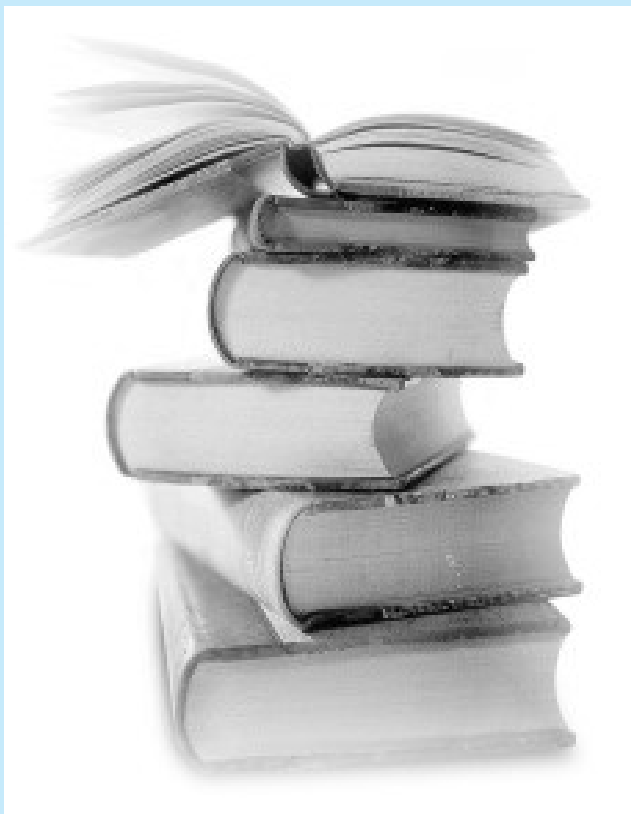




STUDENT ACHIEVEMENT IN FLORIDA

FIRST IN A SERIES OF
REPORTS ON THE STATUS OF
EDUCATION IN FLORIDA

FLORIDA TAXWATCH

CENTER FOR EDUCATIONAL PERFORMANCE & ACCOUNTABILITY

MAY 2004



STUDENT ACHIEVEMENT IN FLORIDA

First in a Series of Florida TaxWatch Reports on the Status of Education in Florida*

Florida's economic and technological competitiveness depends upon the success of our local schools and how favorably they compare to other states and to other industrialized countries. In this report, Florida TaxWatch examines the state's 2003 student achievement test scores and compares Florida's performance among the counties in the state, among the states in the nation, and among the countries of the world. A future report will compare the state's 2004 student achievement data with 2003 within-state data and with 2004 national assessment data, as those national data become available.

HIGHLIGHTS

HOW FLORIDA'S COUNTIES COMPARE

In 1996 Florida created content and performance standards targeted at boosting student achievement in the state. The Florida Comprehensive Assessment Test (FCAT), the state's own assessment instrument, measures progress toward meeting these standards. 2003 FCAT results indicate the following:

- Fifty percent of Florida's students scored at or above grade level in reading, and 51 percent scored at or above grade level in mathematics.
- There is wide achievement variation among Florida's districts: in reading, eight districts had 30 percent or fewer students performing at grade level, while seven districts had at least 60 percent achieving this same level. For example, 69 percent of Santa Rosa and Okaloosa Counties students performed at grade level or above in math, while in Jefferson County only 24 percent reached this level.
- Substantial gaps in achievement exist among White, Black and Hispanic students. For example, in 4th grade reading, 73 percent of Florida's White students scored at grade level or above (level 3+), but only 41 percent of Black students met the same threshold, and only 51 percent of Florida's Hispanic students achieved this basic level. In 4th grade math, 67 percent of Florida's White students scored at grade level or above (level 3+), while less than half as many Black students (33 percent) met the same threshold, and only 48 percent of Florida's Hispanic students achieved this basic level.

HOW FLORIDA COMPARES TO THE FIFTY STATES AND THE NATION

The National Assessment of Educational Progress (NAEP), known as the *Nation's Report Card*, measures student achievement across all states in the nation. Results are reported in percentages of students reaching "proficiency." The federal No Child Left Behind (NCLB) Act of 2001 mandates that, by the year 2014, all students will reach the "proficient" level in reading and math, as measured by NAEP. States must close the achievement gaps among students of different subgroups or lose federal education funds.

*The next report in the series will explore Florida's financial commitment to K-12 education as it compares to other states in the nation.



NAEP results indicate the following:

- Florida's students have historically scored well below the national average. However, in 2003, in reading, 32 percent of Florida's 4th graders scored at or above the proficient level compared to 30 percent nationally. This is the first time that Florida students have surpassed the national average in any subject area. In mathematics, 31 percent of Florida's 4th graders demonstrated proficiency—right at the national average.
- Eighth graders still failed to reach the national average. Only 27 percent of 8th graders reached the proficiency level in reading, compared to 30 percent nationally. In mathematics, only 23 percent of Florida's 8th graders reached the proficient level, below the national average of 27 percent.
- While Florida was the only state that made significant gains over the preceding year in 4th grade reading, Florida was not among the 41 states that made significant gains in 4th grade math or among the 17 states that made significant gains in 8th grade math.
- There are wide achievement gaps among White, Black and Hispanic students. Some educators claim that this is due to lowered expectations for minority groups or students of low socioeconomic status and can be overcome programmatically.¹

HOW THE U.S. COMPARES TO OTHER COUNTRIES

International comparisons of student performance are becoming increasingly critical, as the U.S. workforce must compete in a global marketplace. The Third International Math and Science Study (TIMSS), the Program for International Student Assessment (PISA), and the Progress in International Reading Literacy Study (PIRLS) compare mathematics, science, and reading achievement among the countries of the world.

In 1999, the Third International Math and Science Study-Repeat (TIMSS-R) measured the achievement of 8th graders in 13 states, nine school districts, and five regional consortia of districts across the United States, comparing it against the performance of 23 countries. Miami-Dade participated as one of these school districts, the only Florida school district to do so. The TIMSS-R results indicated:

- Singapore's mathematics performance was the best among all participating entities—46 percent of their students reached the highest achievement level. Only nine percent of U.S. students reached this level, and only two percent in Miami-Dade reached this level.
- No U.S. district, state or consortia scored below Miami-Dade County Public Schools. Miami-Dade's mean scale score was 421. This score was lower than that of Cyprus (476), Romania (472), Chicago Public Schools (462), Rochester City School District NY (444), and Iran (422).

CREATING A MORE FAVORABLE FUTURE OF FLORIDA COMPARISONS

Florida's future progress toward state and national goals, as well as Florida's future competitiveness in a national and global context, depend upon how policymakers use the results of student achievement assessments to address the deficiencies that they illuminate.

¹ See, for example, Patricia Davenport and Gerald Anderson *Closing the Achievement Gap: No Excuses*, (Houston: American Productivity & Quality Center, 2002.)



INTRODUCTION

Twenty years ago, a blockbuster federal report, *A Nation at Risk*, warned that mediocre student achievement threatened our national prosperity. Today, the threat takes on new urgency, as the stakes are higher: U.S. students must be prepared to compete in a global marketplace. In turn, Florida's economic and technological competitiveness depends on how well all students achieve in every school across the state.

Over the last decade, Florida created content and performance standards targeted at boosting student achievement in the state. *The state made significant progress in some areas*. However, as this report points out, *Florida has a significant distance yet to go* before student achievement is raised to a level that is competitive in a national and global context.

In this report, Florida TaxWatch examines the rapidly expanding volumes of data on student achievement and compares Florida students' achievement among the counties in the state, among the states in the nation, and among the countries of the world. Rather than report achievement results by averages, where the exceptional performance of high performing students can mask the poor performance of other students, this report describes student achievement on state, national, and international assessments by achievement levels. The meaning of each of these levels is explained in the various sections of this report.

STUDENT ACHIEVEMENT IN FLORIDA COUNTIES: FLORIDA COMPREHENSIVE ASSESSMENT TEST (FCAT)

Florida's statewide educational accountability program, The A+ Plan, is designed to boost student achievement. Florida's Comprehensive Assessment Test (FCAT) measures the performance of Florida's students against Sunshine State Standards (SSS).² The FCAT assesses all Florida public school students in grades 3 through 10 in reading and mathematics and reports the results as the percent of students falling into each of five performance levels³ in each subject, in each county. Table 1 (page 5) shows the percentage of Florida students achieving performance level 3 (grade level) or above on the 2003 FCAT. It also reveals the relative ranking of each of Florida's counties. Statewide results indicate:

- In reading, 50.3 percent of Florida's students scored at or above level 3 (grade level).
- In mathematics, 50.7 percent of Florida's students scored at or above level 3 (grade level).

² Sunshine State Standards are subject matter grade level expectations that form the basis for state assessments. The progress of children and schools is measured against these standards.

