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# The Achievement Gap

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**T**he most important education issue facing the United States today is almost certainly the severe disparity in academic achievement between white students, on the one hand, and African American and Hispanic students, on the other. Nationally, African American and Hispanic young people are achieving at levels four years behind white students by the end of high school—an “achievement gap” that translates into much worse drop-out rates, far fewer college degrees, much less economic opportunity, and in the end, much of the social gulf that separates America’s major racial groups. The gap is all the more troubling because it has stubbornly resisted a half-century of education reform beginning with the historic 1954 Supreme Court decision, *Brown v. Board of Education*, which outlawed “separate but equal” education for the races.

In Florida the achievement gap is an especially important challenge because African Americans and Hispanics make up half of the total population, and for years the gap has been even larger in Florida

than nationwide.<sup>1</sup> Yet, recently Florida has made significant progress in reducing the gap—more than the nation as a whole. The state should reinforce the policies that seem to be driving that progress. But at the same time, the state must realize that its current policies will not eliminate the gap any time soon. If the state has that as a goal—and it should—it must be even more aggressive in attacking the gap than it has heretofore. More effective approaches do exist.

### Principal Findings

1. It is hard to overstate the importance of the achievement gap to the future of this nation and to the state of Florida. Across the country, the academic skills of Hispanic and African American students are so far below those of white students that it is impossible to contemplate a future in which adults do not suffer vastly different rates of poverty, crime, and other social ills or enjoy quite disparate opportunities for economic and social advancement.<sup>2</sup> In 2005, according to the federal government's National Assessment of Educational Progress (NAEP), only 9 percent of African American eighth graders and 13 percent of Hispanic eighth graders nationally demonstrated proficient or advanced skills in math.<sup>3</sup> In reading the scores were similar, 12 and 15 percent respectively. Not achieving proficiency on NAEP means not having solid grade level skills, and in all likelihood not acquiring the skills that are necessary to complete college—which these racial groups now do at a rate barely above 10 percent. White students, who still have a way to go to achieve universal proficiency

1. In 2005, Florida's population was 51% white, 24% African American, and 22% Hispanic. *National Assessment of Education Progress 2005*.

2. The definitive study of the evolution of the achievement gap for African Americans and its sources is Christopher Jencks and Meredith Phillips, eds. *The Black-White Test Score Gap*, Washington DC: The Brookings Institution, 1998. The Hispanic shortfall has been addressed less definitively.

3. All achievement statistics in this finding are from *National Assessment of Educational Progress 2005*.

themselves, nonetheless are achieving at far higher levels—39 percent proficient or advanced in both math and reading, three to four times the achievement rates of African American and Hispanics. The gap is just as glaring and perhaps even more troubling at the lowest level of achievement. Roughly *half* of all African American and Hispanic 8th graders achieve at the “below basic” level on NAEP, translating into functional illiteracy and poor economic opportunity. Among white students only 20 percent achieve at this low level.

2. The achievement gap nationally has failed to shrink much over the last 15 years, after showing meaningful improvement in the 1970s and 1980s. Achievement for African Americans and Hispanics was even worse in the years after *Brown* than it is today. Due to multiple factors including economic progress by racial minorities and the slow ending of overt racial discrimination in education and elsewhere, achievement among African Americans especially and Hispanics accelerated versus whites in the 1970s and 1980s. The gaps among high school students declined during those decades from over one standard deviation to somewhat less than a standard deviation by the end of the 1980s.<sup>4</sup> But from that point through 2004, the gap widened among high school students, suggesting that the early gains, rooted in broader improvements in racial equality, were finished and further gains would require much tougher and more intentional education interventions.<sup>5</sup>

4. For specific estimates see Alan B. Krueger and Diane M. Whitmore, “Would Smaller Classes Help Close the Black-White Achievement Gap?” in John E. Chubb and Tom Loveless, eds. *Bridging the Achievement Gap*, Washington, DC: The Brookings Institution, 2002, pp. 12–14.

