

# **2004 Guide to Calculating School Grades**

## **Technical Assistance Paper**

### **2003-2004**



**Florida Department of Education**  
**Jim Horne, Commissioner**

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# 2004 Guide to Calculating School Grades Technical Assistance Paper

## I. Overview

### Introduction

The purpose of this technical assistance paper is to provide a description of the procedures used to determine School Performance Grades for the 2004 school year. In 2004, just as in the two previous years, the school grades include three measures of student achievement and three measures of student learning gains. Florida's School Accountability System is being implemented as envisioned by the A+ Plan, passed by the 1999 Florida Legislature. Florida is one of the few states that can track student demographic information from year to year and the first to track annual student learning gains based on the state's academic standards.

School grades have been issued since 1999 with the Florida Comprehensive Assessment Test (FCAT) being the primary criteria in calculating school performance grades. In 2002 significant improvements were made in how school grades were calculated. The most noteworthy improvement was the inclusion of student learning gains. Additionally, a measure was added to determine whether the lowest performing students are making annual improvements in reading. Florida's accountability system allows the improvement of individual students to be tracked from one year to the next based on FCAT developmental scores in reading and mathematics in grades 3 through 10.

This paper contains two sections: the Overview (Section I) and the Process for Calculating School Grades (Section II). These sections describe a series of procedures for determining a school's final performance grade and are intended for knowledgeable audiences who are interested in the details of determining the school performance grades. A more general and concise description of the school grading system is found on the school grading "guide sheet," *Grading Florida Public Schools 2003-2004*, included as Attachment A and also available on the Department of Education website at <http://www.firn.edu/doe/schoolgrades/guide04.htm>.

### Specific Authority

The authority for Florida's system of school accountability is detailed in Florida Statute and State Board of Education Rule. It is not the intent of this section to provide a detailed description of the specific contents of the state law and rule. Readers interested in the additional legal information should consult the source documents.

### Florida Statutes - Section 1008.34 F.S.

This section of Florida law requires the Commissioner of Education to prepare annual reports of student performance for each school and district in the state. The law specifies the grade categories, the timeframes, and the types of information to be included in the calculations. Further, the law directs the State Board of Education to adopt appropriate criteria for each school performance grade category, and requires that added weight be given to student achievement in reading.

### State Board Rule 6A-1.09981

This Rule describes the implementation requirements for Florida's System of School Improvement and Accountability. The State Board of Education revised this rule in November of 2003 for clarification and to bring it into closer compliance with the statute. The rule provides policy information as well as procedural guidance for implementing the program. It also specifies which schools are included in the system and the criteria for designating the school performance grades. In addition, the rule describes the rewards and recognition for schools, and the assistance and intervention provisions for low performing schools (D and F).

### **Summary of the School Performance Grading Criteria**

The FCAT is the primary measure of students' achievement of the Sunshine State Standards. School performance grades are determined by the accumulation of percentage points for six measures of achievement in addition to two other conditions.

Section *6A-1.09981(6)(a)-(f)* of the State Board Rule describes the six performance measures included in the overall performance grade for a school. Points are calculated as follows:

1. One point for each percent of students who score at or above FCAT Achievement Level 3 in reading.
2. One point for each percent of students who score at or above FCAT Achievement Level 3 in mathematics.
3. One point for each percent of students who score 3 or higher averaged with the percent who scored 3.5 or higher on the FCAT writing assessment. In the event that there are not at least 30 eligible students tested in writing, the district average in writing is substituted.
4. One point for each percent of students making learning gains in reading.
5. One point for each percent of students making learning gains in mathematics.
6. One point for each percent of the lowest performing students making learning gains in reading.

These points are added together and converted into a school performance grading scale, shown below in Table 1.

<b>Grade</b>	<b>Total points</b>
A	410 and above
B	380-409
C	320-379
D	280-319
F	Less than 280

In addition to the accumulation of percentage points for each of the six performance measures, schools are also evaluated on the basis of two other conditions:

1. Percent Tested: Schools earning enough total points to receive a grade of A must also test at least 95% of their eligible students. All other letter grade designations are based on a minimum of 90% tested. If any school tests fewer than 90% of their students, the school will initially receive an "I" (incomplete). After investigation, if the percent tested remains less than 90%, the final grade will be one letter grade lower than indicated by the total points accumulated.
2. Adequate Progress of the Lowest Students: Schools earning enough points to receive a C or above must demonstrate that at least half of the lowest students make annual learning gains. For a school to be designated a performance grade of A, adequate progress of the lowest students must be met in the current year. For a school to be designated a performance grade of B or C, adequate progress of the lowest students must be met in the current or previous year. The final grade will be reduced one letter grade for schools failing to meet this criterion.

For purposes of this calculation, the lowest students are the lowest quartile (or 25%) of students scoring in levels 1-3 of the FCAT reading in each grade. The lowest 30 students are substituted when there are not 30 in the lowest quartile. In the event that there are not 30 eligible students scoring in FCAT Achievement Level 3 or below, the percent of students making annual learning gains in reading for all students is substituted for this performance measure.