³ Achievement levels describe student success on Sunshine State Standards as measured on the FCAT. According to the Florida Department of Education, students scoring at level 5 correctly answer most of the test questions; students scoring at level 4 may have only some success correctly answering the most challenging test questions; students scoring at level 3 correctly answer many of the questions but are generally less successful with the most challenging questions; students scoring level 2 have limited success with the most challenging questions; and students scoring level 1 have little success.

[Http:// www.firn.edu/doe/sas/fcat/pdf/fc_ufr2004.pdf](http://www.firn.edu/doe/sas/fcat/pdf/fc_ufr2004.pdf).



Other highlights of this test indicate there to be wide variations between Florida's lowest and highest performing districts and students. For example:

- Eight districts had 30 percent or fewer students performing at grade level or above (level 3+) on the Reading FCAT, while seven districts had at least 60 percent achieving the same level.
- In reading, 67 percent of Santa Rosa County students achieved level 3+. In Jefferson County only 28 percent of students reached this level.
- In math, 69 percent of Santa Rosa and Okaloosa Counties students achieved level 3+. In Jefferson County only 24 percent reached this level.

Florida's A+ Plan specifically states:

"Our public school system will never be able to claim excellence as long as children are left behind to fail or dropout, unable to compete successfully in our society. We must move beyond labeling and lowering expectations for large numbers of children to find innovative ways to boost their learning and their success."⁴

FCAT results indicate that the A+ Plan is moving Florida toward that end. Florida's lowest performing students are progressing from the lowest to higher performance levels, albeit at a slow pace. Figure 1 (page 6) illustrates that statewide there were 3.7 percent fewer students scoring in the lowest level (1) on the reading portion of the 2003 FCAT than there were in 2001. The math portion of the 2003 FCAT had 5.1 percent fewer students statewide scoring in the lowest level (1) than had just two years before.

Overall, there are indications that scores are improving for many students. From 2001 to 2003 the percentage of students scoring at grade level or above (level 3+) in reading and mathematics increased 3.9 percent and 2.3 percent respectively (Figures 2 and 3, page 6).

Although scores are inching upwards, high performance eludes many of Florida's students. A much smaller percentage of Florida's students perform at the highest levels of achievement—levels 4 and 5, which are considered to be above grade level—than at lower levels. Table 2 (page 7) shows the percentage of students scoring above grade level on the 2003 FCAT and their rankings relative to other counties in the state. These scores also vary widely among districts. For example:

- Only 22 percent of Florida's students reach level 4 in reading and 25 percent reach level 4 in math.
- In reading, the number-one ranked Santa Rosa County had 35 percent of its students reaching level 4, while Jefferson and Gadsden Counties tied for last place, each with 8 percent of students reaching level 4.
- In math, the number-one ranked Calhoun County had 45 percent of its students reach level 4. Jefferson County, the lowest ranked county in math, had only 6 percent of its students reach level 4.

⁴ <http://www.myflorida.com/myflorida/government/governorinitiatives/aplusplan/planEducation.html>



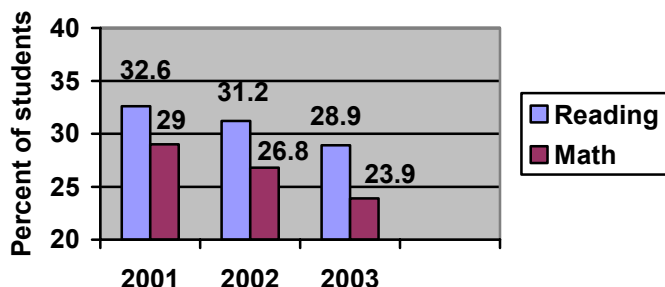
Table 1- Percentage of Florida Students Achieving Performance Level 3 (Grade Level) or Above on 2003 FCAT

	Reading	Rank	Math	Rank
Florida	50%		51%	
Alachua	54%	21	57%	23
Baker	49%	41	56%	28
Bay	58%	11	57%	23
Bradford	44%	54	46%	54
Brevard	63%	4	67%	3
Broward	51%	30	57%	23
Calhoun	57%	12	66%	5
Charlotte	56%	15	62%	10
Citrus	56%	15	58%	19
Clay	60%	8	62%	10
Collier	49%	41	57%	23
Columbia	49%	38	47%	51
Dade	39%	60	44%	58
DeSoto	39%	60	44%	58
Dixie	41%	59	38%	63
Duval	48%	45	47%	51
Escambia	49%	38	48%	49
Flagler	57%	12	59%	14
Franklin	45%	52	47%	51
Gadsden	30%	66	32%	65
Gilchrist	51%	30	61%	12
Glades	43%	56	42%	61
Gulf	56%	15	59%	14
Hamilton	33%	65	34%	64
Hardee	39%	60	49%	46
Hendry	38%	63	42%	61
Hernando	51%	30	51%	42
Highlands	50%	35	53%	38
Hillsborough	51%	30	57%	23
Holmes	50%	35	58%	19
Indian River	52%	26	54%	33
Jackson	53%	24	54%	33
Jefferson	28%	67	24%	67
Lafayette	52%	26	59%	14
Lake	51%	30	55%	30
Lee	52%	26	54%	33
Leon	63%	4	65%	8
Levy	49%	41	52%	41
Liberty	54%	21	53%	38
Madison	34%	64	31%	66
Manatee	52%	26	54%	33
Marion	49%	38	55%	30
Martin	62%	6	66%	5
Monroe	57%	12	61%	12
Nassau	56%	15	59%	14
Okaloosa	65%	2	69%	1
Okeechobee	44%	54	49%	46
Orange	46%	50	50%	44
Osceola	42%	58	44%	58
Palm Beach	49%	41	54%	33
Pasco	50%	35	53%	38
Pinellas	53%	24	55%	30
Polk	46%	50	48%	49
Putnam	43%	56	45%	56
Santa Rosa	67%	1	69%	1
Sarasota	59%	9	64%	9
Seminole	62%	6	67%	3
St. Johns	64%	3	66%	5
St. Lucie	48%	45	50%	44
Sumter	47%	49	51%	42
Suwannee	45%	52	45%	56
Taylor	48%	45	46%	54
Union	48%	45	49%	46
Volusia	55%	20	58%	19
Wakulla	59%	9	59%	14
Walton	56%	15	56%	28
Washington	54%	21	58%	19

Source: <http://fcats.fldoe.org/> and Florida TaxWatch, July 2003



Figure 1
Percentage of Students Achieving Level 1 on
2001-03 FCAT Reading and Math*



Sources:
<http://www.firn.edu/doe/sas/fcat/pdf/fcrp03stm.pdf>,
<http://www.firn.edu/doe/sas/fcat/pdf/fcrp03str.pdf>
and Florida TaxWatch, July 2003

*1= lowest level

Although the percent of students scoring at grade level and above is slowly increasing, and the percent of students scoring at the lowest level is declining correspondingly, the percent of increase in the number of students achieving above grade level (levels 4 and 5) is also small. Figures 2 and 3 (below) graphically depict these small gains, 2.1 percent in reading and 2.9 percent in mathematics over the two-year period. Figures 2 and 3 also show the large differences between the percentage of students scoring at grade level or above (3+) and that of those scoring above grade level (4+). Most students scoring at grade level or above (level 3+) are simply scoring at grade level.

Figure 2
Percentage of Students Achieving Levels 3+
and 4+ on 2001-03 FCAT Math

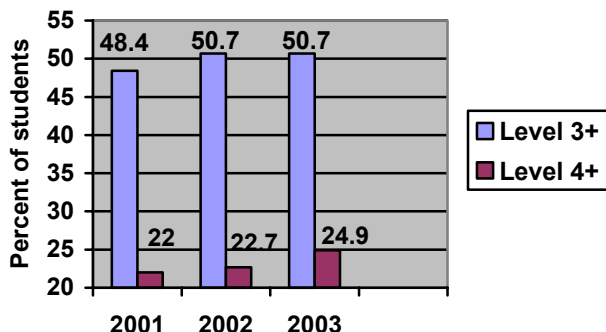
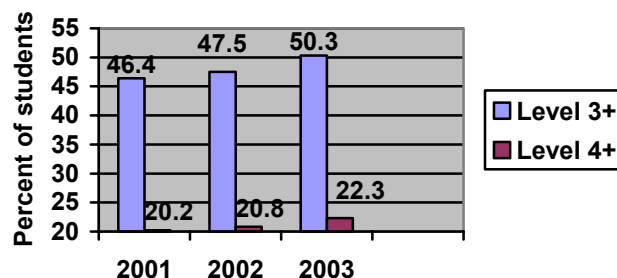


Figure 3
Percentage of Students Achieving Levels 3+
and 4+ on 2001-03 FCAT Reading



Sources: <http://www.firn.edu/doe/sas/fcat/pdf/fcrp03str.pdf> and Florida TaxWatch, July 2003



