

EXECUTIVE SUMMARY

Title: Achieve Algebra II Assessment

Type of Executive Summary:

- Action
- Action on First Reading
- Discussion
- Information

Policy Implications:

- Constitution _____
- General Statute # _____
- SBE Policy # _____
- SBE Policy Amendment
- SBE Policy (New)
- APA # _____
- APA Amendment
- APA (New)
- Other _____

Presenter(s): Mr. Robert L. Logan (Associate Superintendent, Leadership and Innovation), Ms. Everly Broadway (Section Chief, Middle and Secondary Mathematics, Division of Middle/Secondary Education), and Dr. Lou Fabrizio (Director, Accountability Services Division)

Description:

The GCS Committee has requested information on North Carolina’s participation in Achieve’s Algebra II assessment pilot. This item will provide background, as well as cost information.

Resources:

N/A

Input Process:

North Carolina’s Mathematics Alignment team

Stakeholders:

Selected North Carolina Public Schools, selected public school students, parents and teachers

Timeline For Action:

This item is being presented for action at the January 2008 meeting.

Recommendations:

The State Board of Education directs the Department to locate the resources and develop incentives to encourage schools to participate.

Audiovisual equipment requested for the presentation:

- Data Projector/Video (Videotape/DVD and/or Computer Data, Internet, Presentations-PowerPoint preferred)
Specify: _____
- Audio Requirements (computer or other, except for PA system which is provided)
Specify: _____
- Document Camera (for transparencies or paper documents – white paper preferred)

Motion By: _____ **Seconded By:** _____
Vote: Yes _____ No _____ Abstain _____
 Approved _____ Disapproved _____ Postponed _____ Revised _____

*Person responsible for SBE agenda materials and SBE policy updates: Amy Betsill, 919-807-3817

North Carolina Participation in the Achieve Algebra II Exam

Background Information

Achieve, Inc. has facilitated the agreement between nine states participating in the American Diploma Project (ADP) to develop an *American Diploma Project Algebra II End-of-Course Exam*. Nine states, under Ohio's auspices have contracted with Pearson Education Measurement to develop the test. Other states may join at any time.

The test consists of a core exam plus optional "add-on" modules. Students will have access to a calculator for one of the two 45 minute testing sessions but not the other session. The 60 item test will consist of 50 multiple-choice items, 7 short-answer items and 3 extended-response items. Thirty percent of the students' score will be based on the short-answer and extended-response items.

The window for the first administration of the test will be May 1, 2008-June 13, 2008. The tentative window for the first on-line administration of the test will be December 1, 2008-January 15, 2009.

Cost

Cost per student (based on 1000 students taking the test)				
		on-line admin (+\$4.49/student)	1 add-on module (+ \$7.49/student)	1 add-on module + on- line admin.
Score within 1 week	\$24.55	\$29.04	\$32.04	\$36.53
Score within 2 weeks	\$21.05	\$25.54	\$28.54	\$33.03
Score within 3 weeks	\$20.56	\$25.05	\$28.05	\$32.54

Cost for 1000 students				
		on-line admin	1 add-on module	1 add-on module + on- line admin.
Score within 1 week	\$24,550.00	\$29,040.00	\$32,040.00	\$36,530.00
Score within 2 weeks	\$21,050.00	\$25,540.00	\$28,540.00	\$33,030.00
Score within 3 weeks	\$20,560.00	\$25,050.00	\$28,050.00	\$32,540.00

Plan for Participation

February 2008-Offer opportunity to all schools
March 2008-Special invitation to schools with innovative programming (Learn & Earn, Project Lead the Way, etc.)
April 2008-Sites identified

Possible Incentives

Discussion

Revision of the North Carolina Mathematics Standard Course of Study

Background Information

The *North Carolina Standard Course of Study for Mathematics* was last revised in 2003. A schedule for revision was approved at the State Board of Education meeting in May 2007.

Guiding Principles

Factors that support revision:

1. **Globally Prepared Students** [Trends in Mathematics and Science Study (TIMSS); Programme for International Student Assessment (PISA); Partnership for Twenty-first Century Skills Framework; American Diploma Project (ADP); and numerous other reports]
 2. **Alignment with post-secondary expectations** [Changes in the National Assessment for Educational Progress (NAEP) Framework for Mathematics, Grade 12; importance of alignment K-16]
 3. **Alignment with national curriculum documents** [Curriculum Focal Points published in 2006 by the National Council of Teachers of Mathematics (NCTM); Guidelines for Assessment and Instruction in Statistics Education published in 2005 by the American Statistical Association (ASA); College Board Standards for Success: Mathematics and Statistics (conventional courses document published in 2006, integrated courses document published in 2007) by the College Board]
-

Input/Review

During the past 12 months, the mathematics staff has coordinated the review and proposed revision of the North Carolina Mathematics Standard Course of Study. As part of the curriculum review and revision process, committees have included representatives from institutions of higher education, parents, business and industry leaders, district administrators, professional organization leadership, and teachers. Opportunities for input and participation have included:

- Initial survey of stakeholders in Fall 2006
 - Initial revision committee meeting in December 2006
 - Review and advisory panels
 - Textbook publishers
 - Curriculum writing committees
 - Elementary Mathematics/Science Institutes Summer 2007 (3)
 - Meredith Math Institutes Summer 2007 (2)
 - Middle School Mathematics and Science Leadership Institute Summer 2007
 - High School Mathematics Leadership Institute Summer 2007
 - NCCTM Regional Meetings Spring 2007 (3)
 - NCCTM Leadership Meeting October 2007
 - NCCTM Annual Meeting October 2007 (6 sessions)
 - Regional Meetings Middle/Secondary Division Spring 2007 (6) Fall 2007 (6)
 - Listserves and websites administered by DPI staff
 - Feedback survey after each draft (on-line)
-

Revision of the North Carolina Mathematics Standard Course of Study

- Outcomes** Two outcomes most apparent in the proposed revision of the North Carolina Standard Course of Study for Mathematics K-12 are
- Alignment with the 2006 Curriculum Focal Points document from the National Council of Teachers of Mathematics
 - Alignment with the College Board Standards for Mathematics and Statistics
 - Deeper refinement of the objectives which allows a focus on big ideas at each grade level, allowing more time for in-depth instruction and teaching for understanding

View the current draft at
http://community.learnnc.org/dpi/math/archives/2007/06/standard_course.php

Uses The revised *North Carolina Standard Course of Study for Mathematics K-12* will be used for the textbook selections in 2008-2009, ongoing revision and development of support documents in 2008-2009, planning and training in 2009-2010 and the revision of the North Carolina Testing Program for the 2010-2011 administration.

Timeline

School Year	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Content Standards	<ul style="list-style-type: none"> •Review current standards •Write or revise standards 	<ul style="list-style-type: none"> •Present to SBE (Jan.) •Disseminate to schools (spring) •Develop support materials 		<ul style="list-style-type: none"> •Transition year 	<ul style="list-style-type: none"> •Implementation Year
Textbooks/ Curriculum Materials	<ul style="list-style-type: none"> •Review and adjust textbook criteria 	<ul style="list-style-type: none"> •Textbook Call (Spring) •Textbook Review (Summer) 	<ul style="list-style-type: none"> •Textbook selection by schools 	<ul style="list-style-type: none"> •New textbooks in schools 	
Professional Development		<ul style="list-style-type: none"> •Develop professional development materials and dissemination plan 	<ul style="list-style-type: none"> •Leadership Institutes •On-line professional development modules 	<ul style="list-style-type: none"> •On-going professional development 	
EOG Pre3 through 8 Mathematics Assessments	<ul style="list-style-type: none"> •Current Edition (3rd Edition) •(2nd year) 	<ul style="list-style-type: none"> •Current Edition (3rd Edition) •Begin Item Development 	<ul style="list-style-type: none"> •Current Edition (3rd Edition) •Field Test Items Embedded 	<ul style="list-style-type: none"> •Current Edition (3rd Edition) •Field Test Items Embedded 	<ul style="list-style-type: none"> •New 4th Edition •New Standards
EOC Algebra I, Geometry, Algebra II	<ul style="list-style-type: none"> •Current Edition (1st year) 	TBD	TBD	TBD	TBD

*Person responsible for SBE agenda materials and SBE policy updates: Lucy Medlin, (919) 807-3771

2006-07 Accountability Status Changes

2007-08 Non-Title I School Improvement List Changes 2006-07 AYP Status Change

LEA Code	LEA Name	School Code	School Name	Type	Old Status	New Status
720	Perquimans County Schools	316	Perquimans County High	R	Non-Title I SI - YR1 Reading	not in Non-TI SI
180	Catawba County Schools	326	Charles H. Tuttle Elementary	R	Non-Title I SI - YR1 Math	not in Non-TI SI
470	Hoke County Schools	330	Hawk Eye Elementary	R	Non-Title I SI - YR1 Both	Title I School
182	Newton-Conover Schools	304	Conover Special Education	A	Non-Title I SI - YR1 Reading	not in Non-TI SI

2007-08 Title I School Improvement List Changes 2006-07 AYP Status Change

LEA Code	LEA Name	School Code	School Name	Type	Old Status	New Status
470	Hoke County Schools	330	South Hoke Elementary	R	Non-Title I SI - YR1 Both	Name Change to Hawk Eye Elementary

EXECUTIVE SUMMARY

Title: Recommended Interim Achievement Level Descriptors for the NCEXTEND2 OCS English I and Mathematics

Type of Executive Summary:

- Action Action on First Reading Discussion Information

Policy Implications:

- Constitution _____
 General Statute # _____
 SBE Policy #HSP-C-030
 SBE Policy Amendment
 SBE Policy (New)
 APA # _____
 APA Amendment
 APA (New)
 Other NCLB Act of 2001

Presenter(s): Dr. Louis M. Fabrizio (Director, Accountability Services Division)

Description:

In accordance with the practice established after the national audit panel's review of the testing program in 2001, the recommended interim achievement level descriptors for the NCEXTEND2 OCS English I and Mathematics are being provided for adoption on first reading at the January 2008 meeting of the State Board of Education. The NCEXTEND2 OCS English I and Mathematics alternate assessments were implemented initially as operational alternate assessments effective with the 2006-07 school year for students with disabilities who are enrolled in those courses in the Occupational Course of Study in order to access the statewide testing program at the high school level as required by the NCLB Act of 2001. Interim academic achievement standards (cut scores) for these tests were approved by the SBE for the 2006-07 school year in August 2007. The interim achievement level descriptors were generated by a group of practitioners that included the NCDPI Test Development staff. The consequential data used to inform decisions about the descriptors for the NCEXTENDED2 OCS assessments in English and Mathematics were derived from the 2006-07 administration of the assessments. The recommended interim achievement level descriptors are to be effective with the 2006-07 school year and until the final standards (cut scores) and descriptors are adopted for these tests.

Resources:

Staff psychometricians, other staff from Test Development Section at NCDPI, the test development staff at NCSU-TOPS, EC representatives, curriculum staff, and some representatives from other sections and divisions within the agency, a group of English and mathematics educators

Input Process:

Recommendation from mathematics and English educators, staff from the Test Development Section, test development staff at NCSU-TOPS, and staff from other sections and divisions in the department provided input into the recommendation.

Stakeholders:

Public school educators, the exceptional children's community, the ELL community, state and federal policy makers, parents, students, and the general public

Timeline For Action:

The department recommends that the interim achievement level descriptors be adopted on first reading at the January 2008 meeting of the SBE.

Recommendations:

The department recommends that the State Board amend policy HSP-C-030 and that the final achievement level descriptors for the NCEXTEND2 OCS English I and Writing be approved as provided.

