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Schooling Disadvantaged Children: Heading Toward Educational Disaster by 2019

Stuart E. Smith
Alfred University (retired), lorett51@yahoo.com

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Stuart E. Smith, Alfred University (retired)

Abstract. Nationally, the percentage of fourth-grade economically disadvantaged students increased from 45% in 2007 to 52% in 2011. I projected that the percentage of disadvantaged students would be, for 2013, 2015, 2017, and 2019, 55%, 57%, 59%, and 60%, respectively. Unless, the nation finds a way to drastically improve the educational achievement of disadvantaged students, the nation, or a majority of states, will experience by 2019 "educational disaster."

1. **Background/Overview.** *Schooling Disadvantaged Children: Racing Toward Catastrophe* (Natriello, Mc Dill, & Pallas) was published in 1990. The authors projected that by 2020 the percentage of disadvantaged children would increase substantially over the percentage for 1990. Their thesis was that the percentage of Hispanic children would increase from 11% of the under-18 age population to approximately 28% in 2020. Using U.S. Census projections made in the 1980s, the authors noted that "while about 7 in 10 children in 1988 were white, only about 1 in 2 will be in 2020. While only 1 in 9 children in 1988 was Hispanic, more than 1 in 4 children will be in 2020" (p. 37). The authors used these projections of Hispanic percentages as proxies for the percentage of disadvantaged children in 2020. The following quote provides a good statement of their position:

> The projected change in the racial ethnic composition of the school-aged population implies a substantial increase in the size of the educationally disadvantaged population….Thus, assuming a constant relationship between racial/ethnic group identity and poverty as the number and proportion of black and Hispanic children increase, so too will the proportion of children in poverty (p. 37).

The authors used the increasing percentages of Hispanic as markers for the increasing number and percentages of disadvantaged children. The authors did not make any projections about the rate of child poverty for the 1990-2020 period.

In this paper, I define the percentage of disadvantaged students as the percentage of students eligible for the free/reduced price lunch program of the Federal government. Thus, I use percentages of disadvantaged students without regard to race or ethnicity.

I examine the increase in the percentage of students eligible for free/reduced price lunch – hereinafter shortened to "eligible" or "students eligible" – that is, the student disadvantaged population at grades 4 and 8 - for the period 2003-2011. The data are contained in *The Nation's Report Card* series for 2003, 2005, 2007, 2009, and 2011. See the Methodology section for more details.

An underlying point of view of the paper is that policy makers at the national and state levels have – over the course of twenty years or so - underestimated seriously the effects of child poverty on educational achievement. The No Child Left Behind Law is, I submit, the prime example of that underestimation. Without an attempt to document my position, I say that during the past ten years or so, the prevailing view at the national level has been one of unrealistic optimism concerning the level of educational achievement even in the near term.

The pervasive effects of poverty on educational achievement have been exacerbated by The Great Recession. The national child poverty rate increased from 18 percent in 2007 to 23 percent in 2011, *(*see Table 1 below). Some evidence of the effects of poverty can be seen from the increase in the percentage of eligible students during

2003-2011. From 2003 to 2007, the percentage of fourth- grade students increased one percentage point; from 2007 to 2009 by two percentage points; and from 2009 to 2011, by five percentage points.   A similar pattern of increases occurred at the eighth-grade. From 2007 to 2009, the percentage of eligible students increased by three percentage points; from 2009 to 2011, by five percentage points.

The series of reports (*The Nation's Report Card*) of the NAEP results for grades four and eight for 2003-2011 (every two years) present scores for students eligible and not eligible for free lunch. In this paper I refer to the gap in scores between the not eligible and eligible students as the <u>income achievement gap</u>. *Education Week,* in its annual review ("Quality Counts") of state by state progress on various measures of educational achievement, employs the term "poverty gap". I elected to use the term – "income achievement gap" - because income is the basis for eligibility for the free lunch program. *The Nation's Report Card* series of publications does not use the word "poverty" in connection with eligible and not eligible students' scores; they refer to the results in terms of "income levels." So I believe that "income achievement gap" is closer to NAEP usage than "poverty gap" or "poverty achievement gap."

The Nation's Report Card series has not, to date, presented any projections about what the size of the racial achievement gap and the income achievement gap might be at some near-term or long-term point. The *Nation's Report Cards* provide longitudinal data, for the nation and for the states, on a variety of measures. I have used these "longitudinal tables and figures" as the basis for making projections on selected measures for the period 2013 to 2019 and for the year 2019.

Finally, as the title of this paper strongly suggests, I am pessimistic about the trend of the nation's educational achievement, at least as measured by the NAEP tests over the next ten years or so. It is abundantly clear that the goal of the NCLB law - that all students would be proficient on state tests by 2014 - will not be met. I believe that in the coming ten years or so, two forces or events acting together will slow down, or even arrest, the modest gains which have been achieved in the past ten years or so. First, the effects of The Great Recession will continue to increase the number and percentage of disadvantaged students and second, the increasing number and percentage of low-scoring Hispanic students, who are much poorer than White students, will contribute to the increase in the number and percentage of disadvantaged children.