5. The gap between among African American and white 4th graders actually continued to decline from 1990–2004—a positive sign, to be sure. But the improvements for African Americans did not hold up through high school, rendering the gap in achievement, for all practical purposes, worse today than fifteen year ago. The trends in African American and white achievement are especially well documented in Paul E. Peterson, “Toward the Elimination of Race Differences in Educational Achievement,” in Paul E. Peterson, ed. *Generational Change: Closing the Test Score Gap*, New York: Roman and Littlefield, 2006, pp. 1–25. This volume also presents the best available evidence of reforms that could not only reduce the gap but eliminate it.

In reading, despite some progress at the primary level, recent efforts have been largely ineffective. Since 1992, according to NAEP, all racial groups nationally have failed to strengthen their reading performance, and the gaps in basic as well as proficient skills remain the same in 2005 as they were earlier. In math, all groups nationally have made significant progress, but whites have made greater progress, and the racial gaps are actually wider at proficient and basic levels in 2005 than in 1992.<sup>6</sup>

3. Viewed against this discouraging national backdrop, Florida should take considerable pride that it has actually reduced the achievement gap—a fact confirmed by numerous sources of data. Tables 1–4 present national—NAEP—data in the form of scale scores for each racial group in math and reading at grades four and eight, for the nation and the state. The scale scores underlie the previously discussed performance levels (i.e., below basic, basic, proficient, and advanced) and allow all levels of performance to be summarized through averages of performance against a single scale. Because of differences in the availability of state data, the reading data span 1998–2005 while the math data span 1996–2005. Over these seven- to nine-year periods, the data show Florida reducing the achievement gaps in every instance, though more so in math than in reading and at grade four than at grade eight. At grade four, all of Florida’s racial groups gained more than their national counterparts, by a third to over *twice* as much. African American and Hispanic students out-gained white students in Florida and nationally, but by consistently wider margins in Florida

6. At grade eight, for example, the gaps versus whites in proficiency from 1992 to 2005 went from 26 and 22 percentage points for blacks and Hispanics respectively to 27 and 24 points in reading and from 13 and 11 points to 30 and 26 points in math. In 1998 NAEP began to allow accommodation for students with special needs so the scores in 1992 are not strictly comparable to those in 2005, but comparisons of gains should not be affected, except that scores of minority students might be improved more than those of whites because of the higher incidence on participation by racial minorities in special education programs, *National Assessment of Education Progress 2005*.

Table 1. NAEP Math Scale Scores Grade 4

	<i>Achievement Gains 1996–2005</i>			<i>Gaps 1996</i>		<i>Gaps 2005</i>		<i>Gap Reduction</i>	
	<i>Black</i>	<i>His-panic</i>	<i>White</i>	<i>B/W</i>	<i>H/W</i>	<i>B/W</i>	<i>H/W</i>	<i>B/W</i>	<i>H/W</i>
Florida	31	25	21	33	19	23	14	-10	-5
National	22	18	15	33	24	26	21	-7	-3

Table 2. NAEP Reading Scale Scores Grade 4

	<i>Achievement Gains 1998–2005</i>			<i>Gaps 1998</i>		<i>Gaps 2005</i>		<i>Gap Reduction</i>	
	<i>Black</i>	<i>His-panic</i>	<i>White</i>	<i>B/W</i>	<i>H/W</i>	<i>B/W</i>	<i>H/W</i>	<i>B/W</i>	<i>H/W</i>
Florida	17	18	11	31	20	26	13	-5	-7
National	7	9	5	31	31	29	27	-2	-4

Table 3. NAEP Math Scale Scores Grade 8

	<i>Achievement Gains 1996–2005</i>			<i>Gaps 1996</i>		<i>Gaps 2005</i>		<i>Gap Reduction</i>	
	<i>Black</i>	<i>His-panic</i>	<i>White</i>	<i>B/W</i>	<i>H/W</i>	<i>B/W</i>	<i>H/W</i>	<i>B/W</i>	<i>H/W</i>
Florida	16	11	9	42	23	35	21	-7	-2
National	15	12	9	40	30	34	27	-6	-3