Table 2- Percentage of Florida Students Scoring Above Grade Level (Levels 4 and 5) on 2003 FCAT

	Reading	Rank	Math	Rank
Florida	22%		25%	
Alachua	28%	11	31%	10
Baker	20%	42	25%	22
Bay	26%	14	26%	20
Bradford	17%	54	17%	53
Brevard	31%	6	35%	5
Broward	25%	16	26%	20
Calhoun	27%	13	45%	1
Charlotte	25%	16	27%	15
Citrus	25%	16	25%	22
Clay	29%	9	30%	11
Collier	22%	29	27%	15
Columbia	20%	42	17%	53
Dade	14%	59	19%	48
Desoto	14%	59	16%	59
Dixie	16%	55	13%	62
Duval	20%	42	19%	48
Escambia	21%	35	20%	44
Flagler	26%	14	27%	15
Franklin	19%	47	15%	60
Gadsden	8%	66	9%	66
Gilchrist	22%	29	29%	12
Glades	14%	59	10%	65
Gulf	24%	22	23%	34
Hamilton	12%	64	12%	63
Hardee	14%	59	20%	44
Hendry	14%	59	15%	60
Hernando	21%	35	19%	48
Highlands	21%	35	23%	34
Hillsborough	22%	29	28%	13
Holmes	24%	22	25%	22
Indian River	24%	22	25%	22
Jackson	23%	27	23%	34
Jefferson	8%	66	6%	67
Lafayette	21%	35	25%	22
Lake	23%	27	25%	22
Lee	22%	29	24%	31
Leon	32%	4	35%	5
Levy	19%	47	20%	44
Liberty	21%	35	21%	42
Madison	11%	65	11%	64
Manatee	22%	29	23%	34
Marion	21%	35	24%	31
Martin	32%	4	35%	5
Monroe	28%	11	28%	13
Nassau	25%	16	25%	22
Okaloosa	34%	2	37%	2
Okeechobee	16%	55	18%	52
Orange	20%	42	23%	34
Osceola	16%	55	17%	53
Palm Beach	22%	29	25%	22
Pasco	19%	47	22%	40
Pinellas	24%	22	24%	31
Polk	18%	51	20%	44
Putnam	16%	55	17%	53
Santa Rosa	35%	1	36%	4
Sarasota	30%	8	34%	8
Seminole	31%	6	37%	2
St. Johns	33%	3	34%	8
St. Lucie	20%	42	21%	42
Sumter	21%	35	23%	34
Suwannee	19%	47	17%	53
Taylor	18%	51	17%	53
Union	18%	51	19%	48
Volusia	25%	16	27%	15
Wakulla	29%	9	27%	15
Walton	25%	16	22%	40
Washington	24%	22	25%	22



The reason for the large variations in student achievement within the state can be further accounted for by the gap between the percent of White students scoring at grade level (level 3) or above and the percent of Black and Hispanic students performing at this same level. Table 3 (below) shows how Black and Hispanic student performance consistently trails the performance of White students and how this gap widens between 4th and 8th grade.

- In 4th grade reading, the gap between White and Black students was 32 percent, and, between White and Hispanic students, it was 22 percent.
- In 8th grade reading, the gap between White and Black students was 35 percent, and, between White and Hispanic students, it was 24 percent.
- In 4th grade math, the gap between White and Black students was 34 percent, and, between White and Hispanic students, it was 19 percent.
- In 8th grade math, the gap between White and Black students was 39 percent, and, between White and Hispanic students, it was 23 percent.

Table 3 also shows an achievement gap between White students and Black and Hispanic students reaching the highest performance levels (level 4+). It is interesting to note that this gap, while still substantial, is smaller than the gap between these groups scoring at level 3+, as described above.

Table 3 - Percentage of Students by Race/Ethnicity Achieving Levels 3+ and 4+ on 2003 FCAT

	Reading					
	Percent achieving levels 3+			Percent achieving levels 4+		
	White	Black	Hispanic	White	Black	Hispanic
Grade 4	73	41	51	40	14	22
Grade 8	62	27	38	26	7	12
	Math					
	Percent achieving levels 3+			Percent achieving levels 4+		
	White	Black	Hispanic	White	Black	Hispanic
Grade 4	67	33	48	28	7	15
Grade 8	70	31	47	33	8	17

Source: FCAT 2003 State Demographics Reports, Florida Department of Education and Florida TaxWatch, February 2004

As this section documented, 2003 FCAT scores reveal there to be small student achievement gains statewide and in some counties. However, problems remain. There is wide variation in student achievement among the counties of the state, and a disproportionate percentage of Black and Hispanic students overall fail to perform at grade level.



FLORIDA'S RELATIVE ACHIEVEMENT WITHIN THE U.S.: NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

The National Assessment of Educational Progress (NAEP), known as the *Nation's Report Card*, can help policymakers better understand how Florida's students are progressing relative to students in the rest of the nation. NAEP results are reported in four achievement levels⁵, much like the achievement levels used to describe student performance on Florida's FCAT.

However, care must be taken in comparing NAEP levels with FCAT levels. FCAT performance levels do not readily correspond with the NAEP performance levels. While FCAT has 5 performance levels, NAEP has only 4 levels. FCAT level 3 is considered grade level, even though students scoring at this level are described as being, "generally less successful with the most challenging questions" on the FCAT. Students scoring at NAEP's level 3, labeled as "proficient," are considered to exhibit "competency over challenging subject matter." FCAT level 3, defined as "less success with the most challenging test questions" may be more closely aligned with NAEP level 2, labeled as "basic" and defined as "partial mastery of fundamental skills." Similarly, FCAT level 4 may be more closely aligned with NAEP level 3, labeled as "proficient."⁶

For example, NAEP results indicate that 32 percent of Florida's 4th graders can read at the "proficient" level. However, according to 2003 FCAT results, 60 percent of Florida's students perform at grade level (level 3). This indicates that performing at the proficient level on the NAEP is a tougher benchmark than performing at grade level on the FCAT.

Furthermore, if Florida's benchmark for grade level were increased to level 4 on the FCAT, then 29 percent of Florida's 4th grade students would have reached that goal in reading, which more closely aligns with the NAEP report that 32 percent of Florida's 4th graders read at a proficient level. Such discrepancies are found across all grade levels in both reading and math. This suggests that the two tests are comparable in their level of difficulty, even though their scaling is different. In interpreting the national student achievement data that follows, it is important to note these apparent inconsistencies between state and national ideals of adequate student performance.

THE FEDERAL NO CHILD LEFT BEHIND (NCLB) ACT

NCLB Act of 2001 stipulates that, by the year 2014, *all* students will reach the "proficient" level in reading and math, as measured by NAEP. Because all states must participate in the NAEP, it will act as a "check" to verify results of state tests. Each state must administer NAEP reading and mathematics assessments for grades 4 and 8 every other year. The law requires states to raise the bar over the next decade until every student is proficient in reading and math. Figure 4 (page 10) shows how far Florida has to go to comply with the mandate of NCLB. Figure 4 shows the current performance levels on the 2003 NAEP (in black) and how the performance goals escalate over the next ten years. For example, the goal for mathematics for 2002-04 was for at least 38 percent of students to reach the proficient level—a goal that Florida did not meet.

