

**Determining School Status  
In the ABCs Model  
2006-07**

# The ABCs for 2006-07

## Background

In its 2003-04 session, the General Assembly of North Carolina instructed the State Board of Education (SBE) to evaluate the validity of the ABCs accountability system<sup>1</sup>. Staff from the Division of Accountability Services reviewed the current accountability model and conducted analyses. The Chief of the Reporting Section presented findings and proposed new formulas to the Accountability Services' Technical Advisory Committee on January 27, 2005. Committee members offered their input on the proposed formulas and the plan was refined. A summary of the findings, recommendations, and a description of the new formulas follow.

## Rationale

Much has changed since the ABCs of Public Education was implemented in the 1996-97 school year. At that time, formula constants were set using values that represented the statewide average growth. Major revisions to the reading and mathematics curricula since the ABCs began required the development of new tests editions; scores on the new editions of tests were equated back to the original scale to allow comparisons from year to year using the original formulas. Due to relational shifts in the intervening years between statewide student achievement, the taught curriculum, and the end-of-grade tests, the original ABCs formulas needed revision. A review of the original growth formulas found that:

1. As the editions of the tests changed (in direct response to curriculum revisions), changes in the growth expectations may have been warranted
2. Statewide ABCs growth over time, by grade level, forms a saw-toothed pattern of gains and dips in the percent of schools meeting and exceeding growth targets in reading or mathematics as a cohort of students moves from grade to grade.
3. The percent of schools meeting or exceeding growth expectations in reading or mathematics does not appear to be highly correlated to curricular implementation (i.e., a historically high percent of schools met and exceeded expectations in the first year of testing a new curriculum).

Therefore, a need existed for a measure of student change in performance at the school level that

- a. based expected student performance on past student performance,
- b. separated reading from mathematics; i.e., a student's reading score could be included in the ABCs calculations, even if that student did not have a score in mathematics,
- c. did not produce the saw-toothed pattern in percentages of schools meeting expectations at consecutive grade levels over time as a cohort moved through a school,

- d. adjusted for the difference in relative difficulty of the curriculum among adjacent grade levels as the curriculum was revised,
- e. could be used over a series of test editions with little or no modification, and
- f. produced valid and reliable results.

### **A Standardized Scale Model**

Division staff, with input from the Technical Advisory Committee, recommended using a standardized scale to measure relative student performance, similar to *z*-scores<sup>2</sup>, instead of the original developmental scale score. Under the new formulas, student scores were standardized and a student's performance was considered as a point on the *c-scale* (change scale) relative to standard performance for that grade level in a standard setting year. A student's developmental scale score was converted to a *c-scale* score.

In the first year of the test edition implementation (called the standard setting year), approximately half of the students in the state would score above "0" and half below. After the standard setting year, a student scoring above "0" on the *c-scale* was performing better than the average student in the standard setting year. Based on historical data, what was different about the *c-scale* from normative scales was that there was no reason why all students in the state could not score above "0" in any year after the standard setting year. On the *c-scale*, if a student performed equally as well in two consecutive years, the *academic change* (AC) would be "0," meaning that the student was performing equally as well in grade 5 as previously in grade 4.

Using these formulas, schools that assisted students to achieve as well in the current year as in the previous year had a change of "0" on the *c-scale*. If the school did not perform as well in the current year, the AC was negative, and if the school performs better, the AC was positive.

### **Growth Expectations**

Under the new formulas, the individual student is expected to perform as well, or better, on the end-of-grade (EOG) assessment for the current year as she or he did, on average, during the previous two years when the student's scores are placed on the *c-scale*. As an indicator of growth, the new model is based on *academic change*. The *academic change* is based on an average of the previous two years' assessments. If there is only one year's EOG test data available, the expectation for change will be based on one previous assessment. Like the original formulas, the new formulas factor in an adjustment for regression to the mean (a student who performs above or below the mean score on one EOG will likely score closer to the mean on a subsequent EOG).

