NAEP Exams Show Slowing or Stagnant Results for Most Demographic Groups, in Reading and Math, at All Grades/Ages, since the Start of NCLB

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Summary and Introduction

A review of results on the National Assessment of Educational Progress (NAEP) “Main” and “Long Term” assessments leads to the unequivocal conclusion that the rate of improvement for almost all demographic groups, in reading and math, and all grade-level or age groups, has declined compared with the pre-No Child Left Behind (NCLB) period or has been completely stagnant.

NCLB was intended to accelerate the rate of improvement in reading and math achievement, and the law identified NAEP as the primary indicator of success. Thus, this review concludes that the policies and practices implemented through and in response to NCLB have been unsuccessful. NCLB has not succeeded, with rare exception, in even maintaining the previous rates of improvement for Blacks, Hispanics, American Indians, Whites, low-income students, students with disabilities (SWD), or English language learners (ELL), in either subject at any grade.

This paper presents data first from the NAEP “Main” tests, then from the NAEP “Long-term Trend” tests, in reading and math, by grade/age level, for most demographic groups. The findings are generally similar. Previous studies by myself and others have used NAEP data to show that NCLB has not induced NAEP score gains, and thus to conclude that NCLB has not succeeded. However, as I have regularly encountered claims that NAEP results show NCLB to be a success (e.g., Sandy Kress op. ed. in NY Daily News, 4/18/11, and in regular comments on the National Journal Education Blog), I concluded a careful re-examination and presentation of the results is necessary. Here are summary conclusions from the NAEP Main tests:

Grade 4 Reading: Other than a large jump from 2000-02 for most groups, changes were gradual and modest. In most cases, the rate of gain was much faster in 2000-02 than 2002-09. The rates of change before 2000-02 and post-NCLB (2002-09) were about the same for most groups. Gaps
closed at a faster rate post-NCLB for racial groups, but did not close at all post-NCLB for ELL, SWD and low-income. Overall, NCLB did not produce accelerated improvement in reading at grade 4 as rates of improvement were faster 2000-02 and about the same 1992-00 as in 2002-09, with uneven gap closing.

Grade 8 Reading: Grade 8 has seen very little score gain from 1992 to 09. Other than Asian/PI, gains slowed significantly or even reversed from 2002 to 09. NCLB either contributed to this worsening situation or failed to counter other causes.

Grade 4 Math: Gains have flattened significantly across all groups except Asian/PI, and gaps have not closed or have widened in the NCLB era. Overall, NCLB has not led to improvements.

Grade 8 Math: Other than for Blacks, rates of gain were mostly unchanged or slower in the NLCB period (2003-09). ELLs had essentially no gain from 2003-09. Gap-closing was erratic: some narrowed, some widened, whether comparing 1990 to 2003 or 09, or 2003 to 09. For most groups, the NLCB did not induce improvements in grade 8 math except perhaps for Blacks.

NCLB proponents claimed the law would force states and districts to change their historic failure to address inequities by race, class, language learner and disability status and would produce achievement gains. NAEP results demonstrate that, a decade after the law’s signing, it has not been successful. Many supporters of NCLB’s accountability structure, including its test-based “adequate yearly progress” provisions, have failed to fully consider how NAEP results demonstrate the failure of NCLB. Supporters of NCLB-style accountability who genuinely seek educational improvement should look to other means to improve educational outcomes.

I would here note that NAEP tests themselves are limited and do not assess all the important goals in reading or math. Since students who score low on state tests are more subject to test-prep as a dominant mode of schooling, they are even less likely to be taught higher order knowledge and skills. It is likely, therefore, that NAEP results actually underestimate the real gaps in learning by not sufficiently measuring higher order or more complex forms of learning, which are more likely to be attained by students lucky enough to live in wealthier communities.

There are other reasons to conclude that NCLB is a policy failure. Among them are increased teaching to the test; narrowed curriculum; increased use of disciplinary and other policies to remove low-scoring students from schools; efforts by states to alter tests to make schools look better; probably increased cheating; and a growing sense of alienation from school practices by educators, students and parents. Taken with the overall decline in the rate of improvement in NAEP since NCLB began, it becomes clear that the law must be overhauled. While this paper alone does not provide a basis for what those changes should be, I commend to you the work of the Forum on Educational Accountability (http://www.edaccountabilty.org).

