12	1,955
	1980-81	57	1,319	83	141	9	1,587
	1981-82	50	1,167	86	97	7	1,357
	1982-83	0	1,063	90	89	8	1,174
	1983-84	22	1,028	89	86	7	1,157
	1984-85	0	1,074	92	80	7	1,170
	1985-86	0	1,094	91	85	7	1,197
	1986-87	0	1,203	85	191	14	1,414
	1987-88	0	1,323	84	245	16	1,568
Kansas	1979-80	43	3	855	57	37	1,497
	1980-81	148	8	1,099	61	500	28
	1981-82	227	10	1,246	57	447	20
	1982-83	26	2	684	58	417	35
	1983-84	36	3	588	55	371	35
	1984-85	26	2	757	60	392	31
	1985-86	20	2	674	61	341	31
	1986-87	18	2	631	59	316	30
	1987-88	19	2	638	60	329	31
Kentucky	1979-80	101	3	2,059	52	1,348	34
	1980-81	92	2	2,065	54	1,283	33
	1981-82	83	2	1,898	57	1,022	31
	1982-83	81	3	1,700	57	937	31
	1983-84	85	3	1,638	61	720	27
	1984-85	78	3	1,751	58	975	32
	1985-86	92	3	1,697	57	993	33
	1986-87	73	3	1,595	59	841	31
	1987-88	75	3	1,582	56	983	35
Louisiana	1979-80	93	2	1,716	28	3,296	55
	1980-81	148	3	1,867	32	3,107	53
	1981-82	189	4	1,369	30	2,419	53
	1982-83	90	2	1,195	29	2,285	56
	1983-84	179	4	1,327	31	2,270	53
	1984-85	71	2	1,317	30	2,475	56
	1985-86	78	2	772	19	2,673	64
	1986-87	102	2	1,303	29	2,558	57
	1987-88	84	2	1,248	28	2,605	59
Maine	1979-80	0	0	238	17	904	65
	1980-81	0	0	224	21	490	45
	1981-82	0	0	169	13	605	45
	1982-83	0	0	146	14	765	72
	1983-84	0	0	161	16	399	40
	1984-85	0	0	154	14	853	76
	1985-86	0	0	152	15	703	70
	1986-87	0	0	233	20	790	67
	1987-88	22	2	278	25	747	68
Maryland	1979-80	51	1	704	17	2,786	66
	1980-81	43	1	633	19	2,119	63
	1981-82	52	2	415	15	1,781	63
	1982-83	47	2	679	25	1,789	65
	1983-84	43	1	832	27	1,642	53
	1984-85	33	1	927	31	1,856	63
	1985-86	23	1	756	28	1,782	66
	1986-87	32	1	579	24	1,480	61
	1987-88	37	1	588	24	1,529	62
Massachusetts	1979-80	160	3	2,438	47	2,102	41
	1980-81	116	2	2,234	46	2,070	42
	1981-82	122	3	2,134	57	1,187	32
	1982-83	122	4	1,871	55	1,033	30
	1983-84	131	3	2,251	56	1,272	31
	1984-85	118	3	2,249	62	998	28
	1985-86	108	3	1,978	57	1,105	32
	1986-87	112	3	1,894	57	1,005	30
	1987-88	107	3	1,861	57	966	30
Michigan	1979-80	266	4	1,995	29	4,047	59
	1980-81	255	4	2,031	28	4,183	59
	1981-82	218	4	1,653	31	3,272	55
	1982-83	185	4	1,430	31	2,491	55
	1983-84	331	6	1,715	31	2,947	54
	1984-85	221	4	1,785	34	2,794	53
	1985-86	251	5	1,857	35	2,827	53
	1986-87	206	4	1,878	35	2,760	51
	1987-88	232	4	1,837	36	2,524	49

Table C.4 (contd.)

	ADMINIS- TRATIVE	%	TEACHERS	%	TEACHER AIDES	%	TOTAL STAFF	
Minnesota	1979-80	130	3	1,808	43	1,877	45	4,170
	1980-81	201	6	1,460	42	1,597	46	3,485
	1981-82	84	3	1,304	46	1,356	48	2,822
	1982-83	93	4	1,024	43	1,142	48	2,361
	1983-84	58	3	991	43	1,202	52	2,300
	1984-85	41	2	928	43	1,145	53	2,170
	1985-86	36	2	389	24	1,140	69	1,645
	1986-87	76	4	862	40	1,141	53	2,138
	1987-88	59	3	857	39	1,184	54	2,191
Mississippi	1979-80	168	3	2,319	39	2,847	47	6,004
	1980-81	129	2	2,163	39	2,568	47	5,477
	1981-82	130	3	1,886	41	1,999	43	4,600
	1982-83	124	3	1,744	40	1,930	45	4,321
	1983-84	118	3	1,724	45	1,501	39	3,807
	1984-85	127	3	1,826	45	1,645	41	4,023
	1985-86	125	3	1,679	46	1,398	39	3,613
	1986-87	124	4	1,277	40	1,454	45	3,220
	1987-88	144	4	1,260	37	1,676	49	3,442
Missouri	1979-80	28	1	2,188	66	955	29	3,317
	1980-81	26	1	2,204	65	992	29	3,368
	1981-82	30	1	2,116	70	778	26	3,028
	1982-83	32	1	1,961	68	626	22	2,876
	1983-84	31	1	2,002	76	535	20	2,619
	1984-85	24	1	1,757	78	429	19	2,258
	1985-86	23	1	1,734	79	391	18	2,186
	1986-87	23	1	1,766	78	429	19	2,275
	1987-88	23	1	1,811	80	391	17	2,265
Montana	1979-80	20	3	321	42	406	53	773
	1980-81	12	2	319	44	354	49	717
	1981-82	18	3	291	44	312	48	657
	1982-83	6	1	253	50	230	46	502
	1983-84	6	1	233	49	215	45	472
	1984-85	11	2	254	49	247	47	521
	1985-86	13	2	276	50	248	45	551
	1986-87	15	3	323	55	243	41	590
	1987-88	12	2	286	53	225	42	534
Nebraska	1979-80	36	3	672	55	424	35	1,218
	1980-81	44	4	653	57	370	32	1,139
	1981-82	11	1	484	66	211	29	733
	1982-83	18	2	507	61	299	36	836
	1983-84	14	2	506	61	258	31	832
	1984-85	15	2	562	66	227	27	850
	1985-86	21	3	534	64	235	28	840
	1986-87	14	2	490	65	208	27	757
	1987-88	12	2	484	65	203	27	747
Nevada	1979-80	3	1	96	40	99	41	241
	1980-81	4	2	110	40	100	36	275
	1981-82	4	2	99	46	92	43	213
	1982-83	2	1	79	41	88	46	193
	1983-84	2	1	100	41	125	52	241
	1984-85	2	1	117	47	116	47	247
	1985-86	4	1	132	48	113	42	273
	1986-87	3	1	120	47	107	42	253
	1987-88	3	1	137	50	120	44	275
New Hampshire	1979-80	45	8	149	25	318	54	592
	1980-81	44	7	180	28	305	47	644
	1981-82	61	10	175	28	332	54	615
	1982-83	26	7	118	29	214	53	404
	1983-84	28	6	121	27	256	57	449
	1984-85	64	12	151	27	252	46	550
	1985-86	34	6	173	32	274	51	540
	1986-87	35	5	234	36	291	45	647
	1987-88	40	7	195	33	248	42	593
New Jersey	1979-80	205	4	2,673	54	1,410	28	4,985
	1980-81	218	5	2,421	51	1,506	32	4,770
	1981-82	206	5	2,410	59	1,183	29	4,088
	1982-83	206	5	2,410	59	1,183	29	4,088
	1983-84	184	5	2,204	56	1,156	29	3,950
	1984-85	202	4	2,719	56	1,453	30	4,883
	1985-86	160	3	2,931	57	1,470	28	5,175
	1986-87	231	4	3,024	58	1,552	30	5,244
	1987-88	164	3	2,993	58	1,423	27	5,179

Table C.4 (contd.)

	ADMINIS- TRATIVE		TEACHERS		TEACHER AIDES		TOTAL STAFF	
New Mexico	1979-80	7	0	662	39	629	49	1,678
	1980-81	7	0	655	42	717	46	1,555
	1981-82	4	0	608	45	617	45	1,364
	1982-83	9	1	553	42	579	44	1,302
	1983-84	11	1	560	47	530	44	1,191
	1984-85	14	1	574	46	548	44	1,244
	1985-86	10	1	591	46	563	44	1,289
	1986-87	10	1	519	47	461	42	1,101
	1987-88	11	1	544	46	518	43	1,194
New York	1979-80	257	2	6,485	41	8,220	52	15,721
	1980-81	245	2	6,251	42	7,666	52	14,861
	1981-82	235	2	5,361	51	1,278	12	10,612
	1982-83	190	2	4,177	45	748	8	9,219
	1983-84	437	4	5,914	49	1,053	9	12,071
	1984-85	505	4	5,694	48	1,076	9	11,915
	1985-86	213	2	7,439	55	976	7	13,576
	1986-87	201	2	4,491	47	1,016	11	9,564
	1987-88	212	2	4,472	44	1,166	11	10,176
North Carolina	1979-80	122	2	2,817	43	3,161	49	6,478
	1980-81	136	2	3,109	52	2,365	39	6,019
	1981-82	134	3	2,530	57	1,360	31	4,424
	1982-83	99	3	2,412	62	974	25	3,865
	1983-84	110	3	2,411	64	907	24	3,749
	1984-85	96	3	2,256	65	833	24	3,488
	1985-86	100	3	2,184	68	584	18	3,196
	1986-87	78	3	1,880	71	485	18	2,666
	1987-88	81	3	1,969	71	531	19	2,782
North Dakota	1979-80	7	1	386	66	187	32	581
	1980-81	26	3	494	64	246	32	772
	1981-82	3	1	278	67	132	32	417
	1982-83	4	1	330	67	156	32	492
	1983-84	3	1	312	68	144	31	460
	1984-85	4	1	307	66	152	33	464
	1985-86	3	1	294	67	141	32	439
	1986-87	3	1	270	63	157	36	432
	1987-88	3	1	274	62	164	37	443
Ohio	1979-80	130	2	3,679	70	1,228	23	5,264
	1980-81	139	3	3,382	67	1,112	22	5,065
	1981-82	123	3	3,016	73	832	20	4,150
	1982-83	102	3	2,708	77	561	16	3,510
	1983-84	108	3	3,004	78	601	16	3,860
	1984-85	109	3	3,140	76	736	18	4,109
	1985-86	101	3	3,092	78	620	16	3,976
	1986-87	97	3	2,953	79	561	15	3,757
	1987-88	94	2	3,104	77	646	16	4,011
Oklahoma	1979-80	115	4	1,646	57	915	32	2,896
	1980-81	58	2	1,569	60	865	33	2,601
	1981-82	43	2	1,374	61	683	30	2,268
	1982-83	32	2	1,219	66	551	30	1,841
	1983-84	28	1	1,225	66	552	30	1,847
	1984-85	21	1	1,758	67	802	31	2,613
	1985-86	14	1	1,209	61	732	37	1,990
	1986-87	25	1	1,326	74	412	23	1,794
	1987-88	23	1	1,263	75	383	23	1,690
Oregon	1979-80	41	2	656	35	1,045	56	1,871
	1980-81	64	5	460	33	747	54	1,378
	1981-82	70	6	452	37	620	50	1,231
	1982-83	22	2	425	38	571	51	1,110
	1983-84	31	3	460	42	563	51	1,107
	1984-85	69	5	489	37	646	48	1,334
	1985-86	27	2	582	42	718	52	1,393
	1986-87	27	2	535	42	647	51	1,270
	1987-88	34	3	589	44	645	48	1,338
Pennsylvania	1979-80	376	5	197	2	3,394	41	8,345
	1980-81	138	2	3,688	47	3,113	40	7,812
	1981-82	125	2	3,204	49	2,458	38	6,549
	1982-83	115	2	2,924	50	2,147	36	5,900
	1983-84	120	2	3,019	51	2,113	36	5,884
	1984-85	114	2	2,186	36	2,167	36	6,044
	1985-86	109	2	1,758	32	2,102	38	5,484
	1986-87	110	2	2,940	53	1,775	32	5,581
	1987-88	97	2	2,979	52	1,793	32	5,676

Table C.4 (contd.)

	ADMINIS- TRATIVE	%	TEACHERS	%	TEACHER AIDES	%	TOTAL STAFF	
Rhode Island	1979-80	21	3	339	52	187	29	646
	1980-81	21	4	298	59	94	19	504
	1981-82	19	3	346	64	114	21	537
	1982-83	27	6	265	62	59	14	426
	1983-84	26	6	257	62	57	14	413
	1984-85	21	6	246	66	61	16	373
	1985-86	18	5	259	69	49	13	377
	1986-87	12	3	259	72	52	15	358
	1987-88	11	4	239	78	30	10	306
South Carolina	1979-80	95	2	1,621	36	2,223	50	4,456
	1980-81	84	2	1,651	36	2,257	50	4,536
	1981-82	78	2	1,279	36	1,746	49	3,569
	1982-83	75	2	1,132	36	1,530	49	3,147
	1983-84	76	3	1,142	39	1,347	46	2,955
	1984-85	81	3	1,091	40	1,250	46	2,729
	1985-86	62	2	986	40	1,136	46	2,474
	1986-87	54	2	942	42	1,004	45	2,228
	1987-88	58	3	920	40	1,074	47	2,277
South Dakota	1979-80	6	1	457	45	491	49	1,010
	1980-81	4	0	404	44	437	48	918
	1981-82	3	0	388	49	350	45	785
	1982-83	3	0	348	48	371	51	725
	1983-84	3	0	359	48	386	51	750
	1984-85	2	0	347	51	319	47	675
	1985-86	4	1	372	61	232	38	611
	1986-87	2	0	338	49	340	50	682
	1987-88	5	1	299	45	359	54	669
Tennessee	1979-80	496	8	2,911	49	2,080	35	5,969
	1980-81	98	2	2,061	50	1,796	44	4,120
	1981-82	84	2	1,592	46	1,579	46	3,457
	1982-83	107	2	2,572	56	1,645	36	4,613
	1983-84	87	3	1,688	61	903	32	2,782
	1984-85	84	3	1,828	58	1,072	34	3,153
	1985-86	82	3	1,803	58	1,086	35	3,128
	1986-87	78	3	1,713	58	1,013	35	2,935
	1987-88	80	3	1,712	57	1,055	35	2,984
Texas	1979-80	1,662	12	5,068	36	5,734	41	13,951
	1980-81	231	2	5,980	44	5,824	43	13,640
	1981-82	306	2	6,352	36	9,112	52	17,512
	1982-83	274	2	5,690	36	8,163	52	15,690
	1983-84	252	3	3,777	43	3,744	43	8,743
	1984-85	810	5	7,102	45	6,613	42	15,703
	1985-86	570	5	4,855	39	6,111	49	12,544
	1986-87	110	1	3,535	39	4,767	52	9,149
	1987-88	139	1	4,672	42	5,254	48	11,001
Utah	1979-80	18	2	185	20	706	74	951
	1980-81	13	1	139	17	604	76	796
	1981-82	12	2	120	15	624	78	796
	1982-83	12	2	103	16	598	80	750
	1983-84	35	3	117	11	851	60	1,067
	1984-85	13	1	115	13	633	72	909
	1985-86	11	1	117	13	648	74	878
	1986-87	15	2	108	15	584	79	738
	1987-88	13	2	100	12	666	82	812
Vermont	1979-80	17	3	232	46	224	44	509
	1980-81	19	4	216	46	199	43	466
	1981-82	13	3	188	48	166	42	391
	1982-83	12	4	162	49	14	43	333
	1983-84	12	3	174	47	164	45	367
	1984-85	15	4	197	47	182	43	421
	1985-86	15	3	205	48	193	45	428
	1986-87	17	4	182	46	186	47	398
	1987-88	15	4	196	47	196	47	419
Virginia	1979-80	114	2	1,760	35	2,630	52	5,032
	1980-81	104	2	1,715	35	2,442	50	4,882
	1981-82	107	3	1,486	40	1,716	46	3,733
	1982-83	87	3	1,405	42	1,498	45	3,334
	1983-84	86	3	1,416	45	1,340	42	3,165
	1984-85	84	3	1,360	46	1,214	41	2,966
	1985-86	77	3	1,280	49	1,008	38	2,623
	1986-87	69	3	1,225	51	867	36	2,397
	1987-88	66	3	1,302	52	898	36	2,481

Table C.4 (contd.)

	ADMINIS- TRATIVE	%	TEACHERS	%	TEACHER AIDES	%	TOTAL STAFF	
Washington	1979-80	48	3	758	48	675	43	1,584
	1980-81	73	4	805	48	672	40	1,682
	1981-82	38	3	677	51	531	40	1,327
	1982-83	34	3	665	50	576	43	1,329
	1983-84	35	3	683	50	579	43	1,353
	1984-85	36	3	661	50	560	43	1,314
	1985-86	78	4	932	52	682	38	1,797
	1986-87	34	3	644	50	554	43	1,293
	1987-88	30	2	648	49	580	44	1,321
West Virginia	1979-80	55	3	701	34	1,102	53	2,061
	1980-81	53	3	638	33	1,081	56	1,945
	1981-82	53	3	549	33	876	54	1,638
	1982-83	42	3	494	34	812	56	1,449
	1983-84	37	3	520	39	716	53	1,346
	1984-85	43	3	571	41	695	50	1,397
	1985-86	36	3	566	43	651	49	1,330
	1986-87	34	3	542	44	584	48	1,228
	1987-88	34	3	569	46	571	46	1,242
Wisconsin	1979-80	105	3	1,478	48	1,246	40	3,087
	1980-81	48	2	1,441	51	1,113	39	2,818
	1981-82	36	1	1,710	62	856	31	2,757
	1982-83	443	20	1,295	59	391	18	2,209
	1983-84	44	2	1,222	67	465	26	1,812
	1984-85	44	2	1,241	65	536	28	1,901
	1985-86	41	2	1,311	69	473	25	1,902
	1986-87	38	2	1,221	66	534	29	1,858
	1987-88	38	2	1,285	69	478	26	1,870
Wyoming	1979-80	11	5	119	52	88	39	228
	1980-81	6	3	117	56	83	40	209
	1981-82	54	28	98	50	34	17	194
	1982-83	3	2	94	66	38	27	142
	1983-84	3	2	97	63	49	32	154
	1984-85	3	2	97	60	58	35	163
	1985-86	5	3	92	55	66	39	169
	1986-87	4	3	87	52	68	40	169
	1987-88	4	2	98	55	75	42	179
Guam	1979-80	1	1	35	41	34	40	86
	1980-81	2	2	34	39	34	39	88
	1981-82	0	0	0	0	0	0	0
	1982-83	0	0	0	0	0	0	0
	1983-84	0	0	0	0	0	0	0
	1984-85	0	0	0	0	0	0	0
	1985-86	0	0	0	0	0	0	0
	1986-87	0	0	0	0	0	0	0
	1987-88	0	0	0	0	0	0	0
Puerto Rico	1979-80	273	4	3,915	62	397	6	6,364
	1980-81	245	3	3,735	50	959	13	7,512
	1981-82	331	3	6,797	63	950	9	10,869
	1982-83	282	3	6,357	61	1,310	13	10,445
	1983-84	267	3	5,723	55	1,732	17	10,343
	1984-85	288	3	5,321	52	1,938	19	10,217
	1985-86	122	1	5,884	54	2,008	18	10,981
	1986-87	110	1	4,691	51	1,673	18	9,215
	1987-88	118	1	4,654	49	1,709	18	9,485
Trust Terr PI	1979-80	18	5	33	9	255	68	377
	1980-81	32	5	219	32	319	47	674
	1981-82	33	6	124	21	328	55	597
	1982-83	0	0	0	0	0	0	0
	1983-84	20	3	134	21	351	54	648
	1984-85	0	0	0	0	0	0	0
	1985-86	0	0	0	0	0	0	0
	1986-87	0	0	0	0	0	0	0
	1987-88	0	0	0	0	0	0	0
Virgin Islands	1979-80	5	3	39	26	71	47	150
	1980-81	0	0	0	0	0	0	0
	1981-82	0	0	0	0	0	0	0
	1982-83	0	0	0	0	0	0	0
	1983-84	0	0	0	0	0	0	0
	1984-85	0	0	0	0	0	0	0
	1985-86	0	0	0	0	0	0	0
	1986-87	0	0	0	0	0	0	0
	1987-88	0	0	0	0	0	0	0

Table C.4 (contd.)

	ADMINIS- TRATIVE	TEACHERS	TEACHER AIDES	TOTAL STAFF
BIA	1979-80	44	274	947
	1980-81	75	259	834
	1981-82	58	291	853
	1982-83	31	295	690
	1983-84	37	284	657
	1984-85	33	270	656
	1985-86	23	264	611
	1986-87	25	303	575
	1987-88	36	331	561
				58
				969

**APPENDIX D**  
**ADDITIONAL ACHIEVEMENT INFORMATION FOR 1987-88**

This appendix provides additional tables displaying the achievement information for 1987-88. The first set of tables--Tables D.1 through D.4--presents the reading and mathematics achievement results for Chapter 1 students tested on a fall-spring cycle in 1987-88. These tables correspond to Tables 2.1, 2.2, 2.3, and 2.4 in the text, which present achievement results for students tested on an annual cycle.

The second set of tables--Tables D.5 through D.8--presents the pretest percentiles, the posttest percentiles, and the NCE gain scores by grade, for the nation, and the highest and lowest scores.

The third set of tables--Tables D.9 through D.12--presents state-by-state and grade-by-grade listings of the following achievement information: sample weight, weighted number tested, pretest NCE, pretest percentile, posttest NCE, posttest percentile, and gain NCE.

In the second and third sets, the tables are provided in the following order:

- o annual reading;
- o fall-spring reading;
- o annual mathematics; and
- o fall-spring mathematics.

