

# **Closing the Education Achievement Gap: Is Title I Working?**

Marvin H. Kusters and Brent D. Mast

# Purpose:

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*1) Review Title I policy and performance. 2) Provide new evidence based on the National Assessment of Educational Progress (NAEP).*

# Policy History

- Established in 1965, Title I is the largest federal elementary and secondary education program.
- Provides additional resources and funding to low-income or low-performing students. Funding flows through states to local school districts and its use is flexible.
- In school year 1997-98, \$8 billion of Title I funding to 12.5 million public and private school students.
- 1994 reauthorization provided increased targeting towards high-poverty schools and encouraged a schoolwide approach.

## Past Evaluations

- Results of past studies have been mixed. Two major federally-funded studies:
  - Sustaining Effects Study (1970's): few positive long-term effects; little benefit for most disadvantaged students.
  - Prospects Study (early 1990's): relative standing of Title I students unchanged .
- Black/white achievement gap decreased in the 80's, but stagnated or worsened in the 90's.

# The NAEP

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- Starting in school year 1993-94, the Main and State NAEP included an indicator for students receiving Title I funding.
- This study uses the following student-level State NAEP data for 1993-94, 1995-96, and 1997-98.
- Data are examined for 4<sup>th</sup> and 8<sup>th</sup> grades.
- Data are examined for math and reading.
- 4<sup>th</sup> grade reading data are analyzed before and after the 1994 Title I reauthorization.

# Achievement Data

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- 4<sup>th</sup> grade data: 1993-94 (reading), 1995-96 (math), and 1997-98 (reading).
- 8<sup>th</sup> grade data: 1995-96 (math), and 1997-98 (reading).
- Descriptive Statistics in Table 4-1.

# Title I Student Indicator

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- Differences in Title I across grades.
  - A greater percentage of 4<sup>th</sup> graders receive Title I relative to 8<sup>th</sup> graders (see Table 4-1).
  - Funding per student is greater for elementary schools than for secondary schools.
- Changes during the sample period in Title I (see Table 4-2).
  - Increased targeting towards high-poverty schools.
  - Greater use of school-wide programs.
  - Net effect:
    - » The fraction of the sample receiving Title I has increased.
    - » Little change in Title I student characteristics.

# Conclusions

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- Little evidence that Title I is having a systematic positive effect on student achievement.
- No indication performance has improved over time.
- Program is not more effective for lower performing students.

Table 1: Descriptive Statistics for Achievement and Title I Variables

Mean NAEP Value		
Grade/Subject/Year	Weighted Mean*	Standard Deviation
4th Grade Reading 1993-94	210.67	37.90
4th Grade Math 1995-96	221.26	29.85
8th Grade Math 1995-96	269.16	34.50
4th Grade Reading 1997-98	213.68	35.37
8th Grade Reading 1997-98	260.47	31.20
Student Title I Dummy		
Grade/Subject/Year	Weighted Mean*	Standard Deviation
4th Grade Reading 1993-94	.195	.396
4th Grade Math 1995-96	.220	.414
8th Grade Math 1995-96	.127	.333
4th Grade Reading 1997-98	.305	.461
8th Grade Reading 1997-98	.178	.383
*Weights are inverse sampling probabilities.		