Table 4. NAEP Reading Scale Scores Grade 8

	<i>Achievement Gains 1998–2005</i>			<i>Gaps 1998</i>		<i>Gaps 2005</i>		<i>Gap Reduction</i>	
	<i>Black</i>	<i>His-panic</i>	<i>White</i>	<i>B/W</i>	<i>H/W</i>	<i>B/W</i>	<i>H/W</i>	<i>B/W</i>	<i>H/W</i>
Florida	2	4	1	28	17	26	13	-2	-4
National	0	4	1	26	27	27	24	1	-3

than nationwide. The result: Florida reduced the achievement gaps in 4th grade in reading and in math by roughly *twice* the rate the gap was reduced nationwide. The importance of this can be overstated given the slow pace of national improvement, and the fact that improvements in elementary school did not last into high school nationally. Nevertheless, Florida went from having 4th grade gaps that were at the national average for African Americans in the mid-1990s to gaps that were better than the national average in 2005. For Hispanics, gaps that had been somewhat better than the national average in the mid-1990s shrunk to *half* the national average in reading and two-thirds the national average in math. At grade eight, Florida's racial groups gained less than they did at grade four, with math gains outpacing reading gains. The relative gains reduced the achievement gaps in math and very modestly in reading, but the progress mirrored rather than bettered the nation. In 2005 Florida's achievement gaps between blacks and whites were typical of the national gaps, the gaps for Hispanics were far better.

4. The progress seen in the national data is corroborated by the state data. Tables 5–6 report the percentages of students scoring proficient or better on the Florida Comprehensive Assessment Test (FCAT) over time. Tables 7–8 report the median national percentile ranks for the norm-referenced Stanford Achievement Test-9th Edition (SAT9). With the benefit of tests at every grade level, 3–10, the state data permit a more refined picture than the national data and one that extends into high school. The FCAT data show, most importantly, gains by every racial group in both subjects, with greater gains by African Americans and Hispanics than by whites. The FCAT data also show gains by all groups shrinking in middle school, especially in reading, after very strong elementary gains, in the high double digits. Overall, the gains show all racial groups achieving 8–10 percentage points greater proficiency in 2005 than in 2000, but with the gaps in achievement versus whites reduced about 5 points for African Americans and 3 points for Hispanics. The SAT9 data show similar patterns

Table 5. FCAT Math Achievement Gains and Gaps  
Grades 3–10, 2001–2005

Grade	Achievement Gains 2001–2005			Gaps 2001		Gaps 2005		Gap Reduction	
	Black	His-panic	White	B/W	H/W	B/W	H/W	B/W	H/W
3	13.67	12.7	7.59	35.74	19.45	29.66	15.55	-6.1	-3.9
4	12.76	12.2	5.98	37.15	19.4	30.37	15.26	-6.8	-4.1
5	10.63	11.86	7.34	34.68	16.49	31.39	14.37	-3.3	-2.1
6	8.02	9.69	6	33.36	19.43	31.34	17.03	-2.0	-2.4
7	8.67	10.45	6.61	35.58	20.18	33.52	18.55	-2.1	-1.6
8	6.43	7.3	2.48	38.62	23.61	34.67	18.48	-4.0	-5.1
9	13.74	16.1	11.42	38.74	24.42	36.42	20.57	-2.3	-3.9
10	-0.94	-3.83	-1.83	40.13	24.52	39.23	23.38	-0.9	-1.1

Table 6. FCAT Reading Achievement Gains and Gaps  
Grades 3–10, 2001–2005

Grade	Achievement Gains 2001–2005			Gaps 2001		Gaps 2005		Gap Reduction	
	Black	His-panic	White	B/W	H/W	B/W	H/W	B/W	H/W
3	14.67	14.04	8.37	33.06	22.46	26.77	17.93	-6.29	-4.53
4	24.49	22.2	15.34	34.79	20.87	25.63	16.19	-9.16	-4.68
5	15.11	19.02	11.8	34.35	22.8	31.04	18.64	-3.31	-4.16
6	5.9	6.36	3.14	36.87	23.26	34.11	23.89	-2.76	0.63
7	8.37	9.16	3.45	35.67	22.79	30.75	20.31	-4.92	-2.48
8	3.19	2.85	-1.07	36.19	22.12	31.94	21.84	-4.25	-0.28
9	5.73	10.37	8.69	28.52	20.01	31.47	20.15	2.95	0.14
10	-5.91	-10.53	-12.21	34.1	22.71	27.8	20.56	-6.3	-2.15

to the FCAT data, though the SAT9 suggests that African American and Hispanic students may have made their greatest progress relative to whites in middle school math as opposed to elementary math.<sup>7</sup> The