**Table D.1**  
**Reading Achievement Results for Chapter 1 Students  
 Tested on a Fall-Spring Cycle -- 1987-88**

Grade	Weighted Number Tested	Number of States Reporting	Percentile		
			Pretest	Posttest	Change
2	152,634	44	18	33	15
3	125,061	44	18	31	13
4	102,361	44	19	30	11
5	86,538	44	20	29	9
6	68,723	44	19	29	10
7	46,263	44	18	26	8
8	37,013	43	18	25	7
9	25,917	41	17	24	7
10	12,070	39	17	23	6
11	7,813	37	16	23	7
12	4,242	36	18	25	7
Total	668,365	44	19	29	10

**Table D.2**  
**Mathematics Achievement Results for Chapter 1 Students  
 Tested on a Fall-Spring Cycle -- 1987-88**

Grade	Weighted Number Tested	Number of States Reporting	Percentile		
			Pretest	Posttest	Change
2	60,594	42	19	40	21
3	55,993	43	19	37	18
4	55,765	44	19	35	16
5	51,227	44	20	33	13
6	40,807	44	20	33	13
7	26,142	44	20	30	10
8	21,050	43	22	31	9
9	14,624	36	20	30	10
10	7,052	34	23	33	10
11	3,929	31	24	32	8
12	1,703	24	31	35	4
Total	338,886	44	20	35	15

**Table D.3**  
**Reading Achievement Posttest Percentiles and Percentile Gains**  
**for Chapter 1 Students Tested on a Fall-Spring Cycle --**  
**1979-80 to 1987-88**

Grade	Posttest Percentile								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	32	31	31	35	36	37	36	35	33
3	27	27	29	31	31	33	33	32	31
4	24	27	28	29	31	31	33	32	30
5	24	26	28	29	29	30	31	30	29
6	24	26	27	29	29	30	32	30	29
7	22	24	25	27	28	29	28	27	26
8	22	23	24	26	27	28	28	26	25
9	21	22	24	25	25	25	24	23	24
10	20	21	23	22	23	22	23	23	23
11	17	19	19	21	19	18	21	21	23
12	17	18	18	21	19	18	22	20	25

Grade	Changes in Percentile Ranks								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	14	13	13	15	16	15	16	15	15
3	10	10	10	12	12	12	13	12	13
4	9	10	10	10	11	11	12	12	11
5	8	8	10	10	10	9	10	10	9
6	8	8	8	9	9	9	11	10	10
7	7	7	7	7	9	8	9	8	8
8	7	6	6	7	7	8	9	8	7
9	6	7	6	7	7	7	6	6	7
10	5	6	6	6	6	5	6	6	6
11	3	5	4	5	5	3	5	5	7
12	5	5	5	3	5	4	4	5	7

Table D.4

Mathematics Achievement Posttest Percentiles and Percentile Gains  
for Chapter 1 Students Tested on a Fall-Spring Cycle --  
1979-80 to 1987-88

Grade	Posttest Percentile								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	35	36	39	41	41	44	44	42	40
3	31	32	33	37	37	39	39	38	37
4	31	33	34	36	38	37	38	37	35
5	29	31	33	34	35	36	36	35	33
6	29	30	33	35	35	37	36	35	33
7	26	28	30	34	33	34	33	31	30
8	25	27	30	32	32	33	32	30	31
9	25	27	31	29	31	29	29	29	30
10	27	27	30	25	28	27	25	33	33
11	28	26	26	27	30	27	25	27	32
12	27	25	26	27	29	27	26	25	35

Grade	Changes in Percentile Ranks								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	16	17	19	19	21	22	23	21	21
3	13	13	13	16	17	18	19	18	18
4	13	14	15	15	16	17	18	16	16
5	12	13	13	13	14	14	16	14	13
6	11	10	13	13	13	14	15	14	13
7	9	8	9	10	10	10	11	10	10
8	8	8	8	9	10	10	9	8	9
9	9	9	11	9	11	11	10	9	10
10	8	8	7	5	6	6	7	9	10
11	8	7	8	7	9	7	6	7	8
12	9	5	7	7	7	8	5	7	4

Table D.5

**Reading Achievement Pretest Percentiles, Posttest Percentiles, and NCE Gain Scores for Chapter 1 Students Tested on an Annual Cycle - National, Lowest and Highest Standing -- 1987-88<sup>a/</sup>**

Grade	Pretest Percentiles			Posttest Percentiles			NCE Gain Scores		
	National	Lowest	Highest	National	Lowest	Highest	National	Lowest	Highest
2	23	13	44	27	19	46	2.8	-2.8	9.6
3	21	15	42	26	18	44	3.3	-2.0	10.7
4	22	14	38	27	18	40	3.5	-5.7	7.2
5	22	13	33	26	16	39	2.6	-2.5	6.7
6	22	12	38	27	15	48	3.2	-0.7	8.8
7	21	14	31	25	18	40	2.5	-2.7	11.6
8	20	11	36	24	13	42	2.6	-7.7	13.9
9	19	3	31	22	10	39	2.2	-3.1	15.7
10	21	8	35	23	10	42	1.1	-8.6	9.1
11	20	6	30	22	5	32	1.6	-10.0	8.3
12	21	3	42	21	.7	52	0.0	-13.0	10.0

Table D.6

**Mathematics Achievement Pretest Percentiles, Posttest Percentiles, and NCE Gain Scores for Chapter 1 Students Tested on an Annual Cycle - National, Lowest and Highest Standing -- 1987-88<sup>a/</sup>**

Grade	Pretest Percentiles			Posttest Percentiles			NCE Gain Scores		
	National	Lowest	Highest	National	Lowest	Highest	National	Lowest	Highest
2	27	7	48	38	19	68	6.7	-0.2	15.5
3	27	15	55	34	21	55	4.1	-7.0	13.1
4	25	9	50	33	18	55	5.0	-5.7	11.5
5	25	12	45	32	19	58	4.3	-0.8	10.5
6	25	14	38	32	20	52	4.5	-1.0	16.9
7	26	11	42	30	17	46	2.6	-3.0	9.2
8	25	9	40	30	11	47	2.8	-3.7	15.0
9	23	7	44	27	11	50	2.8	-8.4	15.6
10	24	8	39	28	12	51	2.4	-2.3	8.4
11	27	7	34	30	9	58	1.9	-4.2	16.8
12	32	2	80	31	4	86	-0.4	-2.4	21.3

<sup>a/</sup> Values at the extremes are frequently a function of small numbers of Chapter 1 students tested.

Table D.7

**Reading Achievement Pretest Percentiles, Posttest Percentiles, and NCE Gain Scores for Chapter 1 Students Tested on a Fall-Spring Cycle - National, Lowest and Highest Standing -- 1987-88<sup>a/</sup>**

Grade	Pretest Percentiles			Posttest Percentiles			NCE Gain Scores		
	National	Lowest	Highest	National	Lowest	Highest	National	Lowest	Highest
2	18	7	32	33	14	47	10.1	-1.3	17.6
3	18	8	29	31	14	48	8.3	-0.1	16.8
4	19	10	31	30	13	43	7.1	1.6	12.1
5	20	10	32	29	11	41	6.3	1.9	8.8
6	19	10	33	29	13	44	6.2	2.5	9.8
7	18	11	32	26	14	40	5.7	0.9	9.5
8	18	10	35	25	11	40	5.3	-0.5	9.2
9	17	4	32	24	7	37	5.3	0.3	10.5
10	17	5	32	23	5	39	4.8	0.5	12.8
11	16	4	30	23	8	38	5.2	-5.3	11.3
12	18	3	36	25	7	51	4.6	0.4	15.2

Table D.8

**Mathematics Achievement Pretest Percentiles, Posttest Percentiles, and NCE Gain Scores for Chapter 1 Students Tested on a Fall-Spring Cycle - National, Lowest and Highest Standing -- 1987-88<sup>a/</sup>**

Grade	Pretest Percentiles			Posttest Percentiles			NCE Gain Scores		
	National	Lowest	Highest	National	Lowest	Highest	National	Lowest	Highest
2	19	5	30	40	21	62	13.3	4.0	30.0
3	19	7	37	37	19	61	11.3	-0.7	19.1
4	19	6	29	35	15	48	10.0	1.8	15.5
5	20	6	32	33	7	53	8.5	1.0	15.0
6	20	4	34	33	5	52	8.2	-1.1	16.0
7	20	5	35	30	12	49	6.5	-0.5	16.2
8	22	4	37	31	5	49	5.9	-1.0	14.8
9	20	1	62	30	2	55	6.9	-4.3	30.0
10	23	2	44	33	2	54	6.1	-10.6	26.4
11	24	1	48	32	2	54	5.1	0.4	34.0
12	31	1	45	35	2	50	2.6	0.0	26.0

a/ Values at the extremes are frequently a function of small numbers of Chapter 1 students tested.

Table D.9

**Reading Achievement Information for Chapter 1 Participants Tested  
on an Annual Cycle, by Grade and State -- 1987-88**

**1987-88 Chapter 1  
Annual Reading**

State	Sample Weight	Grade 2 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	11,226	35.8	25	35.6	24	-0.2
Alaska	1	601	29.0	0	34.0	22	5.0
Arizona	3	4,777	35.8	25	36.8	26	1.0
Arkansas	1	24,224	34.6	23	36.7	26	2.1
California	1	236	30.5	17	38.0	28	7.5
Colorado	1	903	34.2	22	42.2	35	8.0
Connecticut	1	907	47.0	44	48.0	46	1.0
Delaware	1	13,525	33.5	21	35.0	23	1.5
District of Columbia	1	7,279	34.4	23	38.4	29	4.0
Florida	1	450	39.0	30	43.0	37	4.0
Georgia	1	2,746	37.3	27	34.5	23	-2.6
Hawaii	1	968	36.0	25	43.5	37	7.5
Idaho	1	437	27.0	13	31.9	19	4.9
Illinois	1	3,742	40.6	32	41.5	34	0.9
Indiana	1	4,195	32.7	20	34.5	23	1.8
Iowa	1	683	41.3	34	45.2	41	3.9
Kansas	1	12,012	35.3	24	43.6	38	6.8
Kentucky	1	333	29.4	16	39.5	30	4.2
Louisiana	1	528	35.2	24	35.2	24	0.0
Maine	1	265	36.6	26	41.0	33	4.4
Maryland	1	544	37.4	27	41.0	33	3.6
Massachusetts	1	63	31.8	19	35.0	23	3.2
Michigan	1	304	38.6	29	43.5	37	4.9
Minnesota	1	2,154	32.8	20	39.0	30	6.2
Mississippi	3	813	34.6	23	36.5	26	1.7
Missouri	1	11,043	33.6	21	32.2	19	-1.4
Montana	1	2,444	33.6	21	35.2	24	1.6
Nebraska	1	1,293	42.8	36	44.7	40	1.9
Nevada	1	2,103	34.4	23	38.5	29	4.1
New Hampshire	1	2,207	40.6	32	41.1	33	0.3
New Jersey	1	619	29.5	16	35.3	24	5.8
New Mexico	1	2,428	36.2	25	37.9	26	1.7
New York	1	287	36.3	25	37.4	27	1.1
North Carolina	3	1,164	30.0	17	33.1	21	3.1
North Dakota	1	179	38.6	29	40.1	32	1.4
Ohio	1	24,740	34.4	23	38.5	29	4.1
Oklahoma	1	2,207	40.6	32	41.1	33	0.3
Oregon	1	619	29.5	16	35.3	24	5.8
Pennsylvania	1	2,428	36.2	25	37.9	26	1.7
Rhode Island	1	287	36.3	25	37.4	27	1.1
South Carolina	1	1,293	42.8	36	44.7	40	1.9
South Dakota	1	2,103	39.6	31	42.5	36	2.9
Tennessee	1	1,701	38.4	29	39.2	30	0.8
Texas	1	179	36.7	29	40.1	32	1.4
Utah	1	1	0	0	0	0	0
Vermont	1	1	0	0	0	0	0
Virginia	1	1	0	0	0	0	0
Washington	3	1	0	0	0	0	0
West Virginia	1	1	0	0	0	0	0
Wisconsin	1	1	0	0	0	0	0
Wyoming	1	1	0	0	0	0	0
BIA	1	1	0	0	0	0	0
Total (Weighted)		170,213	34.7	23	37.5	27	2.8
Number of States Reporting		41					

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Table D.9 (contd.)

1987-88 Chapter 1  
Annual Reading

State	Sample Weight	Grade 3 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	11,221	34.1	22	35.7	24	1.6
Alaska	1	797	32.0	19	34.0	22	2.0
Arizona	3	4,010	34.5	23	35.5	24	1.0
Arkansas	1	25,398	34.1	22	36.9	26	2.8
California	1	341	30.0	17	36.1	25	6.1
Colorado	1	1,415	35.4	24	37.3	27	1.9
Connecticut	1	688	46.0	42	44.0	38	-2.0
Delaware	1	653	40.3	32	42.1	35	1.8
District of Columbia	1	13,669	31.4	18	34.0	22	2.6
Florida	1	10,197	32.5	20	35.3	24	2.8
Georgia	1	0	0	0	0	0	0
Hawaii	1	373	34.0	22	39.6	31	5.6
Idaho	1	3,571	33.7	22	33.9	22	0.2
Illinois	1	693	36.4	25	41.3	34	4.9
Indiana	1	0	0	0	0	0	0
Iowa	1	1,352	28.2	15	31.8	19	3.6
Kansas	1	4,029	36.3	25	47.0	44	10.7
Kentucky	1	4,499	30.9	18	33.5	21	2.6
Louisiana	1	530	37.6	27	42.7	36	5.1
Maine	1	845	37.4	27	41.0	34	4.4
Maryland	1	10,850	35.2	24	36.6	26	1.4
Massachusetts	1	275	32.3	20	39.0	30	6.7
Michigan	3	1,485	35.2	24	34.6	23	-0.6
Minnesota	1	0	0	0	0	0	0
Mississippi	1	229	34.5	23	36.1	25	1.6
Missouri	1	503	37.5	27	40.8	33	3.3
Nevada	1	68	33.9	22	36.2	25	2.3
New Hampshire	1	6,825	32.8	20	40.4	32	7.6
New Jersey	1	657	31.3	18	35.0	23	3.7
New Mexico	1	12,046	32.5	20	39.2	30	6.7
New York	3	2,792	31.5	19	35.6	24	4.1
North Carolina	1	320	40.0	31	42.0	35	2.0
Ohio	1	2,010	31.1	18	35.5	24	4.4
Oklahoma	3	902	36.8	26	40.3	32	3.5
Oregon	1	10,482	29.0	15	35.4	24	6.4
Pennsylvania	1	0	0	0	0	0	0
Rhode Island	1	2,621	29.5	16	30.7	18	1.2
South Carolina	1	1,070	40.8	33	41.6	34	0.8
South Dakota	3	27,006	33.3	21	35.9	25	2.6
Tennessee	1	1,996	35.2	24	38.0	28	2.8
Texas	1	590	30.2	17	34.7	23	4.5
Utah	1	2,266	33.8	22	35.8	25	2.0
Vermont	1	287	31.1	18	36.8	26	5.7
Virginia	3	1,866	36.9	26	39.5	30	2.6
Washington	1	2,018	32.7	20	36.0	25	3.3
West Virginia	1	215	33.9	22	39.0	30	5.1
Wyoming	1	0	0	0	0	0	0
BIA	1	186,187	33.2	21	36.5	26	3.3
Total (Weighted)		42					
Number of States Reporting							

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Table D.9 (contd.)

1987-88 Chapter 1  
Annual Reading

State	Sample Weight	Grade 4 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	8,955	33.6	21	36.2	25	2.6
Alaska	1		0		0		
Arizona	3	568	31.0	18	33.0	21	2.0
Arkansas	1	3,570	33.1	21	38.3	29	5.2
California	1	25,245	36.0	25	38.8	29	2.8
Colorado	1	213	33.0	21	38.5	29	5.5
Connecticut	1	1,372	34.3	22	39.4	30	5.1
Delaware	1	649	44.0	38	45.0	40	1.0
District of Columbia	1	480	41.7	34	36.0	25	-5.7
Florida	1	13,425	32.0	19	34.0	22	2.0
Georgia	1	7,780	33.6	21	35.7	24	2.1
Hawaii	1		0		0		
Idaho	1	379	35.9	25	39.2	30	3.3
Illinois	1	4,405	33.1	21	32.7	20	-0.4
Indiana	1	1,412	38.8	29	41.4	34	2.6
Iowa	1		0		0		
Kansas	1	1,407	27.9	14	32.6	20	4.7
Kentucky	1	3,018	39.1	30	40.4	32	1.3
Louisiana	1	4,366	32.5	20	34.1	22	1.6
Maine	1	460	33.6	31	41.0	33	1.4
Maryland	1		0		0		
Massachusetts	1	872	36.6	26	41.2	33	4.6
Michigan	1	9,715	34.6	23	41.1	33	6.5
Minnesota	1	175	30.5	17	37.7	28	7.2
Mississippi	3	1,560	33.1	21	35.2	24	2.1
Missouri	1		0		0		
Montana	1	190	32.2	19	36.3	25	4.1
Nebraska	1	465	37.5	27	41.6	34	4.1
Nevada	1	58	30.9	18	35.6	24	4.7
New Hampshire	1		0		0		
New Jersey	1	4,853	32.7	20	39.0	30	6.3
New Mexico	1	635	33.0	21	36.8	26	3.8
New York	1	11,458	36.6	26	41.8	34	5.2
North Carolina	3	3,788	32.6	20	34.8	23	2.2
North Dakota	1	335	38.9	29	42.0	35	3.1
Ohio	1		0		0		
Oklahoma	1	1,817	30.8	16	36.3	25	5.5
Oregon	3	731	35.6	24	40.6	32	5.0
Pennsylvania	1	9,771	32.8	20	36.5	26	3.7
Rhode Island	1		0		0		
South Carolina	1	2,233	27.3	14	30.7	18	3.4
South Dakota	1	858	39.6	31	41.2	33	1.6
Tennessee	3		0		0		
Texas	1	28,075	32.3	20	37.5	27	5.2
Utah	1	1,280	33.7	22	36.6	26	2.9
Vermont	1	464	32.4	20	37.5	27	5.1
Virginia	1	1,897	34.6	23	35.5	24	0.9
Washington	3	206	34.4	23	35.6	24	1.2
West Virginia	1	1,733	35.1	24	40.4	32	5.3
Wisconsin	1	1,483	32.8	20	35.6	24	2.8
Wyoming	1	145	35.6	24	37.2	27	1.6
BIA	1		0		0		
Total (Weighted)		176,207	33.8	22	37.3	27	3.5
Number of States Reporting		42					

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Table D.9 (contd.)

1987-88 Chapter 1  
Annual Reading

State	Sample Weight	Grade 5		Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
		Number Tested						
Alabama	1	8,181	34.2	22	35.1	24	0.9	
Alaska	1			0		0		
Arizona	3	517	30.0	17	35.0	23	5.0	
Arkansas	1	3,376	36.5	26	37.3	27	0.8	
California	1	23,637	36.2	25	37.5	27	1.3	
Colorado	1	176	32.3	20	33.8	22	1.5	
Connecticut	1	1,303	34.7	23	36.5	26	1.8	
Delaware	1	397	41.0	33	42.0	35	1.0	
District of Columbia	1	450	36.3	25	33.8	22	-2.5	
Florida	1	8,146	32.6	20	35.0	23	2.4	
Georgia	1	9,126	33.2	21	36.0	25	2.8	
Hawaii	1		0			0		
Idaho	1	346	36.3	25	39.0	30	2.7	
Illinois	1	4,291	31.7	19	33.9	22	2.2	
Indiana	1	1,248	39.5	30	38.9	29	-0.6	
Iowa	1		0			0		
Kansas	1	1,113	26.8	13	31.2	18	4.4	
Kentucky	1	3,303	36.2	25	38.5	29	2.3	
Louisiana	1	3,753	31.7	19	34.7	23	3.0	
Maine	1	378	38.5	29	40.4	32	1.9	
Maryland	1		0			0		
Massachusetts	1	809	36.6	26	40.7	33	4.1	
Michigan	1	7,367	35.4	24	38.2	28	2.8	
Minnesota	1	164	32.4	20	37.1	27	4.7	
Mississippi	3	1,779	32.4	20	33.0	21	0.6	
Missouri	1		0			0		
Montana	1	182	32.0	19	34.5	23	2.5	
Nebraska	1	358	37.8	28	41.7	34	3.9	
Nevada	1	89	33.3	21	34.5	23	1.2	
New Hampshire	1		0			0		
New Jersey	1	4,686	33.1	21	37.7	28	4.6	
New Mexico	1	508	35.9	25	38.0	28	2.1	
New York	1	9,465	37.6	27	44.3	39	6.7	
North Carolina	3	3,450	33.1	21	35.1	24	2.0	
North Dakota	1	222	38.1	28	41.8	34	3.7	
Ohio	1		0			0		
Oklahoma	1	1,801	29.7	16	35.0	23	5.3	
Oregon	3	579	36.8	26	41.2	33	4.4	
Pennsylvania	1	8,619	32.8	20	36.0	25	3.2	
Rhode Island	1		0			0		
South Carolina	1	2,346	27.4	14	29.8	16	2.4	
South Dakota	1	858	38.7	29	38.9	29	0.2	
Tennessee	3		0			0		
Texas	1	24,619	33.1	21	35.9	25	2.8	
Utah	1	1,252	33.2	21	36.8	26	3.6	
Vermont	1	367	32.0	19	35.9	25	3.9	
Virginia	1	2,177	34.1	22	40.5	32	6.4	
Washington	3	204	33.1	21	35.9	25	2.8	
West Virginia	1	1,448	37.5	27	38.8	29	1.3	
Wisconsin	1	1,302	31.1	18	37.2	27	6.1	
Wyoming	1	108	34.2	22	38.3	29	4.1	
BIA	1		0			0		
Total (Weighted)		157,558	34.1	22	36.7	26	2.6	
Number of States Reporting		42						

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Table D.9 (contd.)

1987-88 Chapter 1  
Annual Reading

State	Sample Weight	Grade 6 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	5,859	33.2	21	35.5	24	2.3
Alaska	1			0		0	
Arizona	3	2,127	44.0	38	49.0	48	5.0
Arkansas	1	2,975	34.9	23	38.0	28	3.1
California	1	21,943	35.9	25	39.0	30	3.1
Colorado	1	149	30.5	17	34.6	23	4.1
Connecticut	1	1,053	33.3	21	38.9	29	5.6
Delaware	1	232	36.0	25	38.0	26	2.0
District of Columbia	1	490	34.1	22	41.2	33	7.1
Florida	1	6,367	32.2	19	35.0	23	2.8
Georgia	1	7,329	32.0	19	33.3	21	1.3
Hawaii	1			0		0	
Idaho	1	205	36.0	25	36.2	25	0.2
Illinois	1	4,099	32.2	19	33.7	22	1.5
Indiana	1	1,054	36.5	26	40.7	33	4.2
Iowa	1			0		0	
Kansas	1	846	30.3	17	32.9	20	2.6
Kentucky	1	2,986	35.1	24	43.9	36	8.8
Louisiana	1	2,012	33.0	21	32.9	20	-0.1
Maine	1	370	36.7	26	38.5	29	1.8
Maryland	1			0		0	
Massachusetts	1	485	36.8	26	38.7	29	1.9
Michigan	1	5,785	35.2	24	36.5	26	1.3
Minnesota	1	108	32.5	20	36.6	26	4.1
Mississippi	3	1,562	31.4	18	36.4	25	5.0
Missouri	1			0		0	
Montana	1	107	25.6	12	28.6	15	3.0
Nebraska	1	242	38.4	29	40.2	32	1.8
Nevada	1	58	32.7	20	39.4	30	6.7
New Hampshire	1			0		0	
New Jersey	1	4,739	31.9	19	38.3	29	6.4
New Mexico	1	243	31.4	18	35.0	23	3.6
New York	1	7,478	38.2	28	40.3	32	2.1
North Carolina	3	3,116	32.9	20	35.6	24	2.7
North Dakota	1	207	39.8	31	42.6	36	3.0
Ohio	1			0		0	
Oklahoma	1	1,153	31.9	19	37.3	27	5.4
Oregon	3	269	32.4	20	37.9	28	5.5
Pennsylvania	1	7,839	32.8	20	34.1	22	1.3
Rhode Island	1			0		0	
South Carolina	1	1,117	28.7	15	34.4	23	5.7
South Dakota	1	708	37.5	27	41.7	34	4.2
Tennessee	3			0		0	
Texas	1	14,802	31.5	19	34.9	23	3.4
Utah	1	669	33.5	21	38.3	29	4.6
Vermont	1	379	32.7	20	36.6	26	3.9
Virginia	1	1,233	35.9	25	35.2	24	-0.7
Washington	3	131	33.7	22	37.3	27	3.6
West Virginia	1	1,118	33.4	21	38.1	26	4.7
Wisconsin	1	1,100	29.9	17	35.0	23	5.1
Wyoming	1	69	34.7	23	37.9	26	3.2
BIA	1			0		0	
Total (Weighted)		130,105	34.1	22	37.3	27	3.2
Number of States Reporting		42					

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Table D.9 (contd.)

