Ratings for Schools Enrolling Students in Grades Three through Eight

Schools enrolling students in grades three through eight will receive ratings in accordance with the grade organization patterns and rules established in the *Accountability Manual*. This section contains revisions to the accountability criteria and methodology for schools enrolling students in the grades three through eight enacted on January 22, 2010. The ratings for these schools are based on performance on the Palmetto Assessments of State Standards (PASS). Student performance levels on the PASS were established by the Education Oversight Committee (EOC) on October 5, 2009.

Absolute Rating

The absolute performance level is calculated on the basis of a weighted model in which student performance weights are assigned. A weighted model is one in which the percentage of student scores in each PASS performance level category is weighted to represent the importance of scoring in that category, as follows: Exemplary 5, five points; Exemplary 4, four points; Met, three points; Not Met 2, two points; and Not Met 1, one point. The following tables provide the score ranges and cut points for each score category for each grade and subject area. Scale score ranges and cut points for the five performance levels were determined by the State Department of Education based on the performance standards set by the EOC in October 2009.

PASS Cut-Off Scale Scores
Established by SCDE for Use in Calculating Absolute Ratings

Subject	Grade	Not Met 1	Not Met2	Met	Exemplary 4	Exemplary 5
Reading & Research (ELA)	3	LT 563	563	600	643	659
Reading & Research (ELA)	4	LT 569	569	600	649	670
Reading & Research (ELA)	5	LT 574	574	600	661	679
Reading & Research (ELA)	6	LT 565	565	600	648	669
Reading & Research (ELA)	7	LT 566	566	600	644	666
Reading & Research (ELA)	8	LT 569	569	600	649	678
Math	3	LT 566	566	600	642	666
Math	4	LT 580	580	600	658	688
Math	5	LT 579	579	600	659	688
Math	6	LT 582	582	600	658	682
Math	7	LT 585	585	600	652	687
Math	8	LT 585	585	600	657	684

Science	3	LT 537	537	600	649	664
Science	4	LT 561	564	600	674	689
Science	5	LT 566	566	600	676	699
Science	6	LT 560	560	600	669	688
Science	7	LT 571	571	600	664	686
Science	8	LT 562	562	600	651	672
Social Studies	3	LT 580	580	600	653	680
Social Studies	4	LT 590	590	600	668	693
Social Studies	5	LT 570	570	600	658	672
Social Studies	6	LT 585	585	600	671	688
Social Studies	7	LT 562	562	600	646	663
Social Studies	8	LT 571	571	600	656	675
Writing	3	LT 544	544	600	638	666
Writing	4	LT 546	546	600	648	669
Writing	5	LT 550	550	600	649	683
Writing	6	LT 547	547	600	651	676
Writing	7	LT 547	547	600	647	673
Writing	8	LT 538	538	600	651	676

LT = Less Than

Act 254 of 2006 specifies that PASS Science and Social Studies tests will be census-tested for one elementary and one middle grade level, with sampling at the remaining grades, and that different weightings of the subject areas for the calculation of the ratings will be applied for different grade levels, as shown in the table below on next page.

PASS Sampling and Weights for Absolute and Growth Ratings

Grade Levels	Subject	Sample Size	Absolute Rating Weight	Growth Rating Weight
3 & 5	ELA*	Census	30%	30%
3 & 5	Math	Census	30%	30%
3 & 5	Science	50% Random Sample	20%	20%
3 & 5	Social Studies	50% Random Sample	20%	20%
4	ELA*	Census	30%	30%
4	Math	Census	30%	30%
4	Science	Census	20%	20%
4	Social Studies	Census	20%	20%
6 & 8	ELA*	Census	25%	25%
6 & 8	Math	Census	25%	25%
6 & 8	Science	50% Random Sample	25%	25%
6 & 8	Social Studies	50% Random Sample	25%	25%
7	ELA*	Census	25%	25%
7	Math	Census	25%	25%
7	Science	Census	25%	25%
7	Social Studies	Census	25%	25%

*Note: ELA includes results from both Reading & Research and Writing assessments in the proportions of 0.67 and 0.33, respectively.

Two-thirds (0.67) of the ELA component of the Absolute and Growth indexes will be based on reading performance, and one-third (0.33) will be based on writing performance.

In June 2007 the EOC approved the use in the Absolute ratings of state high school credit course End of Course test results administered in middle schools; the use of the End of Course results was continued in the ratings methodology adopted in January 2010. The methodology combines PASS and End of Course test results in the calculation of middle school Absolute ratings in the same way as the methodology previously used for calculating Absolute ratings based on PACT and End of Course test scores.