An important implication of this study is that adjustments in a test-and-sanction approach are not likely to solve the problems caused by the approach. Shifting from sanctioning increasing numbers of schools to sanctioning teachers, as implemented in Race to the Top and proposed in the Obama Administration “Blueprint,” is unlikely to have a positive impact and may exacerbate the slowing of gains that followed in the wake of NCLB.

Finally, research going back to the Coleman Report, and more recently studies by including those of Richard Rothstein and David Berliner, show that schools alone cannot overcome social
inequality in determining overall educational outcomes. If this is the case, then it is very likely our nation will see a decline in NAEP scores as a consequence of the “great recession.” The decline is likely to be sharper for sectors of society most hurt by the recession, including Blacks, Latinos and low-income students. Thus, the gap may widen. It would be a mistake to conclude that schools are at fault for the consequences of the recession, at the same time as it is reasonable to conclude that NCLB has not helped and may well have undermined our nation’s educational progress.

Results from the NAEP “Main” Tests

The data and analysis below compares the rates of gain on NAEP tests in the pre- and post-NCLB periods. It is taken from the ‘average score’ charts at http://nationsreportcard.gov/reading_2009/ and http://nationsreportcard.gov/math_2009/. The NAEP main tests have been administered at grades 4 and 8 (roughly parallel to the longer-lived NAEP Main tests at ages 9 and 13) since 1990 in Math and 1992 in Reading. (The Long-Term Trend NAEP goes back a good deal further, and I analyze those results below.) I recommend that the reader open the relevant charts and use them to assist visualization while this text provides data on score changes between key points and rates of change.

As President Bush signed NCLB into law in January 2002, it cannot have had any meaningful effect in 2002, which was a NAEP reading test year. It may have had a very modest impact in 2003, which was a math test year, but that is the closest test date for demarcating a pre- and post-NAEP period, as the next previous test year was 2000.

NAEP charts present data for all demographic groups on which NAEP reports, including race/ethnicity, family income, disability status (SWD), and English language learners (ELL). ‘Race/ethnicity’ provides separate Black, Hispanic, Asian/Pacific Island (Asian P/I), American Indian, and White data. I use those charts to construct the information below. I do not include data by gender or type of school, which NAEP also provides.

This paper reports score gains (and losses) from the first NAEP main test until 2009 by subject, grade and group. It separates out 2002 to 2009, the post-NCLB period, to compare with pre-NCLB. It also reports narrowing or widening of achievement gaps.

Accommodations were not permitted in reading until 1998 (which reported scores ‘with’ and ‘without’ accommodations), and until 1996 in math (again, reporting ‘with’ and ‘without’). ‘With’ typically produced lower scores in reading, but not in math. In reading at grade 4, there was for Hispanics and Asian/Pi a fairly sizeable gap between ‘with’ and ‘without.’ Score differences between ‘with’ and ‘without’ for grade 4 math and grade 8 reading and math were small (3 points for Asian/Pi reading being the largest, the rest 0 to 2 points). (For details on this point, click on the table option available on each NAEP web page. Also, on the NAEP website, to reveal a score, hold the cursor over the mark for the year and group.)

This report abbreviates ‘92’ for ‘1992’, etc.

In the comments that follow each test by grade presentation, I assess whether NCLB can be associated with changes in the rate of improvement (or decline) and changes in the rate of gap-closing. If there is no improvement or a slowing of the rate of improvement, then it is very
unlikely NCLB led to improvements (which would have had to have been countered by other, negative, forces). If NAEP scores declined or the gap widened, it may be due to NCLB or to other causes. And if there was a gain, it may or may not be attributable to NCLB, the scores alone cannot provide an explanation. As the overall results show declining or stagnant rates of improvement, the conclusion is that NCLB did not produce improvements and may have caused the declines in the rates of improvement.

**Reading**

NAEP main reading started in 1992, but some groups were not tracked separately until later dates (specified below). NCLB was signed in January 2002 and would not have had any effect on the 2002 NAEP results.

**Grade 4 Reading**

There have been gains, at a mostly moderate rate. Blacks and Latinos and especially Asian/PIs improved more quickly than Whites, with some resulting gap closing, but with little or no narrowing and a slowing rate of improvement over the last few test administrations. For some groups, there was a large score jump from 00 to 02, often following a modest decline from 98-00. (A similar leap also occurred in grade 4 math, from 00-03, but did not at grade 8 in either subject for any set of years.)