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Annual Reading

State	Sample Weight	Grade 7 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	2,223	31.4	18	33.4	21	2.0
Alaska	1			0		0	
Arizona	3	343	31.0	18	34.0	22	3.0
Arkansas	1	1,502	33.3	21	34.3	22	1.0
California	1	15,266	37.0	26	37.7	28	0.7
Colorado	1	99	30.0	17	34.1	22	4.1
Connecticut	1	1,003	33.5	21	34.5	23	1.0
Delaware	1	120	34.0	22	35.0	23	1.0
District of Columbia	1			0		0	
Florida	1	1,371	27.4	14	31.0	18	3.6
Georgia	1	5,791	30.3	17	34.6	23	4.3
Hawaii	1			0		0	
Idaho	1	94	33.5	21	37.3	27	3.8
Illinois	1	3,264	31.3	18	35.5	24	4.2
Indiana	1	753	36.9	26	34.2	22	-2.7
Iowa	1			0		0	
Kansas	1	391	29.7	16	33.7	22	4.0
Kentucky	1	2,040	36.9	26	38.1	28	1.2
Louisiana	1	903	32.5	20	35.5	24	3.0
Maine	1	212	35.9	25	39.1	30	3.2
Maryland	1			0		0	
Massachusetts	1	674	34.4	23	33.8	22	-0.6
Michigan	1	4,276	35.1	24	41.7	34	6.6
Minnesota	1	15	28.6	15	33.4	21	4.8
Mississippi	3	675	29.0	15	31.4	18	2.4
Missouri	1			0		0	
Montana	1	164	30.4	17	34.0	22	3.6
Nebraska	1	147	39.8	31	45.0	40	5.2
Nevada	1	16	30.5	17	42.1	35	11.6
New Hampshire	1			0		0	
New Jersey	1	5,285	32.8	20	37.2	27	4.4
New Mexico	1	117	29.9	17	34.4	23	4.5
New York	1	7,902	37.5	27	40.6	32	3.1
North Carolina	3	2,685	33.1	21	34.1	22	1.0
North Dakota	1	63	36.6	26	37.2	27	0.6
Ohio	1			0		0	
Oklahoma	1	845	31.0	18	33.0	21	2.0
Oregon	3	282	32.9	20	39.6	31	6.7
Pennsylvania	1	4,858	28.4	15	31.6	19	3.2
Rhode Island	1			0		0	
South Carolina	1	1,586	31.5	19	31.7	19	0.2
South Dakota	1	411	36.3	25	36.6	26	0.3
Tennessee	3			0		0	
Texas	1	9,793	30.9	18	33.3	21	2.4
Utah	1	411	29.2	16	32.2	19	3.0
Vermont	1	310	33.0	21	36.1	25	3.1
Virginia	1	1,142	35.5	24	37.4	27	1.9
Washington	3	51	29.3	16	32.7	20	3.4
West Virginia	1	467	35.1	24	37.1	27	2.0
Wisconsin	1	754	29.8	16	34.4	23	4.6
Wyoming	1	16	39.2	30	44.3	39	5.1
BIA	1			0		0	
Total (Weighted)		86,392	33.3	21	35.8	25	2.5
Number of States Reporting		41					

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Table D.9 (con'd.)

1987-88 Chapter 1  
Annual Reading

State	Sample Weight	Grades 6 Number Tested	Pretest		Posttest		Gain NCE
			NCE	Percentile	NCE	Percentile	
Alabama	1	1,718	32.9	20	36.1	25	3.2
Alaska	1	0	0	0	0	0	0
Arizona	3	359	27.0	13	30.0	17	3.0
Arkansas	1	1,554	31.5	19	35.2	24	3.7
California	1	13,467	36.3	25	36.1	28	1.8
Colorado	1	56	29.4	16	30.1	17	0.7
Connecticut	1	1,027	28.4	15	34.4	23	6.0
Delaware	1	57	41.0	33	42.0	35	1.0
District of Columbia	1	378	26.6	13	29.5	16	2.9
Florida	1	1,080	24.5	11	29.0	15	4.5
Georgia	1	5,105	30.5	17	32.5	20	2.0
Hawaii	1	0	0	0	0	0	0
Idaho	1	80	32.8	20	38.4	29	5.6
Illinois	1	2,830	32.9	20	35.3	24	2.4
Indiana	1	891	31.6	19	37.5	27	5.9
Iowa	1	0	0	0	0	0	0
Kansas	1	0	0	0	0	0	0
Kentucky	1	1,498	32.0	19	38.6	29	6.6
Louisiana	1	547	33.6	21	34.0	22	0.4
Maine	1	195	36.2	25	36.7	26	0.5
Maryland	1	0	0	0	0	0	0
Massachusetts	1	644	31.4	18	33.4	21	2.0
Michigan	1	3,461	38.1	28	32.4	20	-5.7
Minnesota	1	11	30.3	17	33.3	21	3.0
Mississippi	3	546	28.9	15	37.9	28	9.0
Missouri	1	0	0	0	0	0	0
Montana	1	154	34.8	23	34.6	23	-0.2
Nebraska	1	139	42.9	36	45.8	42	2.9
Nevada	1	29	26.9	13	40.8	33	13.9
New Hampshire	1	0	0	0	0	0	0
New Jersey	1	4,406	32.4	20	36.4	25	4.0
New Mexico	1	115	30.3	17	32.6	20	2.3
New York	1	6,025	37.3	27	40.2	32	2.9
North Carolina	3	2,485	33.1	21	35.2	24	2.1
North Dakota	1	61	37.1	27	36.7	26	-0.4
Ohio	1	0	0	0	0	0	0
Oklahoma	1	671	29.3	16	33.9	22	4.6
Oregon	3	325	33.3	21	39.1	30	5.8
Pennsylvania	1	4,046	28.0	14	32.3	20	4.3
Rhode Island	1	0	0	0	0	0	0
South Carolina	1	1,394	31.0	18	36.3	25	5.3
South Dakota	1	366	34.2	22	37.2	27	3.0
Tennessee	3	0	0	0	0	0	0
Texas	1	8,458	31.5	19	33.0	21	1.5
Utah	1	460	28.6	15	34.0	22	5.4
Vermont	1	235	31.0	18	34.2	22	3.2
Virginia	1	178	29.3	16	26.6	13	-2.7
Washington	3	33	30.5	17	34.3	22	3.8
West Virginia	1	320	32.5	20	38.3	29	5.8
Wisconsin	1	469	29.7	16	35.5	24	5.8
Wyoming	1	9	40.1	32	32.4	20	-7.7
BIA	1	0	0	0	0	0	0
Total (Weighted)		73,778	32.9	20	35.5	24	2.6
Number of States Reporting		41					

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Table D.9 (contd.)

1987-88 Chapter 1  
Annual Reading

State	Sample Weight	Grade 9 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	414	37.2	27	37.2	27	0.
Alaska	1			0		0	
Arizona	3	186	25.0	11	28.0	14	3.0
Arkansas	1	383	26.4	13	29.9	17	3.5
California	1	5,201	33.8	22	34.0	22	0.2
Colorado	1	45	28.6	15	31.0	18	2.4
Connecticut	1	393	25.6	12	31.1	18	5.5
Delaware	1			0		0	
District of Columbia	1	560	23.9	12	29.5	16	3.6
Florida	1			0		0	
Georgia	1	1,410	25.4	12	30.4	17	5.0
Hawaii	1			0		0	
Idaho	1	23	39.6	31	41.2	33	1.6
Illinois	1			0		0	
Indiana	1	496	35.0	24	32.5	20	-3.1
Iowa	1			0		0	
Kansas	1			0		0	
Kentucky	1	769	34.2	22	31.4	18	-2.8
Louisiana	1	19	37.0	26	35.8	25	-1.2
Maine	1	15	27.0	13	32.4	20	5.4
Maryland	1			0		0	
Massachusetts	1	246	31.5	19	36.4	25	4.9
Michigan	1	1,210	29.2	16	31.5	19	2.3
Minnesota	1	4	13.0	3	23.3	10	10.3
Mississippi	3	132	28.5	15	44.2	39	15.7
Missouri	1			0		0	
Montana	1	39	33.7	22	36.5	26	2.8
Nebraska	1	66	36.1	25	40.5	32	4.4
Nevada	1			0		0	
New Hampshire	1			0		0	
New Jersey	1	1,673	31.4	18	32.0	19	0.6
New Mexico	1	103	22.8	9	23.5	10	0.7
New York	1	4,842	39.9	31	40.5	32	0.6
North Carolina	3	694	35.2	24	37.9	28	2.7
North Dakota	1	16	35.8	25	39.0	30	3.2
Ohio	1			0		0	
Oklahoma	1	128	31.0	18	37.9	28	6.9
Oregon	3	327	23.8	10	32.9	20	9.1
Pennsylvania	1	1,858	27.3	14	30.0	17	2.7
Rhode Island	1			0		0	
South Carolina	1	416	27.4	14	30.4	17	3.0
South Dakota	1	50	34.1	22	39.4	30	5.3
Tennessee	3			0		0	
Texas	1	3,339	29.3	16	31.6	19	2.3
Utah	1	163	30.7	18	36.2	25	5.5
Vermont	1	104	32.7	20	37.0	26	4.3
Virginia	1	156	26.5	13	29.0	15	2.5
Washington	3	24	13.3	4	25.0	11	11.7
West Virginia	1			0		0	
Wisconsin	1	447	31.3	18	36.5	26	5.2
Wyoming	1	25	34.2	22	35.9	25	1.7
BIA	1			0		0	
Total (Weighted)		28,702	32.0	19	34.2	22	2.2
Number of States Reporting		36					

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Table D.9 (contd.)

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Annual Reading

State	Sample Weight	Grade 10 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	67	21.3	8	27.9	14	6.6
Alaska	1		0	0	0	0	0
Arizona	3	158	31.0	19	36.0	25	5.0
Arkansas	1	128	30.3	17	31.3	18	1.0
California	1	5,661	35.8	25	35.6	24	-0.2
Colorado	1	8	24.1	10	23.0	10	-1.1
Connecticut	1	262	29.7	16	34.0	22	4.3
Delaware	1		0	0	0	0	0
District of Columbia	1		0	0	0	0	0
Florida	1		0	0	0	0	0
Georgia	1	393	26.3	13	31.4	18	5.1
Hawaii	1		0	0	0	0	0
Idaho	1	40	27.3	14	35.8	25	8.5
Illinois	1		0	0	0	0	0
Indiana	1	296	26.3	13	35.4	24	9.1
Iowa	1		0	0	0	0	0
Kansas	1		0	0	0	0	0
Kentucky	1	466	28.1	14	29.0	15	0.9
Louisiana	1		0	0	0	0	0
Maine	1	11	35.6	24	32.0	19	-3.6
Maryland	1		0	0	0	0	0
Massachusetts	1	211	32.2	19	35.8	25	3.6
Michigan	1	379	27.4	14	29.9	17	2.5
Minnesota	1	2	25.9	12	28.2	15	2.3
Mississippi	3	42	22.8	9	27.6	14	4.8
Missouri	1		0	0	0	0	0
Montana	1	71	30.5	17	32.4	20	1.9
Nebraska	1	13	42.0	35	41.2	33	-0.8
Nevada	1		0	0	0	0	0
New Hampshire	1		0	0	0	0	0
New Jersey	1	1,718	29.2	16	31.5	19	2.3
New Mexico	1	1	32.0	19	26.0	12	-6.0
New York	1	3,914	40.7	33	40.4	32	-0.3
North Carolina	3	514	35.9	25	34.8	23	-1.1
North Dakota	1	15	36.7	26	28.1	14	-8.6
Ohio	1		0	0	0	0	0
Oklahoma	1	70	23.9	10	25.3	12	1.4
Oregon	3	157	29.7	16	29.5	16	-0.2
Pennsylvania	1	1,182	23.6	10	26.4	13	2.8
Rhode Island	1		0	0	0	0	0
South Carolina	1	281	25.1	11	31.3	18	6.2
South Dakota	1	16	31.1	18	34.4	23	3.3
Tennessee	3		0	0	0	0	0
Texas	1	1,516	29.8	16	31.9	19	2.1
Utah	1	35	27.3	14	25.8	12	-1.5
Vermont	1	64	38.9	29	46.0	42	7.1
Virginia	1	27	28.1	14	24.4	11	-3.7
Washington	3	11	21.0	8	29.8	16	8.8
West Virginia	1		0	0	0	0	0
Wisconsin	1	141	31.5	19	34.6	23	3.1
Wyoming	1	20	38.6	29	41.4	34	2.8
BIA	1		0	0	0	0	0
Total (Weighted)		19,654	33.5	21	34.6	23	1.1
Number of States Reporting		34					

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Table D.9 (contd.)

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Annual Reading

State	Sample Weight	Grade 11 Number Tested	Pretest		Posttest		Gain NCE
			NCE	Percentile	NCE	Percentile	
Alabama	1	59	31.7	19	29.4	16	-2.3
Alaska	1			0		0	
Arizona	3	81	32.0	19	35.0	23	3.0
Arkansas	1	77	23.4	10	27.1	13	3.7
California	1	3,520	36.0	25	37.7	28	1.7
Colorado	1	14	25.0	11	26.6	13	1.6
Connecticut	1	105	29.4	16	25.4	12	-4.0
Delaware	1			0		0	
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	87	24.4	11	30.2	17	5.8
Hawaii	1			0		0	
Idaho	1	3	37.0	26	27.0	13	-10.0
Illinois	1			0		0	
Indiana	1	27	29.2	16	33.3	21	4.1
Iowa	1			0		0	
Kansas	1			0		0	
Kentucky	1	217	27.2	14	33.3	21	6.1
Louisiana	1			0		0	
Maine	1	6	36.5	26	34.8	23	-1.7
Maryland	1			0		0	
Massachusetts	1	75	27.4	14	26.1	12	-1.3
Michigan	1	105	22.0	9	24.1	10	2.1
Minnesota	1	2	31.3	18	38.6	29	7.3
Mississippi	3	20	25.0	11	29.1	16	4.1
Missouri	1			0		0	
Montana	1	54	26.3	13	33.5	21	7.2
Nebraska	1	12	39.1	30	40.4	32	1.3
Nevada	1			0		0	
New Hampshire	1			0		0	
New Jersey	1	1,263	27.6	14	30.8	18	3.2
New Mexico	1	6	20.8	8	25.0	11	4.2
New York	1	1,579	39.0	30	39.6	31	0.6
North Carolina	3	346	34.1	22	33.2	21	-0.9
North Dakota	1	4	33.4	21	30.7	18	-2.7
Ohio	1			0		0	
Oklahoma	1	64	21.7	8	30.0	17	8.3
Oregon	3	54	17.7	6	22.2	9	4.5
Pennsylvania	1	704	24.0	10	25.7	12	1.7
Rhode Island	1			0		0	
South Carolina	1	113	26.0	12	30.6	17	4.6
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1	1,263	29.6	16	30.5	17	0.9
Utah	1	28	24.4	11	23.7	10	-0.7
Vermont	1	7	24.7	11	30.9	18	6.2
Virginia	1	11	26.5	13	16.7	5	-9.8
Washington	3			0		0	
West Virginia	1			0		0	
Wisconsin	1	48	36.9	26	37.3	27	0.4
Wyoming	1	13	33.5	21	35.9	25	2.4
BIA	1			0		0	
Total (Weighted)		10,969	32.4	20	34.0	22	1.6
Number of States Reporting		32					

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Table D.9 (contd.)

1987-88 Chapter 1  
Annual Reading

State	Sample Weight	Grade 12 Number Tested	Pretest NCE	Prtest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	3	10.4	3	20.4	8	10.0
Alaska	1			0		0	
Arizona	3	67	28.0	14	26.0	12	-2.0
Arkansas	1	82	20.2	7	21.9	9	1.7
California	1	2,567	38.1	28	36.7	26	-1.4
Colorado	1	10	27.8	14	27.5	14	-0.3
Connecticut	1	5	32.0	19	35.7	24	3.7
Delaware	1			0		0	
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	14	25.3	12	22.6	9	-2.7
Hawaii	1			0		0	
Idaho	1	5	36.1	25	34.9	23	-1.2
Illinois	1			0		0	
Indiana	1	30	26.8	13	29.7	16	2.9
Iowa	1			0		0	
Kansas	1			0		0	
Kentucky	1	167	31.4	18	27.0	13	-4.4
Louisiana	1			0		0	
Maine	1	5	41.4	34	48.0	46	6.6
Maryland	1			0		0	
Massachusetts	1	47	22.8	9	27.3	14	4.5
Michigan	1	41	18.9	7	21.4	8	2.5
Minnesota	1	3	32.0	19	39.5	30	7.5
Mississippi	3			0		0	
Missouri	1			0		0	
Montana	1	20	36.1	25	39.7	31	3.6
Nebraska	1	2	46.0	42	51.5	52	5.5
Nevada	1			0		0	
New Hampshire	1			0		0	
New Jersey	1	383	28.6	15	28.4	15	-0.2
New Mexico	1			0		0	
New York	1	358	30.5	17	35.7	24	5.2
North Carolina	3			0		0	
North Dakota	1	3	43.2	37	39.1	30	-4.1
Ohio	1			0		0	
Oklahoma	1	41	22.1	9	24.9	11	2.8
Oregon	3	48	22.6	9	28.1	14	5.5
Pennsylvania	1	465	25.6	12	23.7	10	-1.9
Rhode Island	1			0		0	
South Carolina	1			0		0	
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1	679	35.4	24	38.1	26	2.7
Utah	1	18	27.3	14	19.2	7	-8.1
Vermont	1	1	32.0	19	19.0	7	-13.0
Virginia	1	14	26.8	13	27.0	13	0.2
Washington	3			0		0	
West Virginia	1			0		0	
Wisconsin	1	29	32.0	19	35.1	24	3.1
Wyoming	1	2	24.0	10	22.0	9	-2.0
BIA	1			0		0	
Total (Weighted)			33.5	21	33.5	21	0.0
Number of States Reporting		5,339	28				

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Table D.10

Reading Achievement Information for Chapter 1 Participants Tested  
on a Fall-Spring Cycle, by Grade and State -- 1987-88

**1987-88 Chapter 1  
Fall-Spring Reading**

State	Sample Weight	Grade 2 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	1,560	33.3	21	38.2	28	4.9
Alaska	1			0		0	
Arizona	3	304	37.0	26	44.0	38	7.0
Arkansas	1	1,628	26.8	15	38.2	28	9.4
California	1	5,066	30.2	17	40.3	32	10.1
Colorado	1	2,566	28.7	15	39.8	31	11.1
Connecticut	1	841	29.8	16	44.3	39	14.5
Dalaware	1	135	33.0	21	47.0	44	14.0
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	5,767	32.2	19	35.4	24	3.2
Hawaii	1	930	19.9	7	33.4	21	13.5
Idaho	1	1,077	31.4	18	43.5	37	12.1
Illinois	1	9,978	35.7	24	43.9	38	8.2
Indiana	1	3,075	34.7	23	45.8	42	11.1
Iowa	1	5,888	37.6	27	46.6	43	9.0
Kansas	1	2,177	19.9	7	33.2	21	13.3
Kentucky	1	5,355	28.3	15	41.1	33	12.8
Louisiana	1	6,871	29.4	16	36.1	25	6.7
Maine	1	1,143	34.4	23	43.7	38	9.3
Maryland	1	5,933	32.7	20	38.0	28	5.3
Massachusetts	1	4,197	32.2	19	44.6	39	12.4
Michigan	1	4,511	30.2	17	42.5	36	12.3
Minnesota	1	7,002	27.7	14	42.1	35	14.4
Mississippi	3	148	35.0	23	46.8	44	11.8
Missouri	1			0		0	
Montana	1	542	28.8	15	38.4	29	9.6
Nebraska	1	2,047	33.9	22	44.8	40	10.9
Nevada	1	377	30.3	17	42.2	35	11.9
New Hampshire	1			0		0	
New Jersey	1	3,522	29.9	17	38.7	29	8.8
New Mexico	1	736	29.3	16	39.4	30	10.1
New York	1	7,919	27.0	13	40.6	32	13.6
North Carolina	3	215	38.3	29	45.3	41	7.0
North Dakota	1	850	40.4	32	48.0	46	7.6
Ohio	1	20,168	32.2	19	41.7	34	9.5
Oklahoma	1	3,420	34.2	22	42.5	36	8.3
Oregon	3	1,074	28.3	15	36.7	26	8.4
Pennsylvania	1	12,653	31.7	19	45.7	41	14.0
Rhode Island	1	1,297	34.0	22	42.5	36	6.5
South Carolina	1			0		0	
South Dakota	1	18	36.0	25	43.7	38	7.7
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1	796		0		0	
Vermont	1	344	27.4	14	42.5	36	15.1
Virginia	1	7,838	32.5	20	40.8	33	8.3
Washington	3	1,405	26.9	13	40.4	32	13.5
West Virginia	1	1,514	29.7	16	40.8	33	11.1
Wisconsin	1	2,001	32.6	20	42.2	35	9.6
Wyoming	1	438	31.2	18	48.8	47	17.6
BIA	1	996	26.6	15	27.3	14	-1.3
Total (Weighted)		2,158,539	31.1	18	41.2	33	10.1
Number of States Reporting		44					

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Table D.10 (contd.)

