

The *A+ Plan* and Student Achievement in Florida

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Introduction

Improving student achievement is the ultimate goal of educational reform, including Florida's *A+ Plan*. The purpose of this paper is to describe student assessment in Florida and statewide changes that have occurred since the *A+ Plan* was passed by the Florida Legislature in 1999. Has student performance improved? In what areas? At what grade levels? What challenges lie ahead for Florida as it sets future education policy for grades K-12?

There are multiple ways to measure student achievement: standardized test scores, teacher assessments, graduation and dropout rates, retention in grade, among others. This paper focuses on standardized test scores—which enable us to examine statewide progress over time for students at all grade levels (elementary, middle and high school) in key subject areas (reading, mathematics and writing). Achievement gaps among different groups of students are discussed in a separate policy brief by Madhabi Chatterji.

The Florida Comprehensive Assessment Test (FCAT)

Statewide student assessment in Florida began in the 1970s with a “minimum competency” test initially administered to a sample of Florida’s public school students and later extended to all students in grades 3, 5, 8, and 11. Beginning in 1983, passing the competency test was required in order to earn a high school diploma. In the early 1990s, the Florida Legislature adopted a new “blueprint” for education accountability and assessment. The Florida Commission on Education Reform and Accountability initiated the development of state standards—what students need to know and be able to do—and design of an assessment tool to measure student progress toward those standards. The result was the Sunshine Standards (subsequently adopted by the State Board of Education) and the Florida Comprehensive Assessment Test (FCAT)—both developed with review and input from committees of practicing teachers and curriculum specialists working with the Florida Department of Education.

For reading and mathematics, the FCAT includes a criterion-referenced test measuring student achievement relative to Florida’s Sunshine State Standards and a norm-referenced test (a form of the Stanford 9) which allows comparison of Florida’s students to the nation’s. The criterion-referenced portion includes both multiple-choice and “performance” items. The latter require a written response or mathematics solution subsequently scored by raters. Each student receives a scale score ranging from 100 to 500 and a level of achievement ranging from 1 to 5.

FCAT writing is a criterion-referenced test only. Originally called the *Florida Writes!* Test, it has been administered statewide since the early 1990s and became part of the FCAT in 1998. Students write for 45 minutes on a topic (“prompt”) which is subsequently scored by raters on a 1-6 scale.

The FCAT was administered for the first time in 1998 in reading, writing and mathematics at four grade levels spanning elementary, middle and high school. The *A+ Plan* extended testing to all students in grades 3 through 10. Since 2001, the FCAT has been administered in grades 3 through 10 in reading and mathematics and in grades 4, 8 and 10 in writing. Science was added in grades 5, 8 and 10 in 2003.

FCAT testing is required for all public school students (including charter school students) and for students attending private schools on Florida’s Opportunity Scholarships, offered to students in failing schools. It is not required for students receiving corporate tax credit scholarships to attend private schools (Florida’s largest voucher program) and is optional for home-schooled students and for students with disabilities attending private schools on McKay Scholarships.

Since 1999, the year the *A+ Plan* was passed, the Florida Department of Education has reported FCAT results for all curriculum students, which include students with disabilities who are expected to pursue a standard high school diploma. Students with limited English proficiency are tested after two years in the public schools. Breakdowns for racial/ethnic groups and other demographic groups of students are available for all curriculum students from the year 2000 forward.

Student Achievement under the A+ Plan

Level of Achievement: How Well Do Florida Students Perform Relative to Sunshine State Standards?

In 1999, a high percentage of Florida’s students were low-achieving—particularly in reading, but also in mathematics. About 25% to 30% scored at the lowest achievement level (level 1) depending on the grade (Figures 1 and 2). By 2005, progress had been made, particularly in 4th-grade reading (Figure 1) but also in mathematics at all three grade levels (Figure 2).