## Population Factor

For certain EOG courses, a population factor is used to account for the differing population of students. Example: Many fewer students take Alg II than Alg I which is a predictor for Alg II.

## The New Formula(s)

*Academic change* is expressed as the difference between a student's actual *c-scale* score for the current year and the student's average of two (in most cases) previous assessments (EOGs and EOCs) with a correction for regression toward the mean. A positive *academic change* indicates a gain in academic achievement, while a negative *academic change* indicates a loss in academic achievement from the previous two years. The simplified formula to determine *academic change* is:

$$AC = CS_{c-scale} - (0.92 \times ATPA_{c-scale})$$

Where

- AC = academic change
- CS = current score
- ATPA = average of two previous assessment scores

A modification is made to the formula for determining *academic change* in grade 3 and for any instance when only one previous year's EOG score is available or only one previous year's EOC score is required. The formula\*, adjusted for one previous year's assessment score, is:

$$AC = CS_{c-scale} - (0.82 \times PA_{c-scale})$$

Where:

- AC = academic change
- CS = current score
- PA = previous assessment score

\* A review is being performed on Physics that is likely to yield a modification in the formula when this test is put back into the growth model in 2007-08.

## A Sample Calculation for Determining *Academic Change* for 3-8

For our example, Jordan is a student in grade 5 in the 2003-04 school year. Jordan's test scores are:

	EOG Reading	EOG Math
Grade 5 (2003-04)	268	271
Grade 4 (2002-03)	263	264
Grade 3 (2001-02)	157*	267

\*Note that these data bridge two different reading test editions scored on differing scales.

Steps in the Operation to Calculate Academic Change:

1. **Convert the developmental scale scores to c-scale scores:**

- a. Subtract the state mean for the standard setting year from the developmental scale score
- b. Divide by the standard deviation for the standard setting year.

Grade Level	Scale score	State mean	Difference	Standard deviation	<b>Actual c-score*</b>
Reading 5	268.0	256.9	11.1	8.03	<b>1.382</b>
Reading 4	263.0	252.3	10.7	8.68	<b>1.233</b>
Reading 3	157.0	146.9	10.1	9.29	<b>1.087</b>
Math 5	271.0	260.0	11.0	9.62	<b>1.143</b>
Math 4	264.0	255.8	08.2	8.32	<b>0.986</b>
Math 3	267.0	250.6	16.4	7.75	<b>2.116</b>

*\*Full precision will be used in the actual calculations, although the values here are rounded for readability.*

2. **Compute the ATPAs (average of two previous assessment scores on the c-scale), for reading and mathematics, and adjust for regression to the mean to determine what is expected for Jordan at grade 5.**

Grade Level	c-scale	ATPA	Coefficient	<b>Expected c-score</b>
Reading 4	1.233	1.16	0.92	<b>1.067</b>
Reading 3	1.087			
Math 4	0.986	1.55	0.92	<b>1.426</b>
Math 3	2.116			

3. **Subtract the expected c-scale score from the actual c-scale score (see step #1) to determine Jordan's academic change.**

Grade Level	Actual c-score (from Step # 1)	Expected c-score (from Step #2)	Difference = Academic Change	Met Expected Academic Change?
Reading 5	1.382	1.067	+0.315	Yes
Math 5	1.143	1.426	-0.283	No

*(Caution: Due to the instability of a single student score, an individual Academic Change should be used with a margin of + or - 0.5. This caution not withstanding, since 30 scores are used when calculating school level academic change, scores will be round to the 0.01 level for use in calculating c-ratios for schools.)*

## High School Examples

### Sample Calculations for Determining Student Academic Change:

As in 3-8, all scale scores will have to be changed to the change scale.