1987-88 Chapter 1  
Fall-Spring Reading

State	Sample Weight	Grade 3 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	1,522	31.0	18	37.7	28	6.7
Alaska	1			0		0	
Arizona	3	279	37.0	26	43.0	37	6.0
Arkansas	1	1,236	30.1	17	38.4	29	8.3
California	1	4,465	30.8	18	39.7	31	8.9
Colorado	1	1,802	29.3	16	38.6	29	9.3
Connecticut	1	659	33.9	22	42.6	36	8.7
Delaware	1	113	34.0	22	49.0	48	15.0
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	3,063	32.1	19	34.9	23	2.8
Hawaii	1	1,163	22.9	9	32.9	20	10.0
Idaho	1	806	33.7	22	41.8	34	8.1
Illinois	1	8,207	34.9	23	41.3	34	6.4
Indiana	1	2,375	33.2	21	42.8	36	9.6
Iowa	1	4,324	38.5	29	45.7	41	7.2
Kansas	1	1,954	22.9	9	33.4	21	10.5
Kentucky	1	5,992	28.5	15	39.3	30	10.8
Louisiana	1	6,425	27.8	14	34.9	23	7.1
Maine	1	849	35.8	25	43.8	38	8.0
Maryland	1	5,536	36.5	26	36.4	25	-0.1
Massachusetts	1	3,431	32.8	20	42.6	36	9.8
Michigan	1	2,921	30.7	18	40.2	32	9.5
Minnesota	1	5,048	28.6	15	39.2	30	10.6
Mississippi	3	1,329	30.3	17	35.7	24	5.4
Missouri	1			0		0	
Montana	1	364	30.2	17	37.1	27	6.9
Nebraska	1	1,746	35.3	24	44.7	40	9.4
Nevada	1	331	32.2	19	38.9	29	6.7
New Hampshire	1			0		0	
New Jersey	1	3,109	28.9	15	41.4	34	12.5
New Mexico	1	543	28.4	15	36.9	26	8.5
New York	1	5,738	30.1	17	41.7	34	11.6
North Carolina	3	297	29.7	16	35.5	24	5.8
North Dakota	1	665	37.5	27	44.7	40	7.2
Ohio	1	13,896	30.9	18	39.4	30	8.5
Oklahoma	1	2,747	33.0	21	39.4	30	6.4
Oregon	3	787	28.7	15	37.6	27	8.9
Pennsylvania	1	10,183	32.1	19	43.2	37	11.1
Rhode Island	1	1,028	30.3	17	37.9	28	7.6
South Carolina	1			0		0	
South Dakota	1	32	34.6	23	41.4	34	6.8
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1	583	27.9	14	37.1	27	9.2
Vermont	1	296	29.7	16	41.4	34	11.7
Virginia	1	6,320	32.2	19	38.9	29	6.7
Washington	3	1,207	29.1	16	39.1	30	10.0
West Virginia	1	1,273	28.4	15	36.2	25	7.8
Wisconsin	1	1,409	32.1	19	41.2	33	9.1
Wyoming	1	285	29.4	16	46.2	42	16.8
BIA	1	925	21.7	8	27.2	14	5.5
Total (Weighted)		125,061	31.3	18	39.6	31	8.3
Number of States Reporting		44					

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Table D.10 (contd.)

1987-88 Chapter 1  
Fall-Spring Reading

State	Sample Weight	Grade 4 Number Tested	Pretest		Posttest		Gain NCE
			NCE	Percentile	NCE	Percentile	
Alabama	1	1,234	31.4	18	37.7	28	6.3
Alaska	1			0		0	
Arizona	3	294	37.0	26	41.0	33	4.0
Arkansas	1	1,101	31.3	18	38.7	29	7.4
California	1	3,831	31.8	19	39.6	31	7.8
Colorado	1	1,287	30.6	17	38.1	28	7.5
Connecticut	1	518	35.3	24	42.2	35	6.9
Delaware	1	130	31.0	18	43.0	37	12.0
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	4,241	34.1	22	35.7	24	1.6
Hawaii	1	1,121	24.3	11	33.6	21	9.3
Idaho	1	713	34.4	23	41.0	33	6.6
Illinois	1	6,610	34.8	23	40.6	32	5.8
Indiana	1	1,777	35.6	24	43.0	37	7.4
Iowa	1	3,341	39.9	31	46.7	43	6.8
Kansas	1	1,597	24.3	11	34.2	22	9.9
Kentucky	1	4,306	28.5	15	38.2	20	9.7
Louisiana	1	5,011	27.4	14	32.3	20	4.9
Maine	1	751	37.5	27	42.2	35	4.7
Maryland	1	4,462	35.8	25	40.0	31	4.2
Massachusetts	1	2,776	34.2	22	41.6	34	7.4
Michigan	1	1,943	31.6	19	40.2	32	8.6
Minnesota	1	3,355	30.3	17	39.0	30	8.7
Mississippi	3	1,404	29.6	16	35.3	24	5.7
Missouri	1			0		0	
Montana	1	317	30.4	17	36.0	25	5.6
Nebraska	1	1,372	36.7	26	45.2	41	8.5
Nevada	1	298	33.1	21	37.8	28	4.7
New Hampshire	1			0		0	
New Jersey	1	2,470	29.7	16	38.5	29	8.8
New Mexico	1	680	30.2	17	37.1	27	6.9
New York	1	5,633	32.7	20	41.2	33	8.5
North Carolina	3	676	25.0	11	31.5	19	6.5
North Dakota	1	513	39.4	30	46.2	42	6.8
Ohio	1	8,732	31.9	19	39.6	31	7.7
Oklahoma	1	2,588	33.6	21	39.6	31	6.0
Oregon	3	600	32.1	19	38.1	28	6.0
Pennsylvania	1	8,596	33.0	21	43.2	37	10.2
Rhode Island	1	805	30.7	18	40.0	31	9.3
South Carolina	1			0		0	
South Dakota	1	33	31.5	19	34.2	22	2.7
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1	452		0		0	
Vermont	1	192	34.2	22	46.3	43	12.1
Virginia	1	4,614	33.3	21	39.0	30	5.7
Washington	3	974	31.1	18	40.2	32	9.1
West Virginia	1	1,090	29.5	16	37.0	26	7.5
Wisconsin	1	961	35.6	24	42.3	35	6.7
Wyoming	1	237	33.0	21	43.9	38	10.9
BIA	1	829	24.0	10	26.8	13	2.8
Total (Weighted)		102,361	32.0	19	39.1	30	7.1
Number of States Reporting		44					

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Table D.10 (contd.)

1987-88 Chapter 1  
Fall-Spring Reading

State	Sample Weight	Grade 5 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	784	30.7	18	36.3	25	5.6
Alaska	1		0		0		
Arizona	3	278	38.0	28	43.0	37	5.0
Arkansas	1	894	32.0	19	39.6	31	7.6
California	1	3,796	33.6	21	39.2	30	5.6
Colorado	1	1,044	31.8	19	38.0	28	6.2
Connecticut	1	482	35.9	25	42.9	36	7.0
Delaware	1	88	34.0	22	41.0	33	7.0
District of Columbia	1		0	0	0		
Florida	1		0	0	0		
Georgia	1	3,166	33.6	21	36.7	26	3.1
Hawaii	1	1,034	27.2	14	34.6	23	7.4
Idaho	1	667	32.9	20	39.7	31	6.8
Illinois	1	5,148	34.6	23	39.8	31	5.2
Indiana	1	1,337	35.2	24	40.6	32	5.4
Iowa	1	2,668	40.1	32	45.8	41	5.5
Kansas	1	1,190	26.2	12	34.7	23	8.5
Kentucky	1	5,180	29.8	16	37.8	20	6.0
Louisiana	1	4,913	27.2	14	33.1	21	5.9
Maine	1	638	36.5	26	41.3	34	4.8
Maryland	1	2,809	37.2	27	39.9	31	2.7
Massachusetts	1	2,455	32.5	20	39.8	31	7.3
Michigan	1	1,447	31.8	19	38.7	29	6.9
Minnesota	1	2,133	31.2	18	38.2	28	7.0
Mississippi	3	1,879	30.2	17	34.8	23	4.6
Missouri	1		0	0	0		
Montana	1	266	31.8	19	37.5	27	5.7
Nebraska	1	1,292	36.9	26	43.8	38	6.9
Nevada	1	337	34.0	22	40.9	33	6.9
New Hampshire	1		0	0	0		
New Jersey	1	2,291	30.7	18	37.5	27	6.8
New Mexico	1	499	29.7	16	37.7	28	8.0
New York	1	5,316	34.3	22	42.0	35	7.7
North Carolina	3	380	30.1	17	37.8	28	7.7
North Dakota	1	412	38.1	28	44.0	38	5.9
Ohio	1	5,835	32.5	20	38.6	29	6.1
Oklahoma	1	2,304	33.5	21	38.3	29	4.6
Oregon	3	477	30.8	18	38.5	29	7.7
Pennsylvania	1	7,295	34.0	22	42.8	36	6.8
Rhode Island	1	727	31.5	19	37.7	28	6.2
South Carolina	1		0	0	0		
South Dakota	1	30	29.7	16	38.1	28	8.4
Tennessee	3	0	0	0	0		
Texas	1		0	0	0		
Utah	1	264	0	0	0		
Vermont	1	142	36.2	25	44.8	40	8.6
Virginia	1	3,837	33.8	22	39.8	31	6.0
Washington	3	778	33.1	21	40.0	31	6.9
West Virginia	1	812	27.9	14	34.4	23	6.5
Wisconsin	1	721	35.2	24	40.5	32	5.3
Wyoming	1	145	33.3	21	41.9	35	8.6
BIA	1	764	23.0	10	24.9	11	1.9
Total (Weighted)		86,538	32.5	20	38.8	29	6.3
Number of States Reporting		44					

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Table D.10 (contd.)

1987-88 Chapter 1  
Fall-Spring Reading

State	Sample Weight	Grade 6 Number Tested	Pretest MCE	Pretest Percentile	Posttest MCE	Posttest Percentile	Gain MCE
Alabama	1	645	31.2	18	37.9	28	6.7
Alaska	1			0		0	
Arizona	3	251	35.0	23	41.0	33	6.0
Arkansas	1	675	31.2	18	37.9	28	6.7
California	1	3,380	33.3	21	39.3	30	6.0
Colorado	1	1,002	31.3	18	37.2	27	5.9
Connecticut	1	408	35.5	24	42.4	35	6.9
Delaware	1	59	35.0	23	40.0	31	5.0
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	3,341	30.6	17	33.1	21	2.5
Hawaii	1	875	28.3	15	36.5	26	8.2
Idaho	1	372	32.0	19	37.3	27	5.3
Illinois	1	3,667	33.4	21	38.9	29	5.5
Indiana	1	1,004	34.8	23	41.6	34	6.8
Iowa	1	1,722	40.9	33	46.8	44	5.9
Kansas	1	941	27.3	14	34.6	23	7.3
Kentucky	1	4,706	30.3	17	39.8	31	9.5
Louisiana	1	3,542	29.1	16	33.1	21	4.0
Maine	1	493	34.6	23	38.2	28	3.6
Maryland	1	540	37.5	27	40.9	33	3.4
Massachusetts	1	2,150	32.6	20	39.1	30	6.5
Michigan	1	1,153	32.1	19	38.1	28	6.0
Minnesota	1	1,468	30.5	17	36.5	26	6.0
Mississippi	3	1,530	32.4	20	38.3	29	5.9
Missouri	1			0		0	
Montana	1	290	29.9	17	34.3	22	4.4
Nebraska	1	1,052	37.1	27	43.2	37	6.1
Nevada	1	388	34.3	22	44.1	39	9.8
New Hampshire	1			0		0	
New Jersey	1	2,300	31.6	19	40.5	32	8.9
New Mexico	1	554	26.6	13	33.4	21	6.8
New York	1	4,050	34.5	23	40.6	32	6.1
North Carolina	3	528	25.8	12	30.0	17	4.2
North Dakota	1	347	39.4	30	45.1	40	5.7
Ohio	1	4,468	33.0	21	38.4	29	5.4
Oklahoma	1	1,941	33.2	21	38.5	29	5.3
Oregon	3	488	27.4	14	35.4	24	8.0
Pennsylvania	1	6,327	33.8	22	42.5	36	8.7
Rhode Island	1	691	29.2	16	36.5	26	7.3
South Carolina	1			0		0	
South Dakota	1	21	23.9	10	32.7	20	6.8
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1	135		0		0	
Vermont	1	140	34.4	23	40.3	32	5.9
Virginia	1	2,547	33.0	21	37.1	27	4.1
Washington	3	341	30.0	17	38.7	29	8.7
West Virginia	1	575	30.5	17	36.1	25	5.6
Wisconsin	1	470	36.3	25	42.1	35	5.8
Wyoming	1	157	34.8	23	42.0	35	7.2
BIA	1	713	23.7	10	26.8	13	3.1
Total (Weighted)		68,723	32.2	19	38.4	29	6.2
Number of States Reporting		44					

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Table D.10 (contd.)

1987-88 Chapter 1  
Fall-Spring Reading

State	Sample Weight	Grade 7		Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
		Number Tested						
Alabama	1	338		33.8	22	37.5	27	3.7
Alaska	1			0			0	
Arizona	3	181		33.0	21	40.0	31	7.0
Arkansas	1	781		31.6	19	38.7	29	7.1
California	1	1,446		31.1	18	36.8	26	5.7
Colorado	1	961		31.3	18	37.3	27	6.0
Connecticut	1	282		30.7	29	42.0	35	3.3
Delaware	1	39		34.0	22	40.0	31	6.0
District of Columbia	1			0			0	
Florida	1			0			0	
Georgia	1	3,290		29.1	16	33.0	21	3.9
Hawaii	1	1,092		29.9	17	37.0	26	7.1
Idaho	1	306		28.8	15	34.4	23	5.6
Illinois	1	2,710		32.6	20	37.7	28	5.1
Indiana	1	841		33.5	21	38.9	29	5.4
Iowa	1	808		38.8	29	44.4	39	5.6
Kansas	1	516		28.4	15	33.9	22	5.5
Kentucky	1	2,380		27.8	14	36.1	25	8.3
Louisiana	1	1,975		31.6	19	35.5	24	3.9
Maine	1	312		33.8	22	37.8	28	4.0
Maryland	1	39		40.3	32	41.2	33	0.9
Massachusetts	1	1,923		32.3	20	37.8	28	5.5
Michigan	1	707		29.4	16	36.1	25	6.7
Minnesota	1	649		33.2	21	38.0	28	4.8
Mississippi	3	798		27.8	14	34.1	22	6.3
Missouri	1			0			0	
Montana	1	280		29.5	16	34.4	23	4.9
Nebraska	1	462		37.6	27	43.0	37	5.4
Nevada	1	651		29.7	16	35.3	24	5.6
New Hampshire	1			0			0	
New Jersey	1	2,024		31.6	19	37.3	27	5.7
New Mexico	1	1,001		29.1	16	36.5	26	7.4
New York	1	3,642		35.3	24	40.2	32	4.9
North Carolina	3	530		27.5	14	30.8	18	3.3
North Dakota	1	196		36.7	26	40.0	31	3.3
Ohio	1	895		31.1	18	38.0	28	6.9
Oklahoma	1	1,648		31.6	19	35.3	24	3.7
Oregon	3	354		25.4	12	33.6	21	8.2
Pennsylvania	1	4,439		31.8	19	39.8	31	8.0
Rhode Island	1	534		28.8	15	37.7	28	8.9
South Carolina	1			0			0	
South Dakota	1	12		35.4	24	44.9	40	9.5
Tennessee	3			0			0	
Texas	1			0			0	
Utah	1	274		35.0	23	41.6	34	6.6
Vermont	1	84		29.2	16	32.8	20	3.6
Virginia	1	1,062		30.3	17	36.5	26	6.2
Washington	3	269		30.6	17	35.5	24	4.9
West Virginia	1	258		27.8	14	32.4	20	4.6
Wisconsin	1	411		33.6	21	36.9	26	3.3
Wyoming	1	72		38.2	28	42.2	35	4.0
BIA	1	527		25.2	11	27.3	14	2.1
Total (Weighted)		46,263		31.1	18	36.8	26	5.7
Number of States Reporting		44						

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Table D.10 (contd.)

1987-88 Chapter 1  
Fall-Spring Reading

State	Sample Weight	Grade 8 Number Tested	Pretest MCZ	Pretest Percentile	Posttest MCZ	Posttest Percentile	Gain MCZ
Alabama	1	165	36.6	26	37.9	28	1.3
Alaska	1	0	0	0	0	0	0
Arizona	3	127	29.0	15	36.0	25	7.0
Arkansas	1	500	30.3	17	38.1	28	7.8
California	1	1,948	31.4	18	34.3	22	2.9
Colorado	1	752	30.8	18	35.1	24	4.3
Connecticut	1	296	33.4	21	41.4	34	8.0
Delaware	1	33	40.0	31	42.0	35	2.0
District of Columbia	1	0	0	0	0	0	0
Florida	1	0	0	0	0	0	0
Georgia	1	1,703	30.7	18	32.3	20	1.6
Hawaii	1	818	26.0	12	34.8	23	8.8
Idaho	1	225	29.2	16	35.2	24	6.0
Illinois	1	2,022	32.8	20	37.2	27	4.4
Indiana	1	535	33.0	21	37.3	27	4.3
Iowa	1	600	39.5	30	44.7	40	5.2
Kansas	1	323	26.4	13	32.6	20	6.2
Kentucky	1	2,411	27.8	14	37.0	26	9.2
Louisiana	1	1,105	32.0	19	35.5	24	3.5
Maine	1	188	34.7	23	39.0	30	4.3
Maryland	1	46	42.0	35	41.5	34	-0.5
Massachusetts	1	1,601	29.9	17	35.7	24	5.8
Michigan	1	589	30.3	17	34.7	23	4.4
Minnesota	1	357	33.3	21	38.5	29	5.2
Mississippi	3	671	29.3	16	34.6	23	5.3
Missouri	1	0	0	0	0	0	0
Montana	1	225	27.2	14	31.4	18	4.2
Nebraska	1	374	36.6	26	41.9	35	5.3
Nevada	1	664	29.6	16	33.5	21	3.9
New Hampshire	1	0	0	0	0	0	0
New Jersey	1	1,930	29.7	16	34.8	23	5.1
New Mexico	1	744	29.6	16	35.3	24	5.7
New York	1	2,898	35.4	24	40.2	32	4.8
North Carolina	3	525	27.4	14	30.3	17	2.9
North Dakota	1	110	36.3	25	37.2	27	0.9
Ohio	1	664	30.5	17	36.8	26	6.3
Oklahoma	1	1,549	31.0	18	36.8	26	5.8
Oregon	3	252	25.7	12	33.6	21	7.9
Pennsylvania	1	3,747	31.1	18	38.9	29	7.8
Rhode Island	1	464	30.9	18	37.8	28	6.9
South Carolina	1	0	0	0	0	0	0
South Dakota	1	0	0	0	0	0	0
Tennessee	3	0	0	0	0	0	0
Texas	1	0	0	0	0	0	0
Utah	1	198	36.4	25	40.7	33	4.3
Vermont	1	54	31.4	18	35.9	25	4.5
Virginia	1	388	30.7	18	34.9	23	4.2
Washington	3	251	31.3	18	36.7	26	5.4
West Virginia	1	207	30.2	17	34.0	22	3.8
Wisconsin	1	477	34.6	23	36.3	25	1.7
Wyoming	1	33	33.5	21	41.3	34	7.8
BIA	1	592	23.2	10	25.0	11	1.6
Total (weighted)		37,013	30.8	18	36.1	25	5.3
Number of States Reporting		43					

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Table D.10 (contd.)

1987-88 Chapter 1  
Fall-Spring Reading

State	Sample Weight	Grads 9 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	16	31.1	18	35.7	24	4.6
Alaska	1			0		0	
Arizona	3	610	27.0	13	35.0	23	8.0
Arkansas	1	165	27.3	14	33.3	21	6.0
California	1	5,215	28.6	15	32.2	19	3.6
Colorado	1	219	29.5	16	33.6	21	4.1
Connecticut	1	419	30.8	18	36.1	25	5.3
Delaware	1	12	26.0	12	30.0	17	4.0
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	454	24.2	11	30.4	17	6.2
Hawaii	1	446	25.3	12	30.8	18	5.5
Idaho	1	77	33.0	21	36.8	26	3.8
Illinois	1	2,585	32.5	20	38.0	28	5.5
Indiana	1	225	30.6	17	35.1	24	4.3
Iowa	1	127	40.5	32	43.5	37	3.0
Kansas	1	51	24.1	10	29.0	15	4.9
Kentucky	1	919	28.5	15	38.0	28	9.5
Louisiana	1			0		0	
Maine	1	83	26.7	13	30.0	17	3.3
Maryland	1			0		0	
Massachusetts	1	1,036	28.5	15	34.3	22	5.8
Michigan	1	336	30.9	18	35.3	24	4.4
Minnesota	1	46	33.7	22	35.9	25	2.2
Mississippi	3	214	30.5	17	35.9	25	5.4
Missouri	1			0		0	
Montana	1	233	27.7	14	29.9	17	2.2
Nebraska	1	216	36.4	25	42.4	35	6.0
Nevada	1	217	32.8	20	34.7	23	1.9
New Hampshire	1			0		0	
New Jersey	1	1,762	32.9	20	37.6	27	4.7
New Mexico	1	393	27.5	14	32.3	20	4.8
New York	1	1,822	35.2	24	40.4	32	5.2
North Carolina	3	240	31.2	18	32.1	19	0.9
North Dakota	1	51	36.1	25	36.4	25	0.3
Ohio	1	97	31.8	19	42.3	35	10.5
Oklahoma	1	471	27.7	14	34.0	22	6.3
Oregon	3	338	26.7	13	33.7	22	7.0
Pennsylvania	1	2,508	31.5	19	37.8	28	6.3
Rhode Island	1	357	25.3	12	31.0	18	5.7
South Carolina	1			0		0	
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1	12	15.1	4	19.5	7	4.4
Vermont	1	65	31.0	18	40.2	32	9.1
Virginia	1	106	24.7	11	32.2	19	7.5
Washington	3	60	29.6	16	38.2	28	8.6
West Virginia	1	36	24.9	11	32.0	20	7.9
Wisconsin	1	303	35.1	24	41.9	35	6.8
Wyoming	1	27	33.0	21	38.7	29	5.7
BIA	1	424	24.5	11	26.9	13	2.4
Total (Weighted)		25,917	30.0	17	35.3	24	5.3
Number of States Reporting		41					

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Table D.10 (contd.)

1987-88 Chapter 1  
Fall-Spring Reading

State	Sample Weight	Grade 10 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	28	30.0	17	38.6	29	8.6
Alaska	1			0		0	
Arizona	3	148	37.0	26	40.0	31	3.0
Arkansas	1	41	25.6	12	26.1	12	0.5
California	1	2,446	28.6	15	32.4	20	3.8
Colorado	1	89	28.0	14	31.0	18	3.0
Connecticut	1	145	33.1	21	40.4	32	7.3
Delaware	1			0		0	
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	38	37.1	27	40.2	32	3.1
Hawaii	1	404	24.5	11	32.0	19	7.5
Idaho	1	78	30.4	17	33.6	21	3.2
Illinois	1	997	31.9	19	35.5	24	3.6
Indiana	1	122	28.5	15	31.6	19	3.1
Iowa	1	49	40.6	32	42.8	36	2.2
Kansas	1	26	21.0	8	29.8	16	8.8
Kentucky	1	165	32.8	20	41.3	34	8.5
Louisiana	1			0		0	
Maine	1	21	32.2	19	35.8	25	3.6
Maryland	1			0		0	
Massachusetts	1	622	32.6	20	38.1	28	5.5
Michigan	1	160	27.6	14	30.3	17	2.7
Minnesota	1	17	30.2	17	35.9	25	5.7
Mississippi	3	79	25.0	11	37.8	28	12.8
Missouri	1			0		0	
Montana	1	230	26.0	12	29.5	16	3.5
Nebraska	1	99	38.0	28	44.3	39	6.3
Nevada	1			0		0	
New Hampshire	1			0		0	
New Jersey	1	1,222	32.3	20	36.5	26	4.2
New Mexico	1	106	33.0	21	38.3	29	5.3
New York	1	907	32.6	20	39.9	31	7.3
North Carolina	3	186	29.2	16	31.2	18	2.0
North Dakota	1	31	33.9	22	37.6	27	3.7
Ohio	1	71	32.7	20	41.9	35	9.2
Oklahoma	1	160	28.1	14	34.1	22	6.0
Oregon	3	115	24.5	11	27.5	14	3.0
Pennsylvania	1	1,170	28.8	15	35.4	24	6.6
Rhode Island	1	222	24.6	11	29.1	16	4.5
South Carolina	1			0		0	
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1	15	15.4	5	16.4	5	1.0
Vermont	1	39	31.8	19	38.3	29	6.5
Virginia	1	46	32.1	19	38.2	28	6.1
Washington	3	30	33.6	21	41.0	33	7.4
West Virginia	1	50	22.3	9	28.0	14	5.7
Wisconsin	1	222	35.8	25	40.4	32	4.6
Wyoming	1	27	30.0	17	37.2	27	7.2
BIA	1	331	22.5	9	25.7	12	3.2
Total (Weighted)		12,070	30.0	17	34.8	23	4.8
Number of States Reporting		39					

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Table D.10 (contd.)