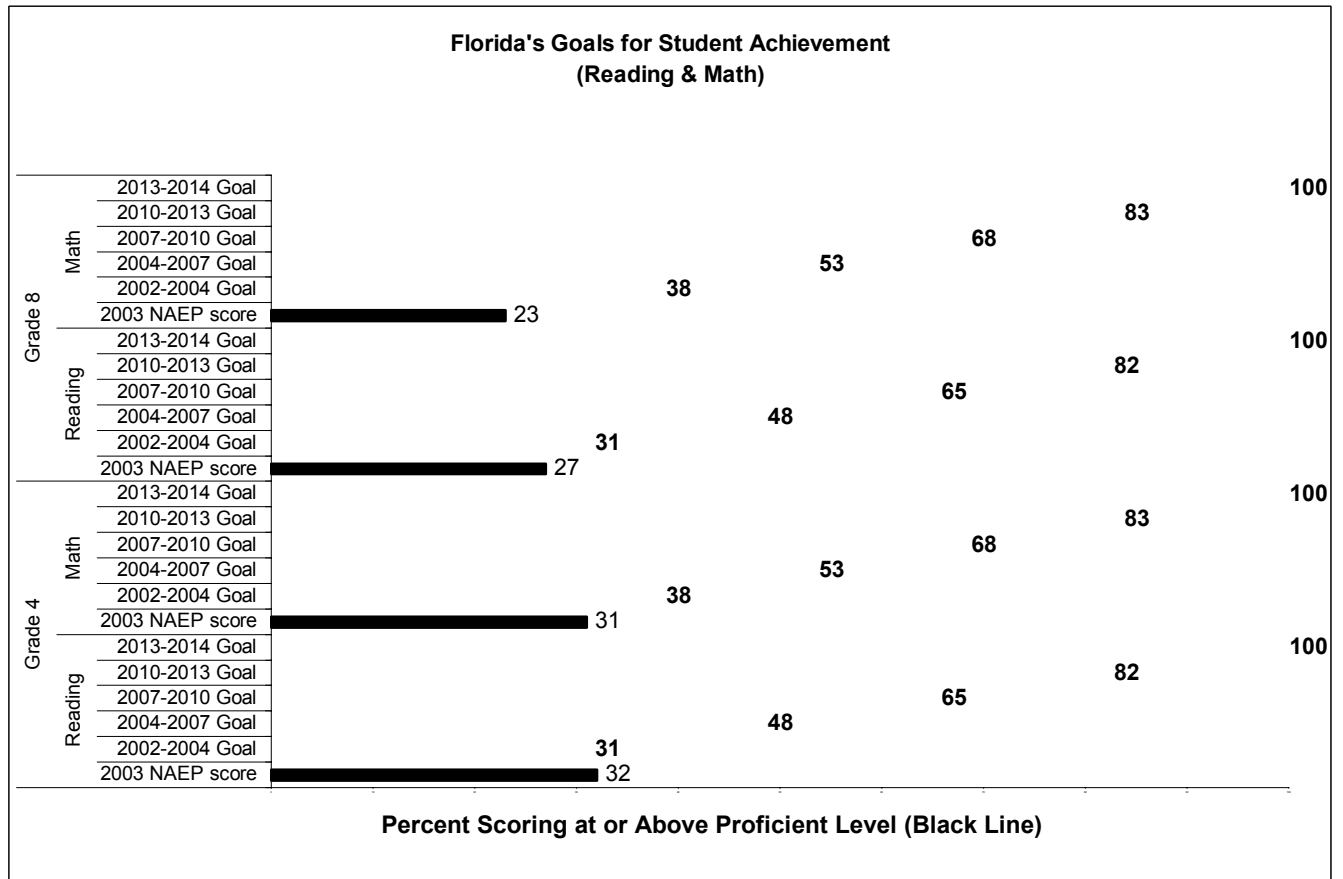
⁵Level 1 is below basic—lack of mastery; level 2 is basic—partial mastery of fundamental skills for each grade level; level 3 is proficient—competency over challenging subject matter; level 4 is advanced—superior performance.

⁶Achievement level comparisons are further complicated by such discrepancies in definitions. Achievement levels describe student achievement relative to standards. Therefore, alignment between the nature and difficulty level of state and national standards is also important. Florida's FCAT performance level definitions, noted in footnote 3 (page 3), lack the specificity necessary for purposes of accountability. A more thorough explication of this issue is not within the purview of this report.



The goal jumps to 53 percent of all students in 2004-07, 68 percent in 2007-2010, 83 percent in 2010-2013, and 100 percent in 2013-2014.

Figure 4



Source: http://www.fldoe.org/nclb/FINALNCLB-AYP-Workbook_4-25-031.pdf and Florida TaxWatch

Figures 5 and 6 (below) show Florida's performance on the NAEP reading and mathematics exam as compared to the national average. Table 4 (page 12) shows 2003 NAEP results for reading and math for Florida and all the states in the nation. It also shows the relative rankings of each state.

Figure 5

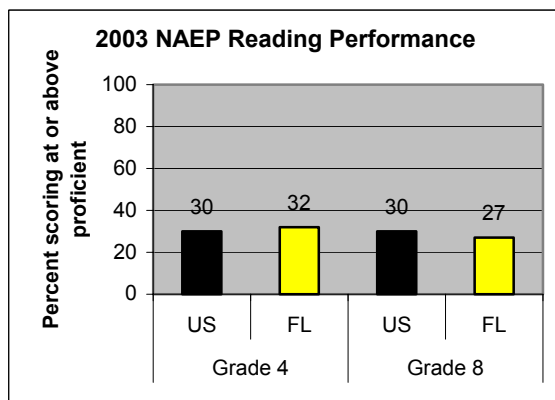
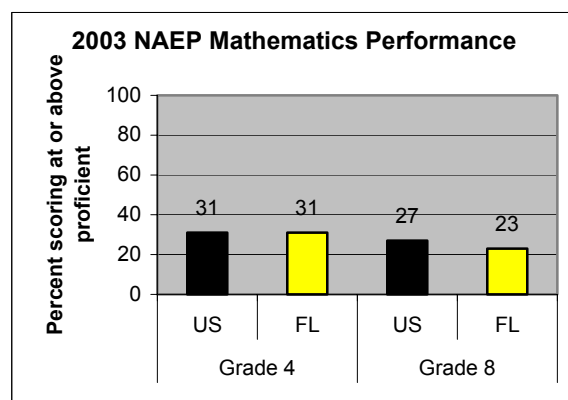


Figure 6



Source: <http://nces.ed.gov/nationsreportcard/site/home.asp> and Florida TaxWatch



Florida's students historically have scored well below the national average on the NAEP exam. However, 2003 Florida NAEP results indicate Florida is making progress—we reached the national average in 4th grade math and surpassed the national average in 4th grade reading. However, in 8th grade reading and math, Florida still performs below the US average.

Other results indicate:

- Connecticut ranked first in the nation in 4th grade reading and Massachusetts was first in 8th grade reading. In both cases, 43 percent of students reached the proficient level. Florida ranked 24th in 4th grade reading and 37th in 8th grade reading.
- New Hampshire and Minnesota ranked first in math for both 4th and 8th grades, with 43 percent and 44 percent of their students (respectively) reaching the proficient level. Florida ranked 29th in 4th grade math and 37th in 8th grade math.
- While Florida was the only state that made significant gains over the preceding year in 4th grade reading, North Dakota was the only state that made significant gains in 8th grade reading. **Florida was not among the 41 states that made significant gains in 4th grade math or among the 17 states that made significant gains in 8th grade math.**

NAEP ACHIEVEMENT GAP

NAEP scores not only allow Floridians to compare achievement with other states and with the nation as a whole, but also show how different groups of students perform academically. When Florida's NAEP achievement results are disaggregated by race, the figures show a large gap between the performance of White students and Black and Hispanic students, both in Florida and in the nation. Table 5 (page 13) illustrates the extent of this gap:

- In 4th grade reading the gap between White and Black students within Florida was 29%, and, between White and Hispanic students within Florida, it was 18%, compared to a national gap of 27% and 25% respectively.
- In 8th grade reading the gap between White and Black students within Florida was 26%, and, between White and Hispanic students within Florida, it was 18%, compared to a national gap of 27% and 25% respectively.
- In 4th grade math the gap between White and Black students within Florida was 35%, and, between White and Hispanic students within Florida, it was 16%, compared to a national gap of 32% and 27% respectively.
- In 8th grade math the gap between White and Black students within Florida was 27%, and between White and Hispanic students within Florida, it was 18%, compared to a national gap of 29% and 25% respectively.



Table 4 - NAEP 2003 Reading and Math

Percent Scoring At or Above Proficient Level/State Rank

	READING				MATH			
	4 th grade		8 th grade		4 th grade		8 th grade	
State	percent	rank	percent	rank	percent	rank	percent	rank
Alabama	22	44	22	44	19	48	16	48
Alaska	28	36	27	35	30	34	30	23
Arizona	23	43	25	41	25	39	21	40
Arkansas	28	37	27	36	26	38	19	45
California	21	45	22	45	25	40	22	38
Colorado	37	5	36	12	34	17	34	10
Connecticut	43	1	37	6	41	4	35	4
Delaware	33	16	31	30	31	28	26	32
District of Columbia	10	51	10	51	7	51	6	51
Florida	32	24	27	37	31	29	23	37
Georgia	27	38	26	38	27	37	22	39
Hawaii	21	46	22	46	23	43	17	46
Idaho	30	33	32	26	31	30	28	29
Illinois	31	30	35	15	32	26	29	27
Indiana	33	17	33	23	35	15	31	20
Iowa	35	9	36	13	36	10	33	12
Kansas	33	18	35	16	41	5	34	11
Kentucky	31	31	34	19	22	46	24	35
Louisiana	20	47	22	47	21	47	17	47
Maine	36	8	37	7	34	18	29	28
Maryland	32	25	31	31	31	31	30	24
Massachusetts	40	2	43	1	41	6	38	2
Michigan	32	26	32	27	34	19	28	30
Minnesota	37	6	37	8	42	2	44	1
Mississippi	18	50	21	48	17	49	12	50
Missouri	34	12	34	20	30	35	28	31
Montana	35	10	37	9	31	32	35	5
Nebraska	32	27	35	17	34	20	32	14
Nevada	20	48	21	49	23	44	20	42
New Hampshire	40	3	40	2	43	1	35	6
New Jersey	39	4	37	10	39	8	33	13
New Mexico	19	49	20	50	17	50	15	49
New York	34	13	35	18	33	23	32	15
North Carolina	33	19	29	34	41	7	32	16
North Dakota	32	28	38	5	34	21	36	3
Ohio	34	14	34	21	36	11	30	25
Oklahoma	26	40	30	32	23	45	20	43
Oregon	31	32	33	24	33	24	32	17
Pennsylvania	33	20	32	28	36	12	30	26
Rhode Island	29	34	30	33	28	36	24	36
South Carolina	26	41	24	43	32	27	26	33
South Dakota	33	21	39	3	34	22	35	7
Tennessee	26	42	26	39	24	41	21	41
Texas	27	39	26	40	33	25	25	34
Utah	32	29	32	29	31	33	31	21
Vermont	37	7	39	4	42	3	35	8
Virginia	35	11	36	14	36	13	31	22
Washington	33	22	33	25	36	14	32	18
West Virginia	29	35	25	42	24	42	20	44
Wisconsin	33	23	37	11	35	16	35	9
Wyoming	34	15	34	22	39	9	32	19
U.S.	30		30		31		27	