Table 1: Standard Setting Means and Standard Deviations for End-Of-Grade (EOG):

*Note: For the accountability year 2004-05, the posttest, pretest, and pre-pretest for grades 3 to 7 are all on the second edition of the test:*

EOG	Standard Setting Year	Mean	Standard Deviation
Reading (2 <sup>nd</sup> Edition)			
Grade 8	2003	263.9	9.05
Mathematics (2 <sup>nd</sup> Edition)			
Grade 8	2005	221.1	10.90
Mathematics (3 <sup>rd</sup> Edition)	2006	359.2	9.21

Table 2: Standard Setting Means and Standard Deviations for End-Of-Course (EOC) and Grade 8 EOG (used as pre-test for EOC):

*Note: Grade 8 EOG used as a pretest can be either first (100-scale) or second edition (200-scale), or third edition (300 scale) depending which grade the EOC (posttest) was taken.*

EOC	Standard Setting Year	Mean	Standard Deviation
Algebra I	2001	61.1	9.31
Algebra I (special transition for use when companion to 2 <sup>nd</sup> Edition EOCs )	2006	63.3	10.1
Algebra I	2007	150.3	8.9
Algebra II	2001	63.8	9.90
Algebra II	2007	150.2	9.3
Biology	2002	57.9	7.61
Chemistry	2002	60.0	8.16
Civics and Economics	2006	150.9	9.4
English	2003	57.7	7.63
English	2007	150.36	8.93
Geometry	2001	59.8	8.85
Geometry	2007	150.2	9.27
U.S. History	2006	150.0	9.14

**First example:**

Sandra is a 9<sup>th</sup> grade student at a local school. Sandra’s test scores are:

Course	Scale Score
Algebra I (1 <sup>st</sup> semester)	148
Geometry (2 <sup>nd</sup> semester)	148
English I (1 <sup>st</sup> semester)	146
Grade 8 Math EOG	349
Grade 8 Reading EOG	254

Steps in the Operation to Calculate Academic Change:

1. **Convert the developmental scale scores to Change Scale Scores (CS) (both the current year’s test and the predictors):**
  - a. Subtract the state mean for the standard setting year from the developmental scale score.
  - b. Divide by the standard deviation for the standard setting year

EOC Course	Scale Score	State Mean	Difference	Standard Deviation	Population Factor	Actual c-score*
Algebra I (1 <sup>st</sup> sem.)	148	150.28	-2.28	8.90		-0.26
Geometry	148	150.20	-2.20	9.27	0.21	-0.03
English I	146	150.36	-4.36	8.93		-0.49
Grade 8 Math EOG	349	359.15	-10.15	9.21		-1.10
Grade 8 Reading EOG	254	263.9	-9.9	9.05		-1.09

*\*Full precision will be used in the actual calculations, although the values here are rounded for readability*

2. **Compute the Academic Change (AC) for each of the End-of-Course Test**

**Algebra I:**

The predictor is Grade 8 EOG Math.

$$Alg I_{AcademicChange} = Alg I_{c-score} - (.82 * (Grade8EOGMath)_{c-score})$$

Algebra I c-score	Grade 8 Math EOG c-score	Coefficient	Target Score <sup>1</sup>	Academic Change	Met expected academic change?
-0.26	-1.10	0.82	-0.90	-0.30	Yes

<sup>1</sup>Target Score= Coefficient\* Predictor

**Geometry:**

The predictor is Algebra I EOC. If Algebra I is not available, the AC will not be computed. The Algebra I EOC has to be administered at the latest during the semester preceding the administration of the Geometry EOC.

In our example, Algebra I is available:

$$Geometry_{AcademicChange} = Geometry_{c-score} - .82 * Alg I$$

<b>Geometry c-score</b>	<b>Algebra I c-score</b>	<b>Coefficient</b>	<b>Target Score</b>	<b>Academic Change</b>	<b>Met expected Academic change?</b>
-0.03	-0.26	0.82	-0.21	0.18	Yes

**Target Score Predictor**

Geometry

$$\frac{CS - SM}{SD} + 0.21$$

Where:

- SD = standard deviation
- CS = current score
- SM = state mean

Steps in the Operation to Calculate Academic Change:

**1. Convert the developmental scale scores to c-scale scores (both the current year’s test and the predictors):**

- a. Subtract the state mean for the standard setting year from the developmental scale score.
- b. Divide by the standard deviation for the standard setting year