- **All students:** 4-point gain from 92 to 09. 2-point gain from 02-09.
- **Hispanic:** 8-point gain from 92 to 09. Decline from 98-00, followed by an 11-point gain from 00-02, then a 4-point gain from 02-09.
- **Black:** 13-point gain from 92-09. Slight decline from 98-00, followed by a 9-point gain from 00-02, then a 6-point gain from 02-09.
- **White:** 6-point gain from 92-09. 5-point gain from 2000-02. 1-point gain from 02-09.
- **Asian/PI:** 19-point gain from 92-09. 8-point gain from 92 to 02. No 00-02 leap (1-point decline). 11-point gain from 02 to 09.
- **American Indians:** measured in 94 and then 00, with a 3-point gain. 10-point decline from 00 to 09, mostly from 00 to 02.
- **ELL:** 14-point gain from 98 to 09, then a 7-point decline from 98-00. 16-point gain from 2000 to 2002, then a 5-point gain from 02-09.
- **Disability:** 14-point gain from 98-09. A decline from 98-00 was followed by a 20-point jump from 00 to 02, followed by 3-point gain from 02 to 09, with no gain from 05-09.
- **Low-income:** 10 point gain from 98-09. Was decline from 98 to 00. 20-point gain from 2000-02, 3-point gain from 02 to 09.

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1 I have endeavored to accurately transcribe the multiple test scores and calculate differences and rates of change. I apologize for any errors, but am quite sure that if there are any, they do not change the overall results.
Gaps: B-W gap was 32 points in 92, 30 points in 02, 25 points in 09. W-H gap was 27 points in 92, 28 points in 02, 25 points in 09. Slower White compared to Black and Hispanic gains explain much of the gap closure, especially after 02. The ELL gap closed from 43 points in 98, to 35 points in 02, but it widened 1 point from 05 to 09. SWD closed the gap from 41 points in 98 to 34 points in 02, where it remains in 09. The income gap did not narrow from 98.

Comment: Other than the large jump from 00 to 02 for most groups (often following a 09-00 decline), changes were gradual and modest. In most cases, the rate of gain was much faster in 00-02 than 02-09. The rates of change before 00-02 and post-NCLB (02-09) were about the same for most groups. Gaps closed at a faster rate post-NCLB for racial groups, but did not close at all post-NCLB for ELL, SWD and low-income. Overall, then, NCLB cannot be said to have produced increased improvement in reading at grade 4 as rates of improvement were faster 00-02 and about the same 92-00 as in 03-09, with uneven gap closing.

**Grade 8 Reading**

*All:* 4-point gain from 92 to 09; no gain from 2002 to 2009.

*Hispanic:* 8-point gain from 92-09. 2-point gain 02-09.

*Black:* 9 point gain from 92-09. 1-point gain from 02 to 09.

*White:* 6 point gain from 92-09. 1 point gain from 02-09.

*Asian/PI:* 6 point gain from 92-09. 8 point gain from 02-09.

*American Indian:* 3 point gain from 92-09. 1 point decline from 02-09.

*ELL:* 1 point gain from 1998 to 2009. A 6-point gain from 98 to 02 was followed by a 5-point decline from 02 to 09.

*SWD:* 6-point gain from 98-09. 2-point gain from 02-09.

*Low-income:* 4-point gain from 98 to 09. No gain from 02-09.

**Gaps:** Gaps closed slightly over the full period, but aside from Asian/PI, the gap did not change much in either direction from 2002-09 (from a 1-point narrowing, to a 4-point widening for ELLs).

**Comment:** Grade 8 has seen very little score gain from 92 to 09. Other than Asian/PI, gains slowed significantly or even reversed from 02 to 09. Either NCLB contributed to this worsening situation or failed to counter other causes.

**Math**

The NAEP Main math tests started in 1990. NCLB was signed half-way through the 2001-02 school year, and likely had little if any effect on the 2003 NAEP results. Accommodations were not permitted until 1996, when both ‘with’ and ‘without’ tests were administered. Overall, there was no difference at grade 4 in the two versions. Unlike reading, for some groups
accommodations meant higher scores than no accommodations, but the differences were quite small.

**Grade 4 Math.**

Sizeable 2000-03 jumps are seen in most groups, seemingly parallel to the 2000-02 grade 4 reading result jumps that did not happen at grade 8 in either subject. Rates of gain have slowed since NCLB was implanted.