Source: <http://nces.ed.gov/nationsreportcard/pdf>, www.edweek.org/sreports/gc and Florida TaxWatch



Table 5 - NAEP 2003 Achievement Gap By Race

Florida v. Nation - Percentage Scoring At Proficient Level or Above

		Percent Scoring At or Above Proficient Level				
		White/Black			White/Hispanic	
		White	Black	Gap	Hispanic	Gap
Reading Grade 4	Florida	42	13	29	24	18
	Nation	39	12	27	14	25
Grade 8	Florida	37	11	26	19	18
	Nation	39	12	27	14	25
Math Grade 4	Florida	43	8	35	27	16
	Nation	42	10	32	15	27
Grade 8	Florida	34	7	27	16	18
	Nation	36	7	29	11	25

Source: *The Nation's Report Card* - accessed at <http://nces.ed.gov/nationsreportcard/pdf/>

When the data are disaggregated, as in Table 5, the news is both good and bad: Florida achieved its 2003 NCLB goal with White students; Florida failed miserably with Black and Hispanic students. Most of the children currently being left behind in Florida are children of color. For example, in 8th grade reading, only 11 percent of Black students and 19 percent of Hispanics are proficient or better. In 8th grade math, only 7 percent of Black students and 16 percent of Hispanic students reached the proficient level. Other good news though: Florida's White/Hispanic gap is considerably less than the nation's.⁷

U. S. ACHIEVEMENT IN A GLOBAL CONTEXT

Florida's workforce must compete in a global marketplace. Our state's economic and technological competitiveness and our nation's prosperity depend upon the success of our local schools and how they measure up in this marketplace. Now, more than ever before, student achievement in Florida schools must compare favorably not just to other states in the nation, but just as importantly, to that of other industrialized countries. International comparisons of student performance are becoming more critical and more sophisticated. The following assessments tell us how well the American educational system compares with the systems of other economically developed countries in the areas of reading, science, and mathematics.

The Third International Math and Science Study (TIMSS) assessed mathematics and science performance of 4th and 8th graders, and the Program for International Student Assessment (PISA) and the Progress in International Reading Literacy Study (PIRLS) assess reading literacy.

⁷Another mandate of the NCLB requires that achievement test data be disaggregated by student ethnicity and income level. Students in each of these various subgroups must make adequate yearly progress toward the goals set by NCLB or they must be allowed to transfer out of their current school, taking both state and federal dollars with them to their new school. A future report in this series will further examine the potential ramifications of this mandate.



PROGRAM FOR INTERNATIONAL STUDENT ASSESSMENT (PISA)

PISA measures 15-year-olds' knowledge and skills in reading in the context of everyday situations, such as the kinds of forms they receive from their governments, the kinds of articles they read in their local newspapers, the kinds of manuals they read for work or school, and the kinds of books or magazines they read for entertainment. Table 6 (page 15) describes the average score of each participating country.

- Average reading literacy scores in the U.S. rank 15th among 27 countries. U.S. students significantly outperformed students from Greece, Luxembourg, Mexico, and Portugal, but students in Canada, Finland, and New Zealand significantly outperformed U.S. students.

In order to provide more information about the way scores are distributed within countries, scores are also reported using five achievement levels⁸. Table 6 also shows that some of the countries with an average score similar to the U.S. vary from the U.S. in the percentages of students scoring in the highest and lowest achievement levels.

- The percentage of students in the U.S. who perform at each level is close to the international average, except that 12 percent of U.S. students read at level 5—a percentage that is higher than the international average.
- About one-third of U.S. students perform at the two highest levels (levels 4 and 5), about 60 percent perform at level 3 or above, approximately 18 percent score below level 2, and level 1 (the lowest proficiency level) encompasses 12 percent of U.S. students. Six percent of U.S. students do not even reach this lowest level.

PROGRESS IN INTERNATIONAL READING LITERACY STUDY (PIRLS)

PIRLS measures 4th grade literary and informational reading comprehension necessary for future learning. However, care must be taken when comparing PIRLS results with other test results reported here.

Unlike other tests reported here, *PIRLS includes students from both public and private schools*. Because 4th grade students in private schools in the United States scored significantly higher than 4th grade students in public schools on the combined reading literacy scale, this undoubtedly raises the reported U.S. achievement level.

Also, PIRLS reading passages are, on average, about half the length of the NAEP reading passages. Reading passages in this assessment were determined to be easier than the NAEP passages. NAEP places more emphasis on having students critically evaluate what they have read.

⁸ In order to reach a particular level, a student must be able to answer correctly a majority of items at that level. Students were classified into reading levels according to their scores: level 5 = a score of 626 and above; level 4 = a score of 553-625; level 3 = a score of 481-552; level 2 = a score of 408-480; and level 1 = a score of 335-407.



**Table 6 – Program for International Student Assessment (PISA)
Combined Reading Literacy - Average Scale Score and Levels of Proficiency**

Country	Average Score ¹	Percentage of Students Reaching Each Proficiency Level							Level 3+ Rank
		Below Level 1	Level 1	Level 2	Level 3	Level 4	Level 5	Level 3+	
^Finland	546	1.7	5.2	14.3	28.7	31.6	18.5	78.8	1
^Canada	534	2.4	7.2	18.0	28.0	27.7	16.8	72.5	3
^New Zealand	529	4.8	8.9	17.2	24.6	25.8	18.7	69.1	6
*Australia	528	3.3	9.1	19.0	25.7	25.3	17.6	68.6	7
*Ireland	527	3.1	7.9	17.9	29.7	27.1	14.2	71.1	5
*Korea	525	0.9	4.8	18.6	38.8	31.1	5.7	75.6	2
*United Kingdom	523	3.6	9.2	19.6	27.5	24.4	15.6	67.5	8
*Japan	522	2.7	7.3	18.0	33.3	28.8	9.9	72.0	4
*Sweden	516	3.3	9.3	20.3	30.4	25.6	11.2	67.1	9
*Belgium	507	7.7	11.3	16.8	25.8	26.3	12.0	64.2	10
*Austria	507	4.4	10.2	21.7	29.9	24.9	8.8	63.7	11
*Iceland	507	4.0	10.5	22.0	30.8	23.6	9.1	63.5	12
*Norway	505	6.3	11.2	19.5	28.1	23.7	11.2	63.0	13
*France	505	4.2	11.0	22.0	30.6	23.7	8.5	62.8	14
United States	504	6.4	11.5	21.0	27.4	21.5	12.2	61.1	15
*Denmark	497	5.9	12.0	22.5	29.5	22.0	8.1	59.6	16
*Poland	497	8.7	14.6	24.1	28.2	18.6	5.9	52.7	22
*Switzerland	494	7.0	13.3	21.4	28.0	21.0	9.2	58.2	17
*Spain	493	4.1	12.2	25.7	32.8	21.1	4.2	58.1	18
*Czech Republic	492	6.1	11.4	24.8	30.9	19.8	7.0	57.7	19
*Italy	487	5.4	13.5	25.6	30.6	19.5	5.3	55.5	20
*Germany	484	9.9	12.7	22.3	26.8	19.4	8.8	55.0	21
*Hungary	480	6.9	15.8	25.0	28.8	18.5	5.1	52.3	23
>Greece	474	8.7	15.7	25.9	28.1	16.7	5.0	49.7	24
>Portugal	470	9.6	16.7	25.3	27.5	16.8	4.2	48.5	25
>Luxembourg	441	14.2	20.9	27.5	24.6	11.2	1.7	37.5	26
>Mexico	422	16.1	28.1	30.3	18.8	6.0	0.9	25.6	27
Average²	500	6.0	11.9	21.7	28.7	22.3	9.5	60.4	

NOTES 1. Scores are reported on a scale of 0 to 1000, with a mean of 500 and a standard deviation of 100.