Figure 1

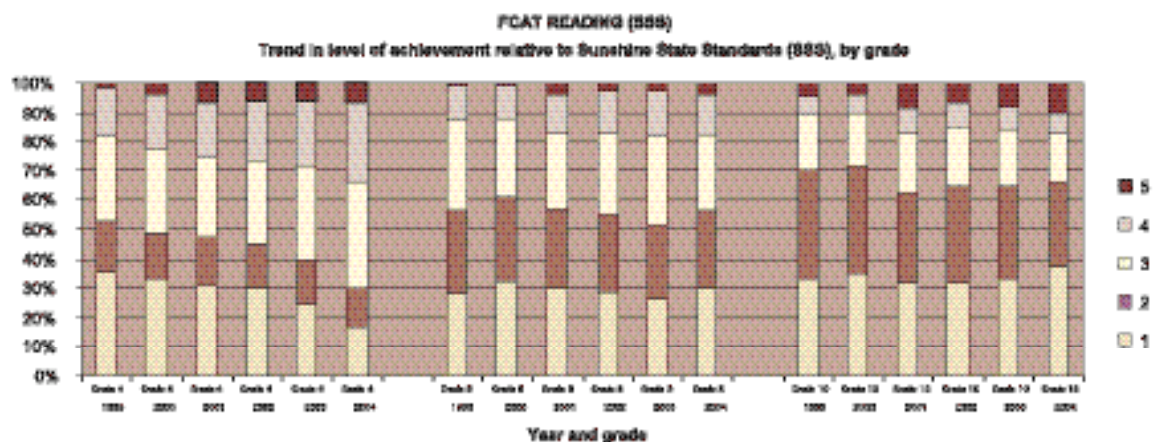
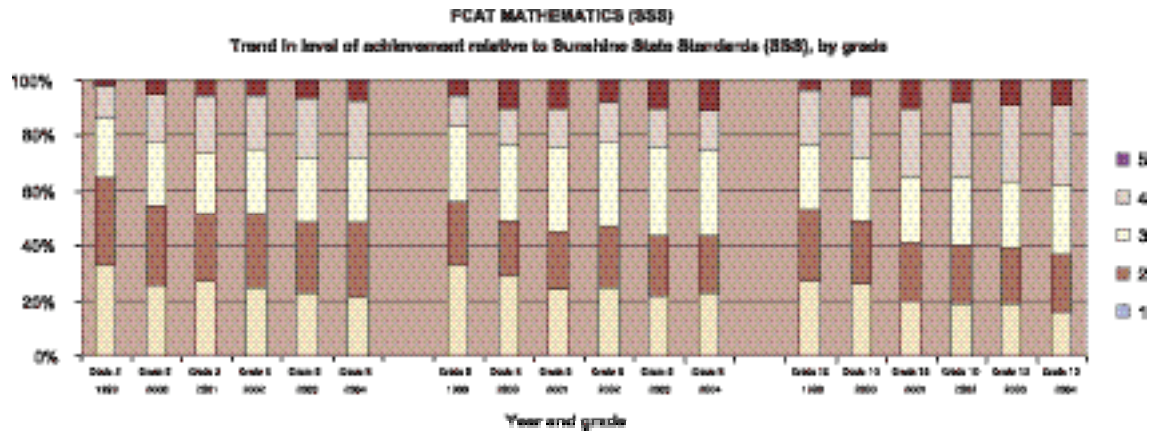