All: 27 point gain from 1990 to 2009. 9-point gain from 2000 to 2003. 5-point gain from 2003 to 2009.

Hispanic: 27-point gain from 90-09. 14-point gain from 02-03. 4-point gain from 03-09. Slower rate of gain under NCLB.

Black: 36-point gain from 90 to 09. 13-point gain from 00-03. 6-point gain from 03-09. Slower rate of gain under NCLB.

White: 18-point gain from 90-09. 9-point gain from 00-03. 5-point gain from 03-09. Slower rate of gain under NCLB.

Asian/PI: 30 point gain from 90-09. Not tested from 96 to 03. 9-point gain from 03-09.

American Indian: 8 point gain from 96 to 09. 9-point decline from 96 to 00. 15-point gain 00-03. 2-point gain from 03-09. Slower rate of gain under NCLB.

ELL: 17-point gain from 96-09. 15-point gain 00-03. 4-point gain 03-09. Slower rate of gain under NCLB.

SWD: 17-point gain from 96-09. 16-point gain from 00-03. 7-point gain from 03-09, but 2 point gain from 05-09. Slowing rate of gain under NCLB.

Low-income: 20 point gain from 96-09. 5-point gain from 03-09. Slower rate of gain under NCLB

Gaps: Grade 4 math gaps have not closed, except in the case of Blacks, for whom the gap-narrowing preceded NLCB. Indeed, a little widening of the gaps has generally occurred from 2003 to 2009. 32- point W-B gap in 90 narrowed to 26 points in 09, but only 1 point of that from 03-09. The A/PI with Blacks gap widened 3 points between 03 and 09. The H-W gap widened 1 point from 90 to 03 and remained the same in 09. The AI-H gap widened from 15 points in 96 to 20 points in 03 and 23 points in 2009. Gap closed 2 points for low-income vs not from 96 to 09; 1 point from 03-09. No gap closure for SWD (stayed 21 points) or ELL (stayed 22 points) from 96-09.

Comment: Gains have clearly flattened significantly across all groups except Asian/PI, and gaps have not closed, have even widened, in the NCLB era. Overall, it appears that NCLB has not led to improvements in math at the 4th grade.
**Grade 8 math**

**All:** 20 point gain from 1990 to 2009. 5-point gain from 03-09. No sudden jumps from 00 to 03 or any other set of years, unlike grade 4, and thus similar to grade 8 reading.

**Hispanic:** 20 point gain 90-09. 7-point gain 03-09. Similar rate of gain pre- and post-NCLB.

**Black:** 24-point gain from 90 to 09. 9-point gain from 03-09. Faster gains 03-09 than previously.

**White:** 23-point gain from 90-09. 5-point gain from 03-09. Slower gains 03-09.

**Asian/PI:** 26-point gain from 90 to 09. Not measured from 92-00. 10-point gain 03-09. Slightly faster rate of gain in 03-09 period.

**American Indian:** 7-point gain 00-09, 3-point gain 03-09, a slight decline in the rate of improvement.

**ELL:** 17-point gain from 96 to 09, 1-point gain 03-09. Much slower rate of gain 03-09.

**SWD:** 18-point gain from 96 to 09, 7-point gain from 03 to 09. Slower rate of gain 03-09.

**Low-income:** 16 point gain from 96-09. 7-point gain from 03-09. Slightly slower rate of gain 03-09.

**Gaps:** 37 point B-W gap in 1990, 36 point gap in 03 and 32 points in 09. H-W gap 24 points in 90, 29 points in 03, and 27 points in 09. ELL to non-ELL gap was 46 points in 1996, 37 points in 03, and 42 points in 09. SWD gap was 42 points in 96, 40 points in 03, and 38 points in 09. Low-income to not-low gap was 27 points in 96, 28 points in 03, and 28 points in 09.

**Comment:** Other than for Blacks, rates of gain were mostly unchanged or slower in the NCLB period (03-09). ELLs had essentially no gain from 03-09. Gap-closing was erratic: some narrowed, some widened, whether comparing 90 to 03 or 09, or 03 to 09. All in all, for most groups the evidence is that NCLB did not induce improvements in grade 8 math except perhaps for Blacks.