The calculation of middle school ratings based on both PASS and End of Course data is accomplished by converting individual student End of Course test scores to the same 1 to 5 point scale used for the PASS test score data. The conversion of End of Course test scores to the 1 – 5 point scale is accomplished based on the table below:

Conversion of End of Course Test Scores
To 1 to 5 Point Scale Used for Calculation of Middle School Absolute Ratings

End of Course Test Score	Point Value for Calculating Rating
A	5
B	4
C	3
D	2
F	1

Once the individual student End of Course test scores are converted to the 1 – 5 point scale, the End of Course test points are treated in the calculation of the index for the Absolute rating in the same way as PASS scores for each grade and subject area. Algebra I scores are combined with PASS Math scores, English I scores are combined with PASS Reading & Research scores, and Physical Science (and Biology I when this testing is resumed) scores are combined with PASS Science scores. Since there are no End of Course test scores in Social Studies administered at the middle school level, only PASS Social Studies data are available for the rating calculations for middle schools.

For schools containing grades 6, 7, or 8 or 6, 7, 8, or 9 (as the terminal grade), an index based on the combined PASS and End of Course points is calculated for each subject area by adding up the total number of points scored (the numerator) and dividing by the total number of student scores (denominator). The subject area indexes are combined based on the weightings specified in Act 254 of 2006 for the calculation of the overall school Absolute index.

In schools having any grades 3, 4, or 5 in addition to grades 6, 7, or 8, the methodology conforms to the requirement in Act 254 that subject areas be weighted differently in grades 3-5 than in grade 6 or above. English language arts (PASS Reading & Research and Writing combined in a 0.67 and 0.33 ratio, respectively) and mathematics are weighted 30% each and science and social studies are weighted 20% each in grades 3 through 5 in the calculation of the Absolute and Growth rating indexes. The subject areas ELA, mathematics, science, and social studies) are weighted 25% each in grade 6 or above.

Calculation of Absolute Ratings for Schools Enrolling Students in Grades Three through Eight

Ratings are calculated using a mathematical formula that results in an index reflecting the average performance level of students in the school. The index is calculated using the following mathematical formula:

(1) Multiply the points assigned to each of the five PASS score performance levels and to each of the five End of Course test score performance levels (if End of Course test results are available for the school) by the number of student scores falling into each of those categories for each subject area tested.

Test scores for students who should be tested but were not are assigned a point value of zero.

(2) Calculate an index for each subject area by dividing the sum of the point scores by the number of test scores for each subject area. To obtain the ELA index, calculate indexes for Reading & Research and for Writing separately, multiply the Reading & Research index by 0.67 and the Writing index by 0.33, and add the two products from these operations.

(3) Multiply the indexes calculated for each subject area by the appropriate weight from the table below for the grade levels and add the products.

PASS Subject Area Weights
Elementary and Middle School Absolute Ratings

Grades 3-5				Grades 6-8			
ELA	Math	Science	Social Studies	ELA	Math	Science	Social Studies
0.30	0.30	0.20	0.20	0.25	0.25	0.25	0.25

(4) Round the sum of the weighted indexes to the nearest hundredth to obtain the school index. If the school contains a grade level outside the range of grade levels for the school organizational level (for example, an elementary school containing grades 3 through 6), a school index is calculated by calculating the average of the grade level indexes, with the grades 3-5 index weighted by the number of test scores in grades 3-5, and the grade 6 and above index weighted by the number of test scores in grades 6 and above. These two values are summed (numerator), and the sum is divided by the total number of PASS and End of Course records available across all the grades (denominator).

Note on rounding: Rounding is used when determining the final Absolute and Growth rating indexes. Rounding is implemented to establish clear cut-off points between each rating category. The index is rounded to the hundredths place at the end of all calculations. If the calculated index results in a decimal having values in the thousandths place or beyond, the value in the thousandths place is examined to determine if the value in the hundredths place is to be rounded up to

the next higher hundredth. The value in the hundredths place is rounded up if the thousandths values range from 0.005 through 0.009.

Examples:
3.334 rounds to 3.33
3.335 rounds to 3.34
3.349 rounds to 3.35
3.351 rounds to 3.35

(5) The rounded index calculated in step 4 is the absolute index for assigning the Absolute rating. Identify the school's Absolute rating corresponding to the absolute index for the current year in the following table:

Index Values for Determining Absolute Ratings
for Elementary and Middle Schools (2009-2013)

Absolute Rating	Range of Indexes
Excellent	3.40 or above
Good	3.18 to 3.39
Average	2.65 to 3.17
Below Average	2.32 to 2.64
At Risk	2.31 or below

The index values will be re-examined in 2013 as part of the cyclical review of the accountability system specified in Act 282.