EOC Course	Scale Score	State Mean	Difference	Standard Deviation	Population Factor	Actual c-score*
Algebra I	148	150.28	-2.28	8.9		-0.26
Algebra II	148	150.20	-2.20	9.33	0.31	0.07
Biology	55	57.30	-2.3	7.47		-0.31
English I	146	150.36	-4.36	7.63		-0.57
Grade 8 Math EOG	349	359.15	-10.2	9.21		-1.10
Grade 8 Reading EOG	254	263.9	-9.9	9.05		-1.09

*\*Full precision will be used in the actual calculations, although the values here are rounded for readability.*

**2. Compute the Academic Change.**

**Algebra II:**

The predictor is Algebra I EOC. The Algebra I EOC has to be administered at the latest during the semester preceding the administration of the Algebra II EOC.

$$Alg\ II_{AcademicChange} = Alg\ II_{CurrentScore} - .82 * Alg\ I_{CurrentScore}$$

Algebra II c-score	Algebra I c-score	Coefficient	Expected c- score <sup>1</sup>	Academic Change	Met expected academic change
0.07	-0.26	0.82	-0.21	0.28	YES

<sup>1</sup>Target Score=Predictor \* Coefficient

Algebra II

$$\frac{CS - SM}{SD} + 0.31$$

Where:

- SD = standard deviation
- CS = current score
- SM = state mean

Note: Population factor applied

**Biology:**

The predictors are Grade 8 Reading EOG and English I EOC. If the English I EOC is not available, Grade 8 EOG Reading will be used. If Grade 8 EOG Reading is not available, the AC will not be computed (even if English I EOC is available). The English I EOC has to be administered at the latest during the semester preceding the administration of the Biology EOC. If the Biology EOC was administered before, or at the same time as the English I EOC then only the Grade 8 Reading EOG is used. If the Biology EOC was administered in 8<sup>th</sup> grade, Grade 7 EOG Reading is used as predictor.

In our example, both Grade 8 EOG Reading and English I EOC are available:

$$\text{Biology}_{\text{Academic Change}} = \text{Biology}_{\text{CurrentScore}} - .92 * \frac{\text{Grade 8 EOG Reading}_{\text{CurrentScore}} + \text{English I}_{\text{CurrentScore}}}{2}$$

Biology c-score	Grade 8 Reading EOG c-score	English I c-score	Coefficient	Target Score <sup>1</sup>	Academic Change	Met expected academic change?
-0.31	-1.09	-0.57	0.92	-.76	.46	Yes

<sup>1</sup>Target Score =  $\frac{\text{Predictor1} + \text{Predictor2}}{2} * \text{Coefficient}$

**Sample Calculations for Determining School Academic Change:**

**Calculating Academic Change Academic Change at the School-level**

For elementary schools with 30 or more scores, *academic change* at the school level is calculated using only those students who actually have the appropriate historic scores and scores for the current year. A mean *academic change* is computed for the school. Unlike the original growth formulas that needed to be combined using a standardization coefficient, all academic change using the new formulas is already standardized on the *c-scale*, so direct comparisons can be made. It is also important to remember that in the formulas, scores can be calculated using only one previous year’s subject or course assessment if necessary. (A student with an EOG score in reading but not in math will contribute to the mean *academic change* for reading only.) *Academic Change* for schools with fewer than 30 total scores will not be calculated. In the example provided above, to determine if Jordan’s school met the expected *academic change*, Jordan’s *academic changes* in reading and mathematics are averaged with all others for the school.

For high schools, other weighted components (change in the passing rate on the competency test, change in the dropout rate, and change in the percent of students in the college/university prep or college tech prep courses of study) are included in the school’s *academic change* composite, just as they have been included in the prior ABCs growth composite. Performance expectations for students taking EOC tests in a current year are based on EOGs and EOCs from previous years, as indicated in the following example.

