

The following mini analysis of Hispanic ELL NAEP scores is excerpted from the forthcoming book chapter:

Caldas, S. J. (in press). The impact of No Child Left Behind policies on bilingual education: A ten year retrospective. In V. C. Mueller Gathercole (Ed.) *Bilinguals and assessment: State of the art guide to issues and solutions from around the world*. Clevedon, UK: Multilingual Matters.

Ten years later, how have ELLs been performing academically?

This brings us to an important point in this discussion. **Has the NCLB Act actually helped to reduce the achievement gap between ELLs and others, as it has promised to do? And has the measurable achievement of ELLs improved more during the period that NCLB has been law than in the period prior to the passage of this educational accountability act?**

Of all the tests that American students in K-12 schools must take, there is only one that allows the kinds of national and state-by-state longitudinal comparisons that would allow for an objective determination of whether subgroups of students are showing improvement over time. This test is the NAEP (National Assessment of Educational Progress), first administered in 1969, which is now taken in alternating years by a nationally representative sample of students, including ELLs, in all 50 states. The NAEP is administered by the National Center for Education Statistics within the U.S. Department of Education.

NAEP specifically issues a report tracking the public school achievement levels of Hispanics (ELLs and non-ELLs) and White students over time on its fourth and eighth grade Reading and Mathematics assessments, which are administered to students *in English* in these grades in alternating years (Hemphill & Vanneman, 2011). The NAEP first began disaggregating data by ELL status with the 1996 administration of its Mathematics test, and the

1998 administration of its Reading test. It only reports data on Hispanic ELLs, since all other ELL subgroups are too small for these kinds of public analyses. Less than one percent of Whites who take the NAEP are classified as ELLs, so White ELLs are included in the broader subgroup of all Whites who take the test. The data in the NAEP achievement gap report are presented in such a manner that ELL and non-ELL achievement in Mathematics and Reading can be tracked and compared prior to and after the implementation of NCLB.

A couple of precautionary notes are in order here. First of all, since these tests are administered in English, and since ELLs are by definition not proficient in English, we can never expect ELLs to do better than non-ELLs on these sorts of assessments. What we can do, though, is use data from the NAEP to gauge any improvement ELLs might be showing on these tests (ostensibly due to changes in how ELLs are being educated), to compare differing rates of improvement in Math and Reading, and to compare the changing gaps over time between ELLs and non-ELLs. According to the logic of NCLB, the gaps between ELLs and non-ELLs should be decreasing on these NAEP assessments as a consequence of the law's educational mandates. An additional caution we must take in analyzing and comparing these test scores is that though we are doing this in the context of changing federal policy (pre- and post NCLB), there are many factors which affect test scores: changing populations of students over time, changing practices in schools and homes which may have no connection to federal policy, and other extraneous factors.

NAEP Mathematics results

The data presented in the Hemphill and Vanneman (2011) report on the NAEP achievement gaps are reported for Hispanic ELLs, non-ELL Hispanics and Whites. The report indicates that there were small, but statistically significant increases in the performance of

Hispanic ELLs between the 2003 and 2009 administrations of the fourth and eighth grade Mathematics tests (p. 17). Whereas one cannot directly compare Hispanic ELLs with Whites, one can compare the achievement of Hispanic ELLs and non-ELL Hispanics on both the fourth and eighth grade NAEP Mathematics tests. Not surprisingly, non-ELL Hispanics scored much better than Hispanic ELLs on both the fourth and eighth grade Mathematics tests. However, the achievement gap between non-ELL Hispanic and Hispanic ELL fourth graders actually increased between the 2003 and 2009 administrations of these tests, though the change was not statistically significant. Importantly, though, there was a statistically significant *increase* in the gap between non-ELL Hispanics and Hispanic ELLs on the eighth grade Mathematics tests between 2003 and 2009. In short, the achievement gap on the Mathematics tests between Hispanic ELLs and non-ELL Hispanics did not decrease at the fourth grade level, and actually increased significantly at the eighth grade level.

In order to more accurately determine whether ELLs had fared better prior to or after the implementation of NCLB in 2002, this author took the liberty of calculating the absolute change in NAEP Mathematics scale scores for Hispanic ELLs, non-ELL Hispanics, and Whites in the period for which data on Hispanic ELL achievement were first available prior to the implementation of NCLB, which was 1996. Since the Mathematics test was also given in 2002, I calculated the change in fourth and eighth grade Mathematics scores from 1998 to 2002—the pre-NCLB era. Then, I calculated the change in scale scores for each subgroup from 2002 to 2009, the NCLB era, and the last year for which data are available (see Table 1.)

(insert Table 1 about here)

As can be seen in Table 1, the Mathematics scale score increase for Hispanic ELLs was from two and one-half (at grade 4) to seven (at grade 8) times *greater* during the period *prior* to

NCLB's implementation compared to the period during which NCLB was the law of the land. In other words, the Mathematics achievement of Hispanic ELLs increased at a much faster rate under the more bilingual education friendly "Improving America's Schools Act of 1994" than it did under the much more accountability oriented NCLB Act of 2001. As for non-ELL Hispanics and Whites, the findings were similar: the Mathematics achievement of neither of these subgroups advanced as much during the NCLB era as they did during the period prior to the passage of NCLB. In other words, **all these subgroups showed greater improvement on the NAEP Mathematics tests prior to the implementation of NCLB.**

NAEP Reading results

I followed the same procedures for determining change on the NAEP Reading tests pre- and post NCLB, though the span of years was not exactly the same due to the differing years that the Reading test was administered. The first year for which data on Hispanic ELLs was available on the NAEP Reading test was 1998. Thus, I looked at the period from 1998 to 2002 as the pre-NCLB era, and used the period from 2002 to 2009 as the NCLB era.