Figure 2



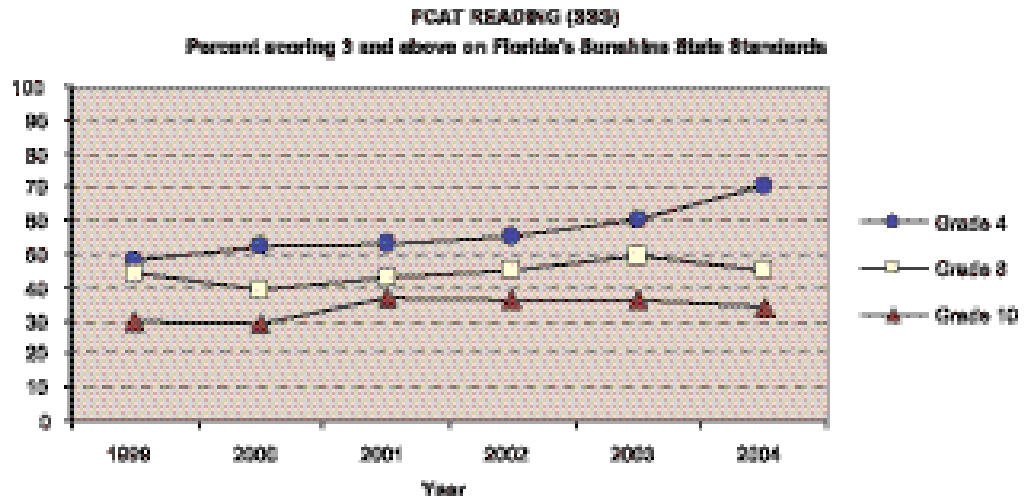
Percentages of students scoring at the lowest two levels (1 and 2 combined) are more discouraging. Even in 4th grade where major progress in reading has been made, 29% of students still scored at levels 1 and 2 (below proficiency) in 2005 (Figure 1). The picture worsens at higher grade levels. As of 2005, the percentage of students scoring at levels 1 and 2 in reading was 56% in Grade 8, and 66% in grade 10. In mathematics (Figure 2), the picture improves somewhat for the upper grades. Eighth graders and particularly 10th graders, do better in mathematics than 5th graders—and perform better in mathematics than in reading. As of 2005, 43% of 5th graders, 41% of 8th graders and 37% of 10th graders scored at the bottom two achievement levels in mathematics.

Achievement Gains: Has Student Achievement Improved Since 1999, the Year the A+ Plan Was Instituted?

The percentage of students scoring proficient (3 and above) has increased from 1999 to 2005, but generally improvements have not been dramatic—nor consistent in all grades for all subjects.

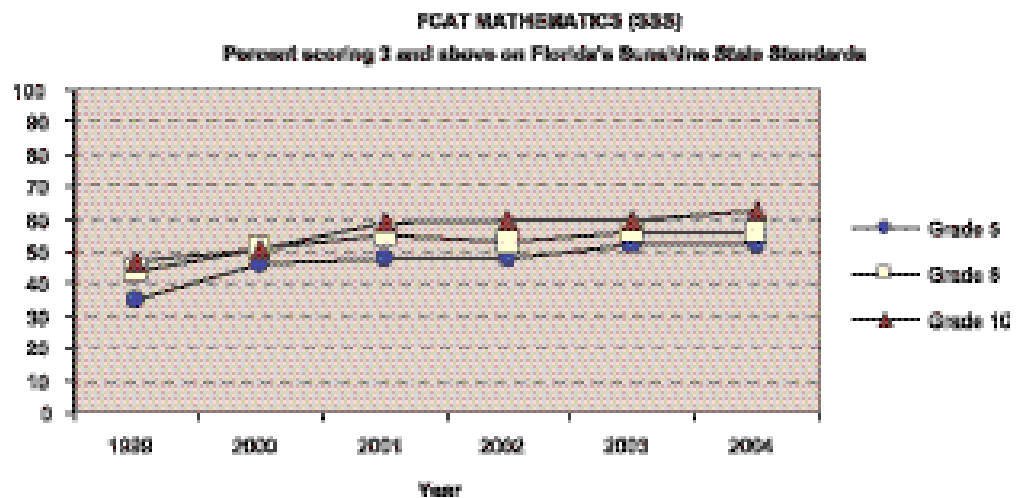
In reading (see Figure 3), grade 4 shows a steady upward trend in the percentage scoring at levels 3 and above, although performance leveled off from 2004 to 2005. Between 1999 and 2005, the percentage of 4th graders scoring at the highest two levels (4 and 5) almost doubled (see Figure 1). Eighth graders' reading performance improved from 2000 to 2003, but then declined. Tenth-grade results have been fairly flat, but the *A+ Plan*, instituted only five years ago, would be expected to have its greatest impact on the earlier grades.