2. The average is the average of the national average of the 27 participating counties.

Source: U.S. Department of Education, NCES. (2001). Outcomes of Learning: Results from the 2000 Program for International Student Assessment of 15-Year-Olds in Reading, Mathematics, and Science Literacy (NCES 2002-115)

KEY

^Scores significantly higher than the U.S.

*Scores not significantly higher than the U.S.

>Scores significantly lower than the U.S.



PIRLS assessed 4th grade reading in 35 countries. Table 7 (page 17) summarizes significant differences between the U.S. and other countries using an average scale score and four achievement levels.⁹

- U.S. 4th grade students perform significantly better than the international average of 500 on the combined reading literacy scale, outperforming their counterparts in 23 of the 34 other participating countries. However, they score significantly lower than students in England, the Netherlands, and Sweden. No significant differences in scores are found between U.S. students and their counterparts in eight of the remaining participating countries.
- Nineteen percent of U.S. students reach the top 10 percent benchmark; 41 percent of U.S. students reach the upper quarter benchmark; 68 percent of U.S. students reach the median benchmark; and 89 percent of U.S. students reach the lower quarter benchmark.

MATHEMATICS AND SCIENCE ACHIEVEMENT: THIRD INTERNATIONAL MATH AND SCIENCE STUDY (TIMSS)

In 1995, TIMSS assessed the mathematics and science performance of 4th grade students in 40 countries. Then, in 1999, 17 of these countries administered the same battery of exams (TIMSS-R) to this same cohort of students, who were then 8th graders.

- In math (in 1995), U.S. 4th graders scored at the average of those 17 countries. In 1999, when those 4th graders were in 8th grade, their achievement dropped to the bottom tier—significantly below the international average—and ahead of only five other countries.
- In science (in 1995), U.S. 4th graders had scored well above the 17-country average. In 1999, this same cohort of students, now 8th graders, slipped below the average in their performance.

The TIMSS-R was also administered to additional U.S. jurisdictions—13 states, 9 school districts, and 5 regional consortia of districts across the United States. This provided these jurisdictions an unprecedented opportunity to assess their comparative international standing in mathematics and science. **Miami-Dade School District seized the opportunity and courageously stepped forward, willing to take a hard look at how their students perform within a global context.**

Tables 8 (page 20), 9 (page 21), and 10 (page 22) summarize the performance of Miami-Dade's 8th graders relative to the U.S. as a whole, other participating U.S. jurisdictions and other participating nations.

⁹ Top ten percent benchmark = score of 615; Upper quarter benchmark = score of 570; median benchmark = score of 510; lower quarter benchmark = score of 435.



Table 7 – Progress in International Reading Literacy Study (PIRLS)

4th graders' combined reading literacy: Average scale score and proficiency levels

Country	Average combined Reading literacy Score	Country	Top Ten percent Benchmark	Upper Quarter Benchmark	Median Benchmark	Lower Quarter Benchmark
Sweden	561	England	24	45	72	90
Netherlands	554	Bulgaria	21	45	72	91
England	553	Sweden	20	47	80	96
Bulgaria	550	United States	19	41	68	89
Latvia	545	New Zealand	17	35	62	84
Canada (Ontario, Quebec)	544	Canada (Ontario, Quebec)	16	37	69	93
Lithuania	543	Singapore	15	35	64	85
Hungary	543	Netherlands	14	40	79	98
United States	542	Italy	14	36	69	92
Italy	541	Scotland	14	32	62	87
Germany	539	Hungary	13	36	71	94
Czech Republic	537	Lithuania	13	36	71	95
New Zealand	529	Latvia	12	36	73	96
Scotland	528	Germany	12	34	69	93
Singapore	528	Israel	11	28	54	79
Russian Federation	528	Romania	11	27	54	81
Hong Kong, SAR	528	Czech Republic	10	32	68	93
France	525	Greece	10	28	60	89
Greece	524	France	9	26	60	90
Slovak Republic	518	Russian Federation	8	27	64	92
Iceland	512	Slovak Republic	7	23	59	88
Romania	512	Iceland	7	23	53	85
Israel	509	Hong Kong, SAR	6	26	64	92
Slovenia	502	Norway	6	19	48	80
International Avg.	500	Cyprus	6	18	45	77
Norway	499	Slovenia	4	17	48	83
Cyprus	494	Moldova	4	15	42	79
Moldova	492	Macedonia	3	10	28	55
Turkey	449	Turkey	2	7	25	58
Macedonia	442	Argentina	2	5	17	46
Colombia	422	Iran	1	4	16	42
Argentina	420	Colombia	1	3	14	45
Iran	414	Morocco	1	3	8	23
Kuwait	396	Kuwait	0	2	10	36
Morocco	350	Belize	0	1	5	16
Belize	327					

Source: NCES 2003-073 and FTW

Source: PIRLS 2001 International Report, Exhibit 3.1 and Florida TaxWatch

Note: Scores are reported on a scale of 0-1000, with an international average of 500.

	Average is significantly higher than the U.S. average
	Average is not significantly different from the U.S. average
	Average is significantly lower than the U.S. average



Table 8 (page 20) shows math and science achievement as measured by average scale score.

- In mathematics, all of the benchmarking states performed either significantly above or similar to the international average, yet significantly below high-performing Asian countries.
- In science, performance for the 13 states was relatively better than in mathematics—all but three states performed significantly above the international average.
- No state scored statistically higher or lower than the U.S. average.
- In mathematics, two (Illinois) U.S. school districts/consortiums, Naperville School District and First in the World Consortium, performed similarly to Hong Kong, Japan, Belgium (Flemish) and the Netherlands.
- In science, the same two Illinois jurisdictions, as well as the Michigan Invitational Group and the Academy School District in Colorado, had average achievement comparable to Singapore.

Tables 9 (page 21) and 10 (page 22) summarize the results of TIMSS-R 1999 using international benchmarks,¹⁰ showing how scores are distributed within each U.S. jurisdiction and each nation, in mathematics and science, respectively.

Consider the following comparisons in mathematics performance.

- Singapore's mathematics performance is the best among all participating entities; 46 percent of their students reached the highest benchmark. Only nine percent of U.S. students reached this top performance level, and only two percent in Miami-Dade reached this level.
- The test score required to achieve the lower quarter benchmark is 396. Miami-Dade's *average* scale score (Table 8) is 421. In the Miami-Dade district, average performance is only slightly above the lower quarter benchmark.
- No U.S. district, state or consortia scored below Miami-Dade County Public Schools. Miami-Dade was outperformed by city public schools in Chicago, New York, and New Jersey.
- The gap between the lowest and highest performing U.S. districts (Miami-Dade and Naperville, Illinois) is larger than the gap between the U.S. and the highest scoring nation on the test, Singapore.

¹⁰ International benchmarks are points on the achievement scale chosen to describe specific achievement levels. The top ten percent benchmark (90th percentile) = a score of 616; the upper quarter benchmark (75th percentile) = a score of 555; the median benchmark (50th percentile) = a score of 479; and the lower quarter benchmark (25th percentile) = a score of 396. Students reaching a particular benchmark demonstrated the knowledge and understandings characterizing that benchmark as well as those characterizing the lower benchmarks. Some students scoring below a benchmark may indeed know or understand some of the concepts that characterize a higher level.



Figure 7 (below) describes highlights from Miami-Dade and U.S. student performance on the TIMSS-R in mathematics.

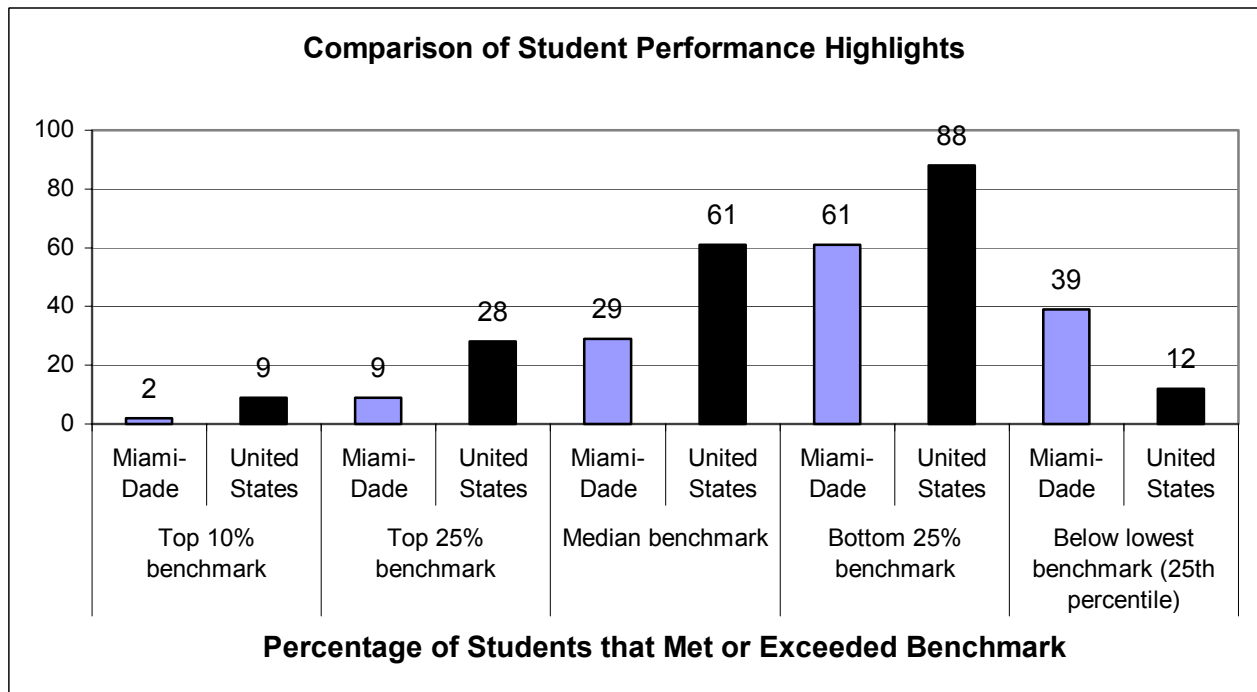
U.S. performance highlights:

- Nine percent of U.S. students reached the top 10 percent benchmark
- 28 percent reached at least the upper quarter benchmark
- 61 percent reached the median benchmark or above
- 88 percent reached at least the lower quarter benchmark
- 12 percent fell below the lowest benchmark—the 25th percentile of achievement

Miami-Dade performance highlights:

- Two percent of Miami-Dade's students reached the top 10 percent benchmark
- Nine percent reached the upper quarter benchmark
- 29 percent reached the median benchmark
- 61 percent reached the lower quarter benchmark
- 39 percent failed to reach the 25th percentile—the lower quarter benchmark

Figure 7



Source: TIMSS-R 1999 Benchmarking Study - Boston College and Florida TaxWatch

Miami-Dade County is not the only county where there is cause for concern. Although the FCAT and TIMSS-R are different tests, and exact mathematical skills measured on these two tests may vary slightly, it is important to note that on the 2003 FCAT, nine counties ranked below Miami-Dade in mathematics performance (see Table 1, page 5).



Table 8 - Third International Math and Science Study (TIMSS-R) 1999

MATHEMATICS		SCIENCE	
^Singapore	604	^Naperville School District 203, IL	584
^Korea	587	^Singapore	568
^Hong Kong	582	^First in the World Consortium, IL	565
^Japan	579	^Michigan Invitational Group	563
^Naperville School District 203, IL	569	^Academy School District No. 20, CO	559
^First in the World Consortium, IL	560	^Hungary	552
^Belgium	558	^Japan	550
^Netherlands	540	^Korea	549
^Montgomery County, MD	537	^Netherlands	545
^Slovak Republic	534	^Australia	540
^Hungary	532	^Czech Republic	539
^Michigan Invitational Group	532	^England	538
^Canada	531	^Belgium	535
^Slovenia	530	^Slovak Republic	535
^Academy School District No. 20, CO	528	^Canada	533
^Russian Federation	526		
^Australia	525	*Michigan	544
		*SW Math/Science Collaborative, PA	543
*Project SMART Consortium, OH	521	*Project SMART Consortium, OH	539
*Czech Republic	520	*Oregon	536
*Michigan	517	*Guilford County, NC	534
*SW Math/Science Collaborative, PA	517	*Indiana	534
*Texas	516	*Massachusetts	533
*Indiana	515	*Slovenia	533
*Guilford County, NC	514	*Montgomery County, MD	531
*Oregon	514	*Hong Kong	530
*Massachusetts	513	*Connecticut	529
*Connecticut	512	*Pennsylvania	529
*Bulgaria	511	*Russian Federation	529
*Illinois	509	*Idaho	526
*Pennsylvania	507	*Missouri	523
*Latvia	505	*Illinois	521
*South Carolina	502	*Bulgaria	518
*United States	502	*United States	515
*England	496	*Freemont/Lincoln/WestSide Public Schools, NE	511
*Idaho	495	*South Carolina	511
*Maryland	495	*New Zealand	510
*North Carolina	495	*Texas	509
*New Zealand	491	*North Carolina	508
*Missouri	490	*Maryland	506
*Freemont/Lincoln/WestSide Public Schools, NE	488	*Latvia	503
*Delaware Science Coalition, DE	479	*Delaware Science Coalition, DE	500
*Jersey City Public Schools, NJ	475		
		>Italy	493
>Lithuania	482	>Lithuania	488
>Italy	479	>Romania	472
>Cyprus	476	>Cyprus	460
>Romania	472	>Rochester City School District, NY	452
>Chicago Public Schools, IL	462	>Chicago City Public Schools, IL	449
>Rochester City School District, NY	444	>Iran	448
>Iran	422	>Jersey City Public Schools, NJ	440
>Miami-Dade County Public Schools, FL	421	>Miami-Dade County Public Schools, FL	426
INTERNATIONAL AVERAGE of 23 countries*	521	INTERNATIONAL AVERAGE of 23 countries*	521

*NOTE: Only the 23 countries that participated in TIMSS and TIMSS-R at the 8th grade level that met sampling guidelines in both 1995 and 1999 are included.

Sources: U.S. TIMSS National Research Center, 2001 and *Education Week*, April 11, 2001

Key

^ Score is significantly higher than the U.S.

* Score is not significantly higher than the U.S.

> Score is significantly lower than the U.S.



TABLE 9 – Third International Math and Science Study (TIMSS-R) 1999 Mathematics Achievement
Percentage of 8th Grade Students Reaching International Benchmarks

Countries	Benchmarks				States	Benchmarks			
	Top 10 percent	Top Quarter	Median	Lower Quarter		Top 10 percent	Top Quarter	Median	Lower Quarter
United States	9	28	61	88	Connecticut	11	31	67	91
Australia	12	37	73	94	Idaho	5	24	61	88
Belgium-Flemish	23	54	85	98	Illinois	10	29	65	92
Bulgaria	11	30	66	91	Indiana	9	30	69	94
Canada	12	38	77	96	Maryland	8	27	57	87
Chile	1	3	15	48	Massachusetts	10	31	68	92
Chinese Taipei	41	66	85	95	Michigan	10	33	70	92
Cyprus	3	17	51	84	Missouri	4	20	58	89
Czech Republic	11	33	69	94	North Carolina	7	25	57	88
England	7	24	58	89	Oregon	10	32	69	91
Finland	6	31	75	96	Pennsylvania	9	28	65	91
Hong Kong, SAR	33	68	92	99	South Carolina	10	30	60	88
Hungary	16	41	74	94	Texas	13	37	66	90
Indonesia	2	7	22	52					
Iran, Islamic Rep. Of	1	5	25	63	Districts				
Israel	5	18	47	77	Academy School	12	38	75	95
Italy	5	20	52	83	District, CO				
Japan	33	64	89	98	Chicago Public	2	12	41	81
Jordan	3	13	32	62	Schools, IL				
Korea, Rep. Of	37	68	91	99	Delaware Science	5	22	51	83
Latvia-LSS	7	26	63	92	Coalition, DE				
Lithuania	4	17	52	85	First in the World	22	56	87	98
Macedonia, Rep. Of	3	12	38	72	Consort, IL				
Malaysia	12	34	69	94	Fremont/Lincoln	6	23	58	84
Moldova	4	16	45	81	Westside PS, NE				
Morocco	0	0	5	27	Guilford County,	10	33	66	91
Netherlands	14	45	81	96	NC				
New Zealand	8	25	56	85	Jersey City Public	6	17	48	82
Philippines	0	1	8	31	Schools, NJ				
Romania	5	19	49	80	Miami-Dade	2	9	29	61
Russian Federation	15	37	72	94	County PS, FL				
Singapore	46	75	93	99	Michigan Invita-	12	39	77	96
Slovak Republic	14	40	78	96	tional Group, MI				
Slovenia	15	39	74	95	Montgomery Co.,	17	45	77	95
South Africa	0	1	5	14	MD				
Thailand	4	16	44	81	Naperville Sch.	24	59	91	99
Tunisia	0	4	32	80	Dist. #203, IL				
Turkey	1	7	27	65	Project SMART	11	34	70	95
					Consortium, OH				
					Rochester City	2	9	32	73
					Sch. Dist., NY				
					SW Math/Sci.	11	32	68	93
					Collaborative, PA				