See Attachment A for a schematic description of the school grading system. Further clarification of the details involved in the calculation of school grades is in the next section of this paper.

## II. Process for Calculating School Performance Grades

This section of the paper describes in sequential order the complex processes involved in evaluating the performance of each school and determining a school grade.

### 1. Identify the Schools to be Graded

Pursuant to State Board Rule, the Commissioner will determine the school types to receive school performance grades. All schools serving at least 30 eligible students with valid FCAT scores in reading and math in both the current year and the previous year are qualified for school performance grades. This includes new schools and schools not in the school accountability data system in previous years. Department of Juvenile Justice Schools do not receive school performance grades.

### 2. Identify the Students to be Included

All students who are enrolled in standard curriculum courses based on the Sunshine State Standards in the same school for a full academic year are included in the calculation of school grades. The performance of students who are speech impaired, gifted, hospital homebound, and limited English proficient who have been in an English for Speakers of Other Languages (ESOL) program for more than two years are also included in the calculation of school grades.

To identify the students to be included in school grade calculations, the electronic record of each student in a school to be graded must be reviewed for the determination his/her eligibility. The following steps briefly describe the process:

Step 2.1 – Determine student ESE and LEP classifications on Survey 3: The exceptional student education (ESE) classification and limited English proficient (LEP) status of each student is determined and the student is identified as “included” for school grades if eligibility criteria is met.

a) Exceptional Student Education (ESE) Status: The electronic record for each student contains up to 20 possible ESE classifications, as well as the student’s entry date into the ESE program. ESE students are included in the school grade calculations when their only exceptionality is gifted (L), hospital/homebound (M), speech impaired (F), or a combination of those three. Students with any other disability are not included in school grades. Students must be enrolled in an ESE program prior to testing to be excluded from the school grading calculation.

b) Limited English Proficient (LEP) Status: LEP students are included in the school grading system when they have been in a English for Speakers of Other Languages (ESOL) program for more than two years prior to testing.

Step 2.2 – Determine full academic year status: Students are included in the school grading system if they have been enrolled in the same school for a full academic year. Students are considered continuously enrolled for a full academic year if they were present in the same school during the October and February FTE (full-time equivalent) counts. This determination is made by matching the “Student Number Identifier, Florida” in the Survey 3 file to the “Student Number Identifier, Florida” in the Survey 2 file by district and school.

Step 2.3 – Identify the grade 10 students who have previously passed the FCAT: Grade 10 students who have previously passed the grade 10 FCAT reading and/or mathematics will not be included in the school grading calculations. The identification process is completed separately for reading and for mathematics. Because there is no passing score for FCAT Writing, all enrolled tenth grade students must take the writing test, even if they have already passed the reading and/or mathematics tests.

Step 2.4 – Obtain corrections from the school districts: Lists of students to be included in school grades are identified by the Department and shared with the school districts in electronic form. Corrections and updates are submitted directly to the Evaluation and Reporting Office and corrected files are posted for district review. Districts are given the opportunity to correct data two times. Any errors that remain after the second round of corrections can not be corrected during the appeals process. A general description of the correction/update process is provided below.

- a. Unmatched Identification Numbers: If there are students who were present for a full academic year, but the student ID on Survey 2 does not match the student ID on Survey 3, this results in unmatched records. Districts are required to match these students by providing one student ID to the Office of Evaluation and Reporting.
- b. Non-public school students taking courses at public schools: Home schooled and private school students who receive services from a public school are excluded from calculations if N998 (Home Education) or N999 (Private School) is reported as the primary school number in the “Current Enrollment” field of Survey 3. For students whose primary instructional school has been misidentified, districts must report the correct school of enrollment number to the Office of Evaluation and Reporting.
- c. LEP status during FCAT is different from Survey 3: Only LEP students who were enrolled in an ESOL program for more than 2 years at the time of testing are included school grade calculations. Updated information must be provided for students who enroll in an ESOL program after Survey 3 but before testing (February 10 in 2004).
- d. ESE status during FCAT is different from Survey 3: All students who are enrolled in designated ESE programs prior to testing are not included in school grade calculations (exemptions noted earlier). Updated information must be provided for students who are enrolled in a program after Survey 3 but before testing (March 1 in 2004).

- e. Withdrawal, promotion, and demotion status prior to testing: All students who were withdrawn from school or who were promoted or demoted out of the FCAT testing range after Survey 3 and prior to FCAT testing must be identified for exclusion from the school grade calculation.
- f. 10th grade FCAT graduation requirements met prior to testing: All 10<sup>th</sup> grade retained students who have passed the reading and/or math FCAT prior to testing are not included in the school grade calculation. Districts must ensure that these students are appropriately identified.
- g. Inaccuracies in the data reported in Survey 3: Districts were given an opportunity to correct inaccuracies in data used for the school accountability calculations and reported in Survey 3.