Figure 3



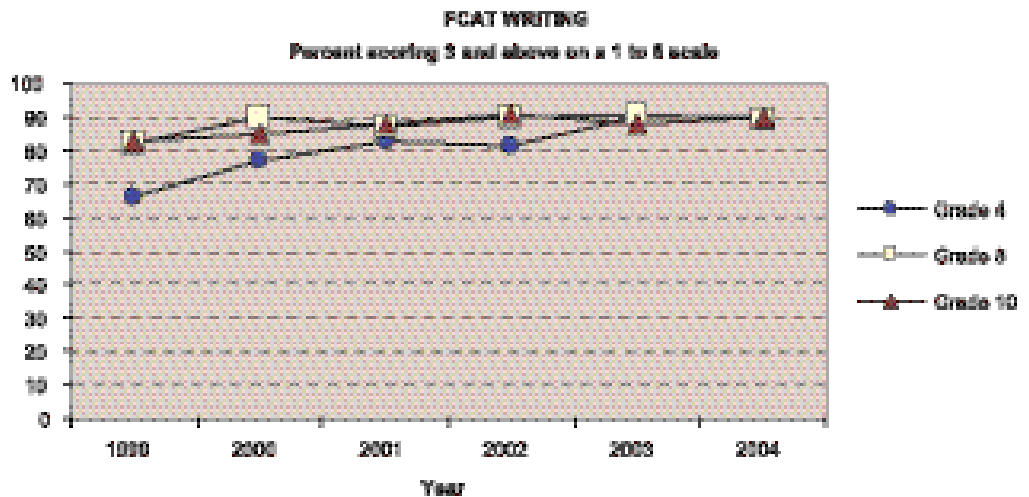
In mathematics (Figure 4), the percentage of students scoring at level 3 and above steadily increased in grades 5, 8 and 10 during the first four years of the *A+ Plan*, then leveled off. In all three grades, an increasing percentage of students are scoring at the highest two achievement levels (4 and 5) in mathematics. In grade 5, the percentage scoring 4 or 5 more than doubled, increasing from 14% in 1999 to 30% in 2005 (See Figure 2).

Figure 4



Florida students perform best on writing. In all grades, most students score 3 and above. As of 2004, about 90% scored at or above this level of proficiency (see Figure 5).

Figure 5



No Child Left Behind Act

The federal *No Child Left Behind Act* (section 1111) requires states to measure “adequate yearly progress” (AYP) at the school, district and state levels using the 2001-02 school year as a baseline. The foundation of AYP consists of (1) challenging standards set by each state (what each student is expected to know and be able to do) and (2) valid, reliable student assessments in reading/language arts and mathematics—and in science by 2007-08—that are aligned with those standards. At the state level, AYP is measured based on the achievement of all students, the achievement of subgroups of students (economically disadvantaged, major racial and ethnic groups, students with disabilities, and students with limited English proficiency), graduation rates, and at least one other indicator selected by the state. By 2014, 100% of the students in the subgroups listed above must meet or exceed proficiency on state assessments of reading, math and science (i.e., the FCAT in Florida). States must set annual objectives to reach this target. Each year, the AYP of individual schools is assessed based on the extent to which these subgroups of students meet their state’s intermediate objectives and whether 95% or more of students enrolled in a school were tested.

The 50 states, including Florida, reported assessment results for subgroups of students for the first time in 2003. In Florida, state-, district-, and school-level results indicated that much work remains to be done by 2014. As of 2004, only 23% of Florida public schools (including charter schools) met all of the criteria for AYP (Florida Department of Education, 2004). Statewide, most of the subgroups, particularly in the higher grades, were far below the 2014 target of 100% at level 3 and above (see Tables 1 and 2).