1987-88 Chapter 1  
Fall-Spring Reading

State	Sample Weight	Number Tested	Grade 11		Posttest NCE	Posttest Percentile	Gain NCE
			Pretest NCE	Pretest Percentile			
Alabama	1	12	27.3	14	22.0	9	-5.3
Alaska	1			0		0	
Arizona	3	125	37.0	26	42.0	35	5.0
Arkansas	1	43	17.1	5	21.7	8	4.6
California	1	1,980	30.0	17	35.7	24	5.7
Colorado	1	61	25.5	12	30.1	17	4.6
Connecticut	1	69	29.3	16	37.6	27	8.3
Delaware	1			0		0	
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	33	39.1	30	39.3	30	0.2
Hawaii	1	254	25.2	11	30.7	18	5.5
Idaho	1	17	25.1	11	26.1	12	1.0
Illinois	1	554	28.6	15	32.3	20	3.7
Indiana	1	27	25.8	12	30.4	17	4.6
Iowa	1	42	38.4	29	41.3	34	2.9
Kansas	1	17	26.8	13	31.7	19	4.9
Kentucky	1	59	27.3	14	36.7	26	9.4
Louisiana	1			0		0	
Maine	1	16	22.3	9	24.1	10	1.8
Maryland	1			0		0	
Massachusetts	1	299	29.8	16	36.3	25	6.5
Michigan	1	102	26.1	12	31.3	18	5.2
Minnesota	1	16	22.3	9	29.5	16	7.2
Mississippi	3	39	22.6	9	29.4	16	6.3
Missouri	1			0		0	
Montana	1	158	25.2	11	30.1	17	4.9
Nebraska	1	49	35.8	25	42.0	35	6.2
Nevada	1			0		0	
New Hampshire	1			0		0	
New Jersey	1	801	31.5	19	36.9	26	5.4
New Mexico	1	61	28.8	15	31.0	18	2.2
New York	1	438	30.4	17	37.0	26	6.6
North Carolina	3	77	32.0	19	30.6	17	-1.4
North Dakota	1	22	31.8	19	40.5	32	8.7
Ohio	1	26	36.6	26	43.9	38	7.3
Oklahoma	1	129	26.7	13	31	19	5.0
Oregon	3	94	26.4	13	33.0	21	6.6
Pennsylvania	1	620	29.0	15	34.4	23	5.4
Rhode Island	1	221	24.3	11	28.6	15	4.3
South Carolina	1			0		0	
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1			0		0	
Vermont	1	13	30.9	18	40.9	33	10.0
Virginia	1	9	13.4	4	24.7	11	11.3
Washington	3	61	32.7	20	40.9	33	8.2
West Virginia	1			0		0	
Wisconsin	1	157	34.0	22	38.6	29	4.6
Wyoming	1	20	30.8	18	34.2	22	3.4
BIA	1	300	22.1	9	26.2	12	4.1
Total (Weighted)		7,813	29.4	16	34.6	23	5.2
Number of States Reporting		37					

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Table D.10 (contd.)

1987-88 Chapter 1  
Fall-Spring Reading

State	Sample Weight	Grade 12 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	2	10.4	3	18.9	7	8.5
Alaska	1			0		0	
Arizona	3	116	37.0	26	42.0	35	5.0
Arkansas	1	59	17.0	5	25.8	12	8.8
California	1	1,212	36.0	25	39.5	30	3.5
Colorado	1	39	23.7	10	28.4	15	4.7
Connecticut	1	23	35.8	25	51.0	51	15.2
Delaware	1			0		0	
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	25	42.9	36	44.7	40	1.8
Hawaii	1	130	28.1	14	32.9	20	4.8
Idaho	1	9	28.8	15	32.3	20	3.5
Illinois	1	116	28.6	15	32.1	19	3.5
Indiana	1	3	31.6	19	39.1	30	7.5
Iowa	1	17		0		0	
Kansas	1			0		0	
Kentucky	1	17	23.0	10	34.1	22	11.1
Louisiana	1			0		0	
Maine	1	7	38.3	29	44.1	39	5.8
Maryland	1			0		0	
Massachusetts	1	239	36.5	26	41.5	34	5.0
Michigan	1	53	29.5	16	29.9	17	0.4
Minnesota	1	4	21.3	8	27.7	14	6.4
Mississippi	3	20	20.9	8	28.8	15	7.9
Missouri	1			0		0	
Montana	1	122	29.0	15	34.3	22	5.3
Nebraska	1	49	34.0	22	38.2	26	4.2
Nevada	1			0		0	
New Hampshire	1			0		0	
New Jersey	1	226	26.7	13	30.7	18	4.0
New Mexico	1	45	30.6	17	40.0	31	9.4
New York	1	208	25.9	12	34.2	22	6.3
North Carolina	3			0		0	
North Dakota	1	14	25.3	12	33.0	21	7.7
Ohio	1	20	33.4	21	39.0	30	5.6
Oklahoma	1	99	26.0	12	30.5	17	4.5
Oregon	3	27	25.3	12	29.9	17	4.6
Pennsylvania	1	458	29.3	16	34.2	22	4.9
Rhode Island	1	139	28.6	15	31.9	19	3.3
South Carolina	1			0		0	
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1			0		0	
Vermont	1	7	35.1	24	42.9	36	7.8
Virginia	1	13	29.1	16	32.4	20	3.3
Washington	3	29	34.0	22	43.2	37	9.2
West Virginia	1	11	13.0	3	20.6	8	7.6
Wisconsin	1	80	35.5	24	41.2	33	5.7
Wyoming	1	9	37.5	27	41.2	33	3.7
BIA	1	211	22.2	9	24.8	11	2.6
Total (Weighted)		4,242	31.3	18	35.9	25	4.6
Number of States Reporting		36					

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Table D.11  
Mathematics Achievement Information for Chapter 1 Participants Tested  
on an Annual Cycle, by Grade and State -- 1987-88

1987-88 Chapter 1  
Annual Math

State	Sample Weight	Grade 2		Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
		Number Tested	Pratst NCE					
Alabama	1	5,847	34.7	23	41.6	34	6.9	
Alaska	1							
Arizona	3	41	32.0	19	44.0	38	12.0	
Arkansas	1	2,351	30.6	17	34.2	22	3.6	
California	1	21,064	41.2	33	44.0	38	2.8	
Colorado	1	61	35.4	24	41.6	34	6.4	
Connecticut	1	432	33.5	21	45.9	42	12.4	
Delaware	1	264	49.0	48	60.0	68	11.0	
District of Columbia	1							
Florida	1	5,530	33.0	21	39.0	30	6.0	
Georgia	1	4,754	37.5	27	47.2	44	9.7	
Hawaii	1							
Idaho	1	237	41.1	33	47.2	44	6.1	
Illinois	1	1,790	35.5	24	35.3	24	-0.2	
Indiana	1	73	32.4	20	45.5	41	13.1	
Iowa	1							
Kansas	1	539	19.4	7	31.8	19	12.4	
Kentucky	1	584	41.3	34	55.5	60	14.2	
Louisiana	1	2,510	37.5	27	44.4	39	6.9	
Maine	1	52	39.0	30	43.2	37	4.2	
Maryland	1							
Massachusetts	1	470	31.7	19	43.9	38	12.2	
Michigan	1	5,336	40.8	33	46.1	42	5.3	
Minnesota	1	204	30.6	17	46.1	42	15.5	
Mississippi	3	635	32.6	20	40.8	33	8.2	
Missouri	1							
Montana	1	159	33.8	22	40.4	32	6.6	
Nebraska	1	292	36.5	26	45.1	40	8.6	
Nevada	1	61	27.0	13	41.8	34	14.8	
New Hampshire	1							
New Jersey	1	5,288	37.0	26	49.9	49	12.9	
New Mexico	1	299	36.6	26	43.9	38	7.3	
New York	1	3,118	31.8	19	45.1	40	13.3	
North Carolina	3	189	36.1	25	40.1	32	4.0	
North Dakota	1	94	39.2	30	41.9	35	2.7	
Ohio	3							
Oklahoma	1	1,052	31.7	19	43.9	38	12.2	
Oregon	1	224	33.7	22	42.1	35	8.4	
Pennsylvania	1	1,259	33.2	21	45.5	41	12.3	
Rhode Island	1							
South Carolina	1	2,329	30.4	17	39.2	30	8.8	
South Dakota	1	922	39.6	31	46.9	44	7.3	
Tennessee	3							
Texas	1	8,912	38.4	29	45.9	42	7.5	
Utah	1	1,117	42.3	35	48.2	46	5.9	
Vermont	1	205	29.5	16	39.4	30	9.9	
Virginia	1	1,434	40.0	31	45.7	41	5.7	
Washington	3	72	33.6	21	39.8	31	6.2	
West Virginia	1	749	43.0	37	52.7	55	9.7	
Wisconsin	1	1,506	35.4	24	44.4	39	9.0	
Wyoming	1	43	40.4	32	45.5	41	5.1	
BIA	1							
Total (Weighted)		83,972	37.3	27	44.0	38	6.7	
Number of States Reporting		41						

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Table D.11 (contd.)

1987-88 Chapter 1  
Annual Math

State	Sample Weight	Grade 3 Number Tested	Prat test NCE	Prat test Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	5,359	34.6	23	37.7	28	3.1
Alaska	1			0		0	
Arizona	3	110	36.0	25	33.0	21	-3.0
Arkansas	1	2,550	38.0	28	40.0	31	2.0
California	1	22,376	40.3	32	40.5	32	0.2
Colorado	1	63	30.2	17	34.0	22	3.8
Connecticut	1	1,103	35.8	25	42.9	36	7.1
Delaware	1	192	53.0	55	46.0	42	-7.0
District of Columbia	1	653	45.4	41	48.1	46	2.7
Florida	1	6,124	33.7	22	37.0	26	3.3
Georgia	1	5,911	35.8	25	37.9	28	2.1
Hawaii	1			0		0	
Idaho	1	278	37.8	28	40.2	32	2.4
Illinois	1	2,309	34.3	22	35.2	24	0.9
Indiana	1	71	33.9	22	43.1	37	9.2
Iowa	1			0		0	
Kansas	1	750	34.0	22	35.3	24	1.3
Kentucky	1	918	37.9	28	44.0	38	6.1
Louisiana	1	2,609	36.0	25	39.1	30	3.1
Maine	1	46	40.6	33	43.2	37	2.4
Maryland	1			0		0	
Massachusetts	1	539	36.0	25	44.5	39	8.5
Michigan	1	5,534	40.4	32	41.9	35	1.5
Minnesota	1	181	30.9	18	38.4	29	7.5
Mississippi	3	1,345	33.7	22	37.7	28	4.0
Missouri	1			0		0	
Montana	1	161	36.8	26	38.5	29	1.7
Nebraska	1	299	36.5	26	45.1	40	8.6
Nevada	1	87	34.0	22	43.5	37	9.5
New Hampshire	1			0		0	
New Jersey	1	7,629	41.7	34	53.1	55	11.4
New Mexico	1	296	38.5	29	43.7	38	5.2
New York	1	6,080	33.8	22	44.2	39	10.4
North Carolina	3	325	34.0	22	42.4	35	8.4
North Dakota	1	122	39.4	30	41.1	33	1.7
Ohio	3			0		0	
Oklahoma	1	1,291	30.0	17	40.9	33	10.9
Oregon	1	506	38.6	29	43.3	37	4.7
Pennsylvania	1	1,765	29.2	16	42.3	35	13.1
Rhode Island	1			0		0	
South Carolina	1	2,263	28.3	15	40.4	32	12.1
South Dakota	1	892	40.3	32	42.5	36	2.2
Tennessee	3			0		0	
Texas	1	10,395	37.4	27	41.9	35	4.5
Utah	1	985	40.0	31	43.9	38	3.9
Vermont	1	334	29.5	16	36.7	26	7.1
Virginia	1	1,423	37.1	27	43.6	38	6.5
Washington	3	85	29.5	16	36.9	26	7.4
West Virginia	1	899	42.6	36	40.4	32	-2.2
Wisconsin	1	1,486	34.5	26	40.3	32	3.8
Wyoming	1	70	37.4	27	39.9	31	2.5
BIA	1			0		0	
Total (Weighted)		100,156	37.2	27	41.3	34	4.1
Number of States Reporting		42					

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Table D.11 (contd.)

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Annual Math

State	Sample Weight	Grade 4 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	4,945	33.8	22	39.3	30	5.5
Alaska	1			0		0	
Arizona	3	254	33.0	21	34.0	22	1.0
Arkansas	1	2,526	36.7	26	41.5	34	4.8
California	1	22,919	38.7	29	40.7	33	2.0
Colorado	1	89	34.3	22	38.6	29	4.3
Connecticut	1	1,078	34.4	23	42.4	35	8.0
Delaware	1	321	50.0	50	53.0	55	3.0
District of Columbia	1	480	47.3	44	41.6	34	-5.7
Florida	1	6,748	31.9	19	35.0	23	3.1
Georgia	1	6,154	34.6	23	39.2	30	4.6
Hawaii	1			0		6	
Idaho	1	267	34.1	22	40.0	31	5.9
Illinois	1	2,640	32.3	20	35.0	23	2.7
Indiana	1	636	44.8	40	51.8	53	7.0
Iowa	1			0		0	
Kansas	1	972	22.4	9	31.4	18	9.0
Kentucky	1	1,521	34.4	23	44.8	40	10.4
Louisiana	1	2,831	35.7	24	41.0	33	5.3
Maine	1	29	41.4	34	45.8	42	4.4
Maryland	1			0		0	
Massachusetts	1	666	37.8	28	45.8	42	8.0
Michigan	1	5,728	38.4	29	43.1	37	4.7
Minnesota	1	225	29.6	16	41.1	33	11.5
Mississippi	3	1,389	33.2	21	37.3	27	4.1
Missouri	1			0		0	
Montana	1	178	30.8	18	34.8	23	4.0
Nebraska	1	286	35.9	25	42.6	36	6.7
Nevada	1	60	34.1	22	37.3	27	3.2
New Hampshire	1			0		0	
New Jersey	1	7,365	42.6	36	49.9	49	7.3
New Mexico	1	371	36.2	25	41.3	34	5.1
New York	1	5,902	33.3	21	42.8	36	9.5
North Carolina	3	826	33.8	22	37.6	27	3.8
North Dakota	1	158	33.4	21	40.4	32	7.0
Ohio	3			0		0	
Oklahoma	1	1,507	30.6	17	39.6	31	9.0
Oregon	1	458	35.8	25	41.5	34	5.7
Pennsylvania	1	4,143	30.7	18	39.8	31	9.1
Rhode Island	1			0		0	
South Carolina	1	1,911	28.5	15	36.2	25	7.7
South Dakota	1	804	38.6	29	41.4	34	2.8
Tennessee	3			0		0	
Texas	1	11,392	36.7	26	42.2	35	5.5
Utah	1	931	39.5	30	40.8	33	1.3
Vermont	1	343	31.4	18	35.8	25	4.4
Virginia	1	1,072	36.7	26	40.6	32	3.9
Washington	3	65	35.7	24	41.2	33	5.5
West Virginia	1	1,324	35.0	23	43.4	37	8.4
Wisconsin	1	1,240	34.1	22	38.4	29	4.3
Wyoming	1	65	32.8	20	39.6	31	6.8
BIA	1			0		0	
Total (Weighted)		107,891	35.9	25	40.9	33	5.0
Number of States Reporting		42					

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State	Sample Weight	Grade 5 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	4,723	35.8	25	40.6	32	4.8
Alaska	1			0		0	
Arizona	3	310	32.0	19	35.0	23	3.0
Arkansas	1	2,354	38.7	29	41.0	33	2.3
California	1	22,282	38.2	28	40.6	32	2.4
Colorado	1	99	29.0	15	34.5	23	5.5
Connecticut	1	1,101	36.0	25	39.5	30	3.5
Delaware	1	262	39.0	30	47.0	44	8.0
District of Columbia	1	450	41.7	34	40.9	33	-0.8
Florida	1	3,949	31.6	19	36.0	25	4.4
Georgia	1	6,760	34.9	23	36.6	26	1.7
Hawaii	1			0		0	
Idaho	1	327	35.3	24	39.6	31	4.3
Illinois	1	2,912	34.4	23	36.6	26	2.2
Indiana	1	730	47.8	45	54.7	58	6.9
Iowa	1			0		0	
Kansas	1	705	25.4	12	32.2	19	6.8
Kentucky	1	1,541	35.1	24	45.6	41	10.5
Louisiana	1	2,556	37.1	27	42.2	35	5.1
Maine	1	28	39.2	30	42.1	35	2.9
Maryland	1			0		0	
Massachusetts	1	488	38.7	29	40.9	33	2.2
Michigan	1	5,097	36.5	26	41.2	33	4.7
Minnesota	1	195	31.0	18	37.8	28	6.8
Mississippi	3	1,643	32.6	20	36.1	25	3.5
Missouri	1			0		0	
Montana	1	168	33.7	22	38.8	29	5.1
Nebraska	1	290	37.3	27	43.8	38	6.5
Nevada	1	99	33.1	21	40.1	32	7.0
New Hampshire	1			0		0	
New Jersey	1	7,413	43.9	38	50.2	50	6.3
New Mexico	1	212	33.9	22	36.3	25	2.4
New York	1	5,325	35.9	25	42.1	35	6.2
North Carolina	3	924	34.5	23	36.0	25	1.5
North Dakota	1	150	38.6	29	42.5	36	3.9
Ohio	3			0		0	
Oklahoma	1	1,580	30.5	17	35.7	24	5.2
Oregon	1	522	36.5	26	40.4	32	3.9
Pennsylvania	1	3,572	30.4	17	38.8	29	8.4
Rhode Island	1			0		0	
South Carolina	1	1,859	28.2	15	33.4	21	5.2
South Dakota	1	785	37.9	28	41.7	34	3.8
Tennessee	3			0		0	
Texas	1	11,020	37.1	27	42.5	36	5.4
Utah	1	930	35.8	25	39.0	30	3.2
Vermont	1	307	32.8	20	36.8	26	4.0
Virginia	1	1,388	37.4	27	46.7	43	9.3
Washington	3	85	31.6	19	35.2	24	3.6
West Virginia	1	1,267	38.4	29	45.5	41	7.1
Wisconsin	1	1,129	32.4	20	39.3	30	6.9
Wyoming	1	55	36.1	25	37.2	27	1.1
BIA	1			0		0	
Total (Weighted)		103,516	36.3	25	40.6	32	4.3
Number of States Reporting		42					

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State	Sample Weight	Grade 6 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	2,898	35.0	23	37.9	28	2.9
Alaska	1			0		0	
Arizona	3	188	31.0	18	34.0	22	3.0
Arkansas	1	2,103	36.8	26	43.7	38	6.9
California	1	20,047	39.0	30	42.0	35	3.0
Colorado	1	59	31.0	18	33.5	21	2.5
Connecticut	1	1,020	34.3	22	40.5	32	6.2
Delaware	1	123	44.0	38	43.0	37	-1.0
District of Columbia	1	490	42.3	35	47.8	45	5.5
Florida	1	3,450	31.1	18	34.0	22	2.9
Georgia	1	6,197	33.1	21	35.3	24	2.2
Hawaii	1			0		0	
Idaho	1	207	36.0	25	39.8	31	3.8
Illinois	1	2,854	35.4	24	36.9	26	1.5
Indiana	1	59	34.5	23	39.9	31	5.4
Iowa	1			0		0	
Kansas	1	520	28.7	15	32.9	20	4.2
Kentucky	1	751	37.7	28	44.5	39	6.8
Louisiana	1	1,179	37.8	28	37.5	27	-0.3
Maine	1	46	33.5	21	37.0	26	3.5
Maryland	1			0		0	
Massachusetts	1	398	36.8	26	41.8	34	5.0
Michigan	1	4,373	37.9	28	37.3	27	-0.6
Minnesota	1	103	30.5	17	37.3	27	6.8
Mississippi	3	1,254	33.1	21	36.9	26	3.8
Missouri	1			0		0	
Montana	1	144	29.8	16	34.4	23	4.6
Nebraska	1	143	30.3	29	44.4	39	6.1
Nevada	1	94	35.2	24	40.2	32	5.0
New Hampshire	1			0		0	
New Jersey	1	7,395	42.7	36	51.5	52	8.8
New Mexico	1	173	30.8	18	39.4	30	8.6
New York	1	4,928	34.9	23	41.9	35	7.0
North Carolina	3	874	30.5	17	36.5	26	6.0
North Dakota	1	107	36.2	25	41.1	33	4.9
Ohio	3			0		0	
Oklahoma	1	1,084	29.8	16	37.6	27	7.8
Oregon	1	278	31.3	18	36.8	26	5.5
Pennsylvania	1	2,994	29.9	17	46.8	44	16.9
Rhode Island	1			0		0	
South Carolina	1	1,506	27.5	14	35.1	24	7.6
South Dakota	1	669	37.7	28	41.3	34	3.6
Tennessee	3			0		0	
Texas	1	6,406	35.8	25	40.0	31	4.2
Utah	1	573	35.3	24	39.0	30	3.7
Vermont	1	268	32.2	19	36.1	25	3.9
Virginia	1	734	36.5	26	36.3	25	-0.2
Washington	3	51	30.9	18	34.2	22	3.3
West Virginia	1	877	37.9	28	40.9	33	3.0
Wisconsin	1	1,056	31.9	19	35.6	24	3.7
Wyoming	1	54	28.5	15	36.2	28	9.7
BIA	1			0		0	
Total (Weighted)		83,461	36.0	25	40.5	32	4.5
Number of States Reporting		42					

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State	Sample Weight	Grade 7 Number Tested	Pretest MCE	Pretest Percentile	Posttest MCE	Posttest Percentile	Gain MCE
Alabama	1	967	33.3	21	36.6	26	3.3
Alaska	1		0	0		0	
Arizona	3	144	31.0	18	30.0	17	-1.0
Arkansas	1	1,083	38.5	29	38.3	29	-0.2
California	1	13,757	39.9	31	40.6	32	0.7
Colorado	1	37	28.7	15	31.9	19	3.2
Connecticut	1	934	31.3	18	36.2	25	4.9
Delaware	1	96	36.0	25	37.0	26	1.0
District of Columbia	1		0	0		0	
Florida	1	1,453	28.5	15	33.0	21	4.5
Georgia	1	4,587	32.6	20	35.9	25	3.3
Hawaii	1		0	0		0	
Idaho	1	59	32.5	20	34.2	22	1.7
Illinois	1	2,017	35.1	24	38.3	29	3.2
Indiana	1	667	45.9	42	42.9	36	-3.0
Iowa	1		0	0		0	
Kansas	1	312	28.6	15	35.6	25	7.2
Kentucky	1	568	34.9	23	39.3	30	4.4
Louisiana	1	439	36.2	25	41.4	34	5.2
Maine	1	47	32.3	20	33.5	21	1.2
Maryland	1		0	0		0	
Massachusetts	1	271	37.3	27	38.1	28	0.8
Michigan	1	3,664	36.5	26	41.7	34	5.2
Minnesota	1	18	32.0	19	34.1	22	2.1
Mississippi	3	840	30.4	17	33.2	21	2.8
Missouri	1		0	0		0	
Montana	1	165	33.6	21	37.6	27	4.0
Nebraska	1	59	41.8	34	46.5	43	4.7
Nevada	1	54	30.6	17	39.8	31	9.2
New Hampshire	1		0	0		0	
New Jersey	1	6,892	44.8	40	47.6	45	2.8
New Mexico	1	180	32.4	20	39.4	30	7.0
New York	1	4,341	36.4	25	37.9	28	1.5
North Carolina	3	937	35.3	24	38.1	28	2.8
North Dakota	1	58	36.2	25	41.3	34	5.1
Ohio	3		0	0		0	
Oklahoma	1	761	29.3	16	34.9	23	5.6
Oregon	1	176	24.9	11	33.1	21	8.2
Pennsylvania	1	1,832	36.4	25	39.4	30	3.0
Rhode Island	1		0	0		0	
South Carolina	1	2,121	30.0	17	34.3	22	4.3
South Dakota	1	364	35.9	25	38.1	28	2.2
Tennessee	3		0	0		0	
Texas	1	4,121	33.1	21	36.9	26	3.8
Utah	1	323	28.1	14	33.8	22	5.7
Vermont	1	184	31.1	18	37.9	28	6.8
Virginia	1	720	35.8	25	37.3	27	1.5
Washington	3	39	32.9	20	36.1	25	3.2
West Virginia	1	127	35.9	25	41.0	33	5.1
Wisconsin	1	721	34.9	23	39.1	30	4.2
Wyoming	1	19	43.6	38	48.2	46	4.6
BIA	1		0	0		0	
Total (Weighted)		59,074	36.7	26	39.3	30	2.6
Number of States Reporting		41					

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Table D.11 (contd.)