7. The SAT9 data extend only through 2004 because the state switched to the SAT10 in 2005, complicating comparisons with earlier years. The apparent discrepancy between FCAT and SAT9 results is likely a reflection of different approaches

overall conclusion holds: Florida has reduced the achievement gaps for African Americans and Hispanics in reading and in math, especially in grade four, while seeing achievement growth for all groups at grade four and grade eight.

5. While the detailed FCAT data for 2000–2005 and SAT9 data for 2000–2004 show that Florida is reducing the achievement gaps at all grade levels, the aggregate FCAT data for 2006 (the only data available as of this writing) indicate that progress is continuing. In grades 3–10 combined, African American and Hispanic students each increased the percentages proficient or above by five points—large one year gains—while white students improved three points. The reading gaps thus narrowed two additional percentage points. In math African American students in grades 3–10 improved 4 points in proficiency and Hispanic students 3 points. Compared to two point gains for white students, the math achievement gaps therefore declined two and one points respectively. And the 2006 data brought further good news. Reading gains in grades 6–8 averaged six points, suggesting that the improvements in reading scores through 2005, which concentrated in the elementary grades, may be transferring to the higher grades.

6. So, there are many indications that Florida is making truly substantial progress in equalizing education outcomes for all races. But, Florida has a long way to go before achievement gaps are not a significant issue for the state. Scores for both Hispanics and African Americans are well below the state's academic standards, which are moderately strong but not as strong as those of NAEP. In math, according to 2005 FCAT results, only a third of African American students and half of Hispanic students are proficient while 60–70 percent

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to measurement. FCAT performance is measured here only at the level of proficient or above on the underlying achievement scale while SAT9 performance is measured up and down the scale. The SAT9 will therefore show achievement gains below the level of proficiency, where African Americans and Hispanics have evidently made stronger middle school math gains than whites.

Table 7. SAT9 Math Achievement Gains and Gaps  
Grades 3–10, 2001–2004

Grade	Achievement Gains 2001–2004			Gaps 2001		Gaps 2004		Gap Reduction	
	Black	His- panic	White	B/W	H/W	B/W	H/W	B/W	H/W
3	2	6	6	31	19	35	19	4	0
4	3	7	3	30	15	30	11	0	–4
5	7	4	–1	33	16	25	11	–8	–5
6	2	2	–3	36	24	31	19	–5	–5
7	13	15	0	39	27	26	12	–13	–15
8	15	12	4	35	22	24	14	–11	–8
9	17	14	3	36	24	22	13	–14	–11
10	1	–12	–5	40	14	34	21	–6	7

Table 8. SAT9 Reading Achievement Gains and Gaps  
Grades 3–10, 2001–2004

Grade	Achievement Gains 2001–2004			Gaps 2001		Gaps 2004		Gap Reduction	
	Black	His- panic	White	B/W	H/W	B/W	H/W	B/W	H/W
3	–4	–4	–8	32	25	28	21	–4	–4
4	2	–1	–7	34	21	25	15	–9	–6
5	15	15	6	33	24	24	15	–9	–9
6	8	8	5	33	24	30	21	–3	–3
7	4	–3	–4	34	22	26	21	–8	–1
8	10	14	6	36	26	32	18	–4	–8
9	19	21	21	28	20	30	20	2	0
10	15	15	13	29	22	27	20	–2	–2

of white students are proficient, depending on the grade level. In reading the racial gaps are similar but the problem has one major difference: the distance all groups are from proficiency grows steadily from elementary school to high school. In third grade 51 percent of African Americans, 60 percent of Hispanics and 78 percent of whites are proficient against state standards. By 10th grade the percentages have

fallen to 9, 16, and 37 percent respectively—similar to the discouraging national figures on reading proficiency and grim harbingers of the state’s future. Making matters worse, the rate of progress that the state has made in reducing the achievement gap recently, impressive though it has been, would require 50–75 more years to reduce gap to zero.