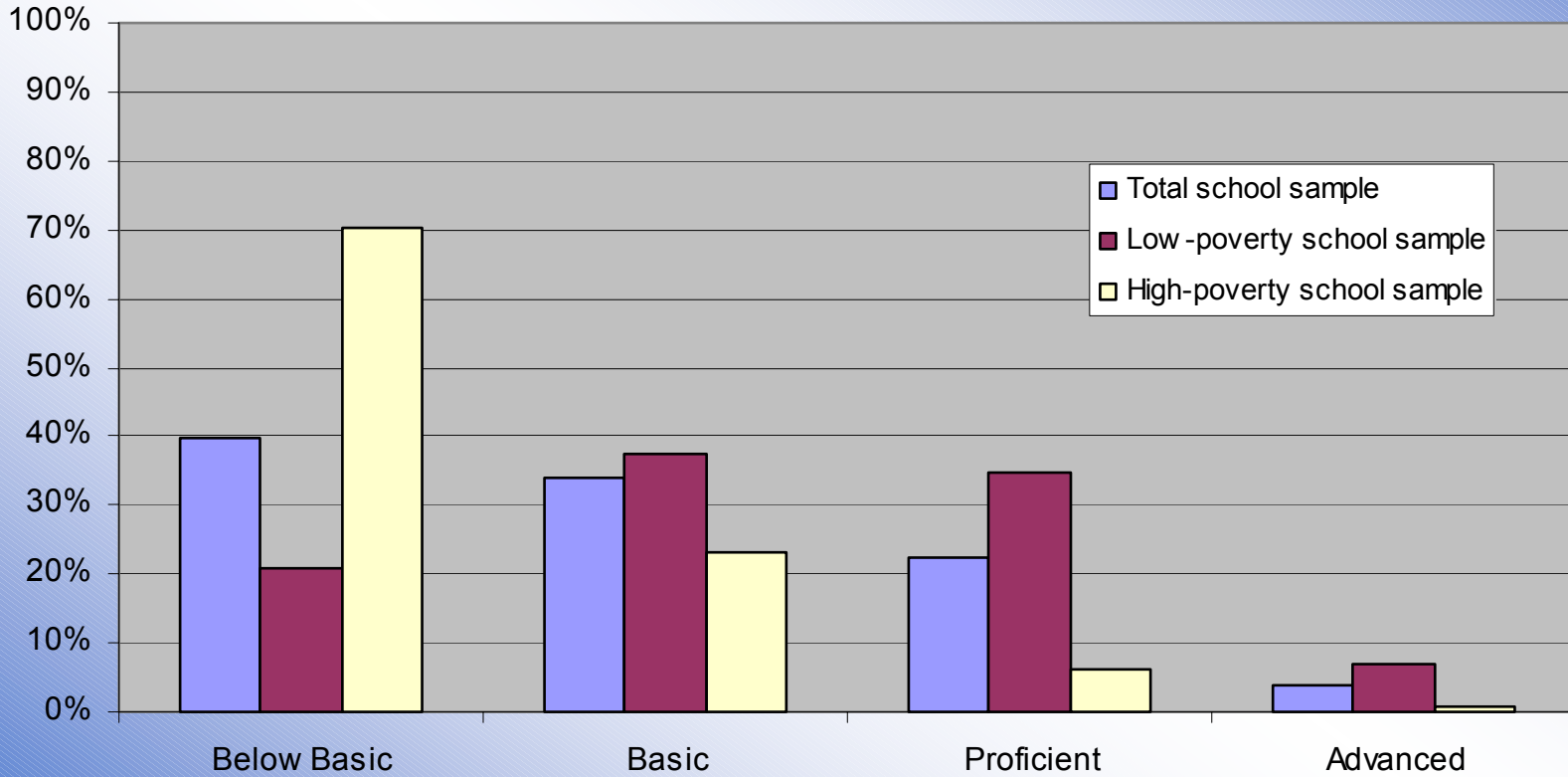
## Table 2: Characteristics of Title I Students

Title I Students: Weighted Means of Select Characteristics							
	4th Grade			% Change	8th Grade		
Year	1993-94	1995-96	1997-98	94-98	1995-96	1997-98	96-98
LEP Student	0.10	0.11	0.08	-15.4	0.08	0.11	46.8
White Student	0.38	0.36	0.40	4.1	0.27	0.27	2.0
Black Student	0.28	0.28	0.27	-0.9	0.28	0.28	-0.6
Hispanic Student	0.28	0.30	0.27	-4.0	0.38	0.38	0.7
Native American Student	0.03	0.03	0.03	-8.5	0.02	0.03	10.2
Asian Student	0.03	0.03	0.04	2.0	0.05	0.04	-18.6
Female Student	0.49	0.49	0.50	2.8	0.50	0.50	0.8
Subsidized Lunch Student	0.65	0.71	0.69	6.7	0.71	0.70	-2.2
School % Subsidized Lunch	61.30	69.86	68.40	11.6	63.93	68.85	7.7
School % Title I	N/A	58.99	74.40	N/A	60.95	74.91	22.9
Urban Area	0.38	0.44	0.44	14.5	0.46	0.46	-0.2
Rural Area	0.20	0.16	0.16	-21.5	0.15	0.14	-1.5
District Child Poverty Rate	25.37	28.47	24.68	-2.7	31.49	28.12	-10.7
Real Median Household Income	33543.55	33805.95	34929.69	4.1	32875.91	33224.71	1.1
Northeast Dummy	0.18	0.19	0.11	-38.1	0.13	0.11	-10.5
Southeast Dummy	0.32	0.31	0.33	4.5	0.28	0.29	3.6
West Dummy	0.38	0.39	0.43	13.7	0.50	0.52	5.2

Table 2: Characteristics of Title I Students (continued)