Step 2.5 – Creation of the Membership File: Upon completion of both rounds of error corrections, a final file is created and referred to as the Membership File. The Membership File is used for all accountability calculations.

### **3. Obtain Student FCAT Scores**

The Evaluation and Reporting Office works closely with the K-12 Assessment staff to obtain accurate FCAT data on all students. The matching process is similar to that used for the matching of Survey 2 and 3. After the initial matching process is complete, districts are provided a list of unmatched and mismatched students. School districts must return updated and corrected information for each student. The extent to which this step is completed correctly by the school districts affects the Department's ability to include the maximum number of eligible students in the school grading process. The matching and corrections process are briefly summarized below.

Step 3.1 – Identify FCAT records with blank or duplicate Student IDs: For records with a blank or duplicate FCAT Student ID, districts must provide the matching student ID from the Membership File for inclusion of student results.

Step 3.2 – Match Membership files to FCAT files by district, school, and student ID: The Membership File is matched to FCAT files using district, school, and student ID. Unmatched records are flagged and districts must provide the matching fields from the Membership File for inclusion of student results.

Step 3.3 – Identify FCAT records that have missing prior year FCAT data: Any record that does not contain prior year test results will be flagged. Districts must report correct prior year print after scan numbers that are associated with the missing data for Reading, Math, and Writing.

Step 3.4 – Update FCAT records with district corrections: Upon completion of error corrections, student results in the FCAT file should be closely matched to the students enrolled in the Membership File.

Note: This process is completed for all students tested not just those to be included in the school grading process. This is important for two reasons. First, scores for these students might be needed for determining learning gains the following year if the students become eligible for inclusion, e.g., students in limited English programs for more than two years. Secondly, because all students are included in determining AYP, it is necessary to correct all Student IDs.

#### **4. Compute the Percentage Points for Each Performance Measure**

The six performance measures evaluated as part of determining school grades can be grouped into three categories:

- The percent of students achieving high standards (steps 4.1-4.3),
- The percent of students making learning gains (steps 4.4-4.5), and
- The percent of the lowest performing students who make learning gains (step 4.6).

Although the computations are similar within each category, the computations for each performance measure are described separately in the following sections.

Step 4.1 – Calculate Reading Performance: This component focuses on the extent to which eligible students scored sufficiently high on the reading portion of the FCAT to be considered “on grade level.” Schools accumulate one point for each percent of eligible students scoring in FCAT Achievement Levels 3, 4, and 5 in reading. The number of eligible students scoring in levels 3-5 is divided by the total number of eligible students who took the FCAT reading test.

Step 4.2 – Calculate Mathematics Performance: This component focuses on the extent to which eligible students score sufficiently high on the mathematics portion of the FCAT to be considered “on grade level.” Schools accumulate one point for each percent of eligible students scoring in FCAT Achievement Levels 3, 4, and 5 in mathematics. The number of eligible students scoring in levels 3-5 is divided by the total number of eligible students who took the FCAT mathematics test.

Step 4.3 – Calculate Writing Performance: This component recognizes the traditional objective that students be able to write a composition that meets at least minimal requirements. The percentage points earned take into account both the percent of students scoring 3 and above and the percent of students scoring 3.5 and above. The number of eligible students scoring 3 and above is added to the number of eligible students scoring 3.5 and above, then divided by twice the number of eligible students who took the writing test.

Table 2 includes an illustration for a hypothetical school, Florida Middle School, to help clarify this procedure. In this hypothetical school there were 131 eligible students who took FCAT Writing. Ninety-four students scored 3.0 and above, and 64 scored 3.5 and above. The percent meeting high standards in writing at Florida Middle School is 60%:



$(94+64)/(131*2)$ . Table 2 shows the method used for determining the final percent meeting high standards on FCAT Writing.

Note: If fewer than 30 eligible students were tested in writing, the district writing average is substituted for writing.

<b>Table 2</b>					
<b>Florida Middle School – Hypothetical Example</b>					
<b>Distribution of Student Writing Scores</b>					
<b>Writing Scores</b>	<b>Number of Students</b>	<b>Percent of Students</b>	<b>Cumulative Number</b>	<b>Cumulative Percent</b>	
6.0	5	4%	5	4%	
5.5	3	3%	8	6%	
5.0	10	7%	18	14%	
4.5	10	2%	28	21%	
4.0	20	10%	48	37%	
3.5	16	6%	64	49%	
3.0	30	30%	94	72%	
2.5	16	16%	110	84%	
2.0	9	9%	119	91%	
1.5	6	6%	125	95%	
1.0	4	4%	129	98%	
0.0	2	2%	131	100%	
Total Students	131				
<b>Calculating Final Percent Meeting Writing Standards</b>					
	<b>Number of Students</b>	<b>Total tested</b>	<b>Percent</b>	<b>Compute Final*</b>	<b>Final Percent</b>
3.5 and above	64	131	49%	158/262	60%
3 and Above	94	131	72%		