Audiovisual equipment requested for the presentation:

Data Projector/Video (Videotape/DVD and/or Computer Data, Internet, Presentations-PowerPoint preferred)

Specify: _____

Audio Requirements (computer or other, except for PA system which is provided)

Specify: _____

Document Camera (for transparencies or paper documents – white paper preferred)

Motion By: _____

Seconded By: _____

Vote: Yes _____ No _____

Abstain _____

Approved _____ Disapproved _____

Postponed _____ Revised _____

*Person responsible for SBE agenda materials and SBE policy updates: Lucy Medlin, 919-807-3771

**NORTH CAROLINA STATE BOARD OF EDUCATION
Policy Manual**

Policy Identification

Priority: High Student Performance

Category: ABCs Accountability Model

Policy ID Number: HSP-C-030

Policy Title: Interim Achievement Level Ranges and Achievement Level Descriptors for the NCEXTEND2 Occupational Course (OCS) of Study English I, and Mathematics, and Life Skills Science

Current Policy Date: ~~12/06/2007~~01/10/2008

Other Historical Information: 08/02/2007, 12/06/2007

Statutory Reference: GS 115C-174.11

Administrative Procedures Act (APA) Reference Number and Category:

***** Begin Policy *** (Do not tamper with this line)**

The interim achievement level ranges approved by the State Board of Education for the NCEXTEND2 OCS in English are as follows:

Subject	Level I	Level II	Level III	Level IV
English	≤139	140-152	153-160	≥161

The interim achievement level ranges approved by the State Board of Education for the NCEXTEND2 in Mathematics are as follows:

Subject	Level I	Level II	Level III	Level IV
Mathematics	≤139	140-150	151-161	≥162

The interim achievement level ranges approved by the State Board of Education for the NCEXTEND2 in OCS Life Skills Science are as follows:

Subject	Level I	Level II	Level III	Level IV
Life Skills	≤138	139-149	150-158	≥159

Science				
---------	--	--	--	--

NCEXTEND2 OCS Achievement Level Descriptors (generic): NCEXTEND2 OCS English I Achievement Level Descriptors (Interim)

Achievement Level I:

~~Students performing at this level do not have sufficient mastery of knowledge and skills in the course to be successful at a more advanced level in the content area.~~

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Achievement Level I demonstrate the need to develop the composition and reading comprehension skills required in the North Carolina English I Occupational *Standard Course of Study*. Students are unable to identify and correct rudimentary language convention errors (such as incorrect verb usage, end punctuation errors, and capitalization errors). Students show little to no evidence of reading skills and strategies required to participate in daily living, home, community, and workplace applications.

Achievement Level II:

~~Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the course and are minimally prepared to be successful at a more advanced level in the content area.~~

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Achievement Level II demonstrate inconsistent application of the composition and reading skills required in the North Carolina English I Occupational *Standard Course of Study*. Students demonstrate a minimal understanding and application of grammar and language usage to identify and correct language convention errors in spelling, verb usage, punctuation, and simple sentence structure. Students inconsistently apply, interpret, and express factual, functional information (such as employment, training manuals, maps, schedules, and public information related to safety and wellness). Students show minimal reading skills and strategies required to comprehend a variety of texts related to daily living, home, community, and workplace applications.

Achievement Level III:

~~Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.~~

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III typically demonstrate composition and reading comprehension skills required by the North Carolina English I Occupational *Standard Course of Study*. Students typically demonstrate an understanding of conventional written expression by editing sentences for correctness related to verb usage and punctuation and capitalization. Students can infer, generalize, draw conclusions, and make connections about texts (such as employment, training manuals, maps, schedules, and public information related to safety and wellness). Students are typically able to comprehend and analyze a variety of texts related to daily living, home, community, and workplace applications.

Achievement Level IV

~~Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.~~

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Level IV demonstrate a strong command of the composition and reading comprehension skills required by the North Carolina English I Occupational *Standard Course of Study*. Students consistently demonstrate an understanding of conventional written expression by editing sentences for correctness related to verb usage, punctuation and capitalization. Students infer, generalize, draw conclusions, and make connections about texts (such as employment, training manuals, maps, schedules, and public information related to safety and wellness). Students are consistently able to comprehend and analyze a variety of texts related to daily living, home, community, and workplace applications.

NCEXTEND2 OCS Mathematics Achievement Level Descriptors (Interim)

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Achievement Level I demonstrate the need to develop the mathematics skills and understanding required in the North Carolina Mathematics I Occupational *Standard Course of Study*. Students are unable to successfully manage financial matters and time scheduling problems (such as monthly expenses, deductions on a paycheck stub, the value of sets of coins, and the time of events.) Students show little to no evidence of mathematics skills and strategies required to participate in daily living, home, community, and workplace applications.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Achievement Level II demonstrate inconsistent application of the mathematics skills and understanding required in the North Carolina Mathematics I Occupational *Standard Course of Study*. Students demonstrate a minimal ability to successfully manage financial matters and time scheduling problems (such as monthly expenses, deductions on a paycheck stub, the value of sets of coins, and the time of events.) Students inconsistently apply knowledge with money to make change, understand how to use measurement tools, and interpret calendars and clocks. Students show minimal mathematics skills and strategies required to participate in daily living, home, community, and workplace applications.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III typically demonstrate the mathematics skills and understanding required by the North Carolina Mathematics I Occupational *Standard Course of Study*. Students typically demonstrate the understanding required to successfully manage financial matters and time scheduling problems (such as monthly expenses, deductions on a paycheck stub, the value of a set of coins and time of events.) Students can solve problems related to time, solve problems involving measurement, compare unit prices, and solve problems involving money. Students are typically able to comprehend and analyze the mathematics involved in a variety of situations related to daily living, home, community, and workplace applications.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Level IV demonstrate a strong command of the mathematics skills and understanding required by the North Carolina Mathematics I Occupational *Standard Course of Study*. Students consistently demonstrate the understanding required to successfully manage financial matters and time scheduling problems (such as monthly expenses, deductions on a paycheck stub, the value of a set of coins, and time of events.) Students apply the mathematics needed for calculating sales tax, using a vending machine, solving measurement problems, and understanding and applying appropriate computations. Students are consistently able to comprehend and analyze the mathematics involved in a variety of situations related to daily living, home, community, and workplace applications.

NCEXTEND2 OCS-Life Skills Science Achievement Level Descriptors (Interim)

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Achievement Level I demonstrate an insufficient level of understanding of healthy living and safety, environmental science, and the application of science-based concepts and scientific inquiry to daily living in the home, community, and workplace.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Achievement Level II demonstrate a minimal level of understanding of healthy living and safety, environmental science, and the application of science-based concepts and scientific inquiry to daily living in the home, community, and workplace.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III demonstrate an adequate level of understanding of healthy living and safety, environmental science, and the application of science-based concepts and scientific inquiry to daily living in the home, community, and workplace.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Achievement Level IV demonstrate an advanced level of understanding of healthy living and safety, environmental science, and the application of science-based concepts and scientific inquiry to daily living in the home, community, and workplace.

EXECUTIVE SUMMARY

Title: Recommended Final Academic Achievement Standards (Cut Scores) for NCCLAS EOC Assessments of Algebra I, Algebra II, Geometry, and English I, and Achievement Level Descriptors for NCCLAS EOC Algebra I, Geometry, and English I

Type of Executive Summary:

- Action Action on First Reading Discussion Information

Policy Implications:

- Constitution _____
 General Statute # _____
 SBE Policy # HSP-C-024
 SBE Policy Amendment
 SBE Policy (New)
 APA # _____
 APA Amendment
 APA (New)
 Other NCLB Act of 2001

Presenter(s): Dr. Louis M. Fabrizio (Director, Accountability Services Division)

Description:

In accordance with the practice established after the national audit panel's review of the testing program in 2001, the recommended *final* academic achievement standards (cut scores for Algebra I, Algebra II, Geometry, and English I) and achievement level descriptors for the NCCLAS EOC tests of Algebra I, Geometry, and English I are being provided for adoption on first reading at the January 2008 meeting of the State Board of Education. (The NCCLAS EOC test of Algebra II achievement level descriptors will be presented to the SBE at the February 2008 meeting at the same time as the general EOC Algebra II descriptors.) The NCCLAS EOC tests are to be implemented effective with the 2007-08 school year for students with disabilities and students with Limited English Proficiency who require an alternate assessment with a different format in order to access grade-level course content and standards with the same degree of challenge and rigor in order to access the statewide testing program as required by the NCLB Act of 2001. The final academic achievement standards (cut scores) and achievement level descriptors were generated by a group of panelists who are practicing special educators in a session held at NCDPI on December 11, 2007. The session was facilitated by an external facilitator who used the Reasoned Judgment method along with analyses and recommendations by NCDPI Test Development staff. After an extensive analysis of all of the data, the department recommends the final academic achievement standards (cut scores for Algebra I, Algebra II, Geometry, and English I) and achievement level descriptors for the NCCLAS EOC (Algebra I, Geometry, and English I) alternate assessments for students with disabilities and limited English proficiency. The recommended final standards and descriptors are to be effective with the 2007-08 school year and beyond.

Resources:

Staff psychometricians, other staff from Test Development Section at NCDPI, the test development staff at NCSU-TOPS, EC representatives, curriculum staff, and some representatives from other sections and divisions within the agency, a group of English and mathematics educators and practitioners, and an external facilitator

Input Process:

Recommendation from mathematics and English educators as panelists during the sessions led by an external facilitator, staff from the Test Development Section, test development staff at NCSU-TOPS, and staff from other sections and divisions in the department provided input into the recommendation.

Stakeholders:

Public school educators, the exceptional children's community, the ELL community, state and federal policy makers, parents, students, and the general public

Timeline For Action:

The department recommends that the final academic achievement standards (cut scores) and achievement level descriptors be adopted on first reading at the January 2008 meeting of the SBE.

Recommendations:

The department recommends that the State Board amend policy HSP-C-024 and that the final academic achievement standards (cut scores) for the NCCLAS EOC alternate assessments in the areas of Algebra I, Algebra II, Geometry, and English I be approved as provided. Also, the department recommends that the State Board amend policy HSP-C-024 for the final descriptors for Algebra I, Geometry, and English I as provided.

Audiovisual equipment requested for the presentation:

Data Projector/Video (Videotape/DVD and/or Computer Data, Internet, Presentations-PowerPoint preferred)
Specify: _____

Audio Requirements (computer or other, except for PA system which is provided)
Specify: _____

Document Camera (for transparencies or paper documents – white paper preferred)

Motion By: _____

Seconded By: _____

Vote: Yes _____ No _____

Abstain _____

Approved _____ Disapproved _____

Postponed _____ Revised _____

*Person responsible for SBE agenda materials and SBE policy updates: Lucy Medlin, (919) 807-3771

**NORTH CAROLINA STATE BOARD OF EDUCATION
Policy Manual**

Policy Identification

Priority: High Student Performance

Category: ABCs Accountability Model

Policy ID Number: HSP-C-024

Policy Title: Policy delineating Academic Achievement Standards (cut scores) for the North Carolina Checklist of Academic Standards (NCCLAS)

Current Policy Date: ~~12/06/2007~~01/10/2008

Other Historical Information: 12/01/2005, 02/02/2006, 03/02/2006,01/04/2007,5/03/2007.
12/06/2007

Statutory Reference: G.S. 115C-174.11(b)(c)

Administrative Procedures Act (APA) Reference Number and Category:

***** Begin Policy *** (Do not tamper with this line)**

The following achievement-level ranges for the NCCLAS have been approved by the State Board of Education for use in the ABCs Accountability Program:

NCCLAS End-of-Course Achievement Level Cut Scores

Course	Achievement Level I	Achievement Level II	Achievement Level III	Achievement Level IV
Algebra I (<u>for 2005-06 through 2006-07</u>)	4-5	6-8	9-13	14-16
<u>Algebra I (effective 2007-08)</u>	<u>4-6</u>	<u>7-9</u>	<u>10-13</u>	<u>14-16</u>
Algebra II (<u>for 2005-06 through 2006-07</u>)	4-5	6-9	10-13	14-16
<u>Algebra II (effective 2007-08)</u>	<u>4-6</u>	<u>7-9</u>	<u>10-13</u>	<u>14-16</u>
Geometry (<u>effective 2005-06</u>)	4-6	7-9	10-13	14-16
Biology	4-6	7-8	9-13	14-16
Chemistry	4-6	7-9	10-13	14-16
Physics	4-5	6-9	10-13	14-16