Example Calculations of 2009 Absolute Ratings for Elementary and Middle Schools

Example A:
Calculation of Absolute Rating Using Both PASS and End of Course Test Data for School Containing Grades 6, 7, and 8

Smith Middle School (grades 6, 7, and 8)

Smith Middle School: Grade 8
There are 100 students attending grade 8 in Smith Middle School.
- All 100 students took the PASS Math test, and 20 of those students also took the Algebra I End of Course test. The school has 120 total scores (PASS Math plus Algebra I) for mathematics in Grade 8.
- All 100 students took PASS Reading & Research. Twenty of the students enrolled in grade 8 also took the English I high school credit course. Thus the school also has 120 scores in Reading & Research (PASS R&R plus English I) in grade 8.
- All 100 of the students enrolled in grade 8 took the PASS Writing assessment. Thus the school also has 100 scores in Writing in grade 8.
- None of the grade 8 students took the Physical Science high school credit course, so none took the Physical Science End of Course test.
- PASS Science and Social Studies tests were administered to random 50% samples of grade 8 students, so 50 students took Science and the other 50 took Social Studies.

Grade 8 Performance

PASS Score Performance Levels (pts)	PASS Math (# of students at level)	PASS Reading and Research (# of students at level)	PASS Writing (# of students at level)	PASS Science (# of students at level)	PASS Social Studies (# of students at level)	End-of Course Score Performance Levels (pts)	Algebra I (# of students at level)	English I (# of students at level)	Physical Science (# of students at level)
Exemplary 5 (5)	10	5	10	1	3	A (5)	8	4	0
Exemplary (4)	20	30	45	7	13	B (4)	5	6	0
Met (3)	45	45	30	22	22	C (3)	4	6	0
Not Met 2 (2)	15	10	10	10	7	D (2)	2	3	0
Not Met 1 (1)	10	10	5	10	5	F (1)	1	1	0
TOTAL	100	100	100	50	50	TOTAL	20	20	0

Smith Middle School: Grade 7
There are 110 students attending grade 7 in Smith Middle School.
- Since Grade 7 is census-tested, all 110 students in grade 7 took both Science and Social Studies.
- There were no End-of-Course tests administered in grade 7 in Smith Middle School.

Grade 7 Performance

PASS Score Performance Levels (pts)	PASS Math (# of students at level)	PASS Reading and Research (# of students at level)	PASS Writing (# of students at level)	PASS Science (# of students at level)	PASS Social Studies (# of students at level)	End-of Course Score Performance Levels (pts)	Algebra I (# of students at level)	English I (# of students at level)	Physical Science (# of students at level)
Exemplary 5 (5)	15	3	15	13	12	A (5)	0	0	0
Exemplary (4)	20	25	20	17	15	B (4)	0	0	0
Met (3)	48	49	50	33	42	C (3)	0	0	0
Not Met 2 (2)	14	17	15	27	26	D (2)	0	0	0
Not Met 1 (1)	13	16	10	20	15	F (1)	0	0	0
TOTAL	**110**	**110**	**110**	**110**	**110**	**TOTAL**	**0**	**0**	**0**

Smith Middle School: Grade 6

There are 105 students attending grade 6 in Smith Middle School.

- PASS Science and Social Studies are sample-tested in grade 6, and 52 sixth graders took PASS Science; 53 took Social Studies.
- There were no End-of-Course tests administered in grade 6 in Smith Middle School.

Grade 6 Performance

PASS Score Performance Levels (pts)	PASS Math (# of students at level)	PASS Reading and Research (# of students at level)	PASS Writing (# of students at level)	PASS Science (# of students at level)	PASS Social Studies (# of students at level)	End-of Course Score Performance Levels (pts)	Algebra I (# of students at level)	English I (# of students at level)	Physical Science (# of students at level)
Exemplary 5 (5)	16	7	10	6	8	A (5)	0	0	0
Exemplary (4)	23	25	25	7	13	B (4)	0	0	0
Met (3)	44	40	40	14	20	C (3)	0	0	0
Not Met 2 (2)	11	17	15	12	7	D (2)	0	0	0
Not Met 1 (1)	11	16	15	13	5	F (1)	0	0	0
TOTAL	105	105	105	52	53	TOTAL	0	0	0

The index for each subject area across grades 6, 7, and 8 is calculated:

Index for Mathematics: **Index for Reading & Research**

Point Weights	Number Scores At Each Point Weight (includes PASS Math and Algebra 1 End-of-Course)	Point Weight *multiplied by* Number of Scores
5	49	245
4	68	272
3	141	423
2	42	84
1	35	35
Totals	**335**	**1059**

Index = Total Point Weights / Total Number of Scores

Math Index = 1059/335 = 3.1611

Point Weights	Number Scores At Each Point Weight (includes PASS R&R and English1 End-of-Course)	Point Weight *multiplied by* Number of Scores
5	19	95
4	86	344
3	140	420
2	47	94
1	43	43
Totals	**335**	**996**

Index = Total Point Weights / Total Number of Scores

Reading & Research Index = 996/335 = 2.9731

Index for Science: **Index for Social Studies**

Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores	Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores
5	20	100	5	23	115
4	31	124	4	41	164
3	69	207	3	84	252
2	49	98	2	40	80
1	43	43	1	25	25
Totals	**212**	**572**	**Totals**	**213**	**636**

Index = Total Point Weights / Total Number of Scores

Science Index = 572/212 = 2.6981

Index = Total Point Weights / Total Number of Scores

Social Studies Index = 636/213 = 2.9859

Index for Writing :

Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores
5	35	175
4	90	360
3	120	360
2	40	80
1	30	30
Totals	**315**	**1005**

Index = Total Point Weights / Total Number of Scores

Writing Index = 1005/315 = 3.1904

The overall absolute index for the school is calculated by averaging the subject-area indexes, giving each subject area index equal weighting.

School Index = (Math Index + ELA Index + Science Index + Social Studies Index) / 4

The ELA index is the sum of the Reading & Research index multiplied by 0.67 and the Writing index multiplied by 0.33:
   ELA index = (2.9731*0.67) + (3.1904*0.33) = 3.0448

Smith Middle School Absolute Index:

   (3.1611 + 3.0448 + 2.6981 +2.9859) / 4 = 2.9724

The absolute index is rounded to the nearest hundredth of a point and compared to the values in the following table to determine the rating.

**Index Values for Determining Absolute Ratings
for Elementary and Middle Schools (2009-2013)**

Absolute Rating	Range of Indexes
Excellent	3.40 or above
Good	3.18 to 3.39
Average	2.65 to 3.17
Below Average	2.32 to 2.64
At Risk	2.31 or below

The Smith Middle School absolute index of 2.9724 rounds to 2.97. Based on the table, an index of 2.97 corresponds to an Absolute rating for Smith Middle School of "Average."

Example B:
Calculation of Absolute Rating Using Both PASS and End of Course Test Data for School Containing Grades 5, 6, 7, and 8

Jones Middle School (grades 5, 6, 7, and 8)

Jones Middle School: Grade 8
There are 100 students attending grade 8 in Jones Middle School.
- Twenty of those students took the Algebra I high school credit course. All 100 students took the PASS Math test, and 20 of those students also took the Algebra I End of Course test. The school has 120 total scores (PASS Math plus Algebra I) for mathematics in Grade 8.
- All 100 students took the PASS Reading & Research test, and 20 students enrolled in grade 8 also took the English I high school credit course. The school also has 120 total scores (PASS R&R plus English I) for Reading & Research.
- None of the grade 8 students took the Physical Science high school credit course, so none took the Physical Science End of Course test. PASS Science and Social Studies tests were administered to random 50% samples of grade 8 students, so 50 students took Science and the other 50 took Social Studies.

Grade 8 Performance

PASS Score Performance Levels (pts)	PASS Math (# of students at level)	PASS Reading and Research (# of students at level)	PASS Writing (# of students at level)	PASS Science (# of students at level)	PASS Social Studies (# of students at level)	End-of Course Score Performance Levels (pts)	Algebra I (# of students at level)	English I (# of students at level)	Physical Science (# of students at level)
Exemplary 5 (5)	10	5	10	1	3	A (5)	8	4	0
Exemplary (4)	20	30	45	7	13	B (4)	5	6	0
Met (3)	45	45	30	22	22	C (3)	4	6	0
Not Met 2 (2)	15	10	10	10	7	D (2)	2	3	0
Not Met 1 (1)	10	10	5	10	5	F (1)	1	1	0
TOTAL	100	100	100	50	50	TOTAL	20	20	0

Jones Middle School: Grade 7
There are 110 students attending grade 7 in Jones Middle School.
- Since Grade 7 is census-tested, all 110 students in grade 7 took both Science and Social Studies.
- There were no End-of-Course tests administered in grade 7 in Jones Middle School.