Step 4.4 – Calculate Reading Gains: Including learning gains as a performance measure for determining school grades was initiated in 2002. It emphasizes the importance of learning a year’s worth of knowledge in a year’s worth of time. Individual student learning gains are determined by comparing each student’s prior year test score to the current year test score using three different methods. Schools earn one point for each percent of students who make learning gains in reading. Students make learning gains by any one of the three methods described below. Students can

- a. Improve one or more achievement levels, e.g., from 1-2, 2-3, 3-4, or 4-5; or
- b. Maintain their achievement levels within levels 3, 4, or 5; or
- c. Demonstrate more than one year’s growth when remaining in achievement level 1 or 2 for both years. Under this alternative, one year’s growth is defined in terms of the difference between a student’s current year and prior year FCAT developmental score. Students who remain in levels 1 or 2 are credited with

learning gains for reading if they improve more than the cut-off scores shown in Table 3.

**Note:** Retained students are included in methods a. and b. above, but not in method c. because the definition of one year's growth is based on taking the FCAT at the next higher grade. Also, when achievement level scores drop, e.g., 4→3, they are not included in the calculation of learning gains, even if the lower score is on or above grade level.

<b>Table 3</b>						
<b>One Year's Growth Definition for FCAT Reading Developmental Scores</b>						
Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
230	166	133	110	92	77	77

**Step 4.5 – Calculate Mathematics Gains:** This component is parallel to the reading procedure described in step 4.4. Individual student learning gains are determined by comparing each student's prior year test score to the current year test score using three different methods. Schools earn one point for each percent of students who make learning gains in mathematics. Students make learning gains by any one of the three methods described below. Students can

- Improve one or more achievement levels, e.g., from 1-2, 2-3, 3-4, or 4-5; or
- Maintain their achievement levels within levels 3, 4, or 5; or
- Demonstrate more than one year's growth when remaining in achievement level 1 or 2 for both years. Under this alternative, one year's growth is defined in terms of the difference between a student's current year and prior year FCAT developmental score. Students who remain in levels 1 or 2 are credited with learning gains for mathematics if they improve more than the cut-off scores shown in Table 4.

**Note:** Retained students are included in methods a. and b. above, but not in method c. because the definition of one year's growth is based on taking the FCAT at the next higher grade. Also, when achievement level scores drop, e.g., 4→3, they are not included in the calculation of learning gains, even if the lower score is on or above grade level.

<b>Table 4</b>						
<b>One Year's Growth Definition for FCAT Mathematics Developmental Scores</b>						
Grade 4*	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
162	119	95	78	64	54	48

**Step 4.6 – Calculate reading gains for the lowest performing students:** Special attention is given to the reading gains of the lowest 25% of students or lowest 30 scoring in FCAT

achievement levels 1, 2, or 3 in each school. The students included in the calculations for this component are students who:

- a. Meet all criteria for inclusion in school grade calculations for the current year,
- b. Have both a prior year score and a current year score on FCAT reading,
- c. Are ranked in the lowest 25% based on their prior year's FCAT reading developmental scale scores, and
- d. Have a prior year score less than or equal to an achievement level 3 score.

The procedure used to identify the lowest 25% of the students in a school is applied separately by grade and the identified students are combined across all grades to determine learning gains. The first step is to rank the scores of all students in the grade from highest to lowest based on their prior year reading developmental scale scores. Students without a prior year score are not included. The second step is to identify the developmental scale score that corresponds to the percentile rank of 25. This is not the same as sorting the scores descending as ranking allows for duplicate scores. This scale score becomes the boundary score. The boundary score must not be in FCAT achievement levels 4 or 5. Any student who has a score equal to or below the boundary score is included in the lowest 25%. Students from all grades are combined to form the total pool of students to be evaluated. If the total number of students in the lowest 25% is 30 or more, the percent making learning gains is calculated as described in Step 4.4.

If the total number of students in the lowest 25% is less than 30, then the following iterative process is used to determine the 30 or more students who will be included the lowest performing group. The next developmental scale score higher than the boundary score is identified (separately for each grade). If this new boundary score is equal to or less than an achievement level 3 score, then all students attaining the next higher developmental scale score for each grade are identified and included in the lowest performing group. If the number of students at this point is not at least 30, the step is repeated. After thirty or more students are identified, the percent making learning gains is determined as described in Step 4.4.

If there are not 30 or more students who scored at or below achievement level 3 in the prior year, the reading gains of all students calculated in step 4.4 will be substituted.

The examples in Table 5 illustrate how this component is evaluated.