Physical Science	4-6	7-9	10-13	14-16
U.S. History	4-5	6-8	9-13	14-16
Civics and Economics	4-5	6-8	9-13	14-16
English I (<u>for 2005-06 through 2006-07</u>)	4-6	7-8	9-13	14-16
<u>English I (effective 2007-08)</u>	<u>4-6</u>	<u>7-9</u>	<u>10-14</u>	<u>15-16</u>

NCCLAS Mathematics End-of-Grade Achievement Level Cut Scores

GRADE	Achievement Level I	Achievement Level II	Achievement Level III	Achievement Level IV
Mathematics 3	4-5	6-8	9-13	14-16
Mathematics 4	4-5	6-8	9-13	14-16
Mathematics 5	4-5	6-8	9-13	14-16
Mathematics 6	4-5	6-8	9-13	14-16
Mathematics 7	4-5	6-8	9-13	14-16
Mathematics 8	4-5	6-8	9-13	14-16
Mathematics 10	4-5	6-9	10-13	14-16

NCCLAS Reading End-of-Grade Achievement Level Cut Scores

GRADE	Achievement Level I	Achievement Level II	Achievement Level III	Achievement Level IV
Reading 3	4-5	6-8	9-13	14-16
Reading 4	4-5	6-8	9-13	14-16
Reading 5	4-5	6-8	9-13	14-16
Reading 6	4-5	6-8	9-13	14-16
Reading 7	4-5	6-8	9-13	14-16
Reading 8	4-5	6-8	9-13	14-16
Reading 10	4-5	6-8	9-12	13-16

NCCLAS Writing Achievement Level Cut Scores

GRADE	Achievement Level I	Achievement Level II	Achievement Level III	Achievement Level IV
Writing 4	4-6	7-9	10-13	14-16

Writing 7	4-6	7-9	10-13	14-16
Writing 10	4-6	7-9	10-13	14-16

NCCLAS Science Achievement Level Cut Scores

GRADE	Achievement Level I	Achievement Level II	Achievement Level III	Achievement Level IV
Science 5	4-5	6-9	10-13	14-16
Science 8	4-5	6-9	10-13	14-16

Achievement Level Descriptors—North Carolina Checklist of Academic Standards (NCCLAS), (A North Carolina Alternate Assessment)

Achievement Level Descriptors—NCCLAS Grade 3 Reading EOG Assessment

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I demonstrate a need to develop the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 3. Students show little evidence of applying reading skills and strategies required to comprehend a variety of third grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II demonstrate limited reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 3. Students typically show evidence of literal comprehension of a variety of third grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students may also make basic inferences, draw simple conclusions, and locate information in a variety of texts, including charts, maps, and diagrams.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 3. Students comprehend a variety of third grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students interpret and analyze text by utilizing skills and strategies such as making inferences, drawing conclusions, predicting outcomes, comparing and contrasting, and determining main idea. They also use text features and text structures to comprehend. Students analyze characters, identify problems, and determine meaning of unfamiliar vocabulary.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV demonstrate an advanced application of the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 3. Students comprehend with depth of understanding a variety of third grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students extend ideas by connecting and integrating information. They apply a more sophisticated understanding of text features and structures to comprehend. Students interpret figurative language and analyze author's word choice.

Achievement Level Descriptors—NCCLAS Grade 4 Reading EOG Assessment

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I demonstrate a need to develop the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 4. Students show little evidence of applying reading skills and strategies required to comprehend a variety of fourth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II demonstrate limited reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 4. Students typically show evidence of literal comprehension of a variety of fourth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students apply some knowledge of text structure and make connections to information beyond the text. They may also draw simple conclusions, make predictions, and interpret information in a variety of texts including graphs, charts, and maps.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 4. Students comprehend a variety of fourth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students examine author's word choice and identify author's purpose. They interpret and analyze text by utilizing skills and strategies such as making inferences, drawing conclusions, comparing and contrasting, and determining main idea. They also use text features and text structures to comprehend. Students examine reasons for characters' actions, integrate information and ideas, and determine meaning of unfamiliar vocabulary.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV demonstrate an advanced application of the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 4. Students comprehend with depth of understanding a variety of fourth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students extend ideas by connecting, synthesizing and integrating information from within the entire text and beyond. They demonstrate a more sophisticated understanding of the text through the inferences and connections they make and the conclusions they draw. Students also interpret figurative language and analyze author's word choice.

Achievement Level Descriptors—NCCLAS Grade 5 Reading EOG Assessment

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I demonstrate a need to develop the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 5. Students show little evidence of applying reading skills and strategies required to comprehend a variety of fifth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II demonstrate limited reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 5. Students typically show evidence of literal comprehension of a variety of fifth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students apply knowledge of text structure to locate information for specific purposes. They may also draw simple conclusions, make basic inferences, identify sequence of events, analyze characters, and interpret information in a variety of texts.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* for grade 5. Students comprehend a variety of fifth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students examine plot and analyze author's word choice and figurative language. They apply skills and strategies such as predicting, making inferences, drawing conclusions, comparing and contrasting, and making connections to interpret and evaluate text. They also use text features and text structures to comprehend. Students examine reasons for characters' actions, integrate information and ideas, and determine meaning of unfamiliar vocabulary.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV demonstrate an advanced application of the reading comprehension skills required in the North Carolina Standard Course of Study for Grade 5. Students comprehend with depth of understanding a variety of fifth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students examine and evaluate relationships. They extend ideas by connecting, synthesizing and integrating information from within the entire text and beyond. They demonstrate a more sophisticated understanding of the text through the inferences and connections they make and the conclusions they draw. Students also determine the effectiveness of figurative language and analyze author's craft.

Achievement Level Descriptors—NCCLAS Grade 6 Reading EOG Assessment

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I demonstrate the need to develop reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 6. Students show little to no evidence of reading skills and strategies required to comprehend a variety of sixth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II demonstrate limited reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 6. Students typically show evidence of literal comprehension of a variety of sixth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students may also make basic inferences, show evidence of utilizing text structure, make connections to prior knowledge, and apply strategies such as determining meaning of unfamiliar vocabulary through context clues.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 6. Students show evidence of comprehension of a variety of sixth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students infer, draw conclusions, and determine author's purpose. Students compare and contrast elements within text and analyze the effect of figurative language, author's craft, and literary elements.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV demonstrate an advanced application of the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 6. Students show evidence of deep comprehension of a variety of sixth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students infer, synthesize, draw conclusions, determine author's purpose, and examine underlying assumptions. Students compare and contrast elements within and between texts. They also analyze the effect of figurative language, author's craft, and literary elements.

Achievement Level Descriptors—NCCLAS Grade 7 Reading EOG Assessment

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I demonstrate the need to develop reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 7. Students show little to no evidence of reading skills and strategies required to comprehend a variety of seventh grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II demonstrate limited reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 7. Students typically show evidence of literal comprehension of a variety of seventh grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. They apply strategies such as determining meaning of unfamiliar vocabulary through context clues. Students may recognize organizational structure and relationships. They make connections within text and examine the purpose of the author.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 7. Students show evidence of comprehension of a variety of seventh grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. They infer, draw conclusions, and analyze author's purpose. Students synthesize and apply elements within text to make meaning based on evidence. They analyze literary elements and different points of view.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV demonstrate an advanced application of the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 7. Students show evidence of deep comprehension of a variety of seventh grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. They integrate and apply information in a variety of situations, as well as consider the implications of figurative language, author's craft, and literary elements.

Achievement Level Descriptors—NCCLAS Grade 8 Reading EOG Assessment

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I demonstrate the need to develop the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 8. Students show little to no evidence of reading skills and strategies required to comprehend a variety of eighth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II demonstrate limited reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 8. Students show evidence of literal comprehension of a variety of eighth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students may also make basic inferences, draw simple conclusions and apply information in text to new situations. They also use context clues to determine meaning of unfamiliar vocabulary and demonstrate initial understanding of the effects of figurative language.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 8. Students show evidence of comprehension of a variety of eighth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students make inferences, draw conclusions, and evaluate author's purpose and stance. They evaluate the effect of literary devices and elements such as figurative language, setting, characterization, irony, dialogue, and symbolism. Students compare and contrast elements within the text and extend ideas beyond the text.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV demonstrate an advanced application of the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 8. Students comprehend with breadth and depth a variety of eighth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students infer, synthesize, draw conclusions, determine author's purpose, and analyze the impact of details to determine underlying assumptions. Students consistently compare and contrast elements within and between texts. They show evidence of a sophisticated analysis of the effect of literary devices and elements such as figurative language, setting, characterization, irony, dialogue, and symbolism.

Achievement Level Descriptors for NCCLAS EOG Assessment-- Grade 3 Mathematics

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Level I show minimal understanding and computational accuracy. The students often respond with inappropriate answers or procedures. They rarely use problem-solving strategies.

Level I students demonstrate a lack of development of number sense for whole numbers through 9,999 and a lack of evidence of ability to perform multi-digit addition and subtraction. They can rarely show knowledge of multiplication facts. Students inconsistently compare, order, and represent rational numbers (halves, fourths, and eighths; thirds and sixths) concretely and symbolically. They rarely use appropriate vocabulary to compare, describe, and classify two- and three-dimensional shapes. Students are not able to correctly measure length, capacity, weight, time, and temperature (Fahrenheit and Celsius). They can sometimes identify and extend simple numeric or geometric patterns. Students show minimal understanding of organizing and displaying data using a variety of graphs. They are rarely able to identify points on rectangular coordinate system. Students seldom correctly use symbols to represent unknown quantities in number sentences and to solve simple equations. They rarely solve problems using a variety of strategies.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Level II typically show some evidence of understanding and computational accuracy. The students sometimes respond with appropriate answers or procedures. They demonstrate limited use of problem-solving strategies.

Level II students show some evidence of number sense for whole numbers through 9,999 and some evidence of multi-digit subtraction. They inconsistently apply multiplication facts in single-digit multiplication and division. Using fractions, they often incorrectly compare, order, and occasionally misrepresent (halves, fourths, thirds, sixths, and eighths). Students sometimes use appropriate vocabulary to compare, describe, and classify two- and three-dimensional shapes. They are inconsistent in measurement of length, capacity, weight, time, and temperature (Fahrenheit and Celsius). Students show limited understanding of the concept of probability. They are inconsistent when they identify and extend numeric and geometric patterns. Students are sometimes successful at organizing and displaying data using a variety of graphs. They sometimes correctly identify points on the rectangular coordinate system. Students occasionally correctly solve problems where symbols are used to represent unknown quantities in number sentences and to solve simple equations. They sometimes solve problems using a limited variety of strategies.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Level III generally show understanding, compute accurately. The students consistently respond with appropriate answers or procedures. They use a variety of problem-solving strategies.

Level III students demonstrate number sense for whole numbers through 9,999 and show consistent evidence of ability with multi-digit subtraction. They know multiplication facts and are fluent with single-digit multiplication and division. They regularly are successful at comparing, ordering and representing rational numbers (halves, fourths, thirds, sixths, and eighths). Students consistently use appropriate vocabulary to compare, describe, and classify two- and three-dimensional shapes. They frequently measure length, capacity, weight, time, and temperature accurately (Fahrenheit and Celsius). Almost always, students identify and extend numeric or geometric patterns correctly. They correctly organize and display data using a variety of graphs. Students appropriately use the rectangular coordinate system to graph and identify points. They understand and use simple probability concepts.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Level IV commonly show a high level of understanding, compute accurately. The students are very consistent responding with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies.