Grade 7 Performance

PASS Score Performance Levels (pts)	PASS Math (# of students at level)	PASS Reading and Research (# of students at level)	PASS Writing (# of students at level)	PASS Science (# of students at level)	PASS Social Studies (# of students at level)	End-of Course Score Performance Levels (pts)	Algebra I (# of students at level)	English I (# of students at level)	Physical Science (# of students at level)
Exemplary 5 (5)	15	3	15	13	12	A (5)	0	0	0
Exemplary (4)	20	25	20	17	15	B (4)	0	0	0
Met (3)	48	49	50	33	42	C (3)	0	0	0
Not Met 2 (2)	14	17	15	27	26	D (2)	0	0	0
Not Met 1 (1)	13	16	10	20	15	F (1)	0	0	0
TOTAL	110	110	110	110	110	TOTAL	0	0	0

Jones Middle School: Grade 6
There are 105 students attending grade 6 in Jones Middle School.
- PASS Science and Social Studies are sample-tested in grade 6, and 52 sixth graders took PASS Science; 53 took Social Studies.
- There were no End-of-Course tests administered in grade 6 in Jones Middle School.

Grade 6 Performance

PASS Score Performance Levels (pts)	PASS Math (# of students at level)	PASS Reading and Research (# of students at level)	PASS Writing (# of students at level)	PASS Science (# of students at level)	PASS Social Studies (# of students at level)	End-of Course Score Performance Levels (pts)	Algebra I (# of students at level)	English I (# of students at level)	Physical Science (# of students at level)
Exemplary 5 (5)	16	7	10	6	8	A (5)	0	0	0
Exemplary (4)	23	25	25	7	13	B (4)	0	0	0
Met (3)	44	40	40	14	20	C (3)	0	0	0
Not Met 2 (2)	11	17	15	12	7	D (2)	0	0	0
Not Met 1 (1)	11	16	15	13	5	F (1)	0	0	0
TOTAL	105	105	105	52	53	TOTAL	0	0	0

20

Jones Middle School: Grade 5

There are 100 students attending grade 5 in Jones Middle School.

Grade 5 Performance

PASS Score Performance Levels (pts)	PASS Math (# of students at level)	PASS Reading and Research (# of students at level)	PASS Writing (# of students at level)	PASS Science (# of students at level)	PASS Social Studies (# of students at level)
Exemplary 5 (5)	16	3	8	8	7
Exemplary (4)	18	31	12	6	6
Met (3)	42	46	60	17	19
Not Met 2 (2)	13	10	12	10	10
Not Met 1 (1)	11	10	18	9	8
TOTAL	100	100	100	50	50

First, the index for each subject area across grades 6, 7, and 8 is calculated:

Index for Mathematics: **Index for Reading & Research**

Point Weights	Number Scores At Each Point Weight (includes PASS Math and Algebra 1 End-of-Course)	Point Weight *multiplied by* Number of Scores
5	49	245
4	68	272
3	141	423
2	42	84
1	35	35
Totals	**335**	**1059**

Index = Total Point Weights / Total Number of Scores

Math Index = 1059/335 = 3.1611

Point Weights	Number Scores At Each Point Weight (includes PASS R&R and English1 End-of-Course)	Point Weight *multiplied by* Number of Scores
5	19	95
4	86	344
3	140	420
2	47	94
1	43	43
Totals	**335**	**996**

Index = Total Point Weights / Total Number of Scores

Reading & Research Index = 996/335 = 2.9731

Index for Science: **Index for Social Studies**

Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores	Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores
5	20	100	5	23	115
4	31	124	4	41	164
3	69	207	3	84	252
2	49	98	2	40	80
1	43	43	1	25	25
Totals	**212**	**572**	**Totals**	**213**	**636**

Index = Total Point Weights / Total Number of Scores

Science Index = 572/212 = 2.6981

Index = Total Point Weights / Total Number of Scores

Social Studies Index = 636/213 = 2.9859

Index for Writing :

Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores
5	35	175
4	90	360
3	120	360
2	40	80
1	30	30
Totals	**315**	**1005**

Index = Total Point Weights / Total Number of Scores

Writing Index = 1005/315 = 3.1904

The overall absolute index for grades 6 through 8 in the school is calculated by averaging the subject-area indexes, giving each subject area index equal weighting.