**Overall findings:** Under NCLB, losses have outnumbered gains on the NAEP main assessments, particularly in frequent declines in the rate of improvement or even stagnation. Grade 4 reading saw a slowdown in 02-09 compared with 00-02, though the 02-09 rates were typically comparable to the 92-00 rates. Grade 8 reading was almost universally stagnant. Grade 4 math rates of improvement clearly flattened in the 02-09 period. Grade 8 math rates of gain were unchanged or slower in 02-09 than previously, except for Blacks, while ELLs gained only 1 point in 7 years. Gaps closed modestly for racial groups on grade 4 reading, and closed modestly for grade 8 reading but not in the NCLB period. For math, gaps did not close except for the Black-White gap prior to NCLB. At grade 8 math, gaps closed modestly in some cases, not in others.

The purported goal of NCLB was to raise all scores and close score-gaps. Because of variations in state tests and the potential of score inflation on those tests, Congress expanded NAEP to test
every other year in all states, in reading and math at grades 4 and 8, in order to provide independent, reliable information about progress toward the goals.

The results of NAEP show a mix of no improvement from the pre-NCLB period to slower rates of improvement than in the pre-NCLB period, mixed with a few cases of faster rates of improvement in the NCLB period.

Much was made by NCLB proponents of the failure of states to address inequities by race, class, language and disability status. NCLB was to prod states to address these issues. Clearly, that effort has not been successful, judging by NAEP results.

NCLB was to impact states, districts and schools by using test scores to point out the gaps (which has happened). Then, through publicity and the consequences embedded in the law for failure to make adequate yearly progress, NCLB was to pressure educators to work smarter and/or harder; districts to address inequities, flawed curriculum, or staff shortcomings; and states to support such efforts. The results show that any such efforts have not succeeded. The "test and punish" conception behind NCLB has not worked at raising test scores faster than during the pre-NCLB period, and far more often than not has had negative effects. Other negative consequences, such as narrowing curriculum or overly focusing instruction on preparation for state tests, have been well-documented. Even spending more time on reading and math at the expense of other subjects has not produced improvements on NAEP scores, but has been most associated with flattening rates of improvement.

NCLB proponents further claimed that NCLB would especially help low-income, racial-minority, ELLs and students with disabilities. In some cases, their scores have risen modestly faster than scores of Whites, but in many cases they have not. The slowing rates of gain, particularly in grade 8 reading and grade 4 math for these groups, show that NCLB is not working for the targeted groups.

Finally, NCLB proponents have claimed that schools alone can overcome poverty. NAEP results reinforce decades of research that this is not the case. This does not mean that schools cannot improve, as many need to do. The NAEP results, however, demonstrate that the NCLB approach has not worked. There is no reason to believe that it will. Further intensification of test and punish by focusing those tools on teachers is no more likely to work than has NCLB and is very likely to intensify the harmful consequences.

**Results from NAEP Long-term Trend Tests**

The NAEP long-term trend assessments have tested national samples of students at ages 9, 13 and 17, in reading since 1971 and in math since 1973. These data are available in reading for Blacks since 1971, Hispanics since 1975, but not other racial/ethnic groups. It does not provide state-level data.

The trends in the long-term assessment parallel trends on the main assessment at grades 4 and 8 (for 9 and 13-year-olds, respectively), as would be expected. But because it reaches back into the 1970s, it can provide important trend indicators that NAEP main cannot, particularly about the narrowing, widening, and narrowing again of test-score gaps, as well as the rise, fall and rise
again of scores. NAEP Main does not have data from multiple years for high school students, so the Long-term Trend report provides our only data on that age (equivalent generally to grade 12).

With so many data points, I only select a few to illustrate key points. The charts on which I rely are available at http://nces.ed.gov/nationsreportcard/pdf/main2008/2009479.pdf. I recommend you read this while looking at the charts; the charts provide the visualization, while this text provides the change scores and rates from point to point.

**Reading.**

The test ‘format’ was changed in 2004, which produced scores on the old and new formats for that year. The new scores were 3, 2 and 2 points lower respectively for ages 9, 13 and 17. The 2008 results were only for the new format. In comparing 04 with previous years, I use the old format, then the new format to compare 04 with 08. I compare these periods because 04-08 is solidly an NCLB period, while 99-04 is mostly before NLCB had any possible impact.

**Age 9:**

All: 12-point gain from 1971 to 2008. Scores rose from 208 in 71 to 215 in 80, hovered around 211-212 from 84-99. Rose from 212 in 99 to 219 in 04 (7 points in 5 years); then rose from 216 (on new format) in 04 to 220 in 08 (4 points in 4 years), a slight slowdown in the rate of improvement.