Level IV students demonstrate a high level of success with regard to number sense for whole numbers through 9,999. They show mastery of multi-digit subtraction and apply multiplication facts fluently with single-digit multiplication and division. They consistently correctly compare, order, and represent rational numbers (halves, fourths, third, sixths, and eighths). Students consistently use appropriate vocabulary to compare, describe, and classify two- and three- dimensional shapes. They accurately measure length, capacity, weight, time, and temperature (Fahrenheit and Celsius). Students successfully identify and extend complex numeric or geometric patterns. They successfully organize, display, and interpret data using a variety of graphs. Students use the rectangular coordinate system to graph, identify, and mentally manipulate points. They accurately apply simple probability concepts. Students correctly use symbols to represent unknown quantities in number sentences and to solve equations. They solve high level thinking problems using a wide variety of strategies.

Students generally are able to use symbols to represent unknown quantities in number sentences and to solve simple equations successfully. They can solve problems using a variety of strategies.

Achievement Level Descriptors for NCCLAS EOG Assessment-- Grade 4 Mathematics

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Level I show minimal understanding and computational accuracy. The students often respond with inappropriate answers or procedures. They rarely use problem-solving strategies.

Level I students rarely show number sense by comparing, ordering, estimating, and representing numbers from 0.01 to 99,999. Students are rarely able to multiply and divide multi-digit numbers or use strategies for estimation of products and quotients in appropriate situations. Students are not able to add and subtract fractions with like denominators. They seldom solve problems involving the perimeter of plane figures and the area of rectangles. Students cannot make appropriate use of the coordinate plane to describe location and relative position of points. They seldom describe lines accurately as parallel or perpendicular. Students are rarely successful at collecting, organizing, analyzing, and displaying data using a variety of graphs. They are unable to use range, median, and mode to describe a set of data. Students can rarely design simple experiments to investigate and describe the probability of events. Students are unable to use the order of operations or the identity, commutative, associative, and distributive properties.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Level II typically show some evidence of understanding and computational accuracy. The students sometimes respond with appropriate answers or procedures. They demonstrate limited use of problem-solving strategies.

Level II students sometimes show number sense by comparing, ordering, estimating, and representing numbers from 0.01 to 99,999. They inconsistently multiply and divide multi-digit numbers. Students sometimes use strategies including estimation of products and quotients in appropriate situations. They are inconsistent in addition and subtraction of fractions with like denominators. Students sometimes solve problems involving perimeter of plane figures and the area of rectangles. Students sometimes correctly use the coordinate plane to describe the location and relative position of points. They inconsistently describe lines correctly as parallel or perpendicular. Students have difficulty collecting, organizing, analyzing, and displaying data using a variety of graphs. They are inconsistent in their ability to use range, median, and mode to describe a set of data. Students sometimes successfully design and use simple experiments to investigate and describe the probability of events. Students inconsistently use the order of operations or the identity, commutative, associative, and distributive properties.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Level III generally show understanding and computational accuracy. The students consistently respond with appropriate answers or procedures. They use a variety of problem-solving strategies.

Level III students frequently show number sense by comparing, ordering, estimating, and representing numbers from 0.01 to 99,999. They are usually consistent when multiplying and dividing multi-digit numbers; they use strategies including estimation of products and quotients in appropriate situations. They also add and subtract numbers with like denominators. Students solve problems involving perimeter of plane figures and area of rectangles. Students use coordinate planes to describe the location and relative position of points. They describe lines correctly as parallel or perpendicular. Students collect, organize, analyze, and display data using a variety of graphs. They use range, median, and mode to describe a set of data. Students design and use simple experiments to investigate and describe the probability of events. Students generally can use the order of operations or the identity, commutative, associative, and distributive properties.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Level IV commonly show a high level of understanding and computational accuracy. The students are very consistent responding with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies.

Level IV students successfully show number sense by comparing, ordering, estimating, and representing numbers from 0.01 to 99,999. They display fluency with multiplication and division of multi-digit numbers. Students effectively use strategies including estimation of products and quotients in appropriate situations. They exhibit mastery of addition and subtraction of fractions with like denominators and decimals through hundredths. Students consistently solve problems involving the perimeter of plane figures and area of rectangles. They show a thorough understanding and application of the coordinate plane when describing location and relative position of a point. Students consistently describe lines correctly as parallel or perpendicular. They successfully collect, organize, and display data using a variety of graphs. Students accurately use range, median, and mode to describe a set of data. They effectively design and use simple experiments to investigate and describe the probability of events. Students successfully use the order of operations or the identity, commutative, associative, and distributive properties.

Achievement Level Descriptors for NCCLAS EOG Assessment-- Grade 5 Mathematics

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Level I usually show minimal understanding and computational accuracy and often respond with inappropriate answers or procedures. They rarely use problem-solving strategies.

Students rarely demonstrate number sense for rational numbers 0.001 through 999,999. They rarely demonstrate ability in the addition, subtraction, comparison, and ordering of fractions and decimals. They seldom can estimate the measure of an object in one system given the measure of that object in another system. They rarely identify, estimate, and measure the angles of plane figures and rarely identify angle relationships. Students rarely identify, define, and describe the properties of plane figures, including parallel lines, perpendicular lines, and lengths of sides and diagonals. Students are seldom able to identify, generalize, and extend numeric and geometric patterns. In solving problems, fifth-graders at Level I rarely organize, analyze, and display data using a variety of graphs. They rarely are able to use range, median, and mode to describe multiple sets of data. Students rarely use algebraic expressions to solve one-step equations and inequalities. They rarely identify, describe, and analyze situations with constant or varying rates of change.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Level II typically show some evidence understanding and computational accuracy and sometimes respond with appropriate answers or procedures. They demonstrate limited use of problem-solving strategies.

Students demonstrate inconsistent number sense for rational numbers 0.001 through 999,999. They demonstrate limited ability in the addition, subtraction, comparison, and ordering of fractions and decimals. They inconsistently estimate the measure of an object in one system given the measure of that object in another system. They sometimes correctly identify, estimate, and measure the angles of plane figures and sometimes correctly identify angle relationships. Students inconsistently identify, define, and describe the properties of plane figures, including parallel lines, perpendicular lines, and lengths of sides and diagonals. Students are sometimes able to identify, generalize, and extend numeric and geometric patterns. In problem solving, fifth-graders at Level II inconsistently organize, analyze, and display data using a variety of graphs. They have inconsistent success using range, median, and mode to describe multiple sets of data. Students sometimes are able to use algebraic expressions to solve one-step equations and inequalities. They inconsistently identify, describe, and analyze situations with constant or varying rates of change.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Level III generally show understanding, compute accurately, and respond with appropriate answers or procedures. They use a variety of problem-solving strategies.

Students generally demonstrate number sense for rational numbers 0.001 through 999,999. They generally demonstrate ability in the addition, subtraction, comparison, and ordering of fractions and decimals. They usually make correct estimates of the measure of an object in one system given the measure of that object in another system. Students generally identify, estimate, and measure the angles of plane figures and generally identify angle relationships. They generally identify, define, and describe the properties of plane figures, including parallel lines, perpendicular lines, and lengths of sides and diagonals. Students are usually able to identify, generalize, and extend numeric and geometric patterns. To solve problems, fifth-graders at Level III generally are able to organize, analyze, and display data using a variety of graphs. They generally use range, median, and mode to describe multiple sets of data. Students generally use algebraic expressions to solve one-step equations and inequalities. They generally identify, describe, and analyze situations with constant or varying rates of change.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Level IV commonly show a high level of understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies.

Students consistently demonstrate number sense for rational numbers 0.001 through 999,999. They consistently demonstrate ability in the addition, subtraction, comparison, and ordering of fractions, mixed numbers, and decimals. They correctly estimate the measure of an object in one system given the measure of that object in another system. Students commonly identify, estimate, and measure the angles of plane figures and commonly identify angle relationships. They consistently identify, define, and describe the properties of plane figures, including parallel lines, perpendicular lines, and lengths of sides and diagonals. Students are commonly able to identify, generalize, and extend numeric and geometric patterns. To solve problems, fifth-graders at Level IV consistently organize, analyze, and display data using a variety of graphs. They consistently use range, median, and mode to describe multiple sets of data. Students commonly use algebraic expressions to solve one-step equations and inequalities. They commonly identify, describe, and analyze situations with constant or varying rates of change.

Achievement Level Descriptors for NCCLAS EOG Assessment-- Grade 6 Mathematics

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Level I lack understanding and computational accuracy. They frequently respond with inappropriate answers or procedures. They seldom use problem-solving strategies.

Level I students seldom accurately add, subtract, multiply, and divide non-negative rational numbers using order of operations. They seldom correctly compare, order, and estimate with rational numbers. They lack understanding in the use of factors, multiples, exponential and scientific notation, prime factorization and percents. Level I students seldom correctly estimate and measure weight and mass of three-dimensional figures to solve problems. They seldom estimate and measure length, perimeter, area, circumference, and angles of two-dimensional figures to solve problems.

They seldom can identify and describe the intersection and transformation of geometric figures in a coordinate plane. They lack understanding of counting strategies and seldom can solve problems by determining the probability of simple, compound, dependent, and independent events. Level I students seldom can simplify algebraic expressions as well as use one- and two-step equations and inequalities to represent relationships and solve problems.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Level II exhibit inconsistent performance and show limited evidence of understanding. They have difficulty applying problem-solving strategies in unfamiliar situations.

Students are not consistently able to add, subtract, multiply, and divide non-negative rational numbers using order of operations. They demonstrate limited ability in the use of factors, multiples, exponential and scientific notation, prime factorization and percents. Level II students inconsistently estimate and measure weight and mass of three-dimensional figures. They inconsistently estimate and measure length, perimeter, area, circumference, and angles of two-dimensional figures to solve problems. They inconsistently identify and describe the intersection and transformation of geometric figures in a coordinate plane. Students demonstrate limited ability with counting strategies and solve problems by determining the probability of simple, compound, dependent, and independent events. They inconsistently apply algebraic principles to simplify algebraic expressions as well as use one- and two-step equations and inequalities to represent relationships and solve problems.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Level III generally show understanding, compute accurately, and respond with appropriate answers or procedures. They use a variety of problem-solving strategies.

Students generally are able to accurately add, subtract, multiply, and divide non-negative rational numbers using order of operations. They usually demonstrate ability in the use of factors, multiples, exponential and scientific notation, prime factorization and percents. Students generally estimate and

measure weight and mass of three-dimensional figures to solve problems. They generally estimate and measure length, perimeter, area, circumference, and angles of two-dimensional figures to solve problems. Students generally identify and describe the intersection and transformation of geometric figures in a coordinate plane. They demonstrate general ability with counting strategies and solve problems by determining the probability of simple, compound, dependent, and independent events. They generally can simplify algebraic expressions as well as use one- and two-step equations and inequalities to represent relationships and solve problems.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Level IV show a high level of understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies.

Students consistently and accurately add, subtract, multiply, and divide non-negative rational numbers using order of operations. They demonstrate fluency in the use of factors, multiples, exponential and scientific notation, prime factorization and percents. Students consistently estimate and measure weight and mass of three-dimensional figures to solve problems. They consistently estimate and measure length, perimeter, area, circumference, and angles of two-dimensional figures to solve problems. They consistently identify and describe the intersection and transformation of geometric figures in a coordinate plane. Students demonstrate fluency with counting strategies and solve problems by determining the probability of simple, compound, dependent, and independent events. They consistently are able to simplify algebraic expressions as well as use one- and two-step equations and inequalities to represent relationships and solve problems.

Achievement Level Descriptors for NCCLAS EOG Assessment-- Grade 7 Mathematics

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Level I lack understanding and computational accuracy. They frequently respond with inappropriate answers or procedures. They seldom use problem-solving strategies.