2. **Objectives** The study had three objectives. The first objective was to determine for the nation the percentage of eligible fourth- grade public school students on the NAEP reading test in 2003, 2005, 2007, 2009, and 2011, and to make projections of the percentage of eligible fourth- grade students in 2013 and 2019. The second objective was to determine the number of states which in 2009 and 2011 had 50 percent or more of their fourth-grade students eligible for free lunch and to make projections of states likely to have 50 percent of their fourth-grade students eligible in 2013 and 2019. The third objective was to determine the mean income achievement gap between the five states which had the highest percentages of eligible students and the five states had the lowest percentages of eligible students on the 2011 NAEP fourth-grade reading test.

3. **Review of selected studies.** The most persuasive data pertaining to the relationship between poverty and achievement have been reported in *The Nation's Report Cards* for 2003, 2005, 2007, 2009, and 2011. Over this eight-year period, eligible students – that is,

disadvantaged students - have scored approximately 25 points (average scale points) below the not eligible students on reading tests, and 23 to 26 points below on the math tests. These data pertain to national averages. These are large differences. These income achievement gaps are very similar in magnitude to the White-Black and White-Hispanic gaps for the same time period.

Table 1 presents national child poverty rates by race/ethnicity for 2006 to 2011. (Data are missing for 2008.) The reader will note that among racial groups there has been little change year – to – year. Perhaps the most sobering aspect of the figures in Table 1 is the huge difference between the poverty rates for Whites and Asians on the one hand, and Blacks and Hispanics and American Indians on the other.

Table
1
Percentages of children in poverty, by race/ethnicity.
_____

Race/ethnicity	2005	2006	2007	2008	2009	2010	2011
_____

White	11	11	11		12	13	14
Black	36	35	35		36	38	39
Hispanic	29	28	27		31	32	34
Asian	13	12	12		13	14	14
American Indian	32	35	33		35	35	37
Nation	19	18	18		20	22	23

_____
Source: Data for *2005, 2006, 2007, and 2009 from Kids Count Data Book* for *2007, 2008, 2009,*
respectively. Data for 2008 missing. Data for 2010 and 2011 available on the internet from Annie E.
Casey Foundation, titled "children in poverty by race."

In 2011, child poverty rates for Blacks were four points higher than in 2007, and seven points higher for Hispanics. I believe it is not unlikely that the 2011 rates remain so in 2012; the 2011 rates might even increase in 2012.

Based on Census poverty figures (the data come from the American Community Survey) and assuming poverty and achievement are substantially negatively related, the racial/ethnic child poverty data in Table 1 would explain much, maybe most, of the differences in NAEP scores across race. Thus, on the fourth- grade 2011 NAEP reading test, the national average scores by race are arranged in almost the same order (inversely) as the child poverty rates: Asians (234), Whites (230), Hispanics (205), Black (205), and American Indian (204) (*The Nation's Report Card: Reading,* 2011, pp 86-87). On the eighth- grade 2011 NAEP math test, the racial/ethnic average scale scores were: Asian (302), Whites (293), Hispanic (269), Black (262), and American Indian (266).(*The Nation's Report Card: Mathematics,* 2011, pp. 88-89.) The child poverty rates would

explain, <u>in broad terms,</u> why Asians and Whites scores are quite close to each other, why

Hispanics score slightly above Blacks, but markedly below Asians and Whites.

Among many articles published in the past ten years or so concerning schools'

lack of resources, an article by Robert Evans presents in a persuasive manner the case for

community support of local schools (Evans, 2005). Evans' central theme is that since

schools did not create the condition of inequality in our children's readiness for school,

society should not expect the solution to solely be in the hands of the schools. Evans

disagrees with the "no excuses" critics. He acknowledges that "there seems little

likelihood that, as a matter of national policy, America will soon tackle the out-of-school

causes of the achievement gap in any sustained preventative way."

Inequality at the Starting Gate: Social background Differences in Achievement as

Children Begin School (Lee & Burkham, 2002) presents evidence concerning the extent

of differences in readiness for school for children from lower socio-economic

backgrounds versus middle and upper socioeconomic backgrounds. I offer one quote

from the study:

> "Low SES children begin school at kindergarten in systematically
> lower-quality elementary schools than their more advantaged counterparts.
> However school quality is defined – in terms of higher student
> achievement, more school resources, more qualified teachers… the least
> advantaged U.S. children begin their formal schooling in consistently
> lower quality schools. This reinforces the inequalities that develop even
> before children reach school age." (p. 3)

In Plain Sight: Simple, Difficult Lessons from New Jersey's Expensive Effort to Close the