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**Table 5**  
**Example of Learning Gains for the Lowest 25% in Reading**

	Shell Elementary School	Dolphin Middle School
Number of eligible students included in the current year school grade	125	1050
Number of eligible students with prior year FCAT reading scores	100	1000
Students in the lowest 25% based on the prior year's FCAT reading scores that are less than or equal to an achievement level 3 score	25	250
Is the number 30 or more?	No	Yes
Identify next higher developmental scale score for each grade that is less than or equal to an achievement level 3 score and add the students attaining that score to the group	29	
Is the number 30 or more?	No	
Identify next higher developmental scale score for each grade that is less than or equal to an achievement level 3 score and add the students attaining that score to the group	40	
Is the number 30 or more?	Yes	
Number showing learning gains	12	150
Percent showing learning gains	30% (12/40)	60% (150/250)
If there are not 30 or more students who scored at or below achievement level 3 in the prior year, the reading gains of all students will be substituted.	If <30 Substitute Reading Gains of All students	

## 5. Determine the Percent Tested

The procedure for estimating a school's percent tested was developed long before school grades were first calculated. Starting in 1995, the estimating procedure was developed in cooperation with district testing directors and has been modified only slightly over the years. It has always been a straightforward approximation.

The estimate of the percent tested is calculated by dividing the total number of eligible students tested in each subject by the number of eligible students in membership who are expected to take each subject test. Again, eligibility for school grades is defined as those students who are enrolled in standard curriculum courses based on the Sunshine State Standards in the same school for a full academic year. Students who are speech impaired, gifted, hospital homebound, and limited English proficient who have been in an English for Speakers of Other Languages (ESOL) program for more than two years are also eligible students. Note that this is a different population than those students used to calculate percent tested for the No Child Left Behind (NCLB) Adequate Yearly Progress (AYP).

The example in Table 6 shows how the percent tested for a hypothetical high school is calculated.

	Number Tested	Eligible Membership	Percent Tested
Reading	620	680	
Mathematics	640	680	
Writing	340	350	
Totals	1600	1710	94%

An adjustment of the membership is included to take into account that some students in the membership have actually taken FCAT, but those scores never show up because the students may have answered too few items to generate a score or their test was invalidated due to a testing irregularity. Another adjustment is included for retained grade 10 students who have previously taken and passed the FCAT. These adjustments are accomplished by either adjusting the number tested (the numerator) or the number in membership (the denominator) as appropriate.

## 6. Determine the Total Points and the Final School Grade

This step is very straightforward.

1. All percentage points are accumulated for each performance measure and added together to obtain the total points.

2. Schools earning enough total points to receive a grade of A must also test at least 95% of their eligible students. All other letter grade designations are based on a minimum of 90% tested. For, schools testing less than 90%, the final grade will be one letter grade lower than indicated by the total points accumulated.
  
3. Schools earning enough points to receive a C or above must demonstrate that at least half of the lowest students make annual learning gains. For a school to be designated a performance grade of A, adequate progress of the lowest students must be met in the current year. For a school to be designated a performance grade of B or C, adequate progress of the lowest students must be met in the current or previous year. The final grade will be reduced one letter grade for schools failing to meet this criterion.

<b>Table 7</b>	
<b>Summary of School Grading Criteria</b>	
<b>Grade</b>	<b>Grading Criteria</b>
A	<ul style="list-style-type: none"> <li>• 410 points or more</li> <li>• 95% tested or more</li> <li>• Make adequate progress (50%) in the current year with the lowest performing students</li> </ul>
B	<ul style="list-style-type: none"> <li>• 380 points or more</li> <li>• 90% tested or more</li> <li>• Make adequate progress (50%) with the lowest performing students in either the current or the previous year</li> </ul>
C	<ul style="list-style-type: none"> <li>• 320 points or more</li> <li>• 90% or greater tested</li> <li>• Make adequate progress (50%) with the lowest performing students in either the current or the previous year</li> </ul>
D	<ul style="list-style-type: none"> <li>• 280 points or more</li> <li>• 90% tested or more</li> </ul>
F	<ul style="list-style-type: none"> <li>• Fewer than 280 points</li> <li>• 90% tested or more</li> </ul>
I	<ul style="list-style-type: none"> <li>• Less than 90% tested (Schools initially receive a grade of “incomplete” while the status is investigated.)</li> </ul>

## 7. Review of School Grades

State Board Rule 6A-1.09981 part (9) requires each district to have an accountability contact person to verify that each school is appropriately classified, that students have been correctly identified and properly included for school grading, that matching FCAT

records and previous year FCAT records can be identified, and that each school grade was calculated as specified in the Rule. The Rule also permits a 30-day period of time for districts to review the grade assigned. Therefore, the Florida Department of Education has instituted an appeals process described in this section. Requests for grade changes related to the specific requirements of the statute or rule cannot be granted and should not be submitted.

If a school district identifies a data miscalculation or circumstances that might result in the assignment of a different grade, the district can participate in the school grade review process. Appropriate documentation of all elements and data to be reviewed by the Department must be submitted within thirty (30) days from the date of the school grades release. These requests must be submitted by the school district accountability contact rather than by individual schools. Appeals that do not comply with the detailed instructions from the Department will not be reviewed.

Following the thirty (30) day appeal window, the Department of Education will review the appeals documentation and present recommendations to an appeals committee for their review and recommendations. Final recommendations will be made to the Commissioner of Education and the Commissioner's determination of a school's performance grade shall be final. The Department will notify each district Superintendent and accountability contact of the final school grade after the final decision of the Commissioner. Local district officials, as designated by the Superintendent, are responsible for notifying individual schools.