School Index (for grades 6-8) = (Math Index + ELA Index + Science Index + Social Studies Index) / 4

The ELA index is the sum of the Reading & Research index multiplied by 0.67 and the Writing index multiplied by 0.33:
ELA index = (2.9731*0.67) + (3.1904*0.33) = 3.0448

Jones Middle School Absolute Index for grades 6 through 8:

(3.1611 + 3.0448 + 2.6981 +2.9859) / 4 = 2.9724

Now, the index for each subject area in grade 5 is calculated:

Index for Mathematics, grade 5:

Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores
5	16	80
4	18	72
3	42	126
2	13	26
1	11	11
Totals	100	315

Index = Total Point Weights / Total Number of Scores

Grade 5 Math Index = 315/100 = 3.1500

Index for Reading & Research, grade 5:

Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores
5	3	15
4	31	124
3	46	138
2	10	20
1	10	10
Totals	100	307

Index = Total Point Weights / Total Number of Scores

Grade 5 ELA Index = 307/100 = 3.0700

Index for Science, grade 5:

Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores
5	8	40
4	6	24
3	17	51
2	10	20
1	9	9
Totals	50	144

Index = Total Point Weights / Total Number of Scores

Grade 5 Science Index = 144/50 = 2.8800

Index for Social Studies, grade 5:

Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores
5	7	35
4	6	24
3	19	57
2	10	20
1	8	8
Totals	50	144

Index = Total Point Weights / Total Number of Scores

Grade 5 Social Studies Index = 144/50 = 2.8800

Index for Writing, grade 5:

Point Weights	Number Scores At Each Point Weight	Point Weight *multiplied by* Number of Scores
5	8	40
4	12	48
3	60	180
2	12	24
1	8	8
Totals	100	300

Index = Total Point Weights / Total Number of Scores

Writing Index = 300/100 = 3.0000

The overall absolute index for grade 5 is calculated by weighting the subject-area indexes, using the following subject area weightings:

Grade 5 Index = (0.3*Math Index) + (0.3*ELA Index) + (0.2*Science Index) + (0.2*Social Studies Index)

The ELA index is the sum of the Reading & Research index multiplied by 0.67 and the Writing index multiplied by 0.33:
ELA index = (3.0700*0.67) + (3.0000*0.33) = 3.0469

Jones Middle School Absolute Index for grade 5:

(0.3*3.1500) + (0.3*3.0469) + (0.2*2.8800) + (0.2*2.8800) = 3.0110

The overall absolute index for the school is calculated by averaging the index for grades 6 through 8 with the index from grade 5, weighting the indexes by the total number of scores for the two sets of grade levels and dividing by the total number of scores in the school.

Overall School Index *equals*

((Grades 6 through 8 Index*Total Number Scores in Grades 6-8)
plus
(Grade 5 Index*Total Number Scores in Grade 5))
divided by
((Total Number Scores in Grades 6 through 8)
plus
(Total Number Scores in Grade 5)),

where the Total Number of Scores reflects the combination of Reading & Research and Writing scores to calculate the ELA index.
The Number of Scores for ELA = ((Number scores for Reading & Research*0.67)+(Number scores for Writing*0.33))

Calculation of Total Number of Scores in Grades 6-8:
    Number of Scores for ELA in Grades 6-8 + Number of Scores for Mathematics in Grades 6-8
   + Number of Scores for Science in Grades 6-8 + Number of Scores for Social Studies in Grades 6-8.

Number ELA scores = $((335*0.67)+(315*0.33))$ =	328.4
+Number Mathematics scores =	335
+Number Science scores =	212
+Number Social Studies scores =	<u>213</u>
Total Number Scores in Grades 6-8	1088.4

Calculation of Total Number of Scores in Grade 5:
    Number of Scores for ELA in Grade 5 + Number of Scores for Mathematics in Grade 5
   + Number of Scores for Science in Grade 5 + Number of Scores for Social Studies in Grade 5.

Number ELA scores = $((100*0.67)+(100*0.33))$ =	100
+Number Mathematics scores =	100
+Number Science scores =	50
+Number Social Studies scores =	<u>50</u>
Total Number Scores in Grade 5	300

Calculation of Overall Absolute Index:

Jones Middle School Absolute Index = $((2.9724*1088.4) + (3.0110*300)) / (1088.4 + 300)$ = 2.981

The absolute index is rounded to the nearest hundredth of a point and compared to the values in the following table to determine the rating.

**Index Values for Determining Absolute Ratings
for Elementary and Middle Schools (2009-2013)**

Absolute Rating	Range of Indexes
Excellent	3.40 or above
Good	3.18 to 3.39
Average	2.65 to 3.17
Below Average	2.32 to 2.64
At Risk	2.31 or below

The Jones Middle School absolute index of 2.981 rounds to 2.98. Based on the table, an index of 2.98 corresponds to an Absolute rating for Jones Middle School of "Average."

Growth Rating

The Education Accountability Act provides that the EOC may consider the performance of subgroups of students in the school in the Growth ratings. Growth ratings are based on longitudinally matched student data.