Black: 34-point gain from 71 to 08. Scores rose 19 points from 70 to 80, then show an erratic saw-tooth pattern until rising from 99 to 04 to 08. Rose 14 points from 99 to 04, then 7 points from 04 to 08, a slowing of the rate of improvement.

Hispanic: 27 point gain from 75 to 08. Largely flat from 80 to 99, then has risen to high of 207. Rose 12 points from 99 to 04, then 8 points from 04-08, a slight decline in the rate of improvement.

Gaps: B-W score gap reflects the saw-tooth score pattern for Blacks: the gap narrowed from 44 to 29 points (in 88 and 96), widening to as much as 35 points, before narrowing to 24 points in 08. H-W gap of 24 points in 08 is narrower by 3 points than previous narrowest in 88. Gap was 34 points in 75, indicating overall narrowing of 10 points.

Low-scorers: At this age, scores rose faster for those in the lowest 10 percent, but rose at each decile.

Comment: Age 9 shows consistent, steady gains overall and for Blacks and Hispanics and lowest scorers. However, the rate of improvement in 04-08 slowed compared with 00-04, mirroring the slowing of the rate of improvement found in NAEP Main in the NCLB period. The B-W and H-W narrowed for this age group as well. Gaps are now narrowest since the tests began, but only slightly narrower than at previous narrowest points. Gains overall from 71-08 were fastest for lowest-scorers, paralleling faster gains among lowest-scoring groups and resulting in gap-closing with highest scorers.
**Age 13:**

**All:** 5-point gain from 1971 to 2008. Since 1980, the scores have fluctuated between 257 and 260, reaching 260 in 92 and 08.

**Black:** 25-point gain from 71 to 08. Rose 21 points from 71 to 88, then declined 11 points (in 94 and 96), before rising again. The 08 score is 4 points above the previous high in 88 (247 vs 243). Rose 6 points from 99 to 04, then 8 points from 04 to 08, a slight increase in the gain rate.

**Hispanic:** 10-point gain from 75 to 08. Score reached 240 in 84 and 88, declined, reached 244 in 99, then declined 2 points from 99 to 08 (to 242). Was a decline from 99-04, then a 1-point gain from 04-08, indicating a slight improvement.

**White:** 7-point gain from 71 to 08. Essentially flat from 92 to 08.

**Gaps:** B-W gap was narrowest in 88 (18 points); in 08 was 21 points equaling the 1990 gap. The gap had closed fastest from 71 to 88, then widened, before narrowing again after 1996 (when it was 32 points). H-W gap narrowed from 30 in 75 to 21 in 88, back to 30 in 96, narrowed to 24 in 99 and then widened again to 26 in 08.

**Low-scorers:** Lowest-scoring 10 percent made less gain from 71-08 than did other, higher scoring deciles.

**Comment:** Most gains by Blacks and Hispanics were in earlier phases of the long-term tests, both in absolute gains and relative to Whites (gap closing). Hispanic scores have actually declined since 99, while Black scores are now a bit higher than previous high in 1988. There was a slight increase in rate of improvement for Blacks and Hispanics in the NCLB period. Gaps were narrowest in 88. This parallels the stagnation seen in the NAEP main tests at grade 8.

**Age 17:**

**All:** 1-point gain from 71 to 08. The 08 score of 286 is below all but two years that were tested, with a high of 290 being reached in 88, 90 and 92.

**Black:** 27 point gain from 71 to 08. The score of 266 in 08 is basically the same as in many of the years since 88. The peak of 274 was reached 88, with a decline of 8 points since then. There was a 4-point gain from 04-08.

**Hispanic:** 17-point gain from 75 to 08. Rose steadily to a peak of 275 in 1990, then declined to 263 in 94, then rose to 269 in 08, 6 points lower than the 1990 high.

**White:** 4-point gain from 71 to 08, but essentially flat scores since 1975.

**Low-scorers:** The lowest-scoring 10 percent gained 2 points from 71 to 08, while other deciles gained 0-1 point; but essentially all were flat.

**Gaps:** The B-W gap closed mostly in the 71 to 88 period (from 53 to 20 points), widened to 37 points in 92, then has remained essentially unchanged since 94, with the 08 gap at 29 points. H-W gap narrowed 17 points from 75 to 08. Closed steadily from 41 points in 70 to 22 points in 90, widened, and was 26 points in 08.
Comments: The basic story is flat scores for Whites and Blacks, while Hispanics have declined from their 1990 high score. Gaps were wider 08 than on the 88-90 tests. These results suggest no positive influence from NCLB on student reading at the high school level.