Table 1

**Percent of students scoring 3 and above on FCAT READING (SSS)
in 2004, by subgroup**

	White	Black	Hispanic	Limited English	Low-Income*	Exceptional Students**
Grade 3	77%	49%	58%	36%	56%	37%
Grade 4	79%	53%	63%	34%	60%	42%
Grade 5	73%	40%	49%	18%	48%	26%
Grade 6	69%	32%	43%	13%	40%	22%
Grade 7	66%	31%	42%	14%	39%	20%
Grade 8	57%	25%	35%	9%	30%	13%
Grade 9	44%	14%	23%	4%	19%	9%
Grade 10	44%	16%	25%	6%	20%	7%

* eligible for free/reduced price lunch

** excludes gifted

Table 2

**Percent of students scoring 3 and above on FCAT MATHEMATICS (SSS)
in 2004, by subgroup**

	White	Black	Hispanic	Limited English	Low-Income*	Exceptional Students**
Grade 3	78%	43%	57%	39%	54%	42%
Grade 4	73%	44%	58%	35%	53%	38%
Grade 5	64%	31%	46%	24%	40%	22%
Grade 6	57%	24%	38%	19%	33%	15%
Grade 7	62%	29%	43%	20%	37%	17%
Grade 8	69%	34%	50%	27%	43%	19%
Grade 9	68%	32%	45%	23%	41%	20%
Grade 10	75%	38%	55%	34%	49%	26%

* eligible for free/reduced price lunch

** excludes gifted

As a rough gauge of the challenge that lies ahead, let's take low-income students in grade 3 as an example (see Table 2). To reach the 2014 target, the percentage scoring 3 and above would need to increase by an increment of 4.6% on average for each of the next 10 years. For Blacks, the percentage would need to increase 5.7% on average each year; for limited English-speaking students, 6.1% per year. Florida has achieved gains of similar and even greater magnitude in a single year for all curriculum students in a single year and for racial/ethnic minorities as well. Between 1999 and 2005, the greatest increase in a single year for all curriculum students has been achieved in 4th-grade reading: 10% from 2003 to 2004. By subgroup, the increases that year in 4th-grade reading were 8% for Black and Hispanic students, 12% for limited English students, 9% for low-income and 14%

for exceptional students. However, annual increments of this magnitude have not been achieved on average. The average annual increase in reading for all curriculum students from 1999 to 2005 was 3.8% for 4th grade and less than 1% for the higher grades (8 and 10).

The progress made to date in the early grades is promising. The question is whether large gains will be achieved for all subgroups of students and whether such gains will be sustained over time.

National Assessment of Educational Progress (NAEP)

Under *No Child Left Behind*, the National Assessment of Educational Progress (NAEP), administered nationally under a Congressional mandate since 1968, will be used to verify state assessment results. NAEP data at the state level have been available only since 1990. Historically, the test has been administered to statewide samples of students in different grades and subjects each year. Student performance is scored on four levels:

- Advanced - superior performance for the grade level tested.
- Proficient - solid academic performance for the student's grade level.
- Basic - partial mastery of fundamental knowledge and skills for proficient work at each grade level.
- Below basic - less than partial mastery.

In Florida, NAEP results are similar to the FCAT's. Florida has a large percentage of low-performing students (about one-third to one-half score below basic, depending on the grade and subject). Few students—generally between 20% and 30%—score at the proficient level or above in reading. Historically, mathematics and science have been Florida's weakest areas, but Florida students have not been tested on the NAEP in those subjects since 1996. Writing is clearly Florida's strongest subject. As of 2002, about 85% of 4th and 8th graders scored basic or above; about 15% below basic (See Table 3).