Achievement Gap (Mac Innes, 2009) is a book about how New Jersey improved the reading

achievement of students in its poorest cities. As the author states, "a preliminary look at the

results…suggests an unsurprising conclusion: when additional funds are concentrated on

supporting teacher's efforts…dramatically better results are possible" (p. 1). New Jersey's

achievement on the fourth- grade NAEP reading test in 2007 and 2011 was second in the

nation; only Massachusetts had higher percentages of proficient students (*The Nation's

Report Card: Reading*, 2011, p. 85). The author attributes New Jersey's success to (1) a

"generous level of court mandated funding," and (2) "the fact that preschool in New Jersey

begins at age three." Although the very good news is that New Jersey has demonstrated

perhaps unmatched success in improving reading performance, I believe the New Jersey

story will not be replicated in any other state. New Jersey is one of the nation's most affluent

states; New Jersey's per pupil expenditures have ranked in the top three or four for ten years

or more. One can hardly imagine Mississippi, or Texas, or Florida, or New York, funding

its poor city districts at the levels of its wealthiest districts.

4. **Methodology (a) Data Sources.** The principal sources of data were the five *Nation's

   Report Card: Reading* published in 2003-2011. Each of the *Nation's Report Card:

   Reading* contains results for the National Assessment of Educational Progress (NAEP)

   tests for the nation, and for each of the 50 states, and the District of Columbia.

   4 (b) Analyses. The primary analysis involved presenting for the nation the percentages

   of fourth grade reading students eligible for free/reduced price lunch, hereafter shortened

   to "percent eligible, " for 2003-2011. I made projections for the percent eligible for

   2013, 2015, 2017, and 2019. See Figure 1.

   The second analysis pertained to identifying the states which had 50% or more of their

   fourth grade students (reading) eligible in 2003-2011. See Table 2. Also, I made

   projections, based on the 2009 to 2011 state changes, not shown in this paper, of the

number of states which I expected to have percentages of 50 or more students eligible in 2013, and in 2019. See Table 2.

5.   **Results**. The results of the primary objective are presented in Figure 1. In Figure 1, the national percentages of disadvantaged students – students eligible for the federal lunch program – are presented for the years 2003, 2005, 2007, 2009, and 2011, together with the projected percentages for 2013, 2015, 2017, and 2019. An inspection of Figure 1 shows that the percentages of disadvantaged students on the fourth -grade NAEP reading test were 44%, 45%, and 45% for the years 2003, 2005, and 2007, respectively. Thus, for the four -year period the percentages increased by one percentage point. For the four-year period 2007 to 2011, the percentage of disadvantaged students increased from 45% to 52%, an increase of seven percentage points; five occurred in the two-year period 2009 to 2011. Hence, the percentage of disadvantaged students increased more in two years than in the previous six years. A similar pattern (not shown) exists for eight-grade students: the percentage of disadvantaged eighth-grade students increased by five percentage points in the two-year period from 2009 to 2011 (*The Nation's Report Card*: *Reading,* 2011).

Figure 1 displays the projected percentages of fourth-grade students for 2013, 2015, 2017, and 2019. (These are the years in which the NAEP results are expected to be published.) The projections for 2013-2019 were made by the author; to date, no projections of any type have been reported in the various issues of *The Nation's Report Card*.

The projected national percentages of disadvantaged fourth- grade students in Figure 1 are 55%, 57%, 59% and 60% for 2013, 2015, 2017, and 2019, respectively. I attribute

the five -point increase from 2009 to 2011 primarily to the effects of The Great

Recession. I assumed the effects of The Great Recession would lessen in the years

following. Thus, I projected a somewhat smaller increase of three percentage points from