Source: TIMSS-R 1999 Benchmarking Study - Boston College and Florida TaxWatch



**TABLE 10 – THIRD INTERNATIONAL MATH AND SCIENCE STUDY (TIMSS-R) 1999 SCIENCE ACHIEVEMENT
PERCENTAGE OF 8TH GRADE STUDENTS REACHING INTERNATIONAL BENCHMARKS**

	BENCHMARKS					BENCHMARKS			
	Top 10 percent	Top Quarter	Median	Lower Quarter		Top 10 percent	Top Quarter	Median	Lower Quarter
Countries					States				
United States	15	34	62	85	Connecticut	17	39	69	90
Australia	19	43	74	93	Idaho	13	37	70	91
Belgium-Flemish	11	39	76	96	Illinois	14	36	66	88
Bulgaria	14	34	65	88	Indiana	18	41	72	92
Canada	14	38	73	94	Maryland	12	31	59	84
Chile	1	5	22	56	Massachusetts	17	40	71	92
Chinese Taipei	31	58	83	95	Michigan	22	47	75	91
Cyprus	2	12	39	74	Missouri	14	36	67	89
Czech Republic	17	41	74	95	North Carolina	11	30	60	85
England	19	42	72	92	Oregon	19	43	73	91
Finland	14	39	74	95	Pennsylvania	15	38	70	91
Hong Kong, SAR	10	35	75	95	South Carolina	13	34	60	85
Hungary	22	49	79	95	Texas	15	35	61	83
Indonesia	1	6	27	64	Districts				
Iran, Islamic Rep. Of	2	9	32	68	Academy School	23	52	84	97
Israel	7	20	45	72	District, CO				
Italy	7	23	54	83	Chicago Public	3	11	34	67
Japan	19	48	80	96	Schools, IL				
Jordan	4	15	38	66	Delaware Science	10	29	56	83
Korea, Rep. Of	22	46	77	94	Coalition, DE				
Latvia-LSS	7	24	59	88	First in the World	27	54	85	97
Lithuania	6	20	51	83	Consort, IL				
Macedonia, Rep. Of	4	15	40	70	Fremont/Lincoln	11	32	63	86
Malaysia	6	21	53	85	Westside PS, NE				
Moldova	4	15	39	70	Guilford County,	19	43	69	90
Morocco	0	1	5	20	NC				
Netherlands	16	46	79	95	Jersey City Public	3	11	31	64
New Zealand	12	32	61	86	Schools, NJ				
Philippines	1	3	13	31	Miami-Dade	4	10	28	58
Romania	6	19	45	75	County PS, FL				
Russian Federation	17	38	68	90	Michigan Invita-	25	54	84	96
Singapore	32	56	80	94	tional Group, MI				
Slovak Republic	14	39	74	94	Montgomery Co.,	17	40	70	91
Slovenia	16	39	71	93	MD				
South Africa	0	2	6	13	Naperville School	33	64	90	98
Thailand	3	15	47	84	District #203, IL				
Tunisia	0	3	19	62	Project SMART	19	43	73	93
Turkey	1	6	25	62	Consortium, OH				
					Rochester City	3	12	33	68
					School District NY				
					SW Math/Science	19	45	75	94
					Collaborative, PA				



CONCLUSION

Florida's state-based assessment system has undoubtedly helped to raise student achievement. But we must not become complacent based solely on the results of our state tests. The quality of Florida's workforce determines the ability of the state to attract high skills jobs and, therefore, impacts the business climate and the standard of living. The future of Florida's economy, and that of the nation, depends on the ability of public schools to produce graduates who can compete internationally.

State, national, and international assessment opportunities will continue to provide important opportunities to gain useful information about Florida's position in this world economy and guard against complacency based solely on the results of our state tests.

- ***Florida policymakers must begin collecting data that will be useful in assessing Florida's relative national and international educational standing.***

It cannot be overstated—Miami-Dade is to be commended for participating in TIMSS-R, and other school districts should be encouraged to participate in the future. The results, while embarrassing, are important for Florida to know. Unfortunately, other large Florida districts have twice passed on opportunities to gather more information about how student achievement in these districts compares to student achievement in other urban school districts across the U.S. and beyond. The Trial Urban District Assessment (TUDA)—a part of the National Assessment of Educational Progress (NAEP)—analyzes and compares skills of 4th and 8th grade students in large urban school districts across U.S. states. Texas, California, and New York—the only three states that are larger than Florida—have all had one of their largest districts participate in TUDA. Houston, Los Angeles, New York, Atlanta, Chicago, and the District of Columbia participated in 2002. Those six districts participated again in 2003 along with four additional districts—Boston, Charlotte-Mecklenburg, Cleveland, and San Diego.

Florida is the 4th largest state in the nation and has 13 of the largest 100 districts in the U.S.¹¹ Yet, Florida has not had any of its large districts take advantage of this opportunity for urban district assessment and comparison.

Miami-Dade is Florida's largest district, enrolling more than 15 percent of the state's students. In light of that county's poor performance on the TIMSS-R, it is particularly important to know whether progress is made. The TUDA could provide such information.

- ***Florida policymakers must determine what it will take to raise student achievement in Florida to high-performing levels.***

¹¹National Center for Education Statistics, *Characteristics of the 100 Largest Public Elementary and Secondary School Districts in the United States: 2000-01*.



For each participating country, TIMSS-R provided data for analysis of student achievement relative to classroom teaching practices, the implemented curricula students receive, and the qualities of their teachers. These data are useful for diagnosing problems that must be addressed. For example, TIMSS-R reports that ***six-out-of-ten U.S. students have math teachers who were not trained in math as their main field of study in college. In the total international sample, the proportion is three-out-of-ten. The fact that the U.S. has twice as many “out-of-field” math teachers as other nations is a potential problem for the quality of instruction in the U.S. and a likely contributing factor to the achievement gap between nations and/or U.S. jurisdictions.***

The federal No Child Left Behind Act of 2001 recognizes the important relationship between student achievement and teacher quality. Toward that end, the federal law mandates that all teachers must be “highly qualified” by 2006. This means that states can hire only teachers who prove subject matter competence in the field in which they teach.

How do Florida’s efforts to improve teacher quality rate? A recent report, *Quality Counts 2004*, issued grades to each state in the nation rating their efforts to improve teacher quality. Florida received a C+ and was outscored by 15 states. There were no F grades given, and only Connecticut and South Carolina earned A grades.¹² The Florida TaxWatch Center for Educational Performance and Accountability Advisory Committee’s Subcommittee on Education Quality may well take up the issue of teacher quality as a research project in the near-term.

The state and district provision of adequate and equitable resources is also important in the effort to raise student achievement and thus meet the requirements of NCLB. *Quality Counts 2004* gave Florida a D+ in Resource Adequacy and a C+ in Resource Equity. In Resource Adequacy, only Arizona and Utah scored lower than Florida. Nevada, Tennessee, and Mississippi also each received a D+. Twenty-four states received an A or B grade. In Resource Equity, Hawaii was the only state to receive an A, and Illinois was awarded the only F. Ten states earned Bs. Thirty-three states scored below Florida’s C+ grade.¹³ The Florida TaxWatch Center for Educational Performance and Accountability Advisory Committee’s Subcommittee on Economics and Administration will be directing TaxWatch staff to initiate research into the sources and uses of education funds.

- ***Florida policymakers must engage in sustained efforts to raise student achievement and rise to the challenge of leaving no child behind.***

Over the last decade, Florida created content and performance standards targeted at boosting student achievement in the state. In fact, the above referenced *Quality Counts 2004* report gave Florida a grade of A for *Standards and Accountability*. Florida’s A+ plan undoubtedly raised student achievement in the state in some areas. However, as this Florida TaxWatch report points out, *Florida has a significant distance yet to go*. The ultimate test is how well-prepared Florida’s students will be to compete in response to national and global challenges.

¹² www.edweek.org/qc04

¹³ www.edweek.org/qc04



For Further Information:

Florida Data:

FCAT

www.firn.edu/doe/sas/fcat.htm

Florida's NCLB Accountability Plan

<http://www.fldoe.org/nclb/>

National Data:

NAEP

<http://nces.ed.gov/nationsreportcard/>

<http://www.edweek.org/reports/qc/>

NCLB

<http://www.ed.gov/legislation/ESEA02/>

International Data:

PISA

www.pisa.oecd.org/index.htm

PIRLS

www.pirls.bc.edu

www.pirls.org

www.nces.ed.gov/surveys/pirls

TIMSS

<http://nces.ed.gov/timss>

<http://timss.bc.edu>

This *Research Report* was written by Janet Herndon, Ph.D., and Brea Gelin, Research Analysts; with assistance from Chima Onwunli and Jarret Stone, Research Assistants; with and under the direction of Keith G. Baker, Ph.D., Senior Vice President & Chief Operating Officer.

Barney Barnett, Chairman, and Dominic M. Calabro, President, Publisher and Editor.
Florida TaxWatch Research Institute, Inc.

© Copyright Florida TaxWatch, May 2004