Level I students show insufficient mastery of addition, subtraction, multiplication, and division of rational numbers following the order of operations. (Rational numbers may be positive, negative, or zero and include whole numbers, fractions, mixed numbers, and decimals). Students show inability to set up and solve real-world percent problems. They rarely can write and solve proportions with rational numbers, including scaling and scale drawing. Students at Level I usually can not solve problems involving the volume of rectangular prisms, triangular prisms, and cylinders. At Level I, students are not successful in creation of a box plot with understanding of measures of central tendency and the effect of outliers. They cannot write and solve functions from graphs, tables, or written descriptions in simpler problems. Students seldom are able to use linear equations or inequalities to solve authentic problems.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Level II exhibit inconsistent performance and show limited evidence of understanding. They have difficulty applying problem-solving strategies in unfamiliar situations.

Level II students demonstrate inconsistent ability with addition, subtraction, multiplication, and division of rational numbers following the order of operations. (Rational numbers may be positive, negative, or zero and include whole numbers, fractions, mixed numbers, and decimals). Students have difficulty with the set up and solution of real-world percent problems. They are inconsistent in ability to write and solve proportions with rational numbers, including scaling and scale drawing. Students at Level II can sometimes solve problems involving the volume of rectangular prisms, triangular prisms, and cylinders. At Level II, students are partially successful in creation of a box plot with understanding of measures of central tendency and the effect of outliers. They write and solve functions from graphs, tables, or written descriptions in simpler problems. Students can sometimes use linear equations or inequalities to solve authentic problems.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Level III generally show understanding, compute accurately, and respond with appropriate answers or procedures. They use a variety of problem-solving strategies.

Level III students demonstrate consistent ability with addition, subtraction, multiplication, and division of rational numbers following the order of operations. (Rational numbers may be positive, negative, or zero and include whole numbers, fractions, mixed numbers, and decimals). Students also show consistent ability to set up and solve real-world percent problems. They demonstrate consistent ability to write and solve proportions with rational numbers, including scaling and scale drawing. Students are able to solve

problems involving the volume of rectangular prisms, triangular prisms, and cylinders. At Level III, students are usually successful in creation of a box plot with understanding of measures of central tendency and the effect of outliers. They write and solve functions from graphs, tables, or written descriptions with consistent success. Students use linear equations or inequalities to solve authentic problems.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Level IV show a high level of understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies.

Level IV students demonstrate fluency with addition, subtraction, multiplication, and division of rational numbers using order of operations. (Rational numbers may be positive, negative, or zero and include whole numbers, fractions, mixed numbers, and decimals). Students show a high level of success to set up and solve real-world percent problems. Level IV students are very successful at writing and solving proportions with rational numbers, including scaling and scale drawing. They solve multi-step surface area and volume problems including composite figures. Students consistently and accurately create a box plot from data, showing understanding of all central tendencies and the effect of outliers. They write and solve functions from graphs, tables, or written descriptions with a high level of success. Students very effectively use linear equations or inequalities to solve authentic problems.

Achievement Level Descriptors for NCCLAS EOG Assessment-- Grade 8 Mathematics

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Level I lack understanding and computational accuracy. They frequently respond with inappropriate answers or procedures. They seldom use problem-solving strategies.

Level I students show lack of understanding of real numbers, including irrational numbers. They rarely are able to use indirect measurements or to use the Pythagorean Theorem to solve problems. Level I students are seldom successful at organizing and interpreting data, using scatterplots and approximating a line of best fit. Students at Level I demonstrate a lack of understanding of functions and are unable to convert functions between forms and interpret slope and intercepts. They can seldom use linear equations and inequalities to solve problems or translate between words, tables, and graphs.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Level II exhibit inconsistent performance and show limited evidence of understanding. They have difficulty applying problem-solving strategies in unfamiliar situations.

Level II students show an inconsistent level of understanding of real numbers, including irrational numbers. They have difficulty using indirect measurements and using the Pythagorean Theorem to solve problems. Level II students show limited evidence of ability at organizing and interpreting data, using scatterplots and approximating a line of best fit. Students at Level II demonstrate a limited understanding of functions are inconsistent in converting functions between forms and interpreting slope and intercepts. They have difficulty using linear equations and inequalities to solve problems, translating between words, tables, and graphs.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Level III generally show understanding, compute accurately, and respond with appropriate answers or procedures. They use a variety of problem-solving strategies.

Level III students consistently show a proficient level of understanding of real numbers including irrational numbers. They generally are correct in use of indirect measurements. Students are usually successful at using the Pythagorean Theorem to solve problems. Level III students are often successful at organizing and interpreting data, using scatterplots and approximating a line of best fit. Students at Level III demonstrate an understanding of functions and can usually convert functions between forms and interpret slope and intercepts. They are generally successful at using linear equations and inequalities to solve problems, translating between words, tables, and graphs.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Level IV show a high level of understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies.

Level IV students consistently show a high level of understanding of real numbers, including irrational numbers. They correctly and accurately use indirect measurements. Students are consistently successful at using the Pythagorean Theorem to solve problems. Level IV students are highly successful at organizing and interpreting data, using scatterplots and approximating a line of best fit. Students at Level IV demonstrate a high level understanding of functions and are successful converting functions between forms and interpreting slope and intercepts. They are highly successful at using linear equations and inequalities to solve problems, translating between words, tables, and graphs.

Achievement Level Descriptors—NCCLAS Grade 4 Writing Assessment

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I have made an attempt to address the task and provide some sense of story. The narrative lacks a sense of logical progression, the topic/subject is not developed, and there is a lack of control of organizational structure and details. The students display an insufficient knowledge of vocabulary and skills in conventions necessary to be successful at the next grade level.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II have unevenly developed narratives with some lapses in the logical progression and the connections between and among ideas. There are some inappropriate and/or sparse details and elaboration provided and readability may detract and/or interfere with the focus on the topic/subject of the narrative. The students display a lack of ability to appropriately use vocabulary and conventions and are minimally prepared to be successful at the next grade level.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III have effectively employed a strategy that connects the beginning, middle, and end of the narrative. The ideas presented are relevant and the elaboration is sufficient, resulting in a reasonable sense of completeness. The students display an appropriate use of vocabulary and conventions and are well prepared for the next grade level.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV have effectively crafted a narrative that demonstrates a strong sense of story that progresses logically from one developed idea to another, resulting in a sense of overall completeness. The students display a skillful use of precise and purposeful vocabulary clearly beyond that required to be proficient at grade level work.

Achievement Level Descriptors—NCCLAS Grade 7 Writing Assessment

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I have made an attempt to address the task but there is a lack of support for the ideas presented and little or no organization or focus on the topic/subject. The students display a lack of minimal sentence fluency and use inappropriate vocabulary and skills in conventions necessary to be successful at the next grade level.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II demonstrate some organization and support for the ideas presented, but may lapse into a loss of focus on the topic/subject when the support or elaboration is sparse or incomplete. The students display limited vocabulary and sentence fluency and are minimally prepared to be successful at the next grade level.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III provide some specific, relevant details in support of the topic/subject and sufficiently elaborated details progress logically. The students employ the use of a variety of sentence structures and vocabulary appropriate to the purpose, audience, and context of the task and are well prepared for the next grade level.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV provide well developed elaboration supporting the topic/subject and have skillfully crafted a logical, fluid, progression of ideas through the use of complex strategies of development. The students use language skillfully and effectively clearly beyond that required to be proficient at grade level work.

Achievement Level Descriptors—NCCLAS Grade 10 Writing Assessment

Achievement Level I:

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I have made an attempt to address the task but there is weak, inconsistent, or little or no sense of progression from one idea to another, resulting in a loss of focus on the topic/subject. Little or no relevant details are present that support the topic/subject. The students display a lack of minimal knowledge of sentence structure, usage, spelling, and punctuation necessary to be successful at the next grade level.

Achievement Level II:

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II exhibit some sense of control of the purpose, audience, and context of the response. An organizational structure establishing minimal relatedness between and among ideas and/or events impacts logical progression and a few general or unelaborated details are present. The students display patterns of errors in conventions and are minimally prepared to be successful at the next grade level.

Achievement Level III:

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III maintain consistent control of the purpose, audience, and context of the response. A sense of organization, a logical progression of ideas, and sufficiently developed support and elaboration are present. Students display a consistent control of conventions and style and are well prepared for the next grade level.

Achievement Level IV:

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV demonstrate the use of higher order thinking skills in presenting a unified progression of ideas while examining the relationships between and among those ideas. In-depth support and elaboration is shown through the use of precise, appropriate language. Students display a skillful use of conventions and style clearly beyond that required to be proficient at grade level work.

Achievement Level Descriptors—NCCLAS Algebra I EOC Assessment

Achievement Level I

~~Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level I show minimal conceptual understanding, limited computational accuracy, and often respond with inappropriate answers or procedures. They rarely use problem-solving strategies successfully.~~

~~In Algebra I, students continue the study of algebraic concepts. Using appropriate technology, they model and solve problems by performing operations with real numbers, polynomials, and matrices; graph using linear, quadratic, and exponential functions; and collect and interpret data. Students solve systems of linear equations and inequalities in two variables. They use Algebra I and geometric concepts developed in previous years for real word applications.~~

~~Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level I show minimal conceptual understanding, limited computational accuracy, and often responds with inappropriate answers or procedures.~~

~~Students at this level are able to display data in a matrix; identify and use an element in a given matrix; add and subtract matrices; apply the laws of exponents to monomials; and add and subtract basic polynomials. Students are able to solve single-step equations and inequalities.~~

Achievement Level II

~~Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level II show inconsistency in conceptual understanding, accurate computation, and responding with appropriate answers or procedures. They demonstrate limited use of problem-solving strategies.~~

~~In Algebra I, students continue the study of algebraic concepts. Using appropriate technology, they model and solve problems by performing operations with real numbers, polynomials, and matrices; graph using linear, quadratic, and exponential functions; and collect and interpret data. Students solve systems of linear equations and inequalities in two variables. They use Algebra I and geometric concepts developed in previous years for real word applications.~~

~~Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level II show inconsistency in: conceptual understanding, computational accuracy, and in ability to respond with appropriate answers or procedures. They demonstrate limited use of problem-solving strategies.~~

~~Students at this level are able to perform basic matrix operations and interpretations; perform direct substitutions in functions and formulas; simplify formulas using order of operations; identify the greatest common factor of a polynomial; and multiply simple binomials. Students are able to use and solve two-step equations and inequalities.~~

Achievement Level III

~~Students performing at this level consistently demonstrate mastery of the course subject matter and skills~~

and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III generally show conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They use a variety of problem-solving strategies.

In Algebra I, students continue the study of algebraic concepts. Using appropriate technology, they model and solve problems by performing operations with real numbers, polynomials, and matrices; graph using linear, quadratic, and exponential functions; and collect and interpret data. Students solve systems of linear equations and inequalities in two variables. They use Algebra I and geometric concepts developed in previous years for real word applications.

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III generally show conceptual understanding and computational accuracy, and they respond with appropriate answers or procedures. They use a variety of problem-solving strategies.

Students at this level are able to write and solve linear equations; create linear models; apply and interpret constants and coefficients; understand the concepts of parallel, perpendicular and the equation of a line; solve systems of equations; factor and solve using polynomials; and use exponential and quadratic functions to solve problems. Students are able to model and solve multi-step equations and inequalities.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Achievement Level IV consistently show a high level of conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They demonstrate capability by using a variety of problem-solving strategies.

In Algebra I, students continue the study of algebraic concepts. Using appropriate technology, they model and solve problems by performing operations with real numbers, polynomials, and matrices; graph using linear, quadratic, and exponential functions; and collect and interpret data. Students solve systems of linear equations and inequalities in two variables. They use Algebra I and geometric concepts developed in previous years for real word applications.

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Achievement Level IV consistently show a high level of conceptual understanding, computational accuracy, and ability to respond with appropriate answers or procedures. They demonstrate capability by using a variety of problem-solving strategies.