# GRADING FLORIDA PUBLIC SCHOOLS 2003-2004

DEPARTMENT OF EDUCATION, JIM HORNE, COMMISSIONER, [www.fldoe.org](http://www.fldoe.org)



**School grades for 2003-04 utilize a point system. Schools are awarded one point for each percent of students who score *high on the FCAT and/or make annual learning gains.***

## Scoring High on the FCAT

The Florida Comprehensive Assessment Test (FCAT) is the primary measure of students' achievement of the Sunshine State Standards. Student scores are classified into five achievement levels, with 1 being the lowest and 5 being the highest.

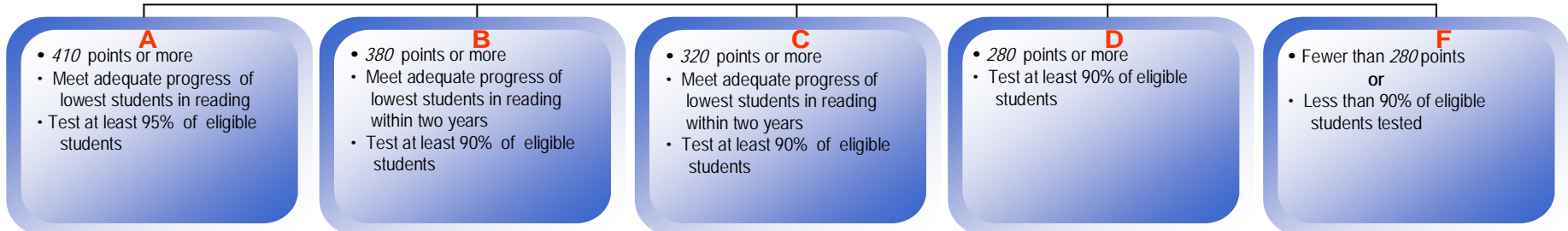
- ⇒ Schools earn one point for each percent of students who score in achievement levels 3, 4, or 5 in **reading** and one point for each percent of students who score 3, 4, or 5 in **math**.
- ⇒ The **writing** exam is scored by at least two readers on a scale of 1 to 6. The percent of students scoring "3" and above is averaged with the percent scoring "3.5" and above to yield the percent meeting minimum and higher standards. Schools earn one point for each percent of students on the combined measure. If a school does not have writing scores, the district average for all students in writing will be the substitute.

## Making Annual Learning Gains

Since FCAT **reading and math** exams are given in grades 3 – 10, it is now possible to monitor how much students learn from one year to the next.

- ⇒ Schools earn one point for each percent of students who make learning gains in reading and one point for each percent of students who make learning gains in math. Students can demonstrate learning gains in any one of three ways:
  - (1) Improve achievement levels from 1-2, 2-3, 3-4, or 4-5; **or**
  - (2) Maintain within the relatively high levels of 3, 4, or 5; **or**
  - (3) Demonstrate more than one year's growth within achievement levels 1 or 2, but not retained.
- ⇒ Special attention is given to the reading gains of students in the lowest 25% or lowest 30 students<sup>1</sup> in levels 1, 2, or 3 in each school. Schools earn one point for each percent of the lowest performing readers who make learning gains from the previous year. It takes at least 50% to make "adequate progress" for this group.