2011 to 2013 than from 2009 to 2011. I projected two percentage point increases from
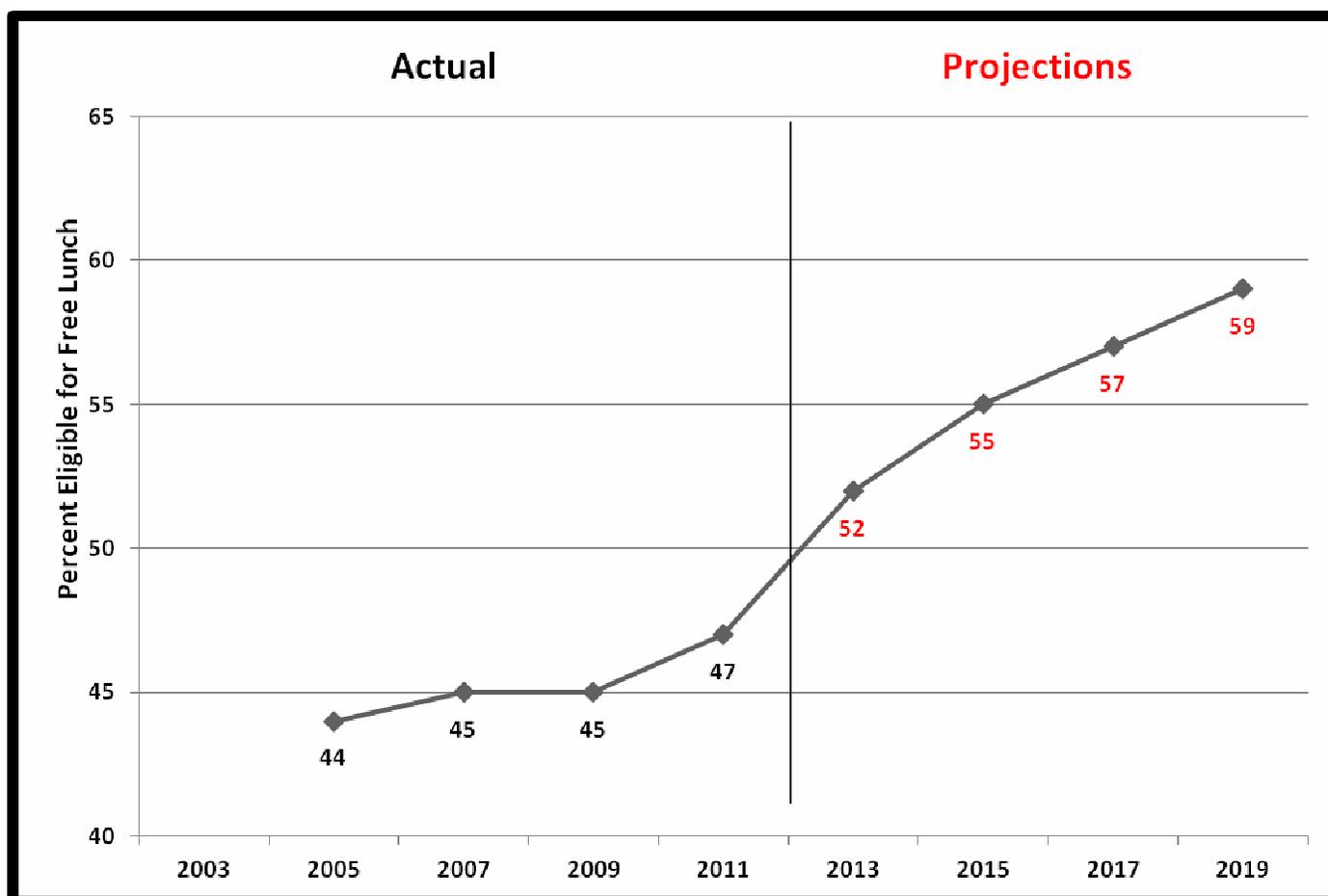
Source: The Nation's Report Card: Reading for 2003, 2005, 2007, 2009 and 2011. Projections for 2013, 2015, 2017, and 2019 are author's projections based on 2009 and 2011.

Figure 1: National percentages of fourth grade students eligible for free/reduced lunch for years 2003 to 2011, together with projections for 2013, 2015, 2017, and 2019.

2013 to 2015, and from 2015 to 2017 on the assumption that the national economy would

slowly improve and, consequently, the associated increases of free lunch eligible

percentages would gradually slow down. The projected increase of one percentage point from 2017 to 2019 assumes that the national economy would continue to slowly improve.

The results pertaining to the second objective are presented in Table 2 below. Table 2 presents results pertaining to disadvantaged fourth- grade students for selected states for 2009 and 2011, together with <u>projected</u> percentages of disadvantaged students for selected states for 2013 and 2019. The reader should observe that for each of the "actual years", 2009 and 2011, in Table 2 there are two columns of data: the left column for each year contains percentages of eligible (disadvantaged) students for selected states while the right column contains "the percent proficient" for the eligible students. In a similar fashion, the two 2013 columns pertain to <u>projected</u> percentages. For 2019, there is only one column, the projected percent eligible for selected states; I did <u>not</u> <u>make</u> <u>projections</u> of the percentages of students "proficient" because it seemed unrealistic to assume that state by state projections of educational achievement eight years from 2011 could be made with useful accuracy. Hence, for 2019, there is only one column of <u>projected</u> percentage of eligible students.

Table 2 consists of states which have, or are projected to have, 50 percent or more of their students eligible for free lunches. I selected "50 percent" as the required minimum percentages because 50 percent was very close to the national average of 52 percent eligible in 2011. The summary values at the bottom of Table 2 provide one way to understand the structure of Table 2. At the bottom of Table 2 note the entry "number of states." For 2009, 2011, 2013, and 2019 the number of states are 17, 24, 30, and 41. Note that the number of states projected in 2019 is 41. Thus, I projected an increase of only 11 states for the six-year period, 2013-2019. This smaller rate of increase,

compared to the 2009-2013 period, reflects the view that the national economy would improve in the 2013-2019 period.