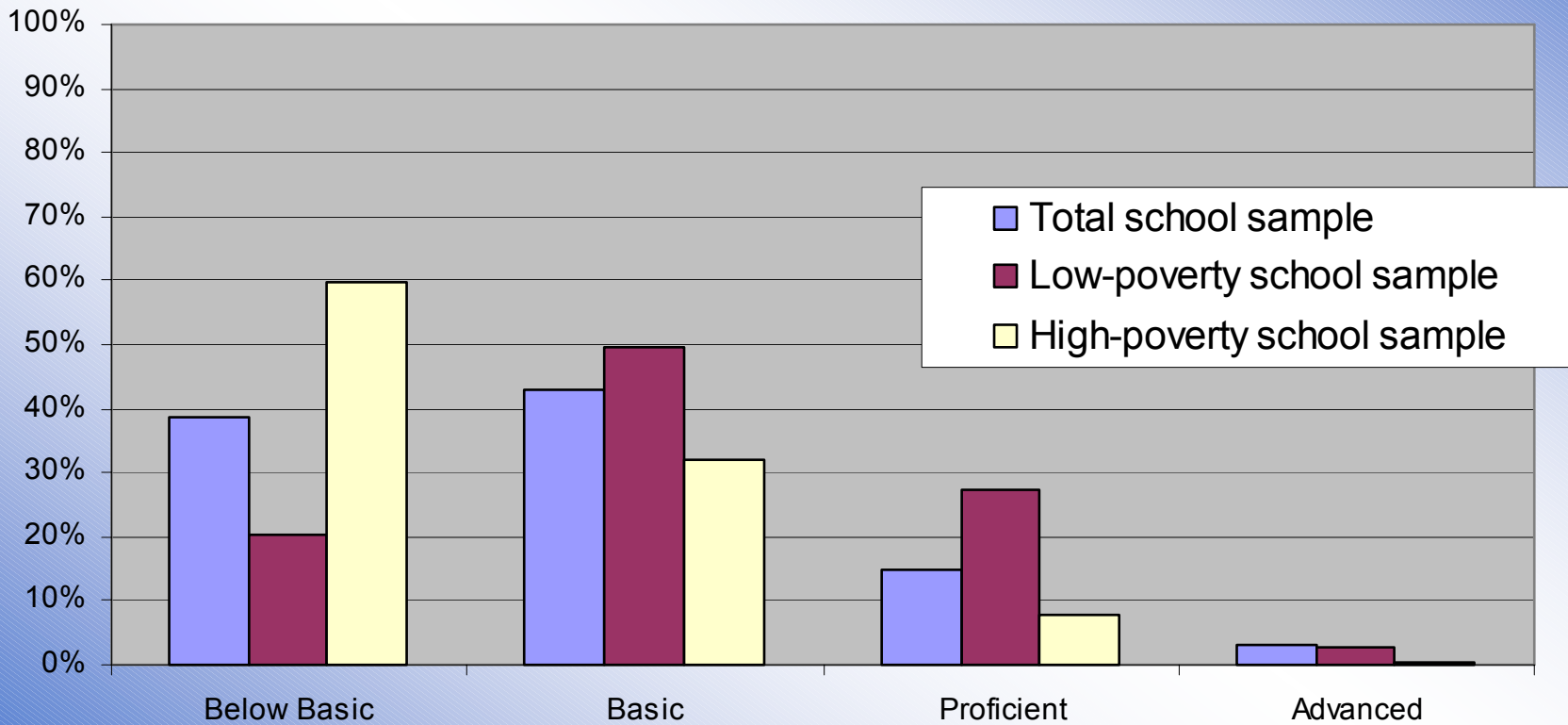
Weighted % of Students Receiving Title I for Select Groups							
	4th Grade			% Change	8th Grade		% Change
Year	1993-94	1995-96	1997-98	94-98	1995-96	1997-98	96-98
All Students	19.5	22.0	30.5	56.4	12.7	17.8	40.0
White Students	11.8	12.6	20.0	69.5	5.4	8.1	49.2
Black Students	35.6	41.0	52.1	46.3	23.7	31.8	34.5
Hispanic Students	33.7	39.2	48.2	43.0	30.3	38.4	27.0
Native American Students	27.5	27.9	37.3	35.6	17.7	26.3	48.1
Asian Students	16.8	19.7	24.4	45.2	13.9	14.8	6.4
Subsidized Lunch Students	30.5	39.3	49.9	63.7	27.6	35.5	28.7
Non-subsidized Lunch Students	11.70	10.50	16.40	40.17	5.40	8.30	53.7
Number of States	40	42	39		39	35	