## High Academic Change

Only schools that meet the standard for expected growth (expected academic change) are eligible to meet the *high change* (growth) standard. *High change* will be calculated as a *c-ratio* (change ratio). This is the ratio of students in the school who have a “0” or greater *academic change* to those who have an *academic change* that is less than “0.” To determine *high change*, divide the number of students with an *academic change* of “0.00” or greater by the number who have an *academic change* less than “0.” If the result is 1.50 or greater, and the school has met expected *academic change*, the school has met high growth. As directed by SBE policies, change in dropout rate will be multiplied by ¼ the ADM of the school and added to the denominator such that an increase in dropouts will have the same effect as more students not meeting the *academic change* target of “0.” Also, change in percent of students graduating in the College Tech Prep Curriculum and College University Prep Curriculum will be multiplied by the number of graduates and added to the numerator such that this change will appear like students who meet the standard. Likewise, change in Competency pass rate will appear in the numerator.

### Step 1: High School Academic Change

Once all of the student academic change scores are known, the school’s academic change score can be computed. Compute the academic change for the EOG and EOC tests for the school by adding the academic changes for all tests administered during the accountability year 2004-05.

$$School\_AC = \frac{\sum_{EOC+EOG} AC}{TotalCount}$$

Count the number of Academic Change Scores computed = Total count

#### High School Example:

Below is a table containing academic change scores for each EOC in a school.

EOC	Total Academic Change	Number of Students in Course	Number of Students that Met	Number of Students that did not meet
Algebra I	53.1	100	80	20
Algebra II	-7.6	76	33	43
Biology	10.2	146	79	67
Chemistry	0.9	50	27	23
English I	39.6	165	111	54
Geometry	-16.5	90	34	56
Physics	-5.9	10	1	9
Physical	-6.1	145	60	85

Science				
<b>Total</b>	<b>67.7</b>	<b>782</b>	<b>425</b>	<b>357</b>

**Other High School Components:**

**Change in percent passing the Competency Test from grade 8 to grade 10:**  
**(Last year for this component)**

After computing the academic change for the school,(see above), you must compute the change in percent passing.

- STD = 12.8 (State Standard deviation for competency)
- Percent who passed competency in grade 8:  $pct8 = \frac{comp8}{tot10} * 100$
- Percent passing competency by grade 10:  $pct10 = \frac{comp10}{tot10} * 100$
- Weighted Competency Component:  $COMP = \frac{(pct10 - pct8 - .1^1)}{STD} * Tot10$

<sup>1</sup>subtract .1 in order for 0 to represent growth

- The total number of scores for competency is **Tot10**
- Tot10 = total number of 10<sup>th</sup> graders in the school who took the 8<sup>th</sup> grade EOG for Math & Reading
- Comp8 = number of 10<sup>th</sup> graders who passed the Competency Test in grade 8. A 10<sup>th</sup> grade student passed competency in grade 8 if he/she scored a proficient score on both grade 8 Math and Reading.
- Comp10 = number of 10<sup>th</sup> graders who passed competency by grade 10. For a student to have passed the Competency Test by grade 10, the competency flags for Reading and Math have to both be “P”.

Example:

Tot10	135
Comp8	132
Comp10	134
STD	12.8
pct8	97.78%
pct10	99.26%
COMP	14.5

**Change in the percent of Graduates in the College Prep, College Tech Prep (CUPCTP) courses of study:**  
**(will have to drop from growth after implementation of the core course of study)**

To compute the change in the percent of graduates in CUPCTP courses.

- Obtain the following variables:
    - Gradyr1 = number of school graduates, year 1 (04-05)
    - Gradyr2 = number of school graduates, year 2 (05-06)
    - Gradyr3 = number of school graduates, year 3 (06-07)
- Note: The students who are in the Occupational course of study are not included in those counts.*
- Cupctpyr1 number of graduates in the CUPCTP course of study, year 1 (04-05)
  - Cupctpyr2 number of graduates in the CUPCTP course of study, year 2 (05-06)
  - Cupctpyr3 number of graduates in the CUPCTP course of study, year 3 (06-07)
- The baseline is the average of the 2 first years' percentages:

$$\frac{(\text{Cupctpyr1}/\text{Gradyr1}) + (\text{Cupctpyr2}/\text{Gradyr2})}{2}$$