I point out two "trends" concerning the percentages of eligible students, 2009-2019. First, consider the "original" 17 states in 2009: the percentages of eligible students increase by small amounts for 2011, 2013, and 2019. Only two of the "original" 17 states had decreases in the percentages of eligible students in 2011: West Virginia decreased from 57% to 52%, and Louisiana decreased from 70% to 69%. Second, because I have assumed that the national economy, and probably most of the individual state economies, will improve gradually over the six-year period from 2013 to 2019, the projections of percentage eligible students for 2019 are, on average, about five percentage points higher than for 2013. Hence, the overall state increases match the projected national increase of five percentage points (55% to 60%) as displayed in Figure 1 above.

Our interest in Table 2 is the relationship between percent eligible and percent proficient. An inspection of the columns for columns 2009 and 2011 reveals that, in general, as percent eligible increases, percent proficient decreases. The correlation between percent eligible and percent proficient for the 17 states in 2009 is -.81; for the 24 states in 2011, the correlation is -.77.

Table 2
States which had at least 50% of their fourth-grade students (reading) eligible 2009 and 2011, together with author's projections, for 2013 and 2019.

State	**Actual** 2009 Percent proficient	2011 Percent eligible	2011 Percent proficient	**Projected** 2013 Percent eligible	2013 Percent proficient	2019 Percent eligible
Iowa						50
Vermont						50
Wyoming						51
Wisconsln						51
Montana						52
Nebraska						52
South Dakota						52
Michigan						54
Alaska						55
Rhode Island						
Washington						55
Hawaii				50	27	55
Maine				50	32	55
Illinois				51	33	56
Ohio				53	32	58
Colorado				53	38	58
Delaware				54	35	54
Kansas		50	36	51	35	56
Idaho		50	33	56	32	59
Indiana		51	33	56	32	59
Missouri		51	34	57	33	60
Oregon		53	30	58	29	61
North Carolina		53	34	57	33	60
Nevada		57	25	62	24	62
Tennessee	50	58	26	64	25	66
Arizona	53	58	26	62	25	64
Florida	54	62	35	68	35	69
Georgia	55	55	32	55	31	58
California	53	58	25	62	24	64
Kentucky	50	54	35	57	35	60
New York	51	55	35	58	34	61
South Carolina	55	57	28	58	27	61
Arkansas	59	64	30	68	29	69
Alabama	54	58	31	61	30	63
Texas	58	63	28	67	27	68
West Virginia	57	52	27	52	26	57
Oklahoma	54	62	27	68	26	69
Louisiana	70	69	23	69	22	70
Mississippi	69	72	22	75	21	75
New Mexico	67	70	21	72	20	72
District of Columbia	73	74	19	74	18	74
Number of states	17	24	24	30	30	41
Nation	**47**	**52**	**32**	**55**	**31**	**60**

Note: The 2009 column also lists "28, 25, 36, 29, 24, 36, 36, 28, 29, 28, 28, 26, 28, 18, 22, 20, 17" (2009 Percent proficient) and 2011 eligible values are as above. Nation 2009: proficient 47, 32.

Source: Percentages for 2009 and 2011 from *The Nation's Report Card: Reading* for 2009 and 2011. Projections were made by the author, based on state percentages for 2009 and 2011.

The last entry in Table 2 presents <u>for the nation</u> the percentages of students

eligible for free lunch and the percentages of students at the proficient level. Thus, for

the nation in 2009 47 percent of fourth- grade students were economically disadvantaged

and 32 percent achieved at the proficient level. Note that these national results are for all

51 states, not just the 17 states in 2009. In 2011, the comparable percentages are 52

percent and 32 percent.

Consider the percentages of students who achieved at the proficient level in 2009.

Of the 17 states only three states had "percent proficient" figures above the national

average of 32 percent proficient. For 2011, only eight of the 24 states had students above

the national average of 32 percent proficient. These figures for 2009 and 2011 are noted

here because a 50 percent eligible figure is in general associated with achievement <u>below</u>

the national average of percent proficient.

Figure 2 below presents a scatterplot between percent eligible and percent

proficient for 24 states in 2011 all 24 states had at least 50 percent of their students

eligible for free lunch. The correlation between percent eligible and percent proficient is

-0.77. Four states in Figure 2 – District of Columbia, New Mexico, Mississippi and

Louisiana - had the <u>highest</u> percentages of eligible students and the <u>lowest</u> percentages of

proficient students. Four states – Kansas, Idaho, Missouri, and Indiana – had the <u>lowest</u>

"percent eligible". One of these four states: Kansas – had the <u>highest</u> "percent proficient"

Given the high (negative) correlation of -.77 most of these states coordinates fall quite

close to the regression line. The notable exception is Florida. Florida is by far the largest

"overachiever."