## SCHOOL PERFORMANCE GRADING SCALE

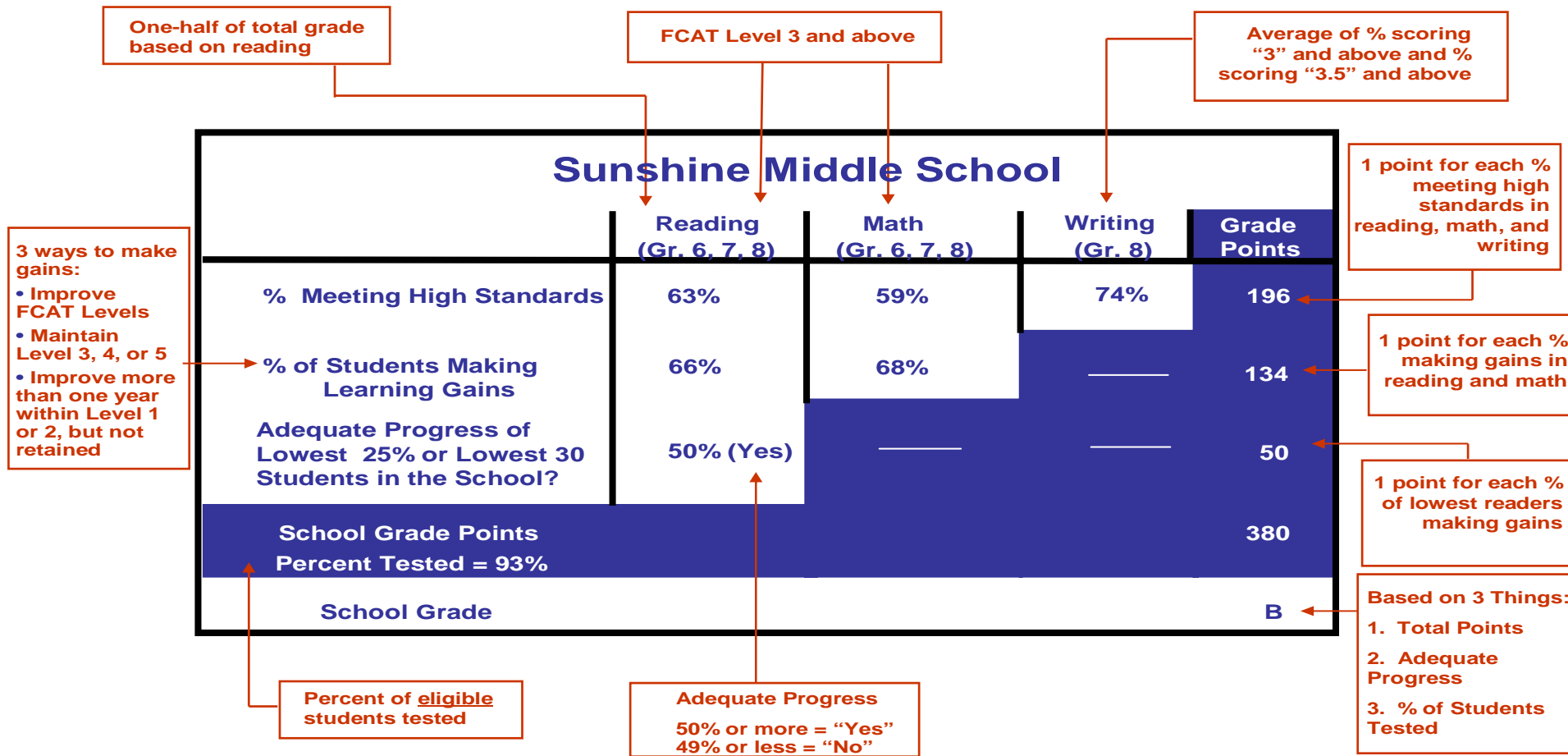


**Which students are included in school grade calculations?** As in previous years, only standard curriculum students who were enrolled in the same school in both October and February. Speech impaired, gifted, hospital/homebound, and Limited English Proficient students with more than two years in an ESOL program are also included. In 2004-05, students with disabilities and LEP students will be included in the learning gains component of the school grade calculation.

**What happens if the lowest students in the school do not make "adequate progress" in reading?** Schools that aspire to be graded "C" or above, but do not make adequate progress with their lowest students in reading, must develop a School Improvement Plan component that addresses this need. If a school, otherwise graded "C" or "B", does not demonstrate adequate progress for two years in a row, the final grade will be reduced by one letter grade.

<sup>1</sup>Lowest students means the lowest 25% of students or the lowest performing 30 students (for schools with less than 30 students in the lowest 25%) at achievement level 3 or below.

# Example Report for 2004



## Attachment B

### Definition of One Year's Growth in the A+ Accountability System

Florida's A+ school accountability system has three major components:

- Yearly achievement of high standards in reading, mathematics and writing,
- Annual learning gains in reading and mathematics, and
- Annual learning gains in reading for the lowest 25% of students in each school.

The definition of learning gains is spelled out in State Board of Education *Rule 6A-1.09981*. There are three ways that schools can be credited for the annual learning gains of their students:

1. when students improve their FCAT achievement level from one year to the next; or
2. when students maintain their achievement levels within 3, 4 or 5 from one year to the next; or
3. when students demonstrate more than one year's growth within Levels 1 or 2, as measured by an increase in their FCAT developmental scores from one year to the next.

The first two gain definitions are relatively straightforward because student achievement level information is readily available from the FCAT student report and district test data files provided by the Department. The third definition is more complex since it is based on the amount of gain that represents one year's growth. Thus, a definition of "one year's growth" in terms of FCAT developmental scale score gain is required.