**Figure 1-1**  
**Fourth Grade Reading Skills by School Poverty Level, 1998**



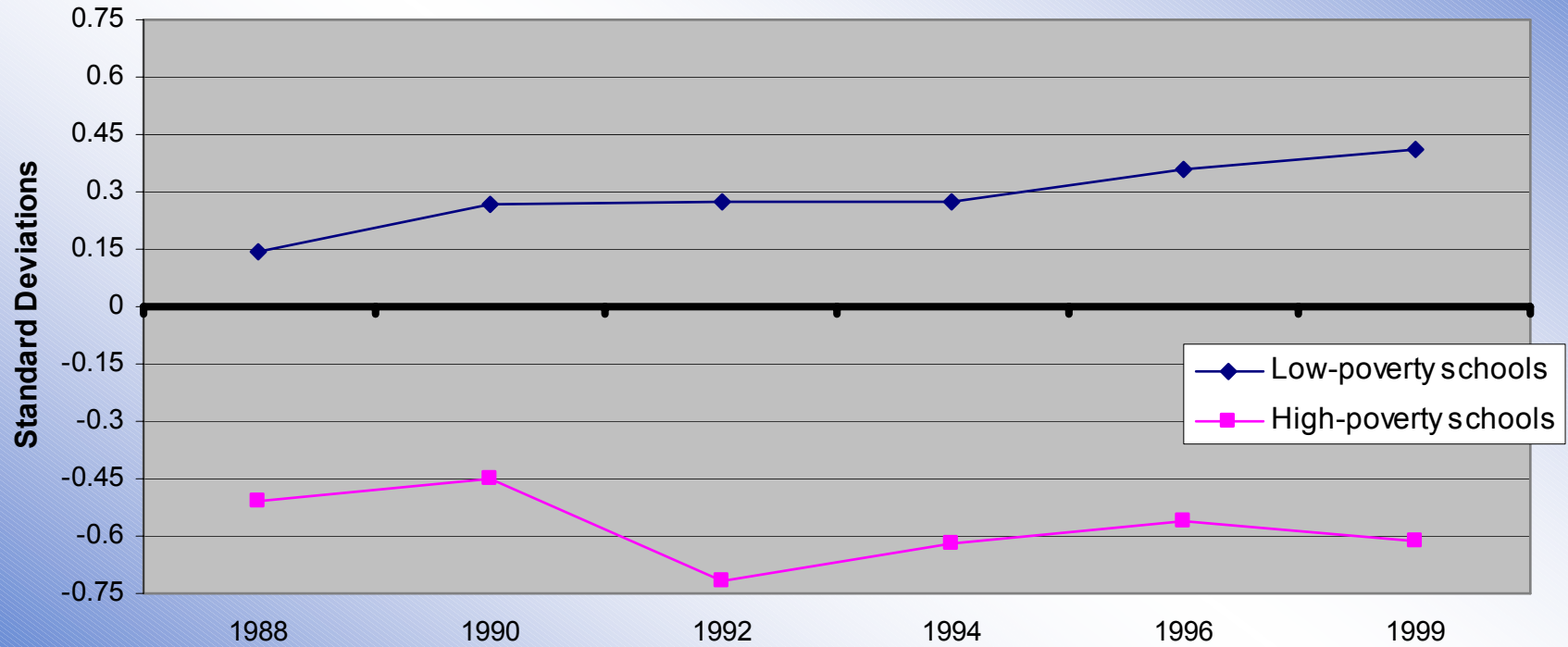
**Note: High-poverty schools are defined as those with more than 75 percent of students eligible for subsidized lunches. Low-poverty schools are those with no more than 25 percent of students eligible.**

**Figure 1-2**  
**Fourth Grade Math Skills by School Poverty Level, 1996**



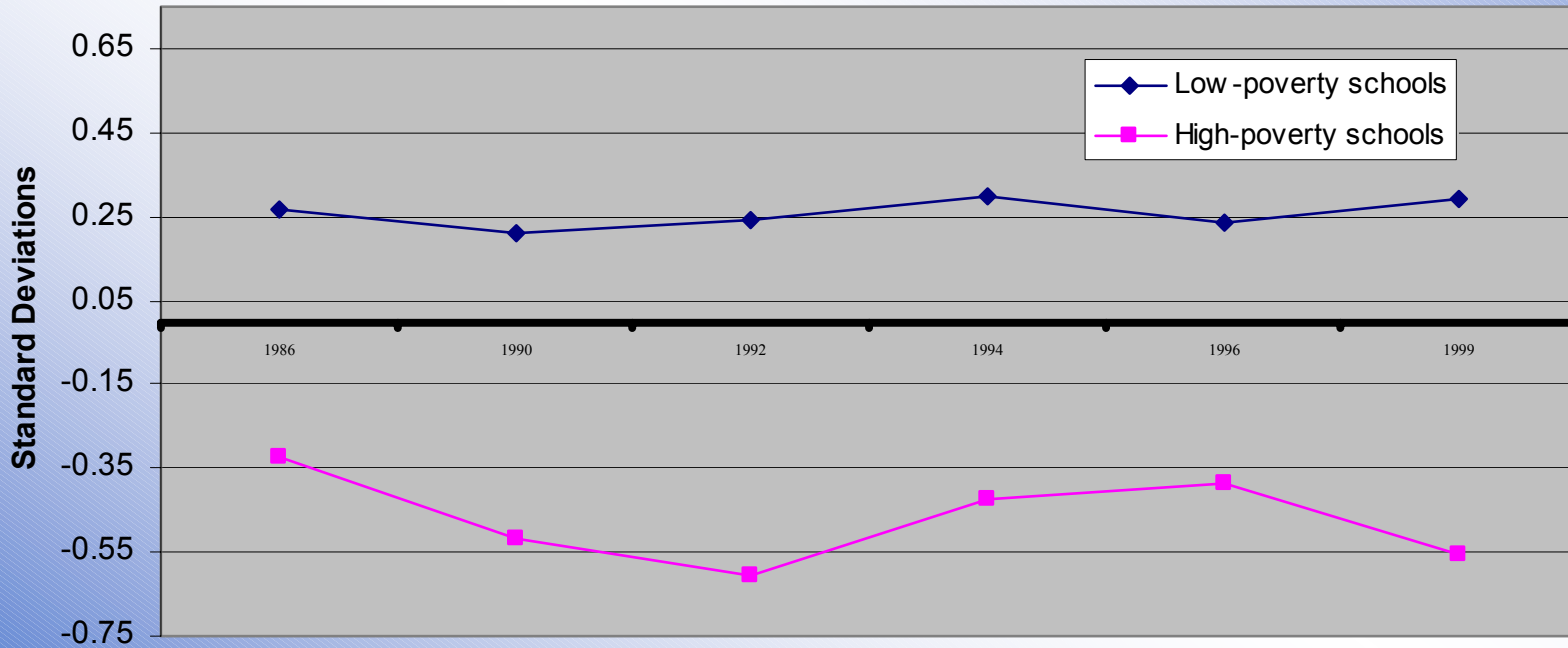
**Note: High-poverty schools are defined as those with more than 75 percent of students eligible for subsidized lunches. Low-poverty schools are those with no more than 25 percent of students eligible.**