Table 3

**National Assessment of Educational Progress (NAEP)
Percentage of Students Scoring at or above each Achievement Level**

Year	FLORIDA				UNITED STATES			
	Advanced	Proficient or Above	Basic or Above	Below basic	Advanced	Proficient or Above	Basic or Above	Below basic
Reading, Grade 4								
1992	3%	21%	53%	47%	6%	27%	60%	40%
1994	5%	23%	50%	50%	7%	28%	59%	41%
1998	4%	22%	53%	47%	6%	28%	58%	42%
2002	5%	27%	60%	40%	6%	30%	62%	38%
2003	8%	32%	63%	37%	7%	30%	62%	38%
Reading, Grade 8								
1998	1%	23%	67%	33%	2%	30%	71%	29%
2002	2%	29%	72%	28%	2%	31%	74%	26%
2003	2%	27%	68%	32%	3%	30%	72%	28%
Mathematics, Grade 4								
1992	1%	13%	52%	48%	2%	17%	57%	43%
1996	1%	15%	55%	45%	2%	19%	61%	39%
2003	4%	31%	76%	24%	4%	31%	76%	24%
Mathematics, Grade 8								
1990	1%	12%	43%	57%	2%	15%	51%	49%
1992	1%	15%	49%	51%	3%	20%	56%	44%
1996	2%	17%	54%	46%	4%	22%	59%	41%
2003	4%	23%	62%	38%	5%	27%	67%	33%
Science, Grade 8								
1996	1%	21%	51%	49%	3%	27%	60%	40%
Writing, Grade 4								
2002	4%	33%	86%	14%	2%	27%	85%	15%
Writing, Grade 8								
1998	1%	19%	78%	22%	1%	24%	83%	17%
2002	3%	32%	84%	16%	2%	30%	84%	16%

Source: *NAEP State Profiles*, <http://nces.ed.gov/nationsreportcard/states/profile.asp>

Note: Percentages reported for advanced, proficient and basic are cumulative, e.g., "proficient" includes students scoring proficient and advanced. Basic and below basic are mutually exclusive and add to 100 percent. Table excludes 2000 data because Florida did not participate in NAEP that year because of a conflict with the FCAT testing schedule.

Although Florida has a long way to go, NAEP, like the FCAT, shows sustained increases in the reading proficiency of 4th graders. In 2003, Florida was the only state in the nation where 4th graders showed significant improvement in reading compared to 2002 (National Center for Educational Statistics, 2003). For the first time, Florida's 4th graders exceeded the nation with 32% scoring proficient or above, compared to 30% in the U.S. Moreover, NAEP, which has been administered since 1992, shows that the improvement in 4th-grade reading clearly occurred between 1998 and 2002.

Similar success in reading has not been sustained at the middle school level, however. After an initial improvement from 1998 to 2002, 8th graders in Florida showed a slight setback in 2003, when the percentage of students scoring proficient and above declined to 27% from 29% the previous year.

Trends are moving in the right direction in mathematics. Both 4th and 8th graders have shown improvement in mathematics over the last decade. The percentage scoring *basic and above* has increased steadily since the early 1990s, and the percentage scoring *proficient and above* substantially increased between 1996 and 2003, particularly in 4th grade (15% in 1996 compared to 31% in 2003). By 2003, the performance of Florida's 4th graders matched the nation's for the first time.

The trends in writing are also positive. Florida's 8th graders (the only grade with more than one year of available data) show an upward trend in writing, in sharp contrast to a slight decline in reading. In 1998, 19% of 8th graders scored *proficient or above* in writing, compared to 32% in 2002.

Florida Compared to the Nation

Two sources of achievement test data are available to compare Florida to the nation: the NAEP and the FCAT norm-referenced test (NRT), which is a form of the Stanford Achievement Test.

From 1992 to 1998 (pre *A+ Plan*), NAEP is the only source of test data for national comparisons. During this period, Florida students consistently scored more poorly than the nation as a whole on the NAEP in reading, mathematics and science. The percentage *at or above* proficiency was consistently lower and the percentage *below basic* considerably higher.