Students at this level understand the translations of linear equations; successfully solve problems in the context of real-world situations; and interpret change in the slope, y-intercept, coefficients and constants. Level IV students are able to model and solve multi-step equations and inequalities in the context of multi-concept application problems.

Achievement Level Descriptors—NCCLAS Algebra II EOC Assessment

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Achievement Level I show minimal conceptual understanding, limited computational accuracy, and often respond with inappropriate answers or procedures. They rarely use problem-solving strategies successfully.

In Algebra II students apply algebraic concepts including relations, functions, polynomials, rational expressions, complex numbers, systems of equations and inequalities, and matrices. They collect and organize data to determine functions of best-fit to analyze, interpret, and solve real world problems. Students use equations of circles and parabolas to model and solve problems. They model and solve problems by using direct, inverse, combined and joint variation.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Achievement Level II show inconsistency in conceptual understanding, accurate computation, and responding with appropriate answers or procedures. They demonstrate limited use of problem-solving strategies.

In Algebra II students apply algebraic concepts including relations, functions, polynomials, rational expressions, complex numbers, systems of equations and inequalities, and matrices. They collect and organize data to determine functions of best-fit to analyze, interpret, and solve real world problems. Students use equations of circles and parabolas to model and solve problems. They model and solve problems by using direct, inverse, combined and joint variation.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III generally show conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They use a variety of problem-solving strategies.

In Algebra II students apply algebraic concepts including relations, functions, polynomials, rational expressions, complex numbers, systems of equations and inequalities, and matrices. They collect and organize data to determine functions of best-fit to analyze, interpret, and solve real world problems. Students use equations of circles and parabolas to model and solve problems. They model and solve problems by using direct, inverse, combined and joint variation.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Achievement Level IV consistently show a high level of conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They demonstrate capability by using a variety of problem-solving strategies.

In Algebra II students apply algebraic concepts including relations, functions, polynomials, rational expressions, complex numbers, systems of equations and inequalities, and matrices. They collect and organize data to determine functions of best-fit to analyze, interpret, and solve real world problems. Students use equations of circles and parabolas to model and solve problems. They model and solve problems by using direct, inverse, combined and joint variation.

Achievement Level Descriptors—NCCLAS Geometry EOC Assessment

Achievement Level I

~~Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level I show minimal conceptual understanding, limited computational accuracy, and often respond with inappropriate answers or procedures. They rarely use problem-solving strategies successfully.~~

~~In geometry students continue the study of geometric and algebraic concepts building upon middle school topics. They move from an inductive approach to deductive methods of proof in their study of geometric figures and in problem solving. Two and three dimensional reasoning skills and geometric patterns are emphasized. Students broaden their use of the coordinate plane to include transformations of geometric figures using matrices. They use geometric figures to solve problems involving probability. Students use trigonometric ratios to model and solve problems involving right triangles.~~

~~Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level I show minimal conceptual understanding, limited computational accuracy, and often respond with inappropriate answers or procedures. They rarely use problem-solving strategies successfully.~~

Achievement Level II

~~Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level II show inconsistency in conceptual understanding, accurate computation, and responding with appropriate answers or procedures. They demonstrate limited use of problem-solving strategies.~~

~~In geometry students continue the study of geometric and algebraic concepts building upon middle school topics. They move from an inductive approach to deductive methods of proof in their study of geometric figures and in problem solving. Two and three dimensional reasoning skills and geometric patterns are emphasized. Students broaden their use of the coordinate plane to include transformations of geometric figures using matrices. They use geometric figures to solve problems involving probability. Students use trigonometric ratios to model and solve problems involving right triangles.~~

~~Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level II show inconsistency in conceptual understanding, computational accuracy, and in their ability to respond with appropriate answers or procedures. They demonstrate limited use of problem solving strategies and experience difficulty with complex problems and developing geometric models.~~

Achievement Level III

~~Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.~~

~~Students performing at Achievement Level III generally show conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They use a variety of problem-solving strategies.~~

~~In geometry students continue the study of geometric and algebraic concepts building upon middle school topics. They move from an inductive approach to deductive methods of proof in their study of geometric figures and in problem solving. Two and three dimensional reasoning skills and geometric patterns are emphasized. Students broaden their use of the coordinate plane to include transformations of geometric figures using matrices. They use geometric figures to solve problems involving probability. Students use trigonometric ratios to model and solve problems involving right triangles.~~

~~Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.~~

Students performing at Achievement Level III generally show conceptual understanding, computational accuracy, and respond with appropriate answers or procedures. They use a variety of problem-solving strategies. Students solve problems with a moderate level of complexity using one or more formulas or concepts.

Achievement Level IV

~~Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.~~

~~Students performing at Achievement Level IV consistently show a high level of conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They demonstrate capability by using a variety of problem-solving strategies.~~

~~In geometry students continue the study of geometric and algebraic concepts building upon middle school topics. They move from an inductive approach to deductive methods of proof in their study of geometric figures and in problem solving. Two and three dimensional reasoning skills and geometric patterns are emphasized. Students broaden their use of the coordinate plane to include transformations of geometric figures using matrices. They use geometric figures to solve problems involving probability. Students use trigonometric ratios to model and solve problems involving right triangles.~~

~~Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.~~

Students performing at Achievement Level IV consistently show a high level of conceptual understanding and computational accuracy, as well as a strong ability to respond with appropriate answers or procedures. Students model and solve problems with a high level of complexity using multiple formulas or concepts.

Achievement Level Descriptors—NCCLAS English I EOC Assessment

Achievement Level I

~~Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level I demonstrate the need to develop the composition and reading comprehension skills required in the English I North Carolina *Standard Course of Study*. Students typically can identify and correct rudimentary language convention errors such as incorrect verb usage and double negatives. Students show little to no evidence of reading skills and strategies required to comprehend a variety of ninth-grade level expressive, informational, argumentative, critical and literary texts.~~

~~Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level I demonstrate the need to develop the composition and reading comprehension skills required in the English I North Carolina *Standard Course of Study*. Students inconsistently identify and correct rudimentary language convention errors (such as incorrect verb usage, end punctuation errors, double negatives, capitalization errors, and non-standard verb forms). Students show little to no evidence of reading skills and strategies required to comprehend a variety of ninth-grade-level expressive, informational, argumentative, critical, and literary texts.~~

Achievement Level II

~~Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level II demonstrate inconsistent application of the composition and reading comprehension skills required in the English I North Carolina *Standard Course of Study*. Students typically can apply knowledge of grammar and language usage to identify and correct language convention errors in areas such as simple sentence structure and punctuation. Students show evidence of literal comprehension of a variety of ninth-grade level expressive, informational, argumentative, critical, and other literary works. They show initial understanding of literary devices and elements. Students may also successfully apply strategies such as determining meaning of unfamiliar vocabulary through context clues and identifying main idea and author's purpose.~~

~~Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.~~

~~Students performing at Achievement Level II demonstrate inconsistent application of the composition and reading skills required in the English I North Carolina *Standard Course of Study*. Students inconsistently apply knowledge of grammar and language usage to identify and correct language convention errors in spelling, punctuation, and simple sentence structure. Students show an initial understanding of basic literary devices and elements (such as symbolism, plot structure, and figurative language). Students may also inconsistently apply strategies such as determining the meaning of unfamiliar vocabulary through context clues and identifying the main idea and supporting details. Students show inconsistent literal comprehension of a variety of ninth-grade-level expressive, informational, argumentative, critical, and other literary works.~~

Achievement Level III

~~Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.~~

~~Students performing at Achievement Level III demonstrate consistent application of the composition and reading comprehension skills required by the English I North Carolina *Standard Course of Study*. Students demonstrate an understanding of conventional written expression by editing various sentence types for correctness, clarity, and style. Students are consistently able to comprehend and analyze a variety of ninth grade level expressive, informational, argumentative, critical, and other literary texts. Students can infer, generalize, draw conclusions and make connections between texts. Students can analyze the impact of details and literary elements and devices (such as characterization, dialect, imagery, and symbolism) on the work as a whole. Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.~~

Students performing at Achievement Level III typically demonstrate composition and reading comprehension skills required by the English I North Carolina *Standard Course of Study*. Students typically demonstrate an understanding of conventional written expression by editing sentences for correctness, clarity, and style. Students can infer, generalize, draw conclusions, and make connections between texts. Students can analyze the impact of details and literary elements and devices (such as characterization, dialect, imagery, symbolism, main idea, purpose, context, and figurative language) on the work as a whole. Students are typically able to comprehend and analyze a variety of ninth-grade-level expressive, informational, argumentative, critical, and other literary texts.

Achievement Level IV

~~Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.~~

~~Students performing at Level IV demonstrate a strong command of the composition and reading comprehension skills required by the English I North Carolina *Standard Course of Study*. Students demonstrate an understanding of conventional written expression by editing various sentence types for correctness, clarity, and style. By inferring, generalizing, drawing conclusions, and making connections between texts, students comprehend with breadth and depth a variety of ninth grade level texts. Students can analyze the impact of details and literary elements and devices on the work as a whole. Students can analyze and evaluate purpose, audience, context, and elements of communication particular to expressive, informational, critical, argumentative, and other literary texts.~~

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Level IV demonstrate a strong command of the composition and reading comprehension skills required by the English I North Carolina *Standard Course of Study*. Students consistently demonstrate an understanding of conventional written expression by editing various sentence types for correctness, clarity, and style. By inferring, generalizing, drawing conclusions, and making connections between texts, students comprehend with breadth and depth a variety of ninth-grade-level texts. Students can analyze the impact of details and more complex literary elements and devices (such as style, diction, and tone) on the work as a whole. Students can analyze and evaluate purpose, audience, context, and elements of communication particular to expressive, informational, critical, argumentative, and other literary texts.

Achievement Level Descriptors—NCCLAS Physical Science EOC Assessment

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Achievement Level I do not have sufficient mastery of physical science concepts. They have minimal understanding of mechanics, energy, electricity and magnetism, wave motion and the nature of sound and light, structure and properties of matter, and regularities in chemistry.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Achievement Level II demonstrate inconsistent mastery of physical science concepts. They have limited understanding of mechanics, energy, electricity and magnetism, wave motion and the nature of sound and light, structure and properties of matter, and regularities in chemistry.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III demonstrate mastery of physical science concepts and are prepared for more advanced science courses. They have an adequate understanding of mechanics, energy, electricity and magnetism, wave motion and the nature of sound and light, structure and properties of matter, and regularities in chemistry.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Achievement Level IV demonstrate superior understanding of physical science concepts and are very well prepared for more advanced science courses. They have an advanced level of understanding of mechanics, energy, electricity and magnetism, wave motion and the nature of sound and light, structure and properties of matter, and regularities in chemistry.

Achievement Level Descriptors—NCCLAS Biology EOC Assessment

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Achievement Level I do not have sufficient mastery of biological concepts. They have a minimal understanding of the physical, chemical, and cellular basis of life, the continuity of life and changes in organisms over time, classification systems and the structure and function of organisms, ecological relationships among organisms, and adaptive responses of organisms.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Achievement Level II demonstrate inconsistent mastery of biological concepts. They have a limited understanding of the physical, chemical, and cellular basis of life, the continuity of life and changes in organisms over time, classification systems and the structure and function of organisms, ecological relationships among organisms, and adaptive responses of organisms.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III demonstrate mastery of biological concepts and are prepared for more advanced science courses. They have an adequate understanding of the physical, chemical, and cellular basis of life, the continuity of life and changes in organisms over time, classification systems and the structure and function of organisms, ecological relationships among organisms, and adaptive responses of organisms.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Achievement Level IV demonstrate superior understanding of biological concepts and are very well prepared for more advanced science courses. They have an advanced level of understanding of the physical, chemical, and cellular basis of life, the continuity of life and changes in organisms over time, classification systems and the structure and function of organisms, ecological relationships among organisms, and adaptive responses of organisms.