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Annual Math

State	Sample Weight	Grade 8 Number Tested	Pretest		Posttest		Gain NCE
			NCE	Percentile	NCE	Percentile	
Alabama	1	669	37.1	27	37.5	27	0.4
Alaska	1	63	30.0	0	34.0	22	4.0
Arizona	3	1,151	34.8	23	38.5	29	3.7
Arkansas	1	12,048	38.9	29	40.3	32	1.4
California	1	43	30.2	17	29.6	16	-0.6
Colorado	1	684	32.2	19	34.5	23	2.3
Connecticut	1	44	40.0	31	41.0	33	1.0
Delaware	1	378	25.1	11	30.4	17	5.3
District of Columbia	1	932	24.9	11	30.0	17	5.1
Florida	1	4,582	32.2	19	34.2	22	2.0
Georgia	1	61	35.1	24	34.8	23	-0.3
Hawaii	1	1,669	35.1	24	37.7	28	2.6
Indiana	1	687	43.8	38	44.9	40	1.1
Iowa	1	207	34.0	22	37.3	27	3.3
Kansas	1	470	33.9	22	40.8	33	6.9
Kentucky	1	297	40.2	32	41.5	34	1.3
Louisiana	1	27	35.6	24	36.6	26	1.0
Maine	1	151	37.1	27	37.1	27	0.0
Maryland	1	3,115	39.5	30	42.6	36	3.1
Massachusetts	1	19	22.6	9	37.6	27	15.0
Michigan	3	660	31.4	18	33.0	21	1.6
Minnesota	1	165	37.5	27	39.7	31	2.2
Mississippi	1	63	45.1	40	47.9	46	2.8
Missouri	1	45	32.3	20	41.7	34	9.4
Montana	1	7,493	43.2	37	48.5	47	5.3
Nebraska	1	155	35.1	24	39.0	30	3.9
New Hampshire	1	3,410	34.3	22	36.7	26	2.4
New Jersey	3	910	33.4	21	37.8	28	4.4
New Mexico	1	35	37.1	27	36.7	26	-0.4
New York	1	1,401	33.1	21	34.1	22	1.0
North Carolina	1	805	28.0	14	40.2	32	12.2
North Dakota	1	316	35.3	24	36.9	26	1.6
Ohio	3	126	0	0	0	0	0
Oklahoma	1	260	30.1	17	33.0	21	2.9
Oregon	1	152	25.6	12	34.9	23	9.3
Pennsylvania	1	3,307	28.5	15	24.8	11	-3.7
Rhode Island	1	94	40.8	33	40.1	32	-0.7
South Carolina	1	803	31.4	18	35.5	24	4.1
South Dakota	1	35	42.3	35	46.1	42	3.8
Tennessee	3	21	0	0	0	0	0
Texas	1	803	33.8	22	34.9	23	1.1
Utah	1	126	29.1	16	32.0	19	2.9
Vermont	1	94	31.2	18	34.3	22	3.1
Virginia	1	316	28.4	15	32.2	19	3.8
Washington	3	94	40.8	33	40.1	32	-0.7
West Virginia	1	35	42.3	35	46.1	42	3.8
Wisconsin	1	0	0	0	0	0	0
Wyoming	1	0	0	0	0	0	0
BIA	1	0	0	0	0	0	0
Total (Weighted)		52,396	36.3	25	39.1	30	2.8
Number of States Reporting		42					

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Table D.11 (contd.)

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Annual Math

State	Sample Weight	Grade 9 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	142	36.3	25	42.9	36	6.6
Alaska	1			0		0	
Arizona	3	53	29.0	15	32.0	19	3.0
Arkansas	1	325	28.6	15	32.3	20	3.7
California	1	4,757	35.4	24	36.9	26	1.5
Colorado	1	6	33.5	21	32.8	20	-0.7
Connecticut	1	467	30.1	17	32.1	19	2.0
Delaware	1			0		0	
District of Columbia	1	560	28.2	15	27.9	14	-0.3
Florida	1			0		0	
Georgia	1	1,221	24.5	11	29.1	16	4.6
Hawaii	1			0		0	
Idaho	1	16	26.3	25	35.1	24	-1.2
Illinois	1			0		0	
Indiana	1	77	23.0	28	29.6	16	-8.4
Iowa	1			0		0	
Kansas	1			0		0	
Kentucky	1	63	36.2	25	29.5	16	-6.7
Louisiana	1	13	32.4	20	33.7	22	1.3
Maine	1			0		0	
Maryland	1			0		0	
Massachusetts	1			0		0	
Michigan	1	521	33.4	21	28.3	15	-5.1
Minnesota	1			0		0	
Mississippi	3	244	36.7	26	39.4	30	2.7
Missouri	1			0		0	
Montana	1	58	38.0	28	44.8	40	6.8
Nebraska	1	20	41.1	33	44.4	39	3.3
Nevada	1	12	29.0	15	33.6	21	4.6
New Hampshire	1			0		0	
New Jersey	1	3,649	47.0	44	50.2	50	3.2
New Mexico	1	16	28.3	15	43.9	38	15.6
New York	1	1,092	34.0	22	39.5	30	5.5
North Carolina	3	248	33.1	21	35.6	24	2.5
North Dakota	1	5	32.9	20	27.6	14	-5.3
Ohio	3			0		0	
Oklahoma	1	66	29.5	16	35.6	24	6.1
Oregon	1	123	18.9	7	26.1	12	7.2
Pennsylvania	1	586	24.5	11	24.5	11	0
Rhode Island	1			0		0	
South Carolina	1	287	31.2	18	31.6	19	0.4
South Dakota	1	46	37.7	28	37.9	28	0.2
Tennessee	3			0		0	
Texas	1	2,369	33.0	21	37.6	27	4.6
Utah	1	304	26.1	12	35.3	24	9.2
Vermont	1	37	36.3	25	36.5	26	0.2
Virginia	1	84	29.1	16	31.1	18	2.0
Washington	3	25	26.2	12	26.6	13	0.4
West Virginia	1			0		0	
Wisconsin	1	1,102	28.5	15	32.5	20	4.0
Wyoming	1	14	34.7	23	38.1	28	3.4
BIA	1			0		0	
Total (Weighted)		19,748	34.8	23	37.6	27	2.8
Number of States Reporting		34					

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Table D.11 (contd.)

1987-88 Chapter 1  
Annual Math

State	Sample Weight	Grade 10 Number Tested	Pretest MCE	Pretest Percentile	Posttest MCE	Posttest Percentile	Gain MCE
Alabama	1	93	35.1	24	39.1	30	4.0
Alaska	1			0		0	
Arizona	3	67	34.0	22	35.0	23	1.0
Arkansas	1	117	26.3	13	25.9	12	-0.4
California	1	4,712	40.1	32	40.3	32	0.2
Colorado	1	2	41.0	33	46.2	42	5.2
Connecticut	1	234	36.7	26	34.4	23	-2.3
Delaware	1			0		0	
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	307	25.6	12	31.4	18	5.8
Hawaii	1			0		0	
Idaho	1	25	31.6	19	31.2	18	-0.4
Illinois	1			0		0	
Indiana	1	6	34.0	22	40.0	31	6.0
Iowa	1			0		0	
Kansas	1			0		0	
Kentucky	1	22	27.7	14	33.3	21	5.6
Louisiana	1			0		0	
Maine	1			0		0	
Maryland	1			0		0	
Massachusetts	1	33	26.7	13	28.2	15	1.5
Michigan	1	118	29.1	16	29.6	16	0.7
Minnesota	1			0		0	
Mississippi	3	86	33.4	21	37.5	27	4.1
Missouri	1			0		0	
Montana	1	55	28.2	15	36.6	26	8.4
Nebraska	1	1	40.0	31	48.0	46	8.0
Nevada	1	12	29.7	16	30.2	17	0.5
New Hampshire	1			0		0	
New Jersey	1	1,460	37.9	28	43.2	37	5.3
New Mexico	1	13	30.7	18	33.1	21	2.4
New York	1	324	34.3	22	40.5	32	6.2
North Carolina	3	364	33.1	21	36.7	26	3.6
North Dakota	1	3	30.0	17	28.0	14	-2.0
Ohio	3			0		0	
Oklahoma	1	39	30.7	18	36.7	26	6.0
Oregon	1	9	30.5	17	29.9	17	-0.6
Pennsylvania	1	421	20.9	8	27.4	14	6.5
Rhode Island	1			0		0	
South Carolina	1	176	27.7	14	32.5	20	4.8
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1	949	34.2	22	36.6	26	2.4
Utah	1	123	28.2	15	33.1	21	4.9
Vermont	1	56	39.6	31	42.5	36	2.9
Virginia	1			0		0	
Washington	3			0		0	
West Virginia	1			0		0	
Wisconsin	1	524	28.8	15	32.4	20	3.6
Wyoming	1	5	44.3	39	50.6	51	6.3
BIA	1			0		0	
Total (Weighted)		11,390	35.7	24	38.1	28	2.4
Number of States Reporting		30					

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Table D.11 (contd.)

1987-88 Chapter 1  
Annual Math

State	Sample Weight	Grade 11 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	97	38.8	29	40.7	33	1.9
Alaska	1		0	0	0	0	
Arizona	3	40	30.0	17	33.0	21	3.0
Arkansas	1	72	26.5	13	26.1	12	-0.4
California	1	2,707	40.6	32	40.6	32	0.0
Colorado	1	5	30.4	17	36.3	25	5.9
Connecticut	1	32	30.7	18	38.9	29	8.2
Delaware	1		0	0	0	0	
District of Columbia	1		0	0	0	0	
Florida	1		0	0	0	0	
Georgia	1	139	27.5	14	31.9	19	4.4
Hawaii	1		0	0	0	0	
Idaho	1	8	33.8	22	39.8	31	6.0
Illinois	1		0	0	0	0	
Indiana	1	6	31.0	18	37.0	26	6.0
Iowa	1		0	0	0	0	
Kansas	1		0	0	0	0	
Kentucky	1	5	26.0	12	35.6	24	9.6
Louisiana	1		0	0	0	0	
Maine	1		0	0	0	0	
Maryland	1		0	0	0	0	
Massachusetts	1	41	26.8	13	30.2	17	3.4
Michigan	1	43	32.3	20	32.7	20	0.4
Minnesota	1		0	0	0	0	
Mississippi	3		0	0	0	0	
Missouri	1		0	0	0	0	
Montana	1	32	39.0	30	42.1	35	3.1
Nebraska	1		0	0	0	0	
Nevada	1	10	28.5	15	40.2	32	11.7
New Hampshire	1		0	0	0	0	
New Jersey	1	1,091	37.4	27	39.7	31	2.3
New Mexico	1	10	26.7	13	43.5	37	16.8
New York	1	133	34.2	22	39.1	30	4.9
North Carolina	3	152	37.8	28	43.1	37	5.3
North Dakota	1		0	0	0	0	
Ohio	3		0	0	0	0	
Oklahoma	1	27	28.6	15	33.0	21	4.4
Oregon	1	8	28.8	15	24.6	11	-4.2
Pennsylvania	1	67	19.4	7	22.8	9	3.4
Rhode Island	1		0	0	0	0	
South Carolina	1	54	22.1	9	31.8	19	9.7
South Dakota	1		0	0	0	0	
Tennessee	3		0	0	0	0	
Texas	1	772	35.9	25	39.4	30	3.5
Utah	1	60	26.2	12	25.5	12	-0.7
Vermont	1	7	30.8	18	36.7	26	5.9
Virginia	1		0	0	0	0	
Washington	3		0	0	0	0	
West Virginia	1		0	0	0	0	
Wisconsin	1	16	34.0	22	33.3	21	-0.7
Wyoming	1	5	41.7	34	54.5	58	12.8
BIA	1		0	0	0	0	
Total (Weighted)		6,023	37.4	27	39.3	30	1.9
Number of States Reporting		27					

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Table D.11 (contd.)

1987-88 Chapter 1  
Annual Math

State	Sample Weight	Grade 12 Number Tested	Pretest		Posttest		Gain MCE
			MCE	Percentile	MCE	Percentile	
Alabama	1	7	31.5	19	35.1	24	3.6
Alaska	1		0		0		
Arizona	3	38	33.0	21	34.0	22	1.0
Arkansas	1	40	15.5	5	15.3	4	-0.2
California	1	2,068	43.1	37	41.4	34	-1.7
Colorado	1		0		0		
Connecticut	1	3	43.0	37	46.0	42	3.0
Delaware	1		0		0		
District of Columbia	1		0		0		
Florida	1		0		0		
Georgia	1	9	28.8	15	35.6	24	6.8
Hawaii	1		0		0		
Idaho	1		0		0		
Illinois	1		0		0		
Indiana	1		0		0		
Iowa	1		0		0		
Kansas	1		0		0		
Kentucky	1	1	24.2	11	21.8	9	-2.4
Louisiana	1		0		0		
Maine	1		0		0		
Maryland	1		0		0		
Massachusetts	1	10	25.0	11	26.7	13	1.7
Michigan	1	7	18.8	6	27.6	14	8.8
Minnesota	1		0		0		
Mississippi	3		0		0		
Missouri	1		0		0		
Montana	1	7	31.0	18	37.5	27	6.5
Nebraska	1		0		0		
Nevada	1		0		0		
New Hampshire	1		0		0		
New Jersey	1	286	34.5	23	37.1	27	2.6
New Mexico	1	7	14.4	4	35.7	24	21.3
New York	1	54	29.5	16	34.8	23	5.3
North Carolina	3		0		0		
North Dakota	1		0		0		
Ohio	3		0		0		
Oklahoma	1	16	25.7	12	31.9	19	6.2
Oregon	1	1	68.0	80	73.0	86	5.0
Pennsylvania	1	4	29.0	15	33.4	21	4.4
Rhode Island	1		0		0		
South Carolina	1		0		0		
South Dakota	1		0		0		
Tennessee	3		0		0		
Texas	1	296	38.0	28	40.7	33	2.7
Utah	1	25	24.2	11	24.4	11	0.2
Vermont	1	1	7.0	2	21.0	8	14.0
Virginia	1		0		0		
Washington	3		0		0		
West Virginia	1		0		0		
Wisconsin	1	9	37.8	28	43.6	38	5.8
Wyoming	1		0		0		
BIA	1		0		0		
Total (Weighted)		2,965	40.2	32	39.8	31	-0.4
Number of States Reporting		20					

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Table D.12

**Mathematics Achievement Information for Chapter 1 Participants Tested  
on a Fall-Spring Cycle, by Grade and State -- 1987-88**

**1987-88 Chapter 1  
Fall-Spring Math**

State	Sample Weight	Grade 2 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	666	27.3	14	37.9	28	10.6
Alaska	1			0		0	
Arizona	3	8	39.0	30	55.0	59	16.0
Arkansas	1	632	32.3	20	47.0	44	14.7
California	1	4,587	33.5	21	46.9	44	13.4
Colorado	1	337	29.1	16	40.9	33	11.8
Connecticut	1	539	34.0	22	50.1	50	16.1
Delaware	1	47	28.0	14	58.0	64	30.0
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	3,568	34.1	22	42.8	36	8.7
Hawaii	1	400	26.1	12	45.9	42	19.8
Idaho	1	292	31.2	18	44.3	39	13.1
Illinois	1	1,209	32.6	20	46.8	44	14.2
Indiana	1	816	34.2	22	51.6	53	17.4
Iowa	1	985	38.5	29	47.8	45	9.3
Kansas	1	677	15.6	5	34.0	22	18.4
Kentucky	1	735	31.6	19	44.8	40	13.2
Louisiana	1	3,993	32.9	20	41.5	34	8.6
Maine	1	74	35.6	24	50.2	50	14.6
Maryland	1	4,277	35.5	24	41.1	33	5.6
Massachusetts	1	1,823	33.0	21	49.1	48	16.1
Michigan	1	1,113	29.3	16	45.2	41	15.9
Minnesota	1	4,948	29.1	16	45.7	41	16.6
Mississippi	3	596	32.3	20	37.7	28	5.4
Missouri	1			0		0	
Montana	1	220	26.8	13	37.0	26	10.2
Nebraska	1	864	34.0	22	47.8	45	13.8
Nevada	1	56	26.3	13	42.9	36	16.6
New Hampshire	1			0		0	
New Jersey	1	2,451	35.4	24	48.2	46	12.8
New Mexico	1	73	23.3	10	43.0	37	19.7
New York	1	2,369	27.1	13	47.1	44	20.0
North Carolina	3			0		0	
North Dakota	1	120	38.2	28	46.9	44	8.7
Ohio	1	1,574	28.4	15	48.2	46	19.8
Oklahoma	1	1,024	31.4	18	45.1	40	13.7
Oregon	3	127	29.1	16	45.1	40	16.0
Pennsylvania	1	3,426	29.0	15	50.5	51	21.5
Rhode Island	1	196	29.6	16	44.7	40	15.1
South Carolina	1			0		0	
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1	47	32.9	20	50.0	50	17.1
Vermont	1	40	22.5	9	39.9	31	17.4
Virginia	1	3,330	35.6	24	43.9	38	8.3
Washington	3	281	25.1	11	38.7	29	13.6
West Virginia	1	8,360	30.3	17	46.2	42	15.9
Wisconsin	1	606	34.2	22	49.9	49	15.7
Wyoming	1	109	28.9	15	46.7	43	17.8
BIA	1	669	29.0	15	33.0	21	4.0
Total (Weighted)		60,594	31.7	19	45.0	40	13.3
Number of States Reporting		42					

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Table D.12 (contd.)

1987-88 Chapter 1  
Fall-Spring Math

State	Sample Weight	Grade 3 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	664	33.9	22	41.3	34	7.4
Alaska	1			0		0	
Arizona	3	17	41.0	33	56.0	61	15.0
Arkansas	1	619	28.0	14	39.4	30	11.4
California	1	4,319	32.3	20	45.9	42	13.6
Colorado	1	523	29.0	15	39.8	31	10.8
Connecticut	1	519	33.5	21	46.6	43	13.1
Delaware	1	62	23.0	10	42.0	35	19.0
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	2,831	36.9	26	40.7	33	3.8
Hawaii	1	343	26.8	13	42.8	36	16.0
Idaho	1	307	29.7	16	43.5	37	13.8
Illinois	1	1,612	34.9	23	44.9	40	10.0
Indiana	1	1,134	32.6	20	48.9	48	16.3
Iowa	1	1,245	38.0	28	44.8	40	6.8
Kansas	1	613	19.4	7	33.4	21	14.0
Kentucky	1	993	29.8	16	41.7	34	11.9
Louisiana	1	4,155	28.9	15	39.1	30	10.2
Maine	1	54	43.0	37	42.3	35	-0.7
Maryland	1	3,956	39.8	31	40.4	32	0.6
Massachusetts	1	1,953	34.5	23	47.0	44	12.5
Michigan	1	1,087	28.5	15	42.2	35	13.7
Minnesota	1	4,686	27.9	14	42.3	35	14.4
Mississippi	3	1,281	31.9	19	41.1	33	9.2
Missouri	1			0		0	
Montana	1	256	23.6	10	33.0	21	9.4
Nebraska	1	864	35.1	24	46.4	43	11.3
Nevada	1	57	26.6	13	35.8	25	9.2
New Hampshire	1			0		0	
New Jersey	1	2,026	33.3	21	52.4	54	19.1
New Mexico	1	101	23.7	10	37.2	27	13.5
New York	1	2,594	29.4	16	45.6	41	16.2
North Carolina	3			0		0	
North Dakota	1	215	36.7	26	43.5	37	6.8
Ohio	1	1,903	28.3	15	44.0	38	15.7
Oklahoma	1	1,076	33.7	22	44.1	39	10.4
Oregon	3	250	23.8	10	41.1	33	17.3
Pennsylvania	1	3,536	30.9	18	47.1	44	16.2
Rhode Island	1	268	31.1	18	43.2	37	12.1
South Carolina	1			0		0	
South Dakota	1	31	35.2	24	49.3	41	10.1
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1	64	34.7	23	46.1	42	11.4
Vermont	1	97	26.4	13	43.7	38	17.3
Virginia	1	2,934	36.3	25	42.8	36	6.5
Washington	3	314	29.3	16	37.7	28	8.4
West Virginia	1	517	31.4	18	41.0	34	10.4
Wisconsin	1	652	32.6	20	44.7	40	12.1
Wyoming	1	87	30.8	18	44.9	40	14.1
BIA	1	654	25.7	12	31.5	19	5.8
Total (Weighted)		55,993	32.0	19	43.3	37	11.3
Number of States Reporting		43					

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Table D.12 (contd.)