Figure 2. Scatterplot for 24 states in Table 2: Percent proficient versus percent eligible (2011).
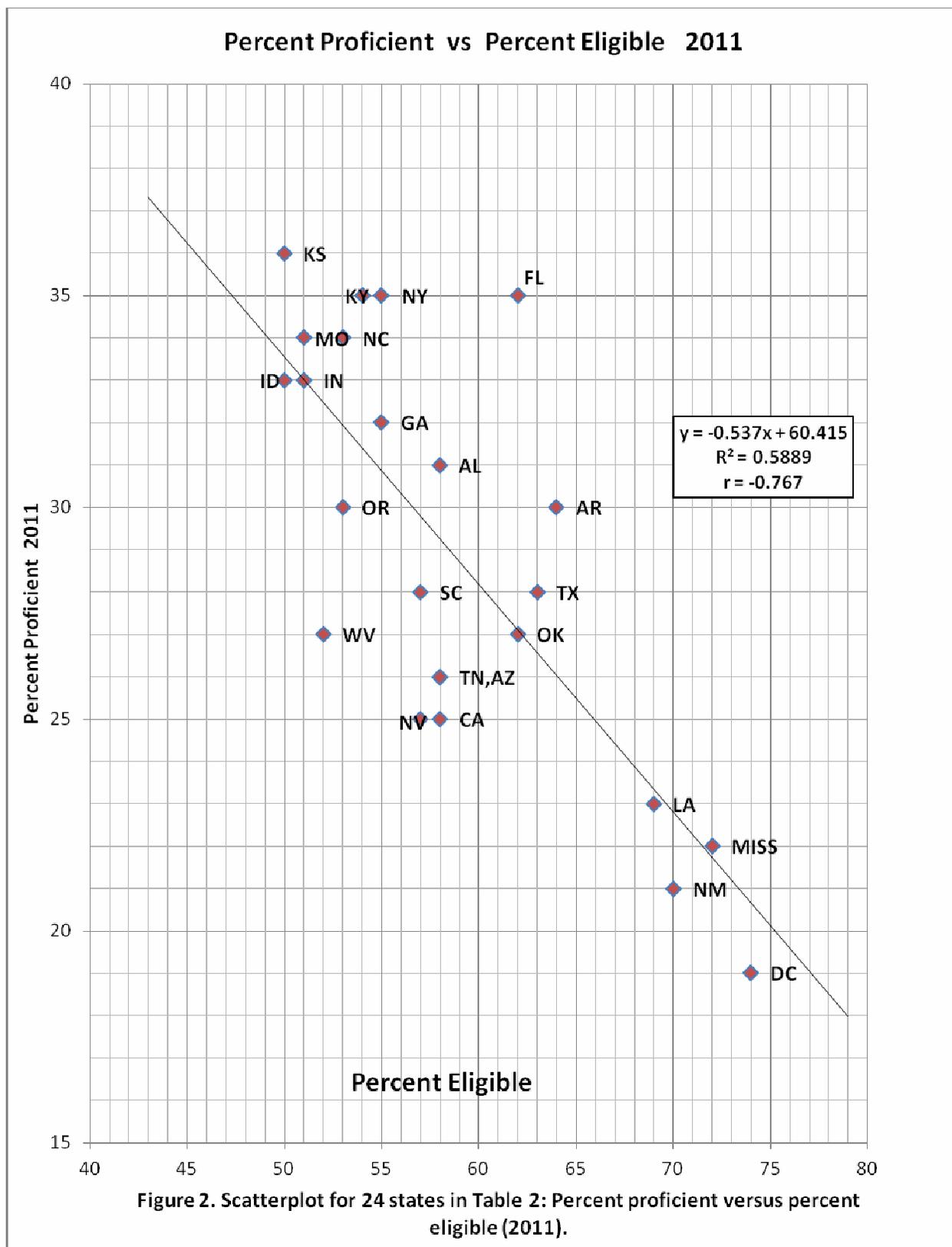
The results associated with the third objective are presented in Table 3 below. Table 3 presents data for the five states with the <u>highest</u> percentages of eligible students. I refer to the five highest percentage states as the poorest states, and to the lowest percentage states as the richest states. The respective "percent proficient" figures for the ten states are also presented in Table 3. The mean of the five gaps is 17.6 percentage points, or approximately 18 percentage points.

One way to interpret the percentages of eligible students in Table 3 is to compare them to the percentages of eligible students for the nation. These national percentages are shown in the bottom line of Table 3. Note that all of the five poorest states have percentages of eligible students markedly <u>above</u> the national mean of 52%; all the five richest states have percentages of eligible students <u>below</u> the national mean of 52%. Note also that the percentages of proficient students for the five poorest states are all <u>below</u> the national mean of 32% whereas the percentages of proficient students for the five richest states are all <u>above</u> the national mean of 32%.