The current year is:

$$\text{cupctpyr3pct} = \text{Cupctpyr3}/\text{Gradyr3}$$

The weighted CUPCTP component:

$$\text{CUPCTP} = \frac{(\text{cupctpyr3pct} - \text{Baseline} - .1^1)}{\text{STD}} * \text{Gradnumber}$$

<sup>1</sup>subtract .1 in order for 0 to represent growth

- The total number of students for CUPCTP is the **Gradnumber (which is the same as Gradyr3)**
- STD=10.0 (State Standard Deviation for CUPCTP)

Example:

Cupctpyr1pct	78.7%
cupctpyr2pct	73.9%
cupctpyr3pct	76.7%
baseline	76.3%
STD	10.0
gradnumber	122
CUPCTP	3.7

**Change in drop out rate over 3 years:**

*Note: the drop out data lags a year as it is collected in October*

To compute the change in your school's drop out rate over the past 3 years.

- $baseline = \frac{DORateYr1 + DORateYr2}{2}$
- STD = 2.1 (State Standard Deviation for Drop out)
- Weighted Drop Out Component:  $DO = \frac{(baseline - DORateYr3)}{STD} * (\frac{1}{4} * ADM)$
- The total number of scores for Drop Out is weighted by:  
 $\frac{1}{4} * \text{the best of the first two months ADM}$

*The "best of the first two months" as defined by the School Business NCDPI Information Analysis and Reporting.*

Example:

DORateYr1	5.7
DORateYr2	5.3
DORateYr3	6.3
Baseline	5.5
STD	2.1
¼*ADM	166.75
DO	-63.5

Note:

**ABCs dropout numerator** = The total number of dropouts in grades 9-12, minus the total number of expulsions in grades 9-12, minus the total number of long term suspensions in grades 9-12, minus the total number of students incarcerated in an Adult Facility in grades 9-12.

**ABCs dropout membership** = 20<sup>th</sup> day previous year's membership in grades 9-12, minus the initial enrollees in membership day 20 in grades 9-12, plus the 20<sup>th</sup> day current year's membership in grades 9-12, divided by 2.

**ABCs dropout rate** =  $\frac{100 * \text{ABCs dropout numerator}}{\text{ABCs dropout membership} + \text{ABCs dropout numerator}}$

**Computing the Academic change for a school:**

The Average Academic Change for the School is computed by adding the Academic change for EOG and EOC tests, the Weighted Competency Component, the Weighted CUPCTP Component and the Weighted Drop Out Component and dividing by the sum of the total number of Academic Changes computed for EOG and EOC tests, the total number of scores for Competency, the total number of scores for CUPCTP and the total number of scores for Drop Out.

High School Average Academic Change:

$$\text{School\_Average\_AC} = \frac{\text{School\_AC} + \text{COMP} + \text{CUPCTP} + \text{DO}}{\text{Totalcount} + \text{Tot10} + \text{Gradnumber} + 1/4 * \text{ADM}}$$

Example:

School_AC	67.7
COMP	14.5
CUPCTP	3.7
DO	-63.5
Totalcount	782
Tot10	135
Gradnumber	122
¼ * ADM	166.75
School_Average_AC	0.02

**Determining if the School met expected growth.**

If the Average School Academic Change is greater or equal to 0, then the school is said to have **Met Expected Growth**.

If the Average School Academic Change is less than 0, then the school is said to **Not Have Met Expected Growth**

Example:

Since the school's Average Academic Change 0.02 was greater than 0, the school has met expected growth.