1987-88 Chapter 1  
Fall-Spring Math

State	Sample Weight	Grade 4 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	686	32.4	20	40.9	33	8.5
Alaska	1			0		0	
Arizona	3	49	35.0	23	47.0	44	12.0
Arkansas	1	672	28.6	15	41.0	34	13.2
California	1	3,750	32.2	19	42.1	35	9.9
Colorado	1	551	29.4	16	38.7	29	9.3
Connecticut	1	364	34.2	22	43.5	37	9.3
Delaware	1	77	23.0	10	32.0	19	9.0
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	3,863	35.8	25	40.6	32	4.8
Hawaii	1	448	27.2	14	34.6	23	7.4
Idaho	1	510	30.5	17	42.9	36	12.4
Illinois	1	1,745	35.7	24	45.2	41	9.5
Indiana	1	1,045	34.1	22	46.7	43	12.6
Iowa	1	962	38.3	29	48.4	47	10.1
Kansas	1	678	18.6	6	34.1	22	15.5
Kentucky	1	1,796	31.3	18	43.1	37	11.8
Louisiana	1	3,538	30.7	18	37.9	28	7.2
Maine	1	47	38.1	28	39.9	31	1.8
Maryland	1	2,995	38.3	29	41.0	33	2.7
Massachusetts	1	1,895	33.6	21	45.4	41	11.8
Michigan	1	1,014	31.2	18	43.7	38	12.5
Minnesota	1	3,729	27.8	14	43.1	37	15.3
Mississippi	3	1,362	26.1	12	34.2	22	8.1
Missouri	1			0		0	
Montana	1	313	23.8	10	31.8	19	8.0
Nebraska	1	834	35.2	24	48.9	46	13.7
Nevada	1	68	29.4	16	40.7	33	11.3
New Hampshire	1			0		0	
New Jersey	1	2,423	34.7	23	46.5	43	11.8
New Mexico	1	172	25.2	11	39.3	31	14.7
New York	1	2,361	32.2	19	45.0	40	12.8
North Carolina	3	69	19.6	7	28.8	15	9.2
North Dakota	1	206	34.5	23	44.9	40	10.4
Ohio	1	2,658	30.6	17	43.6	38	13.0
Oklahoma	1	1,036	33.3	21	43.2	37	9.9
Oregon	3	265	25.7	12	37.8	28	12.1
Pennsylvania	4	3,264	31.9	19	46.0	42	14.1
Rhode Island	1	323	35.7	24	49.0	48	13.3
South Carolina	1			0		0	
South Dakota	1	50	33.2	21	41.6	34	8.4
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1	45	35.3	24	45.4	41	10.1
Vermont	1	76	28.3	15	42.3	35	14.0
Virginia	1	3,030	35.9	25	43.3	37	7.4
Washington	3	440	33.3	21	41.7	34	8.4
West Virginia	1	713	33.0	21	45.2	41	12.2
Wisconsin	1	560	35.5	24	44.3	39	8.8
Wyoming	1	95	34.0	22	45.7	41	11.7
BIA	1	618	24.4	11	31.5	19	7.1
Total (Weighted)		55,765	32.0	19	42.0	35	10.0
Number of States Reporting		44					

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Table D.12 (contd.)

1987-88 Chapter 1  
Fall-Spring Math

State	Sample Weight	Grade 5 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	642	34.0	22	40.5	32	6.5
Alaska	1			0		0	
Arizona	1	40	38.0	28	52.0	53	14.0
Arkansas	1	607	30.1	17	41.0	33	10.9
California	1	3,733	34.3	22	42.2	35	7.9
Colorado	1	573	29.4	16	37.5	27	8.1
Connecticut	1	367	35.2	24	41.4	34	6.2
Delaware	1	70	25.0	11	40.0	31	15.0
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	3,128	36.3	25	39.6	31	3.3
Hawaii	1	188	24.3	11	34.4	23	10.1
Idaho	1	407	28.9	15	41.9	35	13.0
Illinois	1	2,078	31.7	19	41.7	34	10.0
Indiana	1	995	33.2	21	43.5	37	10.3
Iowa	1	877	39.6	31	47.7	45	8.1
Kansas	1	574	21.0	8	34.0	22	13.0
Kentucky	1	1,654	32.5	20	42.4	35	9.9
Louisiana	1	3,331	30.3	17	38.1	28	7.8
Maine	1	48	30.4	17	33.9	22	3.5
Maryland	1	1,072	40.4	32	41.4	34	1.0
Massachusetts	1	1,634	34.0	22	43.4	37	9.4
Michigan	1	840	28.1	14	40.4	32	12.3
Minnesota	1	2,439	28.6	15	39.8	31	11.2
Mississippi	3	1,676	27.9	14	33.6	21	5.7
Missouri	1			0		0	
Montana	1	259	25.5	12	32.8	20	7.3
Nebraska	1	741	36.2	25	46.5	43	10.3
Nevada	1	49	25.9	12	39.5	30	13.6
New Hampshire	1			0		0	
New Jersey	1	2,717	36.1	25	46.5	43	10.4
New Mexico	1	184	30.0	17	43.0	37	13.0
New York	1	2,181	32.4	20	43.5	37	11.1
North Carolina	3	72	17.9	6	19.6	-	1.7
North Dakota	1	180	34.7	23	44.0	38	9.3
Ohio	1	2,205	32.3	20	42.3	35	10.0
Oklahoma	1	1,077	35.5	24	42.1	35	6.6
Oregon	3	229	26.1	12	38.9	29	12.8
Pennsylvania	1	3,242	31.8	19	45.4	41	13.6
Rhode Island	1	264	33.5	21	47.4	45	13.9
South Carolina	1			0		0	
South Dakota	1	35	31.1	18	36.7	26	5.6
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1	40	37.5	27	45.2	41	7.7
Vermont	1	66	30.5	17	39.0	30	8.5
Virginia	1	2,979	37.8	28	43.8	38	6.0
Washington	3	422	30.7	18	39.6	31	8.9
West Virginia	1	543	32.3	20	39.9	31	7.6
Wisconsin	1	447	35.0	23	44.2	39	9.2
Wyoming	1	79	33.9	22	46.2	42	12.3
BIA	1	565	25.7	12	31.8	19	6.1
Total (Weighted)		51,277	32.5	20	41.0	33	8.5
Number of States Reporting		44					

Table D.12 (contd.)

1987-88 Chapter 1  
Fall-Spring Math

State	Sample Weight	Grade 6 Number Tested	Pretest MCE	Pretest Percentile	Posttest MCE	Posttest Percentile	Gain MCE
Alabama	1	537	34.	22	41.2	33	7.0
Alaska	1	49	37.0	26	45.0	40	8.0
Arizona	3	502	34.9	23	40.5	32	5.6
Arkansas	1	3,244	35.5	24	42.3	35	6.8
California	1	303	31.7	19	38.8	29	7.1
Colorado	1	303	32.5	20	41.1	33	8.6
Connecticut	1	16	28.0	14	44.0	38	16.0
District of Columbia	1		0	0	0	0	
Florida	1	3,234	32.0	19	35.9	25	3.9
Hawaii	1	135	25.9	12	34.8	23	8.9
Idaho	1	306	29.6	16	40.2	32	10.6
Illinois	1	1,658	31.7	19	40.2	32	8.5
Indiana	1	680	33.6	21	44.4	39	10.8
Iowa	1	649	38.5	29	47.7	45	9.2
Kansas	1	379	21.2	8	34.7	23	13.5
Kentucky	1	1,199	32.7	20	43.5	37	10.8
Louisiana	1	2,346	32.2	19	35.9	25	3.7
Maine	1	10	34.6	23	33.7	22	-1.1
Maryland	1	344	41.6	34	45.8	42	4.2
Massachusetts	1	1,337	34.3	22	43.5	37	9.2
Michigan	1	672	28.4	15	38.1	28	9.7
Minnesota	1	1,742	30.4	17	37.3	27	6.9
Mississippi	3	1,722	30.9	18	37.6	27	6.7
Missouri	1		0	0	0	0	
Montana	1	215	25.6	12	32.4	20	6.6
Nebraska	1	605	37.7	26	45.8	42	8.1
Nevada	1	59	27.3	14	41.6	34	14.3
New Hampshire	1		0	0	0	0	
New Jersey	1	2,649	38.4	29	51.4	52	13.0
New Mexico	1	112	31.1	18	39.2	30	8.1
New York	1	2,145	32.5	20	43.8	38	11.3
North Carolina	3	65	13.8	4	15.4	5	1.6
North Dakota	1	224	32.1	19	40.8	33	8.7
Ohio	1	1,576	30.4	17	41.6	34	11.2
Oklahoma	1	1,005	31.4	18	39.2	30	7.8
Oregon	3	110	29.2	16	45.0	40	15.8
Pennsylvania	1	2,626	30.7	18	43.4	37	12.7
Rhode Island	1	296	32.9	20	45.6	41	12.7
South Carolina	1		0	0	0	0	
South Dakota	1	26	36.2	25	48.4	47	12.2
Tennessee	3		0	0	0	0	
Texas	1		0	0	0	0	
Utah	1	25	39.0	30	40.8	33	1.8
Vermont	1	67	24.6	11	32.8	20	8.2
Virginia	1	1,696	38.1	28	43.2	37	5.1
Washington	3	221	28.6	15	37.2	27	8.6
West Virginia	1	321	31.3	18	43.5	37	12.2
Wisconsin	1	317	35.0	23	43.6	38	8.6
Wyoming	1	110	27.3	14	42.2	35	14.9
BIA	1	566	27.0	13	31.6	18	4.4
Total (Weighted)		40,807	32.6	20	40.8	33	8.2
Number of States Reporting		44					

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Table D.12 (contd.)

1987-88 Chapter 1  
Fall-Spring Math

State	Sample Weight	Grade 7 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	574	31.7	19	40.8	33	9.1
Alaska	1	76	35.0	23	38.0	28	3.0
Arizona	3	76	30.1	17	37.6	27	7.5
Arkansas	1	265	32.6	20	40.5	32	7.9
California	1	1,200	32.6	20	37.3	27	4.7
Colorado	1	190	32.6	18	37.6	27	6.4
Connecticut	1	268	31.2	18	37.6	27	6.4
Delaware	1	9	42.0	35	46.0	42	4.0
District of Columbia	1			0	0	0	
Florida	1			0	0	0	
Georgia	1	2,987	32.2	19	34.9	23	2.7
Hawaii	1	136	30.5	17	33.4	21	2.9
Idaho	1	185	29.1	16	36.6	26	7.5
Illinois	1	1,118	32.5	20	37.7	28	5.2
Indiana	1	414	34.6	23	40.6	32	6.0
Iowa	1	307	41.8	34	48.6	47	6.8
Kansas	1	176	24.8	11	34.5	23	9.7
Kentucky	1	852	32.7	20	43.1	37	10.4
Louisiana	1	1,210	34.8	23	39.5	30	4.7
Maine	1	16	37.3	27	36.8	26	-0.5
Maryland	1	40	42.1	35	47.8	45	5.7
Massachusetts	1	1,150	31.7	19	39.1	30	7.4
Michigan	1	354	27.7	14	37.1	27	9.4
Minnesota	1	531	33.6	21	40.9	33	7.3
Mississippi	3	1,064	34.6	23	39.7	31	5.1
Missouri	1			0	0	0	
Montana	1	253	26.4	13	32.0	19	5.6
Nebraska	1	285	36.0	25	44.2	39	8.2
Nevada	1	76	32.5	20	48.7	47	16.2
New Hampshire	1			0	0	0	
New Jersey	1	2,282	36.8	26	44.7	40	7.9
New Mexico	1	313	28.2	15	38.1	28	9.9
New York	1	1,432	35.6	24	43.2	37	7.6
North Carolina	3	61	17.1	5	25.5	12	8.4
North Dakota	1	99	33.9	22	43.0	37	9.1
Ohio	1	295	28.6	15	39.0	30	10.4
Oklahoma	1	886	35.4	24	39.8	31	4.4
Oregon	3	77	21.6	8	30.9	18	9.3
Pennsylvania	1	1,605	31.0	18	39.0	30	8.0
Rhode Island	1	113	30.1	17	37.2	27	7.1
South Carolina	1			0	0	0	
South Dakota	1			0	0	0	
Tennessee	3	10	40.1	32	49.5	49	9.4
Texas	1			0	0	0	
Utah	1	16	39.5	30	46.0	38	4.5
Vermont	1	35	28.0	14	37.3	27	9.3
Virginia	1	581	31.7	19	38.4	29	6.7
Washington	3	210	28.4	15	36.9	26	8.5
West Virginia	1	85	31.2	18	37.7	28	6.5
Wisconsin	1	797	30.1	17	37.2	27	7.1
Wyoming	1	24	41.5	34	45.9	42	4.4
BIA	1	509	27.3	14	31.7	19	4.4
Total (Weighted)		26,142	32.7	20	39.2	30	6.5
Number of States Reporting		44					

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Table D.12 (cont'd.)

1967-68, Chapter 1  
Fall-Spring Math

State	Sample Weight	Grade 8 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1	180	33.1	21	40.3	32	7.2
Alaska	1	0	0	0	0	0	0
Arizona	1	49	36.0	25	43.0	37	7.0
Arkansas	1	286	32.4	20	37.9	28	5.5
California	1	1,771	33.9	22	36.9	26	3.0
Colorado	1	130	29.9	17	36.5	26	6.6
Connecticut	1	176	28.5	15	30.5	29	10.0
Delaware	1	6	41.0	33	40.0	31	-1.0
District of Columbia	1	0	0	0	0	0	0
Florida	1	0	0	0	0	0	0
Georgia	1	1,287	33.0	21	35.2	24	2.2
Hawaii	1	114	23.9	10	33.1	21	9.2
Idaho	1	172	31.8	19	38.4	29	6.6
Illinois	1	856	33.8	22	40.1	32	6.3
Indiana	1	272	30.0	17	38.8	29	8.8
Iowa	1	205	43.0	37	49.3	48	6.3
Kansas	1	96	22.8	9	32.4	20	9.6
Kentucky	1	888	31.5	19	37.2	27	5.7
Louisiana	1	690	36.6	26	39.3	30	2.7
Maine	1	4	34.3	22	35.8	25	1.5
Maryland	1	36	41.7	34	42.7	36	1.0
Massachusetts	1	900	31.4	18	38.9	29	7.5
Michigan	1	293	28.2	15	35.2	24	7.0
Minnesota	1	318	30.9	18	37.6	27	6.7
Mississippi	3	1,061	36.1	25	44.5	39	8.4
Missouri	1	0	0	0	0	0	0
Montana	1	203	25.3	12	29.0	15	3.7
Nebraska	1	182	39.9	31	44.5	39	4.6
Nevada	1	60	29.8	16	41.7	34	11.9
New Hampshire	1	0	0	0	0	0	0
New Jersey	1	2,517	38.8	29	44.8	40	6.0
New Mexico	1	213	28.3	15	37.0	26	8.7
New York	1	1,248	36.4	25	41.5	34	5.1
North Carolina	3	49	13.8	4	16.8	5	3.0
North Dakota	1	66	36.2	25	44.5	39	8.3
Ohio	1	186	29.1	16	37.4	27	8.3
Oklahoma	1	838	34.7	23	39.0	30	4.3
Oregon	3	66	18.4	6	27.3	14	8.9
Pennsylvania	1	1,379	32.5	20	40.5	32	8.0
Rhode Island	1	60	32.5	20	37.2	27	4.7
South Carolina	1	0	0	0	0	0	0
South Dakota	1	0	0	0	0	0	0
Tennessee	3	0	0	0	0	0	0
Texas	1	0	0	0	0	0	0
Utah	1	8	35.7	24	36.8	26	1.1
Vermont	1	24	25.5	12	33.7	22	8.2
Virginia	1	177	31.7	19	36.8	26	5.1
Washington	3	144	28.3	15	34.3	22	6.0
West Virginia	1	82	31.4	18	38.1	28	6.7
Wisconsin	1	448	37.1	27	39.1	30	2.0
Wyoming	1	12	34.7	23	49.5	49	14.8
BIA	1	538	28.1	14	32.6	20	4.5
Total (Weighted)		21,050	33.8	22	39.7	31	5.9
Number of States Reporting		43					

Table D.12 (contd.)

1987-88 Chapter 1  
Fall-Spring Math

State	Sample Weight	Grads 9 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1			0		0	
Alaska	1			0		0	
Arizona	3	169	24.0	10	37.0	26	13.0
Arkansas	1	29	37.8	28	36.3	25	-1.5
California	1	4,562	31.9	19	38.6	29	6.7
Colorado	1	59	30.4	17	36.7	26	6.3
Connecticut	1	119	31.1	18	37.1	27	6.0
Delaware	1			0		0	
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	381	26.7	13	29.8	16	3.1
Hawaii	1	13	14.2	4	9.9	2	-4.3
Idaho	1	55	29.5	16	31.2	18	1.7
Illinois	1	1,190	33.1	21	38.6	29	5.5
Indiana	1	11	28.1	14	37.3	27	9.2
Iowa	1	58	46.2	42	50.9	51	4.7
Kansas	1	30	28.0	14	38.6	29	10.6
Kentucky	1	218	34.7	23	43.1	37	8.4
Louisiana	1			0		0	
Maine	1	2	57.0	63	53.0	55	-4.0
Maryland	1			0		0	
Massachusetts	1	697	27.3	14	36.9	26	9.6
Michigan	1	120	25.5	12	32.3	20	6.8
Minnesota	1	48	28.7	15	38.0	28	9.3
Mississippi	3	245	26.5	13	35.2	24	8.7
Missouri	1			0		0	
Montana	1	193	23.8	10	26.0	12	2.2
Nebraska	1	86	38.2	28	47.2	44	9.0
Nevada	1	13	34.3	22	43.9	38	9.6
New Hampshire	1			0		0	
New Jersey	1	2,582	40.4	32	48.0	46	7.6
New Mexico	1	70	30.4	17	38.5	29	8.1
New York	1	614	36.7	26	43.2	37	6.5
North Carolina	3			0		0	
North Dakota	1	53	34.1	22	36.1	25	2.0
Ohio	1	44	26.7	13	37.8	28	11.1
Oklahoma	1	34	21.4	8	27.1	13	5.7
Oregon	3	178	26.5	13	30.2	17	3.7
Pennsylvania	1	824	31.8	19	38.1	28	6.3
Rhode Island	1	12	1.0	1	31.0	18	30.0
South Carolina	1			0		0	
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1			0		0	
Vermont	1	4	9.4	2	36.7	26	27.3
Virginia	1	34	27.5	14	31.8	19	4.3
Washington	3	47	34.3	22	38.1	28	3.8
West Virginia	1	5	14.6	4	35.2	24	20.6
Wisconsin	1	91	36.0	25	40.5	32	4.5
Wyoming	1			0		0	
BIA	1	456	26.2	12	31.4	18	5.2
Total (Weighted)		14,624	32.3	20	39.2	30	6.9
Number of States Reporting		36					

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Table D.12 (contd.)

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Fall-Spring Math

State	Sample Weight	Grade 10		Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
		Number Tested						
Alabama	1	42	31.0	18	37.1	27	6.1	
Alaska	1			0		0		
Arizona	3	9	26.0	12	43.0	37	17.0	
Arkansas	1	10	40.3	32	43.5	37	3.2	
California	1	2,133	35.2	24	40.6	32	5.4	
Colorado	1	38	30.9	18	40.0	31	9.1	
Connecticut	1	109	28.0	14	37.1	27	9.1	
Delaware	1			0		0		
District of Columbia	1			0		0		
Florida	1			0		0		
Georgia	1	61	32.6	20	38.6	29	6.0	
Hawaii	1	1	17.3	6	6.7	2	-10.6	
Idaho	1	23	29.5	16	37.8	28	8.3	
Illinois	1	334	34.7	23	39.0	31	5.1	
Indiana	1	9	27.3	14	34.7	23	7.4	
Iowa	1	28	47.2	44	52.4	54	5.2	
Kansas	1			0		0		
Kentucky	1	26	20.7	8	34.2	22	13.5	
Louisiana	1			0		0		
Maine	1			0		0		
Maryland	1			0		0		
Massachusetts	1	303	26.1	12	33.1	21	7.0	
Michigan	1	86	18.7	6	22.5	9	3.8	
Minnesota	1	5	21.0	8	36.0	25	15.0	
Mississippi	3	113	27.4	14	32.8	20	5.4	
Missouri	1			0		0		
Montana	1	108	23.7	10	28.8	15	5.1	
Nebraska	1	42	41.6	34	42.9	36	1.3	
Nevada	1	1	33.7	22	42.5	38	0.8	
New Hampshire	1			0		0		
New Jersey	1	2,043	42.0	35	48.6	47	6.6	
New Mexico	1	11	26.3	13	37.5	27	11.2	
New York	1	259	40.0	31	45.2	41	5.2	
North Carolina	3			0		0		
North Dakota	1	12	29.9	17	29.6	16	-0.3	
Ohio	1	26	27.0	13	36.0	25	9.0	
Oklahoma	1	11	20.6	8	31.3	18	10.7	
Oregon	3	52	21.7	8	29.3	16	7.6	
Pennsylvania	1	307	30.5	17	38.3	29	7.8	
Rhode Island	1	3	10.1	2	20.2	7	10.1	
South Carolina	1			0		0		
South Dakota	1			0		0		
Tennessee	3			0		0		
Texas	1			0		0		
Utah	1			0		0		
Vermont	1	3	10.1	2	36.5	26	26.4	
Virginia	1	26	27.2	14	34.0	22	6.8	
Washington	3	25	27.9	14	33.1	21	5.2	
West Virginia	1			0		0		
Wisconsin	1	41	36.5	26	36.1	25	-0.4	
Wyoming	1			0		0		
BIA	1	354	25.7	12	31.7	19	6.0	
Total (Weighted)		7,052	34.8	23	40.9	33	6.1	
Number of States Reporting		34						

Table D.12 (contd.)