Table 3: State income achievement gap between give states with the highest percentage of eligible students and five states with the lowest percentage of eligible students on the NAEP fourth grade reading test in 2011						
States with highest percentile eligible			State Income achievement gap	States with lowest percentile eligible		
States	Percent Eligible	Percent Proficient		Percent Proficient	Percent Eligible	States
Mississippi	72	22	21	43	25	New Hampshire
New Mexico	70	21	29	50	33	Massachusetts
Louisiana	69	23	13	36	35	North Dakota
Arkansas	64	30	14	44	35	New Jersey
Texas	63	28	11	39	36	Virginia
		Mean Gap	17.6			
Nation	**52**	**32**		**32**	**52**	**Nation**

Source: The Nation's Report Card: Reading, 2011.

Up to this juncture, the thrust of the paper has been on the effect of child poverty on achievement for the actual years 2003 through 2011 and the projected effects 2013 to 2019. But any discussion of projected trends in public school education, both at the national level and the state level, should take notice of the fairly well-known anticipated changes in the racial composition of the nation's public school students.

In Table 4 below, the percentages of White, Black, and Hispanic fourth-grade students on the NAEP reading test for 2003-2011 are presented. Also presented are my projections for 2013-2019. Note that the White percentage decreased by two points from 2009 to 2011 and that the Hispanic percentage increased by two percentage points from 2009 to 2011.

e 4:
entage distribution of students assessed in fourth grade reading by race/ethnicity: various years, 2003-2011, together with author's projections, 2013, 2015, , and 2019.

e/ethnicity	Actual					Projections		
	2003	2005	2007	2009	2011	2013	2015	2017
e	59	57	56	54	52	50	48	46
k	17	17	17	16	16	16	16	16
anic	18	19	20	21	23	25	27	29

ce: For "actual" years, see *The Nation's Report Card:* 2003, 2005, 2007, 2009, and 2011. The "projected" percentages were developed by the author and are ed on the "actual" percentages for 2009 and 2011.

Education Week (June 7, 2012, p. 4) stated that "By 2020, one in four children enrolled in America's K-12 public schools will be Latino." The authors of *Schooling Disadvantaged Children: Racing Against Catastrophe*. (Natriello, McDill, & Pallas, 1990) projected that approximately 28% of the school-age population would be Hispanic by 2020. The projections in Table 4 pertain to fourth grade public school students. Projections for eighth grade students – older students – would be slightly lower for Hispanics. Thus, my projections in Table 4 for 2019 appear to agree quite closely with other estimates.

My interpretation of the changing percentages in Table 4 is that the relatively low Hispanic percentages compared to the White percentages for 2003 – 2011 did not affect very much the national achievement levels. During those eight years, the NAEP reading scores of Whites were so much higher - about 23 to 24 percentage points (proficient) higher than the Hispanics fourth- graders that the White achievement level dominated the national picture.

But, for the "projected" years, 2013 to 2019, the differences in the projected percentages between White and Hispanic students become considerably smaller.

I suggest one way to understand the affects of the increasingly higher Hispanic percentage coupled with the decreasing White percentages as projected in Table 4 is to look at some states which in 2011 have percentages which match the national <u>projections</u> in Table 4. Consider the year 2017. The projected White percentage is 46% and the projected Hispanic percentage is 29%. In 2011, there were six states which had 46% or <u>fewer</u> White fourth-graders, and also had 39% or <u>more</u> Hispanic students. Those 2011 six states are: Arizona, California, Florida, Nevada, New Mexico, and Texas. All but one, Florida, had "percent proficient" figures below the 2011 national mean of 32% proficient on the 2011 NAEP fourth-grade reading test.

I infer from the six state figures for 2011 that the 46% White/29% Hispanic ratio projected for the nation in 2017 will depress the national NAEP fourth- grade "scores" below the 2011 levels by some small amount, say, 1 or 2 or 3 percentage points. I have predicted in Table 2 that the nation's fourth -grade NAEP reading "score" in 2013 will be 31 percent proficient, a decrease of one percentage point from the 2011 value of 32%.

In an article about high school graduation rates *Education Week*, (June 10, 2010), Christopher Swanson said this about the challenges posed by the increasingly larger Hispanic enrollment: "Put simply, the challenge of improving high school graduation rates is analogous to swimming upstream against a rapid and generally unfavorable demographic current (23)." I see Swanson's analogy as aptly capturing the K-12 educational achievement challenge in the next few years.

Because of expected continuing high rates of child poverty, especially in the nation's large urban school districts, I expect that "the school turnaround movement" will have only limited effect on improving educational achievement across the nation.