Growth ratings in elementary and middle schools are based on longitudinal student data, with test results from the current year matched to results from the previous year to measure growth. Elementary and middle school Growth ratings for the 2008-2009 school year and beyond are based on a new methodology adopted by the EOC in January 2010. While the methodology remains the same in 2008-2009 as in subsequent years, the 2008-2009 Growth ratings will be based on a comparison of 2008 PACT performance to PACT-equivalent performance estimates based on the PASS tests in 2009; in subsequent years the growth comparisons will be based on PASS- to PASS-results.

PASS was administered for the first time in Spring 2009, so PASS results from 2008 are not available for longitudinal matching in 2009. The 2009 PASS results can be matched to the 2008 PACT results, however. A special study conducted by the Data Recognition Corporation for the EOC provided tables to convert 2009 PASS scale scores to 2008 PACT scale scores in reading & research, mathematics, science, and social studies. The tables are listed in DRC's Linking Study, South Carolina Standard Setting Study 4: Linking Study. The 2009 PASS scores are converted to PACT scores so comparisons can be made between 2008 and 2009 student performance and to assign Growth ratings for the 2008-2009 school year. The 2008-2009 Growth ratings can be interpreted as representing student gains in PACT. In 2010 and in subsequent years, PASS data will be available for both the pretest and posttest years so that student achievement gains can be interpreted as gains in PASS performance.

The elementary and middle school Growth rating methodology adopted by the EOC is based on value tables, which represent a different methodology than in previous years for measuring growth by individual students from one year to the next. In this methodology, each student's change in test score performance from pretest (year 1) to posttest (year 2) is assigned a value. The assignment of different values for growth categories provides a mechanism for measuring growth differentially based on students' initial performance levels. For example, in the value table model the points assigned for a change from Below Basic 1 to Below Basic 2 (PACT), or Not Met 1 to Not Met 2 (PASS) or from Proficient or Advanced (PACT), or Exemplary 4 to Exemplary 5 (PASS) are different. The growth index from a value table is the average of all the points from the table awarded to each student for pretest to posttest growth in each subject area tested. Growth value tables can be symmetrical, in which relative value changes from pretest to posttest are the same regardless of the pretest level, or asymmetrical, in which changes from some pretest to posttest levels receive relatively higher values than changes associated with other pretest levels. The Growth value table adopted for use in calculating elementary and middle school Growth ratings is asymmetrical.

Since PACT Writing and PASS Writing scores could not be linked accurately, the 2008-2009 Growth ratings are based on growth in Reading & Research, Mathematics, Science, and Social Studies test performance. In 2010 and subsequent years all PASS

results (Reading & Research, Writing, Mathematics, Science, and Social Studies) will be used for the Growth rating calculations.

In the Growth rating model an index is calculated which represents average student growth in achievement based on 5 performance levels on both the pretest (year 1) and posttest (year 2). This value table is asymmetrical, in that, for example, the changes in values from Below Basic 1 or Below Basic 2 to Basic (Not Met 1 or Not Met 2 to Met in PASS) are awarded relatively higher values than changes in values from Basic to Proficient or Advanced (Met to Exemplary 4 or Exemplary 5 in PASS). The index is the average of all the values from the table earned by every student's change from pretest to posttest across all subjects and grades tested.

Using this value table, a school growth index of 94.00 indicates that, on average, the performance levels of students on the posttest did not differ from their performance on the pretests. A growth index greater than 94.00 indicates that posttest performance levels of individual students tended to be higher than their pretest performance levels. Growth indexes less than 94.00 indicate that individual students' posttest performance levels tended to be lower than their pretest performance levels. The values assigned to each pair of pretest and posttest combinations are listed in the Growth model value table below.

Growth Value Table Based PACT-to-PACT Comparisons (2008-2009 Only) and PASS-to-PASS Comparisons (2009-2010 and Beyond) (Growth from Not Met to Met Valued Higher Than Growth Above Met)

Year One (Pretest)	Year Two (Posttest)				
	Below Basic 1 (PACT); Not Met 1 (PASS)	Below Basic 2 (PACT); Not Met 2 (PASS)	Basic (PACT); Met (PASS)	Proficient (PACT); Exemplary 4 (PASS)	Advanced (PACT); Exemplary 5 (PASS)
Advanced (PACT); Exemplary 5 (PASS)	40	60	80	90	100
Proficient (PACT); Exemplary 4 (PASS)	50	70	90	100	110
Basic (PACT); Met (PASS)	60	80	100	110	120
Below Basic 2 (PACT); Not Met 2 (PASS)	70	90	110	120	130
Below Basic 1 (PACT); Not Met 1 (PASS)	80	100	120	130	140

Calculation of the Growth Index

(1) For the students whose data are to be included in the growth index calculation (see Section II, Students Included in the Ratings), values from the Growth value tables are assigned for each subject area based on each student's pretest and posttest performance. The values based on each student's performance on all the subject areas tested are accumulated across the students and grade levels in the school. The weighted mean of all the values from all students, grade levels, and subjects in the school is the growth index. End of Course test scores from high school courses in middle schools are not included in the calculation of middle school Growth ratings because, since students typically take such courses only once in middle school, longitudinal data are not available.