7. The education policies that Florida has implemented in recent years, largely during the tenure of Governor Jeb Bush, have likely helped reduce the state’s achievement gaps, but those policies will not be enough to ensure progress in the future. While it is beyond the scope of this brief evaluation to identify and disentangle the various sources of improvement in Florida’s achievement gaps, it is reasonable to infer probable influences. First, Florida’s academic *performance* standards are tougher than the norm for nationally.<sup>8</sup> Florida has nobly resisted lowering its performance standards or reducing its Annual Measurable Objectives to make it easier for schools to meet federal accountability standards—namely No Child Left Behind (NCLB)—as many states have done. It is well established that more demanding course work boosts achievement, especially among students, like racial minorities, who may have been given easier work in the past.<sup>9</sup>

8. The best evidence of the rigor of state standards is the match between the percentage of students judged proficient on state tests and the percentage proficient on NAEP. Florida’s FCAT is in the mid-range of state deviations from NAEP in grade four and among states with the lowest deviation in grade eight. Additional evidence of the rigor of state standards is the percentage of schools failing to make adequate yearly progress (AYP) under NCLB. Florida has one of the nation’s highest rates of schools not making AYP—meaning the state has resisted pressure to lower standards to improve AYP performance.

9. On the importance of rigorous course work for minority achievement see David Klein, “High Achievement in Mathematics: Lessons from Three Elementary Schools,” and Samuel R. Lucas and Adam Gamoran, “Tracking and the Achievement Gap,” in Chubb and Loveless, *Bridging the Achievement Gap*, pp. 157–198. It is important to note that Florida’s academic standards are not adequately detailed in their expectations of the knowledge students should master, as chapters by Hirsch, Evers, and Ravitch, in this volume, explain. But the state’s expectations for test score performance are reasonably high.

Second, the accountability provisions of Florida's A+ Plan appear to have promoted academic growth statewide. It is becoming clear that state accountability systems with meaningful consequences for success and failure can raise student achievement, and that the gains are likely to be greatest where expectations have historically been lowest—for poor and minority students. It is likely that the A+ Plan has been especially helpful to disadvantaged students.<sup>10</sup> Florida's more recent policy to eliminate social promotion at grade three and provide targeted remediation—rather than repetition of the failed grade—is also a probable cause of progress in elementary reading scores. Again, disadvantaged students are likely to be disproportionate beneficiaries of the policy, because of their historically high rates of failure at early reading. It is fair to say, that most of the reforms recently pursued by Florida, and reviewed in this volume, are likely to help most those who historically have achieved least, for they have been most short-changed by policies of the past. There is reason to believe, however, that these policies, if implemented in earnest in years to come, will still not be enough to raise the achievement of African American and Hispanic students to desired levels. That will take sterner measures.

### Principal Recommendations

1. Research has established that student achievement is strongly influenced by factors outside of formal schooling, especially by the family, community, and peers.<sup>11</sup> Because African American and His-

10. On the effects of accountability systems on achievement generally, see Eric Hanushek, "Impacts and Implications of State Accountability Systems" in John E. Chubb, ed. *Within our Reach: How American Can Educate Every Child*, New York: Roman and Littlefield, 2005, pp. 95–112. On the effects of accountability of minority achievement, see Laurence A. Toenjes, A. Gary Dworkin, Jon Lorence, and Antwanette N. Hill, "High-Stakes Testing, Accountability, and Student Achievement in Texas and Houston," in Chubb and Loveless, *Bridging the Achievement Gap*, pp. 109–130.