Overall reading comments: Scores have gone up since the start of the NAEP long-term trend. However, much of the gain came earlier on. At age 9, the rate of improvement has slowed in the NCLB period for both Hispanics and Blacks. Black scores at age 13 make the strongest case for NCLB, having continued to rise over time and increase at a faster rate in 04-08 than 99-08, though the B-W gap remained wider than in 88. For Hispanics at age 13, scores are lower than in 99, and the gap is wider in 08 than in 1988. At age 17, the Black score is lower than many previous years, but there was a 4-point gain from 04-08. For Hispanics, the 08 score is 6 points lower than the 1990 score, but there was a 2-point gain from 04 to 08. Lower scorers closed the gap with higher scorers at age 9, while at age 13 higher scorers widened the gap, and at age 17 trends were flat for many years.

Overall, then, the results provide more negative than positive evidence about NCLB, with cases of slowing rates of improvement mixed with a few cases of faster rates, and with scores for 17-year-old Blacks and Hispanics and 13-year-old Hispanics lower in 08 than at points in the 90s. Even in the strongest case for NCLB, Black 13-year-olds in 08, while Blacks improved the score gap with Whites remained wider than at previous points. The long-term trend reading results, overall, reinforce the results from the NAEP Main that contradict any claims for the success of NAEP.

The other point to be made is the frequent saw-tooth pattern to NAEP results: significant gains in the early days of NAEP (which some such as the Civil Rights Project attribute to the beneficial consequences of integration, which ended as re-segregation accelerated); then years of saw-toothing, except mostly flat for all groups at age 17; then some gains in some cases, especially at 13. The earlier periods of gain were clearly not caused by NCLB, but by other factors.

Mathematics

NCLB was signed in January 2002, so it would have had no impact in 02, perhaps a slight impact in 03, and some impact in 04, if in fact NCLB has had an impact. A new format was introduced in 2004; in that year, scores on the new format were 2 points lower than on the old format, for “all” students at ages 13 and 17. As with Reading, when I single out the 04-08 results, I use the new format, while I use the old format for 99-04. As with Reading, a saw-tooth pattern is often visible, with declines following increases.

Age 9

All: 24-point gain from 73 to 08. Steepest gains were from 86-90 (8 points) then 99-04 (9 points). Overall, rate of gain in NCLB period (04-08) about same as overall, at 1 point/year, but with the new format, the 2-point gain in 4 years from 04-08 suggests a slowdown under NLCB.

Black: 34-point gain from 73-08. Rose steadily from 190 to reach 212 in 94. Rose 13 points from 99 to 04, then 3 points from 04 to 8, a slowdown in the rate of improvement in the NCLB period.
**Hispanic:** Rose 32 points from 73 (202) to 08 (234). Reached 214 in 88, stayed about there until 99 (213), then rose to 230 in 04 and 234 in 08, indicating that the 99-04 rate of improvement declined from 13 points in the 5 years from 99-04, to 5 points in 4 years.

**Gaps:** B-W steadily narrowed from 35 points in 73 to 27-25 range from 90-96, then after a one-test widening, narrowed to 23 in 04, widened again to 26 in 08, comparable to the 90-96 range. H-W gap varied from 20-23 points in the 73-92 period, widened to 26 in 99, then narrowed to 18 in 04 and 16 in 08, indicating a slower gap closing from 04 to 08 than 99 to 04.

**Low-scorers:** Scores of students at the 10th and 25 percentiles rose faster than those of students at higher percentile ranks. 10 point gain from 99-04 for those at 10th percentile slowed to a 5-point gain in 04-08. At higher percentile points, rate of improvement also slowed from 99-04 to 04-08.

**Comment:** The rate of gain has slowed for All, Blacks, and Hispanics from 04 to 08 compared with 99-04. The most rapid gains were in 80s into early 90s, though 99-04 saw strong Black and Hispanic gains. B-W gaps are comparable in 09 to 90-96, while Hispanic gap is narrower than at any previous point, though gap-closing rate slowed from 99-04 to 04-08. Improvement rate among low scorers and higher scorers has declined in 04-08 compared with 99-04. In sum, as with grade 4 NAEP Main math results, the evidence fails to show positive effects from NCLB.