**Figure 1-3**  
**Test Score Gaps by School Poverty Levels for Fourth Grade NAEP**  
**Reading Test: 1988-1999**



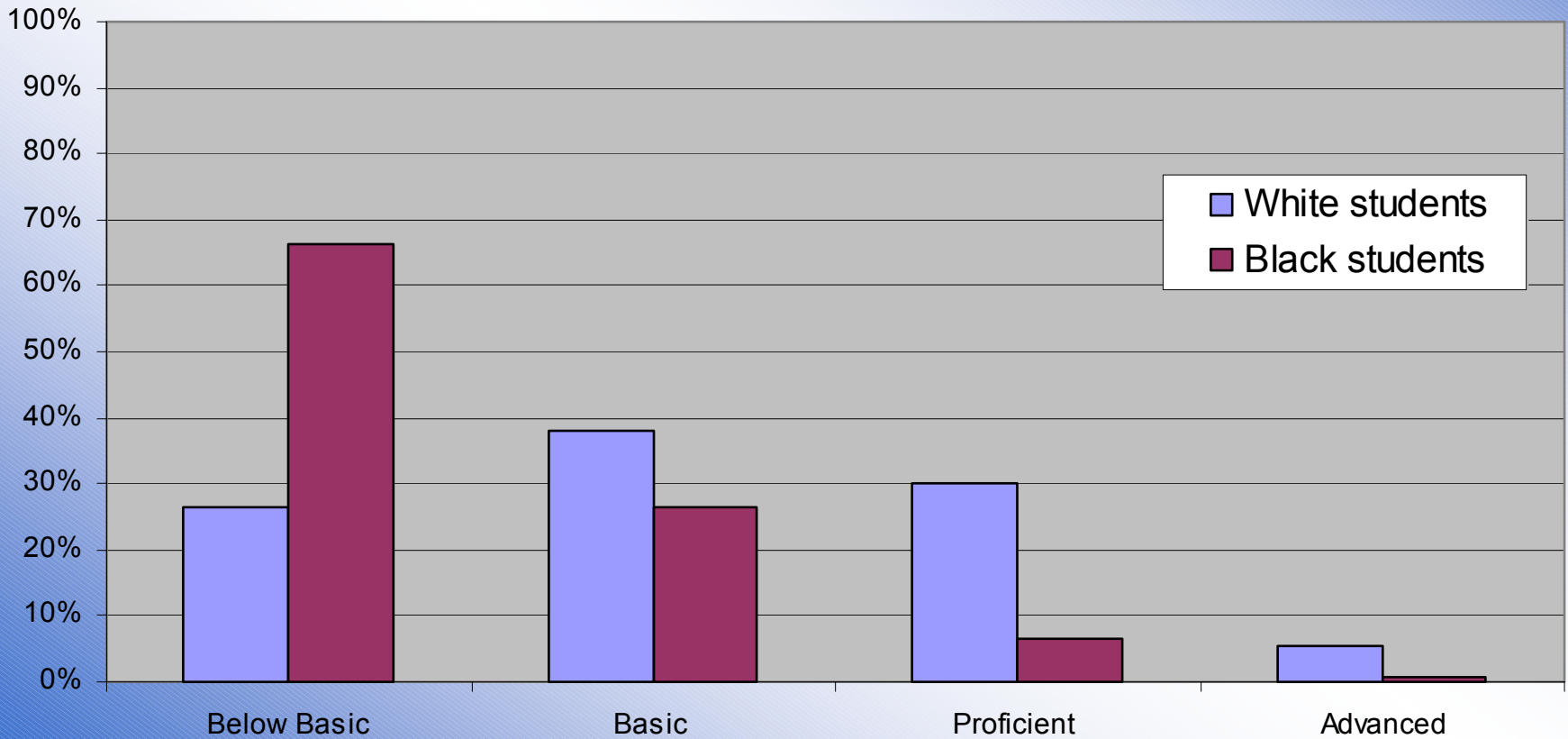
Note: Measures of gaps are computed from comparisons with average scores. High-poverty schools are defined as those with more than 75 percent of students eligible for subsidized lunches. Low-poverty schools are those with no more than 25 percent of students eligible.