1987-88 Chapter 1  
Fall-Spring Math

State	Sample Weight	Grade 11 Number Tested	Pretest MCE	Pretest Percentile	Posttest MCE	Posttest Percentile	Gain MCE
Alabama	1	2	49.2	48	52.3	54	3.1
Alaska	1			0		0	
Arizona	3	4	20.0	7	27.0	13	7.0
Arkansas	1	13	32.5	20	36.1	25	3.6
California	1	1,695	38.5	29	42.8	36	4.3
Colorado	1	11	29.8	16	36.9	26	7.1
Connecticut	1	27	21.5	8	33.5	21	12.0
Delaware	1			0		0	
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	22	35.0	23	38.0	28	3.0
Hawaii	1			0		0	
Idaho	1			0		0	
Illinois	1	32	33.4	21	34.8	23	1.4
Indiana	1			0		0	
Iowa	1	14		0		0	
Kansas	1			0		0	
Kentucky	1	27	23.7	10	32.0	19	8.3
Louisiana	1			0		0	
Maine	1	1	41.0	33	43.0	37	2.0
Maryland	1			0		0	
Massachusetts	1	103	24.3	11	34.1	22	9.8
Michigan	1	57	13.7	4	14.1	4	0.4
Minnesota	1			0		0	
Mississippi	3	22	30.0	17	37.0	26	7.0
Missouri	1			0		0	
Montana	1	36	25.7	12	27.8	14	2.1
Nebraska	1	44	27.6	14	42.9	36	15.3
Nevada	1	1	31.5	19	32.3	20	0.8
New Hampshire	1			0		0	
New Jersey	1	1,019	40.4	32	45.9	42	5.5
New Mexico	1	5	28.0	14	37.0	26	9.0
New York	1	102	40.8	33	47.3	44	6.5
North Carolina	3			0		0	
North Dakota	1	4	22.5	9	33.8	22	11.3
Ohio	1	6	29.3	16	48.3	46	19.0
Oklahoma	1	4	2.9	1	7.6	2	4.7
Oregon	3	21	18.8	6	22.0	9	4.0
Pennsylvania	1	137	30.0	17	36.6	26	6.6
Rhode Island	1			0		0	
South Carolina	1	4	1.0	1	35.0	23	34.0
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1			0		0	
Vermont	1	1	6.7	2	33.7	22	27.0
Virginia	1	1	4.0	1	20.0	7	16.0
Washington	3	46	29.5	16	30.4	17	0.9
West Virginia	1			0		0	
Wisconsin	1	28	35.2	24	42.3	35	7.1
Wyoming	1			0		0	
BIA	1	254	24.7	11	30.4	17	5.7
Total (Weighted)		3,929	35.4	24	40.5	32	5.1
Number of States Reporting		31					

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Table D.12 (contd.)

1987-88 Chapter 1  
Fall-Spring Math

State	Sample Weight	Grade 12 Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	1			0		0	
Alaska	1			0		0	
Arizona	3	2	31.0	18	50.0	50	19.0
Arkansas	1			0		0	
California	1	978	47.6	45	47.6	45	0.2
Colorado	1	5	39.6	31	42.8	36	3.2
Connecticut	1	10	33	20	37	27	4.7
Delaware	1			0		0	
District of Columbia	1			0		0	
Florida	1			0		0	
Georgia	1	7	26.0	12	36.3	25	10.3
Hawaii	1			0		0	
Idaho	1	13	22.7	9	35.7	24	13.0
Illinois	1	6	27.6	14	35.4	24	7.6
Indiana	1			0		0	
Iowa	1	8		0		0	
Kansas	1			0		0	
Kentucky	1	21	21.5	9	31.5	19	10.0
Louisiana	1			0		0	
Maine	1			0		0	
Maryland	1			0		0	
Massachusetts	1	59	29.9	17	34.8	23	4.9
Michigan	1	43	12.2	3	12.5	3	0.3
Minnesota	1			0		0	
Mississippi	3			0		0	
Missouri	1			0		0	
Montana	1	12	21.9	9	24.7	11	2.8
Nebraska	1	8	24.6	11	41.5	34	16.7
Nevada	1	2	27.5	14	41.1	33	13.6
New Hampshire	1			0		0	
New Jersey	1	176	34.2	22	39.1	30	4.9
New Mexico	1	4	32.0	19	45.0	40	13.0
New York	1	59	45.4	41	48.2	46	2.8
North Carolina	3			0		0	
North Dakota	1			0		0	
Ohio	1	3	33.4	21	36.7	26	3.3
Oklahoma	1			0		0	
Oregon	3	2	30.2	17	30.7	16	0.5
Pennsylvania	1	77	31.0	18	36.8	26	5.8
Rhode Island	1	1	1.0	1	27.0	13	26.0
South Carolina	1			0		0	
South Dakota	1			0		0	
Tennessee	3			0		0	
Texas	1			0		0	
Utah	1			0		0	
Vermont	1			0		0	
Virginia	1	1	6.0	2	8.0	2	0.0
Washington	3			0		0	
West Virginia	1			0		0	
Wisconsin	1	12	20.0	7	27.2	14	7.2
Wyoming	1			0		0	
BIA	1	186	24.6	11	31.5	19	6.9
Total (Weighted)		1,703	39.6	31	42.2	35	2.6
Number of States Reporting		24					

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## APPENDIX E

### ADDITIONAL NATIONAL ACHIEVEMENT INFORMATION FOR 1979-80 TO 1987-88

This appendix provides data on the number of students tested and the numbers of states reporting achievement data from 1979-80 to 1987-88. Table E.1 displays the percentages of public school participants who received reading and mathematics and who were tested in these subjects by grade for 1987-88. In Tables E.2 and E.3, the numbers of students tested are presented for annual and fall-spring testing cycles, respectively. Tables E.4 and E.5 present the number of states for each year providing achievement data for annual and fall-spring testing cycles, respectively.

Table E.1

**Number of Chapter 1 Public School Participants Receiving  
Reading and Mathematics Services, and Number of Chapter 1  
Students Tested, by Subject Area and by Grade -- 1987-88**

Grade	Number Receiving Reading <sup>a/</sup>	Weighted Number Tested for Reading <sup>b/</sup>	Percent	Number Receiving Mathematics <sup>a/</sup>	Weighted Number Tested for Mathematics <sup>b/</sup>	Percent
2	447,713	322,847	72	276,388	145,014	52
3	421,522	311,248	74	260,219	157,161	60
4	386,305	278,568	72	238,478	164,572	69
5	349,085	244,096	70	215,502	155,787	72
6	287,596	198,828	69	177,542	124,820	70
7	217,053	132,655	61	133,994	85,568	64
8	189,155	110,791	59	116,771	73,836	63
9	138,734	45,571	33	85,645	34,618	40
10	81,628	23,039	28	50,392	18,460	37
11	46,425	13,152	28	28,660	9,972	35
12	29,929	4,242	14	18,476	4,670	25
Total	2,595,144	1,685,037	65	1,602,067	974,478	61

- a/ The following steps were performed to calculate the numbers in these columns: (1) the distribution of public school participants by grade was calculated for each state, (2) the numbers of public school participants receiving reading and receiving mathematics were multiplied by the percentages from step 1 for each grade and for each state; (3) the numbers of participants in pre-K, kindergarten, and first grade, and ungraded participants were subtracted from the totals in step 2; and (4) the national totals for the number receiving reading and the number receiving mathematics were calculated by adding the figures by grade for each state.
- b/ Both test cycles combined. In states that provided achievement information based on a sample of school districts, the number tested was weighted to reflect the sample.

**Table E.2**  
**Weighted Number Tested on an Annual Cycle, by Subject**  
**Area -- 1979-80 to 1987-88**

Grade	Reading								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	85,768	89,092	99,168	80,295	94,334	105,048	122,963	160,537	170,213
3	109,619	106,715	116,879	93,943	115,490	115,600	139,562	171,646	186,187
4	109,512	113,445	117,250	103,054	119,854	119,851	142,803	168,241	176,207
5	113,337	109,659	122,490	104,089	121,509	113,339	136,045	148,932	157,558
6	109,583	91,682	102,584	91,971	105,084	93,996	108,958	118,373	130,105
7	67,623	60,950	68,468	52,094	65,288	61,013	71,886	90,989	86,392
8	58,677	55,319	61,404	46,748	65,841	61,433	69,670	76,623	73,778
9	30,824	31,578	33,772	23,569	31,349	28,001	33,825	31,256	28,702
10	14,654	13,776	13,814	13,671	13,495	13,093	16,370	22,098	19,654
11	8,933	10,459	11,015	9,915	7,979	10,594	13,625	12,081	10,969
12	7,333	5,650	7,645	6,957	4,506	8,129	7,819	6,273	5,339

Grade	Mathematics								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	50,578	46,476	55,366	50,659	54,802	54,436	64,701	84,661	83,972
3	65,938	57,177	70,264	61,335	64,677	60,751	74,454	98,170	100,156
4	71,178	64,306	69,498	69,147	72,591	67,936	82,208	105,905	107,891
5	71,638	66,926	74,847	72,795	77,689	68,143	84,274	100,402	103,516
6	69,546	63,538	69,486	65,167	68,247	50,009	69,373	77,758	83,461
7	36,802	37,456	45,109	34,944	39,114	35,733	44,545	61,112	59,074
8	30,111	35,488	39,276	32,882	45,857	38,002	46,828	54,364	52,396
9	16,656	18,795	22,753	17,187	22,635	19,682	22,191	20,982	19,748
10	8,165	7,986	8,344	8,835	8,378	9,609	11,157	14,590	11,390
11	4,406	6,194	6,924	7,052	5,108	7,515	9,609	8,195	6,023
12	3,703	3,936	4,547	5,161	3,352	5,664	6,065	3,587	2,965

**Table E.3**  
**Weighted Number Tested on a Fall-Spring Cycle, by  
 Subject Area -- 1979-80 to 1987-88**

Grade	Reading								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	310,555	257,335	260,782	225,279	184,299	190,022	171,848	173,553	152,634
3	293,909	252,292	247,357	195,859	159,604	158,840	144,922	150,805	125,061
4	270,892	247,378	237,656	179,675	142,104	142,765	122,679	128,105	102,361
5	246,212	225,423	221,809	167,199	122,452	121,827	104,998	110,020	86,538
6	212,891	187,367	185,213	143,084	107,539	100,196	83,013	88,804	68,723
7	152,468	147,493	135,007	96,557	70,731	73,036	61,270	59,204	46,263
8	122,054	119,177	103,858	75,204	50,034	57,374	46,822	47,894	37,013
9	66,512	62,151	56,809	46,548	30,824	36,313	33,757	30,437	25,917
10	36,123	31,853	29,382	27,897	18,037	19,912	18,649	15,309	12,070
11	17,738	16,384	15,660	16,968	9,737	10,582	11,355	7,650	7,813
12	8,383	9,168	8,420	9,774	5,873	6,431	6,095	4,135	4,242

Grade	Mathematics								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	124,576	99,076	94,992	81,862	63,967	63,540	59,383	56,239	60,594
3	137,608	122,418	110,414	89,187	68,278	69,025	65,400	63,751	55,993
4	147,360	135,886	119,617	92,526	68,400	71,072	64,538	65,625	55,765
5	136,906	130,741	119,222	94,281	65,521	65,617	59,029	58,977	51,227
6	119,047	109,178	100,572	79,128	55,600	54,702	45,084	48,398	40,807
7	74,869	79,275	71,824	50,758	36,621	36,628	30,745	35,799	26,142
8	60,801	66,102	54,702	39,299	28,667	30,685	25,057	28,139	21,050
9	28,587	32,582	26,974	24,296	18,132	20,712	19,283	17,055	14,624
10	12,192	15,310	11,663	12,283	7,545	7,890	8,538	8,124	7,052
11	5,270	6,063	6,234	5,133	3,300	3,520	3,652	2,990	3,929
12	2,195	3,163	3,303	3,402	1,862	1,881	1,853	1,274	1,703

**Table E.4**  
**Number of States Reporting Reading and Mathematics  
Achievement Information on an Annual Cycle --  
1979-80 to 1987-88**

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Grade	Reading								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	44	42	43	40	37	40	40	44	41
3	43	40	42	40	39	40	42	44	42
4	43	42	42	40	38	40	43	44	42
5	43	40	42	40	38	40	43	44	42
6	44	41	42	39	39	40	43	44	42
7	42	40	41	39	38	40	42	44	41
8	41	40	42	39	38	40	42	44	41
9	34	32	37	27	30	38	38	38	36
10	33	28	30	27	29	36	38	36	34
11	26	25	30	23	26	34	34	32	32
12	22	22	26	22	25	32	30	27	28


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Grade	Mathematics								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	41	39	40	37	37	40	40	44	41
3	41	40	41	39	40	40	41	44	42
4	41	40	40	39	39	40	43	44	42
5	41	40	41	39	39	39	43	44	42
6	42	39	41	38	40	40	41	44	42
7	39	37	37	38	38	40	41	44	41
8	37	36	36	38	38	40	40	44	42
9	28	29	27	28	27	32	34	36	34
10	21	22	22	23	25	31	30	29	30
11	17	17	21	19	22	24	24	25	27
12	15	14	16	17	16	21	20	20	20

Table E.5

**Number of States Reporting Reading and Mathematics Achievement  
Information on a Fall-Spring Cycle --  
1979-80 to 1987-88**

Grade	Reading								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	51	49	50	48	44	46	45	47	44
3	49	49	49	47	43	46	45	47	44
4	49	49	48	47	43	46	45	47	44
5	49	49	48	47	43	46	45	47	44
6	51	48	49	48	44	46	45	47	44
7	48	49	49	47	42	46	44	47	44
8	47	48	47	47	42	46	43	47	43
9	47	48	47	45	41	45	43	44	41
10	48	47	46	46	41	43	43	44	39
11	44	46	46	44	37	41	42	43	37
12	41	45	45	43	35	40	41	41	36

Grade	Mathematics								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	50	48	49	48	44	46	43	45	42
3	48	48	48	47	43	46	43	46	43
4	48	48	47	47	43	46	45	46	44
5	48	48	47	47	43	46	45	46	44
6	50	48	47	48	44	46	45	46	44
7	48	48	47	47	42	44	43	46	44
8	47	47	46	47	42	44	42	46	43
9	46	47	41	38	37	39	41	38	36
10	42	43	40	35	32	33	39	36	34
11	37	38	35	32	30	32	35	32	31
12	32	34	33	27	25	28	29	30	24

## APPENDIX F

### NATIONAL ACHIEVEMENT INFORMATION FOR 1979-80 TO 1987-88 EXPRESSED IN NORMAL CURVE EQUIVALENTS

This appendix provides achievement information expressed in normal curve equivalents (NCEs) for 1987-88 as well as for the nine-year period 1979-80 to 1987-88.

#### PERCENTILE RANKS AND NORMAL CURVE EQUIVALENTS

The achievement information in the body of the text is presented in percentile ranks. Percentile ranks indicate the percentage of students nationwide that obtained scores lower than that particular achievement level. A percentile rank of 50, for example, indicates the achievement level which 50 percent of all students scores below. Percentile ranks must be interpreted cautiously because they are not based on an equal-interval scale. This means that a child who increases achievement by 10 percentile points, from 45 to 55 for example, has not learned the same amount as a child who increases from 85 to 95. Percentile ranks cannot, therefore, be used for averaging student achievement gains since each point of gain does not represent the same amount of learning.

Another measure, which is derived from percentile rankings, the Normal Curve Equivalent (NCE), is an equal-interval scale. Therefore, any identical increase represents the same amount of increase, whether the increase came between 45 and 55 NCEs or between 85 and 95 NCEs.

Figure F.1 is a graphic depiction of the relationship between NCEs and percentile ranks.

Table F.1

Reading Achievement Results Expressed in NCEs for  
Chapter 1 Students Tested on an Annual Cycle -- 1987-88

Grade	Weighted Number Tested	Number of States Reporting	NCE		
			Pretest	Posttest	Gain
2	170,213	41	34.7	37.5	2.8
3	186,187	42	33.2	36.5	3.3
4	176,207	42	33.8	37.3	3.5
5	157,558	42	34.1	36.7	2.6
6	130,105	42	34.1	37.3	3.2
7	86,392	41	33.3	35.8	2.5
8	73,778	41	32.9	35.5	2.6
9	28,702	36	32.0	34.2	2.2
10	19,654	34	33.5	34.6	1.1
11	10,969	32	32.4	34.0	1.6
12	5,339	28	33.5	33.5	0.0
Total	1,045,104	42	33.7	36.7	3.0

Table F.2

Mathematics Achievement Results Expressed in NCEs for  
Chapter 1 Students Tested on an Annual Cycle -- 1987-88

Grade	Weighted Number Tested	Number of States Reporting	NCE		
			Pretest	Posttest	Gain
2	83,972	41	37.3	44.0	6.7
3	100,156	42	37.2	41.3	4.1
4	107,891	42	35.9	40.9	5.0
5	103,516	42	36.3	40.6	4.3
6	83,461	42	36.0	40.5	4.5
7	59,074	41	36.7	39.3	2.6
8	52,396	42	36.3	39.1	2.8
9	19,748	34	34.8	37.6	2.8
10	11,390	30	35.7	38.1	2.4
11	6,023	27	37.4	39.3	1.9
12	2,965	20	40.2	39.8	-0.4
Total	630,592	42	36.5	40.8	4.3

Table F.3

**Reading Achievement NCE Gain Scores for Chapter 1  
Students Tested on an Annual Cycle -- 1979-80  
to 1987-88**

Grade	NCE Gain Score								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	1.0	1.3	1.2	0.9	1.0	1.5	1.1	2.8	2.8
3	2.4	3.2	2.2	2.8	3.0	2.6	2.8	3.3	3.3
4	1.9	3.1	2.7	2.6	2.9	3.5	3.1	3.5	3.5
5	2.3	3.2	3.3	3.2	3.1	3.8	3.1	2.5	2.6
6	3.2	4.0	3.4	3.4	3.2	3.5	3.5	3.1	3.2
7	1.9	2.1	2.4	2.2	2.5	4.0	2.6	2.5	2.5
8	2.2	3.0	3.1	3.1	2.4	2.5	2.6	2.1	2.6
9	1.9	2.2	2.4	2.7	1.6	1.5	2.4	1.4	2.2
10	-0.6	1.4	0.8	1.5	1.1	1.5	1.3	1.0	1.1
11	-2.0	2.4	0.5	-0.6	0.3	1.7	1.8	1.8	1.6
12	1.5	0.3	1.7	-0.3	0.3	0.0	-0.3	1.5	0.0

Table F.4

**Mathematics Achievement NCE Gain Scores for Chapter 1  
Students Tested on an Annual Cycle -- 1979-80  
to 1987-88**

Grade	NCE Gain Score								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	1.2	2.6	3.3	1.7	3.2	4.0	5.2	6.0	6.7
3	0.5	2.1	3.3	2.4	3.2	2.5	3.6	4.2	4.1
4	1.8	3.3	2.7	2.7	3.1	3.3	3.9	4.7	5.0
5	2.5	2.7	3.7	4.5	4.4	4.3	5.3	4.1	4.3
6	3.9	4.7	4.3	4.9	4.0	3.5	4.0	4.0	4.5
7	2.2	1.8	3.0	4.4	3.5	4.0	3.7	3.0	2.6
8	2.9	3.1	3.3	3.6	3.1	2.8	2.4	2.5	2.8
9	0.9	0.8	1.3	2.2	0.7	0.7	1.3	2.7	2.8
10	-1.0	0.7	0.3	1.4	0.5	1.4	1.9	1.9	2.4
11	0.8	1.3	0.5	0.8	1.1	2.3	2.2	2.1	1.9
12	1.2	-0.1	0.7	0.3	1.9	1.9	1.1	2.4	-0.4

Table F.5

Reading Achievement Results Expressed in NCEs for  
Chapter 1 Students Tested on a Fall-Spring Cycle -- 1987-88

Grade	Weighted Number Tested	Number of States Reporting	NCE		
			Pretest	Posttest	Gain
2	152,634	44	31.1	41.2	10.1
3	125,061	44	31.3	39.6	8.3
4	102,361	44	32.0	39.1	7.1
5	86,538	44	32.5	38.8	6.3
6	68,723	44	32.2	38.4	6.2
7	46,263	44	31.1	36.8	5.7
8	37,013	43	30.8	36.1	5.3
9	25,917	41	30.0	35.3	5.3
10	12,070	39	30.0	34.8	4.8
11	7,813	37	29.4	34.6	5.2
12	4,242	36	31.3	35.9	4.6
Total	668,365	44	31.5	38.9	7.4

Table F.6

Mathematics Achievement Results Expressed in NCEs for  
Chapter 1 Students Tested on a Fall-Spring Cycle -- 1987-88

Grade	Weighted Number Tested	Number of States Reporting	NCE		
			Pretest	Posttest	Gain
2	60,594	42	31.7	45.0	13.3
3	55,993	43	32.0	43.3	11.3
4	55,765	44	32.0	42.0	10.0
5	51,227	44	32.5	41.0	8.5
6	40,807	44	32.6	40.8	8.2
7	26,142	44	32.7	39.2	6.5
8	21,050	43	33.8	39.7	5.9
9	14,624	36	32.3	39.2	6.9
10	7,052	34	34.8	40.9	6.1
11	3,929	31	35.4	40.5	5.1
12	1,703	24	39.6	42.2	2.6
Total	338,886	44	32.4	41.9	9.5

Table F.7

**Reading Achievement NCE Gain Scores for Chapter 1  
Students Tested on a Fall-Spring Cycle -- 1979-80  
to 1987-88**

Grade	NCE Gain Score								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	9.4	8.9	8.5	9.6	9.9	9.3	9.8	9.5	10.1
3	7.4	7.1	6.7	7.7	8.2	7.9	8.2	8.0	8.3
4	7.0	6.9	6.3	6.9	7.5	7.3	7.6	7.2	7.1
5	6.1	6.2	6.3	6.2	6.7	6.5	6.6	6.3	6.3
6	6.0	5.8	5.7	5.9	6.3	6.2	6.6	6.5	6.2
7	5.5	4.7	4.8	5.1	5.6	5.5	5.8	5.6	5.7
8	5.0	4.4	4.6	4.8	5.1	5.2	5.7	5.1	5.3
9	5.2	5.1	4.5	5.0	5.3	4.9	4.6	4.5	5.3
10	4.2	4.6	4.0	4.3	4.5	3.9	4.2	4.4	4.8
11	3.2	4.1	3.6	3.2	4.1	3.3	3.9	4.4	5.2
12	4.4	4.4	4.8	2.4	4.6	3.8	3.5	4.3	4.6

Table F.8

**Mathematics Achievement NCE Gain Scores for Chapter 1  
Students Tested on a Fall-Spring Cycle -- 1979-80  
to 1987-88**

Grade	NCE Gain Score								
	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
2	10.5	11.0	11.7	11.4	12.9	13.2	13.6	12.6	13.3
3	8.6	8.8	8.8	9.8	10.8	11.1	11.8	11.1	11.3
4	9.0	9.2	9.8	9.4	10.3	10.5	11.2	10.0	10.0
5	8.2	8.4	8.2	8.1	8.8	8.7	9.7	8.6	8.5
6	7.7	7.2	8.0	7.8	8.4	8.4	8.9	8.6	8.2
7	6.3	5.9	5.8	5.9	6.3	6.4	6.8	6.2	6.5
8	6.2	5.6	5.6	5.5	6.0	5.7	5.8	5.5	5.9
9	6.2	6.4	7.1	5.9	7.2	7.1	6.8	6.2	6.9
10	5.3	5.5	5.1	3.5	4.2	3.8	4.8	5.6	6.1
11	5.6	5.1	5.6	4.5	5.9	5.2	4.8	4.7	5.1
12	6.5	3.8	5.0	4.5	4.5	5.4	3.6	5.4	2.6

**Figure F.1**  
Relationship of NCEs and Percentiles