From 1998 to 2003, when the *A+ Plan* was instituted, the NAEP shows improvement in all grades/subjects assessed (reading, mathematics and writing). Fourth-grade reading improved substantially during this time period, compared to little change in prior years. Eighth graders improved in writing, but not in reading. Over the years, the gap between Florida and the nation has been narrowing in reading and writing. By 2003, Florida was on par with the nation in the percentage of 4th graders scoring proficient or above in mathematics—and slightly *exceeded* the nation's proficiency in 4th-grade reading and 8th-grade writing.

The FCAT-NRT administered since 1999 shows similar but more positive comparisons for Florida than NAEP (see Table 4). Generally, Florida's students have been gaining relative to their national peers. By 2004, the majority of students at every grade level equalled or excelled their national peers in reading and mathematics, except in 9th- and 10th-grade reading. The median NPR indicates the percentage of students in Florida who score above the national median. An NPR of 50% would indicate that Florida and U.S. students perform equally well. An NPR greater than 50% indicates that Florida performs better than the nation as a whole; less than 50%, more poorly than the nation.

Table 4

**Median National Percentile Rank on the FCAT-NRT
Percent of students who scored above the national median
in reading and mathematics**

	READING					MATHEMATICS				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Grade 3	49%	56%	57%	61%	62%	56%	59%	62%	66%	68%
Grade 4	56%	56%	57%	58%	63%	57%	59%	62%	64%	69%
Grade 5	45%	51%	52%	55%	56%	63%	59%	61%	63%	63%
Grade 6	43%	49%	52%	53%	54%	55%	61%	63%	64%	66%
Grade 7	48%	54%	56%	57%	57%	48%	61%	65%	66%	67%
Grade 8	54%	59%	60%	58%	60%	56%	62%	64%	65%	66%
Grade 9	38%	44%	44%	44%	44%	52%	63%	65%	66%	69%
Grade 10	33%	49%	50%	46%	45%	54%	64%	67%	66%	66%

Note: Students are not tested in writing on the FCAT-NRT. The 2005 FCAT-NRT results are not comparable to results for prior years; in 2005 the test was changed from the Stanford 9[®] to the Stanford 10[®].

Conclusions

Both the NAEP and the FCAT indicate that student achievement generally has improved since the late 1990s when the *A+ Plan* was instituted. Florida has excelled most in areas where the state has focused initiatives on changing classroom instruction: reading in the early grades and writing at all grade levels. This observation suggests that incentives alone did not produce the results. Nevertheless, incentives in the *A+ Plan* may have played an important role in combination with professional development and instructional initiatives in specific subject areas. Unfortunately, these effects are difficult to isolate. If changes are indeed attributable to the *A+ Plan*, the question still remains: what elements of the plan produced these effects? Annual student assessment in grades 3 through 10? School grading? The threat of vouchers? Student consequences for promotion and graduation? Targeted resources to low-performing schools? What elements are working—or not working? For which groups of students? Other factors also may have contributed to improvements, such as school district alignment of curriculum with state standards.

Despite the positive overall trends, some serious challenges lie ahead. Florida still has a very high percentage of low-achieving students in both reading and mathematics—particularly reading at the middle and high school levels. The picture is especially bleak for racial/ethnic minorities and students who are educationally disadvantaged because of disabilities, low income, and limited English proficiency.

Without a greater, sustained impact across subgroups and grade levels, how will Florida be able to (a) fulfill the state's "paramount duty" in the Florida Constitution (Article

IX) to provide a “high quality system of free public schools that allows students to obtain a high quality education,” (b) meet the educational requirements of a changing workforce, or (c) deliver the results expected in the federal *No Child Left Behind* Act, particularly for minority and disadvantaged students, many of whom score below the level of proficiency of 3 and above?

Beyond the current *A+ Plan*, what else must be done by the State of Florida, school districts, families and communities to help low-performing students move to higher levels of achievement? And finally, what state policies will support those efforts as Florida addresses one of its most difficult and critical challenges of the 21st Century: the education of our children?

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