11. Heredity has also been shown to affect achievement, but its linkage to the racial achievement gap is less certain. On the influences of family, peers, and com-

panic homes and neighborhoods have historically had lower levels of educational attainment than those of whites, the achievement gap begins outside the school. Throughout their formal schooling, African American and Hispanic youngsters must on average struggle to acquire at school many of the skills that white students begin to acquire and have regularly reinforced outside of school. The instances of this are many, but a few are critical. The first of these is readiness for formal schooling at all, and especially readiness to learn how to read. Children from economically disadvantaged families, disproportionately African American and Hispanic, have half the experience with oral language—to say nothing of books—than children from working-class families and a third the experience of children from professional families.<sup>12</sup> African American children are also frequently raised to speak dialectal English while Hispanic students are raised to speak Spanish—though often not a formally correct Spanish. The lack of extensive experience with formal English before school begins puts African American and Hispanic students at a huge disadvantage in learning to read. The best remedy for this is a strong pre-school program focused on the development of literacy skills. Florida has the potential to be the national pioneer in employing pre-school to its full potential with its new voluntary pre-K program, addressed in Chester E. Finn Jr.'s chapter in this volume. The challenge will be in ensuring that the program in fact provides ample oral language development, introduction to a rich vocabulary, and early phonological experience. While the new program is guided by respectable standards, it will require some doing to ensure that high quality early literacy instruction occurs—something wide spread inner city Head Start programs have not accomplished in forty years.<sup>13</sup> Nonetheless, Florida has a

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munity on the achievement gap see Jencks and Phillips, *The Black-White Test Score Gap*.

12. B. Hart and T. R. Risley, *Meaningful Differences in the Everyday Experience of Young American Children*, Baltimore: Paul H. Brookes, 1999.

13. The qualities that are needed in a high quality preschool program are well

serious opportunity to reduce the achievement gap through universal preschool.

2. Even if reading readiness can be improved, reading will remain the highest hurdle to more equal achievement. Reading is the basis for learning and achieving in all other subjects and reading is most influenced by forces outside of formal schooling. Students do not generally learn lots of math or science or history at home, but they do learn many words, phrases, and expressions; and they do acquire—or fail to acquire—the habits to read and discuss. With each passing year, the student from the educated home gains more of a literacy advantage over the student from the less-educated home—unless the school works to counteract the experience. Vastly better reading instruction is truly the key to reducing the achievement gap. While there is no single solution here, such as adopting the “right” elementary reading program, there are certain steps that Florida could take to improve reading achievement, especially among African American and Hispanic students. These include three vital innovations. First, require through its state standards that the phonological skills required to read—the ultimately automatic association of letters with sounds that provides the basis for fluent reading—are part of the curriculum all the way through 8th grade, instead of 2nd grade as now demanded.<sup>14</sup> In the most recent revision of the Florida’s language arts standards, teachers in upper grades are directed to employ the decoding standards of lower grades if students are struggling with decoding. But such direction is not likely to be as effective as including phonological skills in the required curriculum through grade eight. Second, because vocabulary is such a powerful influence on reading comprehension as

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established. Ron Haskins, “Putting Education into Preschools,” in Peterson, ed., *Generational Change*, pp. 47–87. If the requisite qualities are not put into place, the potential benefits of preschool are not realized and any early achievement gains dissipate in the first year or two of formal schooling.

14. See, for example, Louisa C. Moats, *Language Essentials for Teachers of Reading and Spelling*. Longmont, CO: Sopris West, 2006.

students get older, and because vocabulary is best taught in the context of meaningful text, the state should mandate through its standards for English, History, Science, Math—indeed all subjects—a systematic body of content that students must be taught each year, K–12. Florida’s standards, as E. D. Hirsch Jr. and Diane Ravitch report in chapters 5 and 7 of this volume, must be stronger in specifying required content. Without rich content students will not develop the vocabulary to comprehend sophisticated text.<sup>15</sup> Third, the state should require regular diagnostic testing of all students every year—using tools such as DIBELS—until FCAT begins at grade three, and then diagnostic testing of all students at the below-basic level of FCAT thereafter. The state now supports district diagnostic testing plans, which districts define as they see fit and then include in their Comprehensive Reading Plans. Diagnostic testing, however, is too important to be left to such district discretion. Just as mandatory FCAT testing holds schools accountable for achievement in grades 3–10, mandatory diagnostic testing should hold schools to account in grades K–2. Reading skills will never approach proficiency if serious weaknesses are not addressed early. Good remediation programs exist, and the state should insist that students not making progress be assessed and then supported vigorously.