It is important to note that the Reading tests are likely even more dependent on a student's level of English proficiency than are the Mathematics tests. Thus, these comparisons are more sensitive to the effects of language instructional strategies and curricula. Again, using the Hemphill and Vanneman (2011) NAEP achievement gap report, one can see that though there was a slight increase in Reading scores for Hispanic ELLs from 2002 to 2009, the increase was not statistically significant (p. 43). On the other hand, **there was actually a statistically significant decrease in eighth grade Hispanic ELL Reading scores from 2002 to 2009. In short,**

Reading scores did not significantly increase for ELLs over the period of NCLB, and in fact significantly *decreased* on the eighth grade test.

As regards the gap between non-ELL and ELL Hispanics, there was no statistically significant change in this substantial gap on the fourth grade test between 2002 and 2009.

However, there was actually a statistically significant *increase* in the gap between non-ELL and ELL Hispanic eighth grade Reading scores from 2002 to 2009. So, gaps between Hispanic ELLs and non-ELLs not only did not narrow at either grade level, but actually *increased significantly* on the eighth grade test.

Table 2 compares the growth of NAEP Reading scores in the pre-NCLB era with the growth in scores during the post-NCLB era among Hispanic ELLs, non-ELL Hispanics, and White fourth and eighth graders.

(insert Table 2 about here)

In a similar pattern to what was observed with the change in fourth grade Mathematics achievement pre- and post NCLB, Hispanic ELL growth on the fourth grade Reading test *prior* to the implementation of NCLB was more than twice the growth rate in Reading scores observed during the NCLB era (Hemphill & Vanneman, 2011, p. 43). The more striking difference, though, was among eighth grade Hispanic ELL Reading scores. *Though there was an increase of seven points on the NAEP Reading test during the pre-NCLB period from 1998 to 2002, there was actually a statistically significant decrease of five points in Hispanic ELL Reading scores during the NCLB era from 2002 to 2009.*

The differences in Reading achievement growth pre- and post NCLB were not quite as great among non-ELL Hispanics and Whites. Nevertheless, for Whites, the growth in Reading scores prior to NCLB was twice the rate of growth during the NCLB era on the fourth grade test,

while Whites showed no growth at all on the eighth grade reading test post-NCLB (though there was growth during the pre-NCLB era). Non-ELL Hispanics bucked the overall trend at the fourth grade level, showing more growth post-NCLB than pre-NCLB. In summary, though, Hispanic ELLs showed much more growth pre-NCLB on both the fourth and eighth grade reading tests, and actually lost ground during the NCLB era at the eighth grade level.

Summary of Hispanic ELL Academic performance on NAEP

As noted above, we have to be careful making comparisons of ELLs on tests not normed for non-English proficient students. Nevertheless, we can draw some broad generalizations from this little investigation on the only nationwide assessment on which any sort of comparisons of this nature can be made. There is no evidence to suggest that the stated purpose of NCLB, which is to “close the achievement gap,” is being accomplished based on NAEP data. In actuality, the NAEP data lend more support to the notion that if anything, the achievement gap between Hispanic ELLs and non-ELLs is growing at the eighth grade level in both Mathematics and Reading. Moreover, it appears that ELLs were achieving at a faster rate in Reading and Mathematics prior to NCLB than after the passage of this accountability law. In summary, all the empirical evidence here suggests that the NLCB mandates for ELLs are not only not working, but if anything are having negative learning consequences for English learners.

Table 1 ¹			
Change in NAEP Scale Score Points in <i>Mathematics</i> Before and After Implementation of NCLB for Public School Hispanic ELL, Non-ELL Hispanic, and White Students: Grades 4 & 8			
	Hispanic ELLs	Non-ELL Hispanics	Whites
Grade 4			
<i>1996-2003</i>	+13	+17	+13
<i>2003-2009</i>	+5	+6	+5
Grade 8			
<i>1996-2003</i>	+14	+9	+8
<i>2003-2009</i>	+2	+2	+5

¹ Data were obtained from Hemphill, F. C., & Vanneman, A. (2011). *Achievement gaps: How Hispanic and White students in public schools perform in Mathematics and Reading on the National Assessment of Educational Progress* (NCES 2011-459). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Table 2 ² Change in NAEP Scale Score Points in <i>Reading</i> Before and After Implementation of NCLB for Public School Hispanic ELL, Non-ELL Hispanic, and White Students: Grades 4 & 8			
	Hispanic ELLs	Non-ELL Hispanics	Whites
Grade 4			
<i>1998-2002</i>	+13	+1	+4
<i>2002-2009</i>	+6	+4	+2
Grade 8			
<i>1998-2002</i>	+7	+6	+3
<i>2002-2009</i>	-5	+4	0

² Data were obtained from Hemphill, F. C., & Vanneman, A. (2011). *Achievement gaps: How Hispanic and White students in public schools perform in Mathematics and Reading on the National Assessment of Educational Progress* (NCES 2011-459). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.