Achievement Level Descriptors—NCCLAS Chemistry EOC Assessment

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Achievement Level I do not have sufficient mastery of chemical concepts. They have minimal understanding of structure and properties of matter, regularities and energy changes in chemistry, and equilibrium and kinetics.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Achievement Level II demonstrate inconsistent mastery of chemical concepts. They have limited understanding of structure and properties of matter, regularities and energy changes in chemistry, and equilibrium and kinetics.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III demonstrate mastery of chemical concepts and are prepared for more advanced science courses. They have an adequate understanding of structure and properties of matter, regularities and energy changes in chemistry, and equilibrium and kinetics.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Achievement Level IV demonstrate superior understanding of chemical concepts and are very well prepared for more advanced science courses. They have an advanced level of understanding of structure and properties of matter, regularities and energy changes in chemistry, and equilibrium and kinetics.

Achievement Level Descriptors—NCCLAS Physics EOC Assessment

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Achievement Level I do not have sufficient mastery of the concepts relating to physics. They have minimal understanding of motion, forces, energy, impulse and momentum, wave motion and the nature of sound and light; thermodynamics, and electricity and magnetism.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Achievement Level II demonstrate inconsistent mastery of the concepts relating to physics. They have limited understanding of motion, forces, energy, impulse and momentum, wave motion and the nature of sound and light, thermodynamics, and electricity and magnetism.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III demonstrate mastery of the concepts relating to physics and are prepared for more advanced science courses. They have an adequate understanding of motion, forces, energy, impulse and momentum, wave motion and the nature of sound and light, thermodynamics, and electricity and magnetism.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Achievement Level IV demonstrate superior understanding of concepts relating to physics and are very well prepared for more advanced science courses. They have an advanced level of understanding of motion, forces, energy, impulse and momentum, wave motion and the nature of sound and light, thermodynamics, and electricity and magnetism.

Achievement Level Descriptors—NCCLAS End-of-Course Assessment Civics and Economics

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Level I are able to describe the impact of the founding of the American nation and government; identify the organization and structure of national, state and local governments; list the principles of American government; identify the purpose and function of the American legal system; identify methods of civic and economic participation; identify the functions of the American economy at the national and personal levels; and list fundamental economic concepts.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Level II are able to explain the impact of the founding of the American nation and government; describe the roles of national, state and local governments; explain the principles of American government; explain the purpose and function of the American legal system; investigate opportunities for civic and economic participation; describe the functions of the American economy at the national and personal levels; and understand fundamental economic concepts.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Level III are able to analyze the impact of the founding of the American nation and government; analyze the organization and structure of national, state and local governments; apply the principles of American government to the functions of national, state, and local governments; analyze the purpose and function of the American legal system; investigate opportunities for civic and economic participation and apply learned skills and principles to various situations; explain the functions of the American economy at the national and personal levels; and apply fundamental economic concepts.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Level IV are able to analyze the impact of the founding of the American nation on the development of American government; evaluate the effectiveness of the organization and structure of national, state and local governments; assess the relationship between the principles of American government and the functioning of national, state, and local governments; evaluate the effectiveness of the American legal system in maintaining order and justice; determine the effectiveness of civic and economic participation as applied to learned skills and principles; evaluate the functions of the American economy at the national and personal levels; and analyze fundamental economic concepts.

Achievement Level Descriptors –NCCLAS End-of-Course Assessment United States History

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Level I are able to identify the effectiveness of the emerging institutions of the New Republic; the impact of technology on economic, political and social life in America; the trends and impact of economic, political, and social developments of the twentieth century; assess the competing forces of expansionism, nationalism, and sectionalism including the impact on domestic conflicts and social and political reforms; the causes and effects of the United States' rise as a world power, its role in world conflicts and trends in foreign affairs; and the significance of the developments of the twentieth century on the lives of Americans.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Level II are able to identify and describe the effectiveness of the emerging institutions of the New Republic; the impact of technology on economic, political and social life in America; the trends and impact of economic, political, and social developments of the twentieth century; assess the competing forces of expansionism, nationalism, and sectionalism including the impact on domestic conflicts and social and political reforms; and the causes and effects of the United States' rise as a world power, its role in world conflicts and trends in foreign affairs, and the significance of the developments of the twentieth century on the lives of Americans.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Level III are able to identify, describe, and analyze the effectiveness of the emerging institutions of the New Republic; the impact of technology on economic, political and social life in America; the trends and impact of economic, political, and social developments of the twentieth century; analyze the competing forces of expansionism, nationalism, and sectionalism including the impact on domestic conflicts and social and political reforms; and the causes and effects of the United States' rise as a world power, its role in world conflicts and trends in foreign affairs, and the significance of the developments of the twentieth century on the lives of Americans.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Level IV are able to identify, describe, analyze, and evaluate the effectiveness of the emerging institutions of the New Republic; the impact of technology on economic, political and social life in America; the trends and impact of economic, political, and social developments of the twentieth century; assess the competing forces of expansionism, nationalism, and sectionalism including the impact on domestic conflicts and social and political reforms; and the causes and effects of the United States' rise

as a world power, its role in world conflicts and trends in foreign affairs, and the significance of the developments of the twentieth century on the lives of Americans.

NCCLAS EOG Grade 5 Science Assessment Achievement Level Descriptors (Interim)

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I demonstrate an insufficient level of understanding of landforms, weather and climate, the interdependence of plants and animals, and forces and motion in technological designs.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II demonstrate a minimal level of understanding of landforms, weather and climate, the interdependence of plants and animals, and forces and motion in technological designs.

Achievement Level III

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III demonstrate an adequate level of understanding of landforms, weather and climate, the interdependence of plants and animals, and forces and motion in technological designs.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV demonstrate an advanced level of understanding of landforms, weather and climate, the interdependence of plants and animals, and forces and motion in technological designs.

NCCLAS EOG Grade 8 Science Assessment Achievement Level Descriptors (Interim)

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I demonstrate an insufficient level of understanding of the hydrosphere, chemistry, evolutionary theories, cellular biology, and microbiology using scientific inquiry and technological design.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II demonstrate a minimal level of understanding of the hydrosphere, chemistry, evolutionary theories, cellular biology, and microbiology using scientific inquiry and technological design.

Achievement Level III

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III demonstrate an adequate level of understanding of the hydrosphere, chemistry, evolutionary theories, cellular biology, and microbiology using scientific inquiry and technological design.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV demonstrate an advanced level of understanding of the hydrosphere, chemistry, evolutionary theories, cellular biology, and microbiology using scientific inquiry and technological design.

EXECUTIVE SUMMARY

Title: Recommended Final Achievement Level Descriptors for the NCEXTEND2 EOG Writing Grades 4 and 7

Type of Executive Summary:

- Action Action on First Reading Discussion Information

Policy Implications:

- Constitution _____
 General Statute # _____
 SBE Policy #HSP-C-027
 SBE Policy Amendment
 SBE Policy (New)
 APA # _____
 APA Amendment
 APA (New)
 Other NCLB Act of 2001

Presenter(s): Dr. Louis M. Fabrizio (Director, Accountability Services Division)

Description:

In accordance with the practice established after the national audit panel's review of the testing program in 2001, the recommended *final* academic achievement standards (cut scores) and achievement level descriptors for the NCEXTEND2 EOG writing assessment at grades 4 and 7 being provided for adoption on first reading at the January 2008 meeting of the State Board of Education. The NCEXTEND2 EOG writing modified alternate assessments were implemented initially as operational modified alternate assessments effective with the 2005-06 school year for students with disabilities who require the modified assessments in order to access the statewide testing program as required by the NCLB Act of 2001. Interim academic achievement standards (cut scores) for these tests were approved by the SBE for the 2005-06 and the 2006-07 school years pending the adoption of the final regulations by the USED. The final achievement level descriptors were generated by a group of panelists who were practicing ELA educators in sessions held with Pearson Educational Measurement facilitating the sessions along with analyses and recommendations by NCDPI Test Development staff. The consequential data used to inform decisions about the descriptors for the NCEXTEND2 EOG writing assessments were derived from the 2005-06 and the 2006-07 administrations of the assessments. After an extensive analysis of all of the data, the department will recommend the achievement level descriptors for the NCEXTEND2 writing alternate assessments at grades 4 and 7 for students with disabilities who require the use of the NCEXTEND2, a modified alternate assessment, in order to access the statewide testing program. The recommended final descriptors are to be effective with the 2007-08 school year and beyond.

Resources:

Staff psychometricians, other staff from Test Development Section at NCDPI, the test development staff at NCSU-TOPS, EC representatives, curriculum staff, and some representatives from other sections and divisions within the agency, a group of English and mathematics educators and practitioners, and facilitators from the Pearson Educational Measurement

Input Process:

Recommendation from English educators as panelists during the Body-of-Work session led by Pearson Educational Measurement, staff from the Test Development Section, test development staff at NCSU-TOPS, and staff from other sections and divisions in the department provided input into the recommendation.

Stakeholders:

Public school educators, the exceptional children's community, the ELL community, state and federal policy makers, parents, students, and the general public

Timeline For Action:

The department recommends that the final achievement level descriptors be adopted on first reading at the January 2008 meeting of the SBE.

Recommendations:

The department recommends that the State Board amend policy HSP-C-027 and that the final achievement level descriptors for the NCEXTEND2 EOG Writing Assessments at grades 4 and 7 be approved as provided.

Audiovisual equipment requested for the presentation:

Data Projector/Video (Videotape/DVD and/or Computer Data, Internet, Presentations-PowerPoint preferred)
Specify: _____

Audio Requirements (computer or other, except for PA system which is provided)
Specify: _____

Document Camera (for transparencies or paper documents – white paper preferred)

Motion By: _____

Seconded By: _____

Vote: Yes _____ No _____

Abstain _____

Approved _____ Disapproved _____

Postponed _____ Revised _____

*Person responsible for SBE agenda materials and SBE policy updates: Lucy Medlin, 919-807-3771

**NORTH CAROLINA STATE BOARD OF EDUCATION
Policy Manual**

Policy Identification

Priority: High Student Performance

Category: ABCs Accountability Model

Policy ID Number: HSP-C-027

Policy Title: ~~Interim~~ Achievement Level Ranges and Achievement Level Descriptors for the NCEXTEND2 (EOG) Writing Assessment Grades 4 and 7, and the NCEXTEND2 OCS Writing Assessment at Grade 10

Current Policy Date: ~~12/06/2007~~01/10/2008

Other Historical Information: 08/03/2006, 06/07/2007, ~~12/06/2007~~

Statutory Reference: GS 115C-174.11

Administrative Procedures Act (APA) Reference Number and Category:

***** Begin Policy *** (Do not tamper with this line)**

The final achievement-level ranges approved by the State Board of Education for the NCEXTEND2 (EOG) Writing Assessment Grades 4 and 7, and the NCEXTEND2 OCS Writing Assessment at Grade 10 for use in the ABCs Accountability Program are as follows:

Subject	Grade	Level I	Level II	Level III	Level IV
Writing (EOG) (Interim Effective 2005-06 and 2006-07) (Final Effective 2007-08)	4	4-7	8-13	14-17	18-20
	7	4-7	8-13	14-17	18-20
Writing (OCS) (Interim Effective 2006-07) (Final	10	4-6	7-11	12-16	17-20

Effective 2007-08)					
-----------------------	--	--	--	--	--

NCEXTEND2 Writing Assessment Achievement Level Descriptors Grade 4

Achievement Level I

~~Students performing at Achievement Level I have made an attempt to address the task. The narrative lacks a sense of logical progression and may or may not be random or confusing. The topic/subject is not developed, and there may be a lack of organizational structure. Students may or may not provide details. The students demonstrate an insufficient knowledge of vocabulary and lack skills in conventions necessary to be successful at the next grade level.~~

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I have made an attempt to address the task. The narrative lacks a sense of logical progression and may or may not be random or confusing. The topic/subject is not developed, and there may be a lack of organizational structure. Students may or may not provide details. The students demonstrate an insufficient knowledge of vocabulary and lack skills in conventions necessary to be successful at the next grade level.