3. Research on achievement generally and on reading particularly find that while better standards, programs, and assessments are important, their effects are dwarfed by those of teachers. The greatest known influence on achievement, within the school experience, is the teacher. A top quartile teacher can, over the span of three years, move a student from the lowest quartile of achievement to the top. A bottom quartile teacher can do the reverse.<sup>16</sup> Sadly, African American and

15. The argument for this piece of reading development is most cogently presented in E. D. Hirsh, *The Knowledge Deficit: Closing the Shocking Education Gap for American Children*. Boston: Houghton Mifflin, 2006.

16. The evidence on the causes and consequences of teacher quality are reviewed exhaustively in Dan Goldhaber, “Review of Research on Teacher Attributes and Student Achievement,” Paper prepared for Edison Schools, Inc., February 2006.

Hispanic students are often taught by the least effective teachers. Living in less advantaged communities with more academic problems, their schools attract and retain less able teachers. Seniority rules customary in collective bargaining agreements exacerbate the problem, allowing more experienced teachers to transfer automatically from tougher schools, often serving non-whites. Florida currently faces the challenge of hiring approximately 30,000 new teachers to keep up with population growth and teacher retirements. The state recognizes the opportunity this presents to attract and train teachers differently: the traditional education school pipeline will not get the job done, and alternative approaches must be found. As Terry M. Moe discusses in this volume, there are exciting new ideas in teacher recruitment, certification, training, and compensation. Florida is already an innovator in these areas with its new STAR system of teacher and administrator bonuses for student achievement; its new requirements for differentiated pay in district salary schedules; and its proscriptions against over-staffing disadvantaged schools with novice teachers. It remains to be seen how these promising policies actually work. But the state will need to be extremely vigilant of district implementation because these policies have been emasculated in collective bargaining when tried elsewhere across the nation. Among the state's priorities as it oversees implementation, the most important should be rewarding teachers who work in highly disadvantaged schools and rewarding teachers whose students make unusually large academic gains. The latter of these Florida is especially well positioned to implement. With the state's excellent data systems it should be possible to gauge fairly the impact of classroom teachers on student achievement. Since this "value-added" approach to teacher compensation is only beginning to be used nationally and remains controversial, what better place to begin in Florida than with teachers who are making a difference for historically under-achieving students? One way or another, the state must get better teachers in front of low-achieving African American

and Hispanic students. Otherwise, progress will prove slow and inadequate.

### Conclusion

Floridians should be proud of the progress that the state has made in reducing the persistent and pernicious gap in achievement between whites on the one hand and African Americans and Hispanics on the other. The state has made more progress than the nation as a whole—indeed more progress than all but three states nationwide.<sup>17</sup> Hispanics now trail whites by much less than the national average, while for African Americans the gap has at least caught up to the national norm. The state's strong academic accountability system may be the most important source of this progress. But the state must do more, especially in reading, the key to all academic progress and a weakness for all of Florida's youth—especially African Americans and Hispanics who generally do not leave high school proficient. These gaps and weaknesses will not be eliminated by just continuing what has been done in the past. The state will need to become even more aggressive in the years to come. The investments that would likely pay the greatest dividends for all students but especially those historically left behind would be: (1) focusing the state's voluntary preschool sharply on literacy; (2) fortifying the state's already comprehensive reading initiative with mandatory assessment and remediation in grades K–2, explicit phonics through grade eight, and more prescribed content at all grades; and (3) effective use of recently legislated incentives to attract and retain excellent teachers in schools serving disadvantaged students. Florida has taken steps in each of these areas, and that is good news, but larger steps must yet be taken.

17. Ron Mathas, "Florida is Narrowing Achievement Gap," *St. Petersburg Times*, October 19, 2005.