**Age 13:**

**All:** 15-point gain. Fairly gradual rise to present, little different in 04-08 NCLB period (2 points in 4 years vs 13 points in 21 years for the 73-04 period).

**Black:** 34-point gain from 73-08. Rose from 228 in 73 to 249 in 86, flattened, then rose from 251 to 262 from 99 to 04 (11 points in 5 years), then 5 points (in new format) in the 4 years from 04-08, a slowing of the rate of progress in the NCLB period.

**Hispanic:** 29-point gain from 73 (239) to 08 (268). Rose to 252 in 82, then 259 in 92 and 99, then 265 in 04 and 268 in 08, a slight slowing of rate of change in 04-08 compared with 99-04.

**Gaps:** Narrowed from 46 in 73, to 24 in 88, widened back steadily, reaching 32 points in 99, then narrowed to 27 and 28 in 04 and 08 respectively, essentially similar to 90-96 period. H-W 25-point gap in 73 narrowed to 22 in 82 and 19 in 86, then widened to maximum of 25 in 96, followed by narrowing to 23 in 04 and 08. In short, NCLB has not induced gap narrowing.

**Low-scorers:** Scores of students at the 10th and 25 percentiles rose faster than those of students at higher percentile ranks. At 10th percentile, was 4-point gain from 99-04, 3-point gain from 04-08. At higher percentile points, rate of improvement slowed between 99-04 and 04-08.

**Comment:** The rate of gain in Black scores was slower in 04-08 than in 99-04, though the scores have risen in recent test periods. Hispanic scores also rose, with their rate of change only slightly lower in 04-08 than 99-04. B-W gaps were about same in 04 and 08 as in 90-96. H-W gap is slightly wider in 08 than at several previous points, and gap did not close from 04 to 08. Lower-scorers continued similar rate of improvement from 99-04 to 04-08, while higher scorers rate of improvement slowed. With slowing rates of improvement and gaps not closing, the evidence again is that NCLB is not inducing improvement in math.
**Age 17:**

**All:** 2-point gain from 73-08. Fell to 298 in 82, then rose and has stayed at 305-6 most years since 90, with score of 306 in 08. Peak was 308 in 99, declined 2 points under NCLB.

**Black:** 17-point gain from 73 to 08. Steady rise from 270 in 73 to 289 in 90, then slight decline ending back at 289 in 08. Did rise 3 points from 04 to 08, about the historical improvement rate.

**Hispanic:** Rose 16 points from 277 in 73 to 293 in 08. Reached 292 in 92, 293 in 99. With old format dropped 4 points to 04; with new format rose 1 point from 04-08, indicating flat scoring from 04-08 compared with a decline in 99-04.

**Gaps:** B-W 40 point gap in 73 narrowed to 21 points in 90, re-widened to 26 in 92, remains at 26 in 08 after a bit of up and down in the intervening years. H-W 33 point gap in 73 narrowed to 19 points in 92, widened to 24 in 04. With new format, gap was 19 points in 04, 21 points in 08.

**Low-scorers:** Rate of improvement at 10th and 25th percentiles faster than at higher percentile levels, but difference less strong than for younger students. However, there has been no change at any percentile level since 1992, save for a slight rise until 99, followed by a 3-4 point decline to 08 at both 75th and 90th percentiles.

**Comment:** Scores in 08 are similar to scores in 90 or 92 for both Blacks and Hispanics, with scores edging up and down over the years. B-W gap wider in 08 than in 90. H-W gap in 08 is about same as in 90, slightly wider in 08 than 04. Rate of improvement for low-scorers has not changed meaningfully since 92. Comparing 99 to 04 with 04-08, rates of improvement have mostly been flat or declined. Thus, NCLB has not contributed to improved math results among high-school students.

**Overall math comments:** While Blacks and Hispanics and low-scorers have gained over the years and closed gaps, the gains and gap-closings have been erratic in math. Scores at age 17 are about the same in 08 as at points in the 90s for Blacks and Hispanics. Often the fastest gains and narrowest gaps were seen in the early 90s. The rate of improvement in most cases has been constant or slower when comparing the NCLB period of 04-08 to the previous 99-04 period. Given the slow-down in the rate of progress in the 04-08 period, it could be that the gains pre-NCLB were even stronger but began to be negatively affected by NCLB in the 03-04 school year. In any event, NAEP long term trend math results show that NCLB has not had a positive effect on math learning, as measured by NAEP.