6. **Discussion.** The overall thrust of this paper is that child poverty is the primary player in determining the levels of educational achievement of public school students in the nation. Probably the most widely used measure of child poverty is percentage of students eligible for free

lunch. As displayed in Figure 1 above, the percentage of eligible fourth grade students increased

seven percentage points from 2007 to 2011; in contrast, in the four-year period from 2003 to 2007

there was only a one percentage point increase. I assert that the seven point increase was the

result of The Great Recession, especially the five point increase from 2009 to 2011. It appears

that the national percentages of child poverty from 2007 to 2011, especially from 2009 to 2011,

support this assertion. As reported in Table 1 above, the national child poverty rate increased

from 18% in 2007 to 23% in 2011. Given the weak condition of the national economy in 2012

(this paper is being written in October 2012), it appears that the high child poverty rates may

continue for the near term. My projections in Figure 1 for 2013, 2015, 2017, and 2019 are that

55%, 57%, 59%, and 60% respectively, of the nation's fourth-grade public school students will be

eligible for free lunch.

      Although not explicitly stated elsewhere in this paper, my assumption is that sometime in

the eight- year period from 2011 to 2019, the substantial increase in the national percentage of

disadvantaged students will offset the positive effects of the reform movement on the

achievement of the nation's students. Thus, in Table 2 I have projected a decrease of one

percentage point for the nation's fourth grade students in 2013; that is, the projected percent

proficient is 31%. The reader should know that, for fourth- grade students, the national percent

proficient means for 2002, 2003, 2005, 2007, 2009, and 2011 were 30%, 30%, 30% 32%, 32%,

and 32%, respectively.

7.   **Educational Implications**. The results presented in this paper point toward a leveling off in the

period from 2011 to 2019 of the modest gains in national NAEP scores from 2003 to 2011., and

then a gradual decline in NAEP scores. I would expect the downward effects would more likely

appear first at the fourth-grade level. Fourth graders are, on average, poorer than eighth-graders,

since their parents are younger, on average. I assert that sometime between 2013 and 2019 the

projected decline will become apparent at the national level. For the four largest population states

– California, Texas, New York, and Florida – I believe the decline in NAEP scores will occur by

2015 or 2017.   These four states constitute one third of the nation's population; California and Texas together constitute one-fifth of the nation's population. In 2011 all four of these states had percentages of White fourth-grade students below the national average. In 2011, three of the four states had percentages of Hispanic fourth-grade students above the national average; only New York's Hispanic percentage was lower than the national average – lower by only three percentage points. In 2011 California and Texas had percentages of proficient students below the national average on the NAEP fourth-grade reading test; Florida and New York had percentages above the national average. Unless the Hispanic students in California and Texas – Hispanics constituted more than 50% of the respective state enrollments in 2011 - increase dramatically their NAEP achievement in the next three or four years, almost certainly California's and Texas' NAEP scores will decline by 2013 or 2015. I expect Florida's and New York's to decline by 2015 or 2017.

As stated earlier in this paper, it is my view that the pervasive effects of child poverty on educational achievement in grades K-12 have been largely underestimated. The most dramatic example of this underestimation of the effects of child poverty is the No Child Left Behind Law which proclaims that all students will be proficient on state tests by 2014.

8.   **Projections/Predictions**   I list here three projections and four predictions concerning eight- year period from 2011 to 2019:

1.   In 2003 59% of the nation's public school fourth- graders were White; in 2011, 52% were White. I project that by 2013, 50% of public school fourth- graders will be White, and by 2019, 44% will be White.

2. In 2003 18% of the nation's public school fourth graders were Hispanic; in 2011 23% were Hispanic. I project that by 2013, 25% of public school fourth-grade students will be Hispanic, and by 2019, 31% will be Hispanic.

3.   In 2011 24 states had 50% or more of their fourth-grade students eligible for the free lunch program. I project that in 2019 41 states will have 50% or more of their fourth-grade students eligible for free lunch.

4. In 2006 the national child poverty rate was 18%; in 2009, 2010, and 2011, the respective rates were 20%, 22% and 23%. I predict the national child poverty rate in 2012 will be 23%; I predict that by 2019 the child poverty rate will decline to 20%.

5. In 2011 the national child poverty rates for Whites, Blacks, and Hispanics were 14%, 39%, and 34% respectively. I predict that in 2019 the large differences among the groups which existed in 2011 will remain essentially unchanged.

6. For the nation on the NAEP reading test the percentages of fourth-grade students who achieved at the proficient or above level in 2002, 2003, 2005, 2007, 2009, and 2011 were 30%, 30%, 30%, 32%, 32% and 32%, respectively. I predict that the percent proficient averages will be 31%, 30%, 29%, and 28% in 2013, 2015, 2017, and 2019, respectively. These predictions represent the first sustained decline since 2002.

7. California deserves special attention because it is, by far, the largest state in the nation; approximately 12% of the nation's population live in California. In 2011, 25% of California fourth-grade students were proficient on the NAEP reading test.   The U.S. mean was 32%. Only New Mexico (21%), Mississippi (22%), and Louisiana (23%) had lower percentages. I predict that California will remain in the group of lowest performing states in 2019.

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