**Figure 1-4**  
**Test Score Gaps by School Poverty Levels for Fourth Grade NAEP Math Tests: 1986-1999**



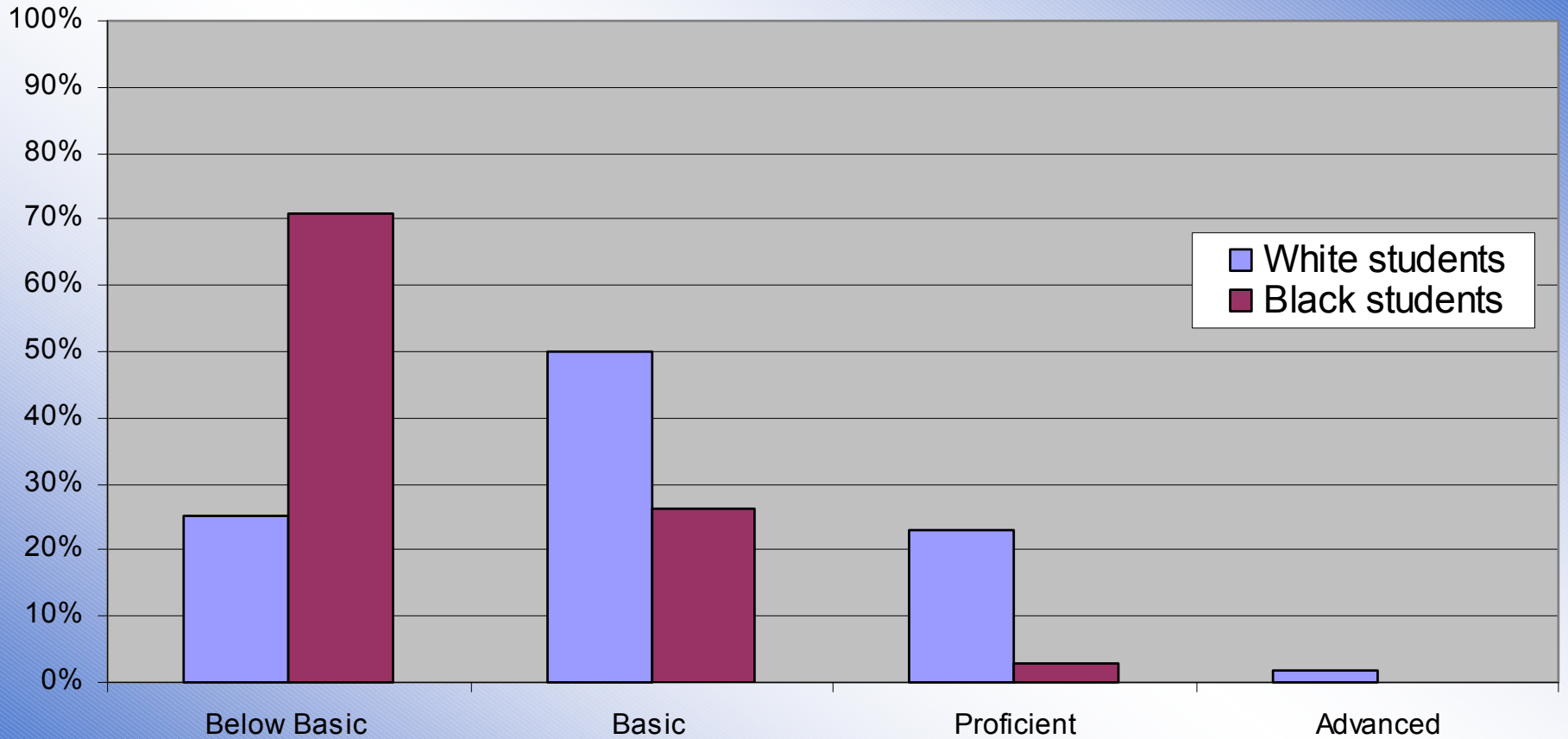
Note: Percentage gaps are computed from comparisons with average scores. High-poverty schools are defined as those with more than 75 percent of students eligible for subsidized lunches. Low-poverty schools are those with no more than 25 percent of students eligible.  
Source: DOE, PES 2001a and NCES, 2002.