**Computing the C-Ratio in order to determine if the School met High Growth**

- Count the number of Academic Change Scores that are greater or equal to 0  
= **NumberACGreater0**
- Count the number of Academic Change Scores that are less than 0  
= **NumberACLess0**

C-Ratio:

$$C - Ratio = \frac{NumberACGreater0 + COMP + CUPCTP}{NumberACLess0 - DO}$$

*Note: DO is computed by subtracting the current year drop out rate from the baseline, dividing by the state standard deviation for drop out and multiplying by  $\frac{1}{4} * ADM$ , therefore an **increase** in drop out rate leads to  $DO \leq 0$ , by subtracting DO from the denominator, the C-ratio is decreased. On the other hand, a **decrease** in drop out rate leads to  $DO \geq 0$ , by subtracting DO from the denominator; the C-Ratio is increased. Therefore, a decrease in drop out rate helps the school toward making High Growth.*

Two conditions are needed for a school to **Meet High Growth**

- The school must **Meet Expected Growth**
- C-Ratio  $\geq 1.5$

Example:

NumberACGreater0	425
NumberACLess0	357
COMP	14.5
CUPCTP	3.7
DO	-63.5
C-Ratio	1.1

The school has only met one criterion. Since their c-ratio is less than 1.5, it did not meet High Growth.

**EOC Predictors:**

**Expected performance in:**

English I

Biology

Civics and Economics

U.S. History

Physical Science

Physics

Chemistry

Algebra II

Algebra I

Geometry

**Based on previous performance in:**

EOG Reading Grade 8

EOG Reading Grade 8 and English I, if available, or

EOG Reading Grade 8 (if English I is not available)

Biology and English I, if available, or

English I (if Biology is not available)

Biology and English I, if available, or

Biology (if English is not available)

EOG Mathematics Grade 8

Chemistry and Geometry

Biology

Algebra I

EOG Mathematics Grade 8

Algebra I

Note: A new math edition resulted in a change from a 200 scale to a 300 scale score.

## Technical Notes

Technical notes are available at: [www10.ncschoolcats.com/technotes/](http://www10.ncschoolcats.com/technotes/)

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### NOTES:

#### <sup>1</sup>**EVALUATE VALIDITY OF ABC ACCOUNTABILITY SYSTEM**

**SECTION 7.12.(a)** *G.S. 115C-105.35 reads as rewritten:*

**"§ 115C-105.35. Annual performance goals.**

*(a) The School-Based Management and Accountability Program shall (i) focus on student performance in the basics of reading, mathematics, and communications skills in elementary and middle schools, (ii) focus on student performance in courses required for graduation and on other measures required by the State Board in the high schools, and (iii) hold schools accountable for the educational growth of their students. To those ends, the State Board shall design and implement an accountability system that sets annual performance standards for each school in the State in order to measure the growth in performance of the students in each individual school. During the 2004-2005 school year and at least every five years thereafter, the State Board shall evaluate the accountability system and, if necessary, modify the testing standards to assure the testing standards continue to reasonably reflect the level of performance necessary to be successful at the next grade level or for more advanced study in the content area.*

*As part of this evaluation, the Board shall, where available, review the historical trend data on student academic performance on State tests. To the extent that the historical trend data suggest that the current standards for student performance may not be appropriate, the State Board shall adjust the standards to assure that they continue to reflect the State's high expectations for student performance.*

*(b) For purposes of this Article, the State Board shall include a "closing the achievement gap" component in its measurement of educational growth in student performance for each school. The "closing the achievement gap" component shall measure and compare the performance of each subgroup in a school's population to ensure that all subgroups as identified by the State Board are meeting State standards.*

*(c) The State Board shall consider incorporating into the School-Based Management and Accountability Program a character and civic education component which may include a requirement for student councils."*

**SECTION 7.12.(b)** *The State Board shall complete its initial evaluation and any necessary modifications to the testing standards required under G.S. 115C-105.35, as rewritten by subsection (a) of this section, so that the modified standards are in effect no later than the 2005-2006 school year.*

<sup>2</sup>*A z-score is a standardized score showing how far and in what direction a test score deviates from the mean, or average, of the distribution. The z-score is especially useful in comparing standings of test scores from differing measures that have different scales or standards.*

<sup>3</sup>*In cases where middle school students are taking Algebra I, the previous year's EOG is used.*