(2) As with the Absolute ratings, in the calculation of the growth index the subject areas receive different weightings in grades 3-5 and grades 6-8. The following table lists the subject area weights used for calculating the growth rating index for grades 3-5 and grades 6-8.

PASS ELA, Math, Science, and Social Studies Weights
Elementary and Middle School Growth Ratings

Grades 3-5				Grades 6-8			
ELA*	Math	Science	Social Studies	ELA*	Math	Science	Social Studies
0.30	0.30	0.20	0.20	0.25	0.25	0.25	0.25

*Note: ELA includes results from both Reading & Research and Writing assessments in the proportions of 0.67 and 0.33, respectively.

(3) The Growth index is calculated in a manner similar to the absolute index calculations, calculating the mean values from the tables for each subject area, combining the Reading & Research and Writing indexes to obtain the ELA index, and applying the appropriate subject area weightings to calculate a school growth index. The school growth index should be rounded to the nearest hundredth and compared to the criteria in the table to obtain the Growth ratings. Compare the school's growth index to those in the table below to determine the school's Growth rating. For example, the school achieving a growth index of 97.22 would receive a Growth rating of "Good."

Growth Rating Criteria Based on Growth Indexes
Elementary and Middle School Growth Ratings

Growth Rating	Range of Indexes
Excellent	98.48 or above
Good	96.39 to 98.47
Average	92.20 to 96.38
Below Average	90.11 to 92.19
At Risk	90.10 or below

(4) A school's Growth rating may be increased by one level if the growth in performance on the Reading & Research assessment of historically underachieving demographic groups of students meets or exceeds a criterion. Historically underachieving groups consist of African-American, Hispanic, and Native American students, those eligible for the free or reduced-price federal lunch program, Limited English Proficient (LEP) students, migrant students, and students with non-speech disabilities. The school's eligibility for the increased Growth rating is determined as follows:
  a. Calculate the reading & research growth index for the group of eligible students. The group must consist of 40 or more students to be considered for analysis.
  b. Compare the reading & research growth index for the group to the state two-year average reading & research growth index for all students in the state. (Since data for two years are not available for the 2008-2009 Growth rating analysis, the comparison in 2008-2009 will be based on performance in 2008-2009 only.) The state two-year average growth index is the average of the growth indexes for all students for the current and prior years. If the growth index for the historically underachieving group in the school exceeds the state two-year average growth index by at least one standard deviation, the school's Growth rating may be increased by one level. If the school is rated Excellent for Growth on the basis of all students, the performance for groups should also be calculated and reported even though the school's rating cannot be increased.

Schools Having Grade Three as the Highest Grade Enrolled

Longitudinal analyses of scores from students enrolled in schools having grade organizations such as kindergarten through grade three, grades two through three, grades one through three, and so on, cannot be performed because these schools will have PASS data for grade three only. There is no PASS test in grade two administered on a statewide basis to serve as a pretest for the longitudinally matched data. The Growth rating for schools such as these will be calculated based on the change in absolute performance from year to year. The change in absolute performance is calculated by subtracting the un-rounded absolute index for the previous year from the

un-rounded absolute index for the current year. The result is then rounded to the nearest tenth of a point and the rating is obtained from the table below.

**Growth Rating Criteria for Schools Having
Grade Three as the Highest Grade Enrolled**

Growth Rating	Growth Index
Excellent	0.4 or greater
Good	0.3
Average	0.1–0.2
Below Average	0.0
At Risk	-0.1 or less

Schools with Absolute Ratings of Excellent in Two Subsequent Years

If a school is rated Excellent for absolute achievement for both the current and previous years, the school will receive a Growth rating of "Good." If the school's *Growth* index for all students has a value of 94.00 or higher, the school's Growth rating will be elevated to "Excellent." The performance growth of the groups will also be reported for these schools. Schools achieving an absolute index of 4.75 or higher for two consecutive years will be awarded an "Excellent" Growth rating.