**Figure 1-5**  
**Fourth Grade Reading Skills by Race, 1998**



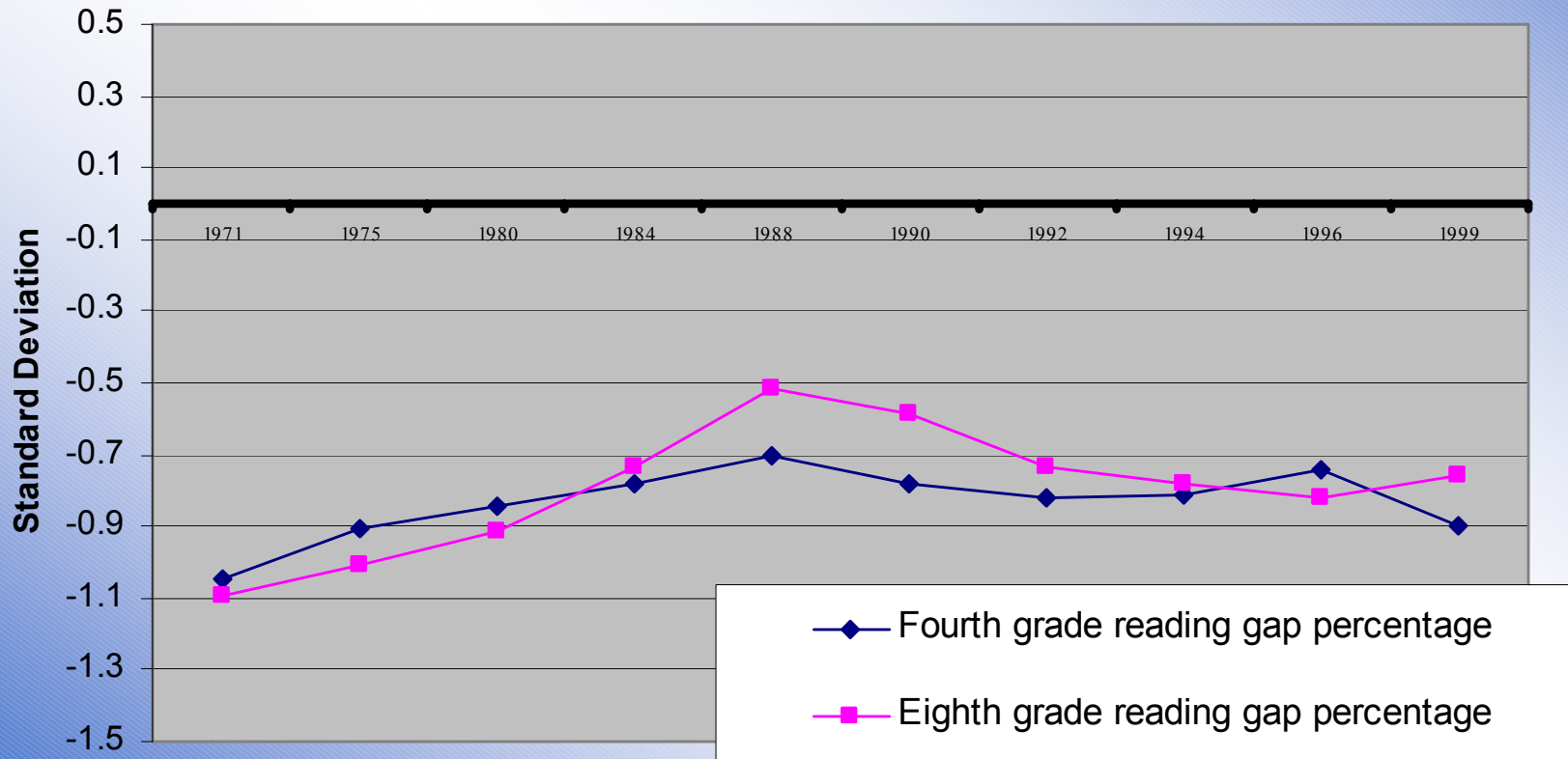
Source: Authors' calculations used state NAEP restricted data for fourth grade reading, 1998.

**Figure 1-6**  
**Fourth Grade Math Skills by Race, 1996**



Source: Authors' calculations used state NAEP restricted data for fourth grade math, 1996.

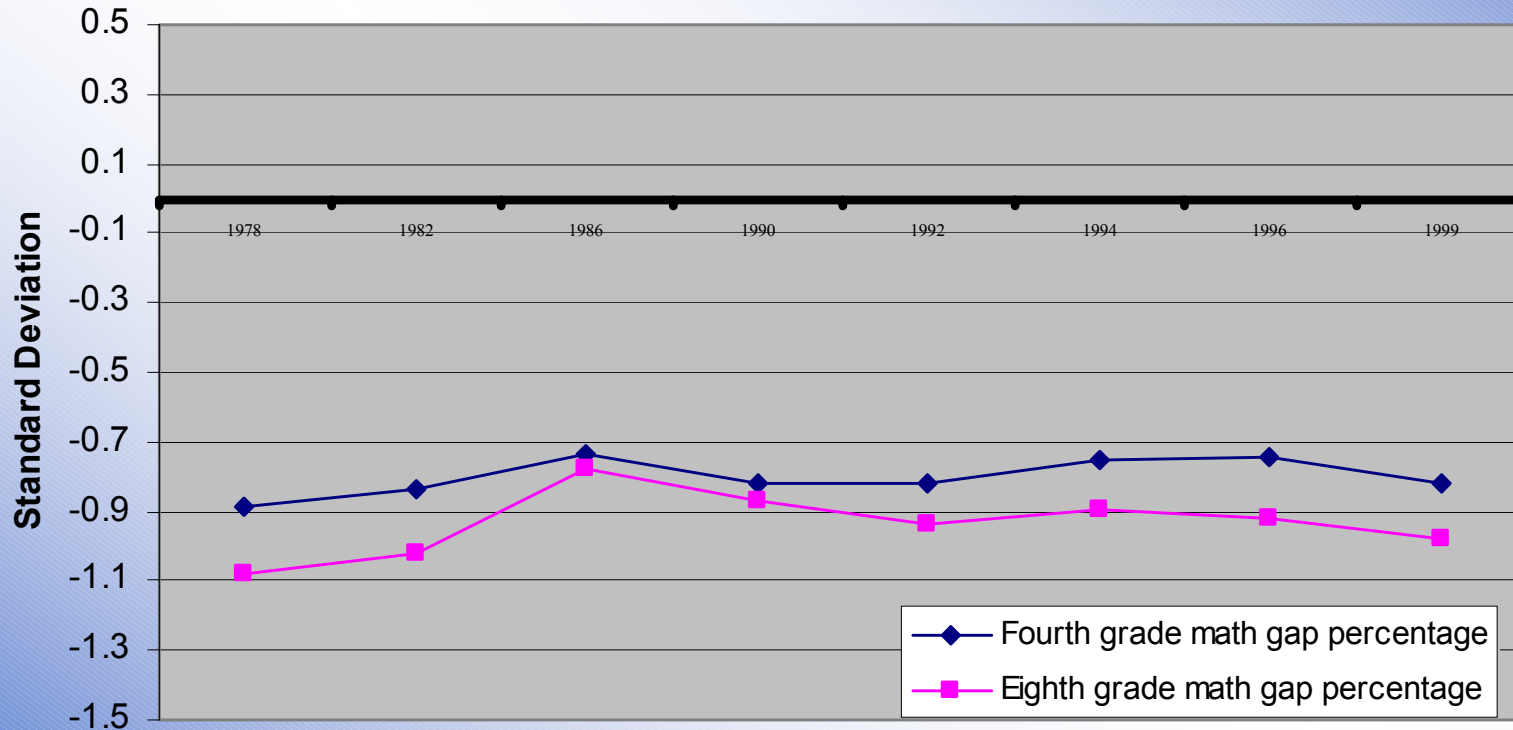
**Figure 1-7**  
**Black-White Test Score Gaps for NAEP Reading Tests: 1971-1999**