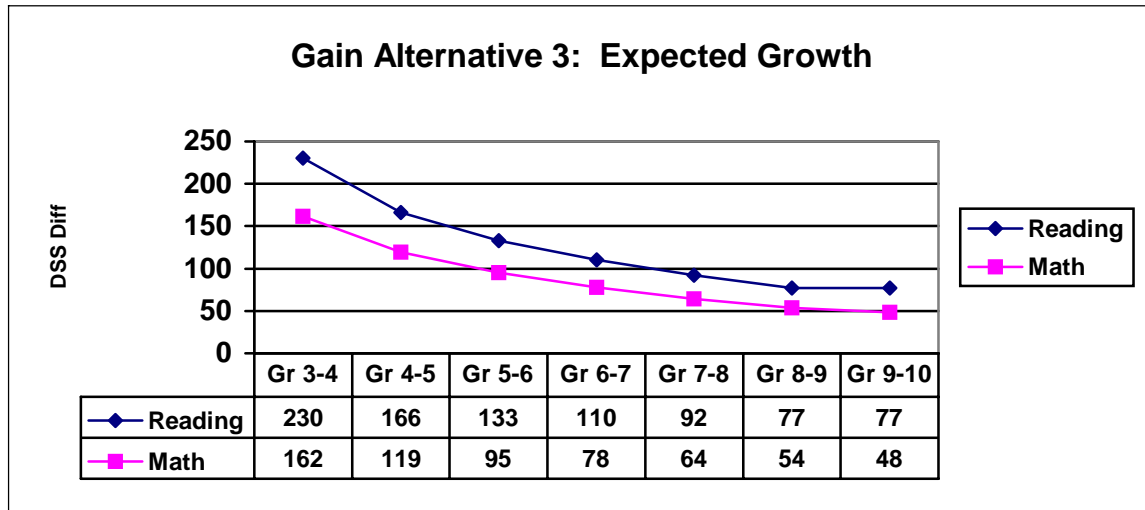
The definition of "one year's growth" applied to the third gain option for calculating school grades is based on the numerical cut-scores for the FCAT achievement levels approved by the State Board of Education. In State Board Rule 6A-1.09422, there are four cut-off scores that separate FCAT scale scores into five achievement levels, with Level 1 being the lowest and Level 5 being the highest. At each of the four cut-off scores between achievement levels, FCAT scale scores (100-500) were converted to FCAT developmental scores that range from 0-3000. This allows all of the cut scores to be placed on the same scale. The increase in FCAT developmental scores necessary to maintain the same relative standing within achievement levels from one grade to the next was calculated for each of the four cut points between the five achievement levels.

The following table provides an example of how the three preceding steps were applied to the reading cut points from grade three to grade four:

<b>Grade 4 Example</b>					
<b>Grade</b>	<b>Measure</b>	<b>Level 1-2 Cut</b>	<b>Level 2-3 Cut</b>	<b>Level 3-4 Cut</b>	<b>Level 4-5 Cut</b>
3	FCAT scale score	258	283	331	393
	Developmental score	1045	1197	1488	1865
4	FCAT scale score	274	298	338	385
	Developmental Score	1314	1455	1689	1964
3 – 4	Difference in Developmental Scores at the cut points	269	258	201	99
Midpoint of differences at the cut points			230		

The last line of the table shows the expected gain from one achievement level to the next is different, depending on the initial achievement level of the student. To produce a single value that represents the entire student population, the median value of the differences is calculated. The median of the four developmental scale score differences necessary for students to maintain the same relative standing within an FCAT achievement level in the example is 230. The median was considered more appropriate than the average or maximum of the four values because the median is less sensitive to very high or low values.

After median gain expectations were determined for each grade progression (3-4, 4-5, 5-6, 6-7, 7-8, 8-9, and 9-10), a best-fit curve (logarithmic trend line) was calculated, beginning at grades 3-4 and ending at grades 9-10. Other curve fits were considered, including regression lines and polynomial transformations; however, the logarithmic trend line was adopted because it best described the theoretical expectation of greater gains in the early grade levels and lesser at the upper grade levels due to student maturation. The expected gain values for reading and mathematics were obtained separately. The following chart provides the values used to define one year's growth.



It is important to note the following points:

- For purposes of school accountability calculations under the third gain alternative, 6A-1.09981 requires that students who remain within FCAT Achievement Levels 1 or 2 must demonstrate more than one year's growth on the FCAT developmental scale, as determined by the Department. Therefore, for students to be credited with learning gains under the third alternative, they must achieve at least one developmental scale score point more than the values listed above.
- The definition of "one year's growth" in terms of the FCAT developmental score applies to all students who are promoted from one grade level to the next. It cannot be ascertained for retained students who take the same level of the test in two consecutive years.

Other methods for defining one year's growth were also considered prior to the adoption of the procedures described herein. These alternative procedures are described briefly for historical purposes, but each of these options was determined to be less desirable than the one adopted. (1) Expected growth amounts could have been calculated using observed differences in students' developmental scale scores for two consecutive years; however, this approach would lock in expected growth values based on the first year of available gain data and might not reflect actual growth patterns in future years. (2) Expected growth could have been defined at some point in the future after tracking actual cohorts of students over multiple years and determining their average yearly gains; however, this would have delayed the use of learning gains in the accountability system for several more years. (3) The definition of "one year's growth" could have been done separately for students within each of the five achievement levels; however, this method would result in different standards for different students. (4) The definition of "one year's growth" could have been based on the values obtained from grades 3-10 without statistical smoothing; however, this would lead to widely fluctuating expectations from grade to grade.

In summary, the definition of “one year’s growth” applied to the calculating of learning gains was based firmly on the numerical cut-scores approved by the State Board of Education for the FCAT achievement levels. The numeric values of the learning gain expectations represent the average progress expected of students from grade to grade.