Note: Measures of gaps between black and white students are computed from comparisons with average scores for all students. In addition to black and white students, averages for all students include scores for Hispanic, Native American, and Asian students

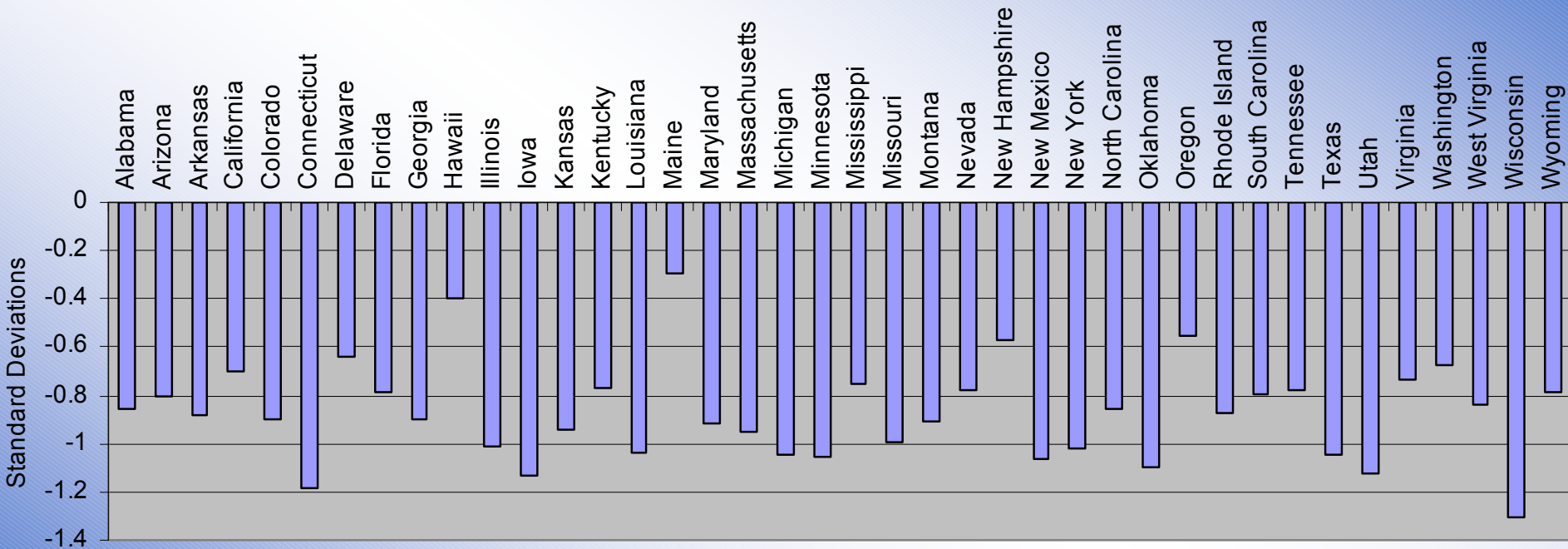
Source: DOE, NCES 2000C and 2002.

**Figure 1-8**  
**Black-White Test Score Gaps for NAEP Math Tests: 1978-1999**



Note: Measures of gaps between black and white students are computed from comparisons with average scores for all students. In addition to black and white students, averages for all students include scores for Hispanic, Native American, and Asian students. Source: DOE, NCES 2000C and 2002.

**Figure 1-9**  
**Black-White Test Score Gaps for 4th Grade Reading Tests by State: 1998**



Note: Measures of gaps between black and white students are computed from comparisons with average scores for all students. In addition to black and white averages for all students include scores for Hispanic, native-American, and Asian students

Source: Authors' calculations using State NAEP restricted data for fourth grade reading, 1998.