Achievement Level II

~~Students performing at Achievement Level II provide unevenly developed narratives that may or may not maintain focus on the topic/subject. There are attempts to connect some ideas and thoughts; however there are some irrelevant, repetitious, and/or sparse details and elaboration. The students demonstrate a limited ability to appropriately use vocabulary, do not maintain a consistent use of conventions and are minimally prepared to be successful at the next grade level. Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.~~

Students performing at Achievement Level II provide unevenly developed narratives that may or may not maintain focus on the topic/subject. There are attempts to connect some ideas and thoughts; however there are some irrelevant, repetitious, and/or sparse details and elaboration. The students demonstrate a limited ability to appropriately use vocabulary, do not maintain a consistent use of conventions and are minimally prepared to be successful at the next grade level.

Achievement Level III

~~Students performing at Achievement Level III provide evidence of a beginning, middle, and end of a narrative that result in a reasonable progression of ideas and events. The support and elaboration presented contain some relevant and specific details. The students display an attempt at a variety of appropriate vocabulary, demonstrate basic control of conventions, and are prepared for the next grade level.~~

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III provide evidence of a beginning, middle, and end of a narrative that result in a reasonable progression of ideas and events. The support and elaboration presented contain some relevant and specific details. The students display an attempt at a variety of appropriate vocabulary, demonstrate basic control of conventions, and are prepared for the next grade level.

Achievement Level IV

~~Students performing at Achievement Level IV have crafted a narrative that demonstrates a well-developed story that progresses logically from one idea to another, resulting in a sense of overall completeness. Details are specific and relevant leading to a clear progression of ideas and events. The students display a skillful use of purposeful vocabulary and maintain control of conventions beyond that required to be proficient at grade level work.~~

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV have crafted a narrative that demonstrates a well-developed story that progresses logically from one idea to another, resulting in a sense of overall completeness. Details are specific and relevant leading to a clear progression of ideas and events. The students display a skillful use of purposeful vocabulary and maintain control of conventions beyond that required to be proficient at grade level work.

July 2006

NCEXTEND2 Writing Assessment Achievement Level Descriptors Grade 7

Achievement Level I

~~Students performing at Achievement Level I have made an attempt to address the task but there is a lack of support for the ideas presented and little or no organization or focus on the topic/subject. Ideas and events are generally incomplete and lack connections. The students demonstrate little or no sentence fluency and the use of appropriate vocabulary and skills in conventions necessary to be successful at the next grade level.~~

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I have made an attempt to address the task but there is a lack of support for the ideas presented and little or no organization or focus on the topic/subject. Ideas and events are generally incomplete and lack connections. The students demonstrate little or no sentence fluency and the use of appropriate vocabulary and skills in conventions necessary to be successful at the next grade level.

Achievement Level II

~~Students performing at Achievement Level II demonstrate some organization and support for the ideas presented, but may lose focus on the topic/subject. Support and elaboration may be irrelevant and/or repetitious. The control of conventions is often inconsistent. The students demonstrate limited vocabulary and sentence fluency and are minimally prepared to be successful at the next grade level.~~

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II demonstrate some organization and support for the ideas presented, but may lose focus on the topic/subject. Support and elaboration may be irrelevant and/or repetitious. The control of conventions is often inconsistent. The students demonstrate limited vocabulary and sentence fluency and are minimally prepared to be successful at the next grade level.

Achievement Level III

~~Students performing at Achievement Level III provide some specific, related details in support of the topic/subject and there is evidence that the ideas and events progress logically. There is evidence of purposeful elaboration that supports the topic/subject. Students demonstrate the appropriate use of vocabulary relevant to the purpose, audience, and context of the task and are well prepared for the next grade level.~~

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III provide some specific, related details in support of the topic/subject and there is evidence that the ideas and events progress logically. There is evidence of purposeful elaboration that supports the topic/subject. Students demonstrate the appropriate use of vocabulary relevant to the purpose, audience, and context of the task and are well prepared for the next grade level.

Achievement Level IV

~~Students performing at Achievement Level IV provide clear elaboration in support of the topic/subject and demonstrate a clear, logical progression of ideas and/or events through the use~~

~~of specific related details. The students demonstrate a skillful use of language and conventions clearly beyond that required to be proficient at grade level work.~~

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV provide clear elaboration in support of the topic/subject and demonstrate a clear, logical progression of ideas and/or events through the use of specific related details. The students demonstrate a skillful use of language and conventions clearly beyond that required to be proficient at grade level work.

July 2006

NCEXTEND2 OCS Writing Assessment Achievement Level Descriptors Grade 10

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Students performing at Achievement Level I have made an attempt to address the task. The topic/subject is not developed and ideas may be presented in a random or confusing manner. Details, if provided, lack development and/or are unrelated to the topic/subject. The students demonstrate an insufficient knowledge of sentence formation and lack skills in conventions necessary to be successful at the next grade level.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Students performing at Achievement Level II may or may not maintain focus on the topic/subject. Ideas are presented in an attempt to establish a logical progression and the details provided are sparse. The students demonstrate a limited knowledge of sentence formation, do not maintain a consistent use of conventions, and are minimally prepared to be successful at the next grade level.

Achievement Level III

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well-prepared for the next grade level.

Students performing at Achievement Level III establish a focus on the topic/subject and the ideas presented progress logically. Most of the details provided are sufficiently developed. The students demonstrate a general knowledge of sentence formation and conventions and are well-prepared for the next grade level.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Achievement Level IV consistently focus on the topic/subject and use clear transitions that define a logical progression of ideas. Most of the details provided are developed and supported with appropriate examples. The students demonstrate a consistent knowledge of sentence formation and conventions clearly beyond that required to be proficient at grade level work.

EXECUTIVE SUMMARY**Title:** Revision of the North Carolina Standard Course of Study for Mathematics K-12**Type of Executive Summary:**
 Action
 Action on First Reading
 Discussion
 Information
Policy Implications:

-
- Constitution _____
-
-
- General Statute # _____
-
-
- SBE Policy #HSP-F-002
-
-
- SBE Policy Amendment
-
-
- SBE Policy (New)
-
-
- APA # _____
-
-
- APA Amendment
-
-
- APA (New)
-
-
- Other _____

Presenter(s): Mr. Robert L. Logan (Associate Superintendent, Leadership and Innovation), Ms. Everly Broadway (Section Chief, Middle and Secondary Mathematics), and Ms. Donna Thomas (Consultant, Elementary Mathematics)

Description: The *North Carolina Standard Course of Study for Mathematics* was last revised in 2003. A schedule for revision was approved at the State Board of Education meeting in May 2007.

Resources: State

Input Process:

<u>When</u>	<u>What</u>
Oct-Nov. 2006	Survey regarding 2003 Mathematics SCS
Dec 18, 2006	Review Committee (parents, IHE reps, teachers, curriculum coordinators) recommend revision
January 4-6, 2007	Curriculum Review Team Session 1 (Expert Steering Committee)
January 31-February 2, 2007	Curriculum Review Team Session 2 (Expert Steering Committee) K-5 and 9-12 only
February 17 & 24, 2007	Information and Feedback sessions (3) NCCTM Regional Meetings North Carolina Wesleyan College; Rocky Mount, NC
March 12-13, 2007	Curriculum Review Team Session 3 (Expert Steering Committee)
April 18-19, 2007	Curriculum Review Team Session 4 (Expert Steering Committee)
May 15-16, 2007	Curriculum Review Team Session 5 (Expert Steering Committee) K-5 only
June 14-15, 2007	Curriculum Focus Group
June 30, 2007	DRAFT 1 and Feedback Survey Available on-line
July 1, 2007 – August 15, 2007	Public Review of Draft 1 <ul style="list-style-type: none"> •Website to download draft and survey to collect feedback (K-5, 6-8, 9-12) •Collect feedback at various summer institutes around the state (K-12)
August 13-14, 2007	Curriculum Focus Group 2
September 18, 2007	DRAFT 2 and Feedback Survey Available on-line
September 18, 2007 – October 19, 2007	Public Review of Draft 2 <ul style="list-style-type: none"> •Website to download draft and survey to collect feedback (K-5, 6-8, 9-12)
October 10-12, 2007	NCCTM Leadership meeting and State Math Conference: feedback sessions
November 7, 2007	DRAFT 3 and Feedback Survey Available on-line
November 7, 2007 – November 30, 2007	Public Review of Draft 3 <ul style="list-style-type: none"> •Website to download draft and survey to collect feedback (K-5, 6-8, 9-12)
November 5 & 15, 2007	Meetings with DPI Test Development staff regarding testing implications for K-5
December 10, 2007	Meeting with DPI Test Development staff regarding testing implications for 6-12

More Info at: http://community.learnnc.org/dpi/math/archives/2007/06/standard_course.php

Stakeholders: Teachers, administrators, students, parents, college/university professors, community members and Department of Public Instruction staff

Timeline For Action:

This item is submitted for discussion at the January 2008 GCS committee meeting and will be returned for further discussion in February 2008 and action in March 2008.

Recommendations:

The State Board of Education is asked to grant approval of the proposed revision to the *North Carolina Standard Course of Study for Mathematics K-12*.

Audiovisual equipment requested for the presentation:

Data Projector/Video (Videotape/DVD and/or Computer Data, Internet, Presentations-PowerPoint preferred)
Specify: Data Projector

Audio Requirements (computer or other, except for PA system which is provided)
Specify: _____

Document Camera (for transparencies or paper documents – white paper preferred)

Motion By: _____

Seconded By: _____

Vote: Yes _____ No _____

Abstain _____

Approved _____ Disapproved _____

Postponed _____ Revised _____

*Person responsible for SBE agenda materials and SBE policy updates: Amy Betsill, 919-807-3817

**NORTH CAROLINA STATE BOARD OF EDUCATION
Policy Manual**

Policy Identification

Priority: High Student Performance

Category: Standard Course of Study

Policy ID Number: HSP-F-002

Policy Title: Policy delineating the NC Standard Course of Study for, Mathematics, Grades K-12

Current Policy Date: 03/03/2005

Other Historical Information: Previous board dates: 06/01/1989, 05/07/1998, 06/06/2002, 11/07/2002, 03/06/2003

Statutory Reference:

Administrative Procedures Act (APA) Reference Number and Category:

Please refer to the insert **NC Standard Course of Study - Mathematics Education K-12 Curriculum**. This Manual is available for purchase from the NC Department of Public Instruction. For price and availability, please call the Publication Sales Section of the Communications and Information Services Division at 1-800-663-1250. Instructions for ordering will be given at that time.

Questions regarding the **NC Standard Course of Study - Mathematics Education K-12 Curriculum**, should be directed to:

NC Department of Public Instruction
Division of Instructional Services
Mathematics and Science Section
6352 Mail Service Center
Raleigh, NC 27699-6352

Grades K-6: (919) 807-3839

Grades 4-6: (919) 807-3840

Grades 6-9: (919) 807-3841

Grades 9-12: (919) 807-3842

The **NC Standard Course of Study - Mathematics Education K-12 Curriculum** is also available from the following link:

<http://www.ncpublicschools.org/curriculum/mathematics/>

Revision of the North Carolina Mathematics Standard Course of Study

Background Information

The *North Carolina Standard Course of Study for Mathematics* was last revised in 2003. A schedule for revision was approved at the State Board of Education meeting in May 2007.

Guiding Principles

Factors that support revision:

1. **Globally Prepared Students** [Trends in Mathematics and Science Study (TIMSS); Programme for International Student Assessment (PISA); Partnership for Twenty-first Century Skills Framework; American Diploma Project (ADP); and numerous other reports]
 2. **Alignment with post-secondary expectations** [Changes in the National Assessment for Educational Progress (NAEP) Framework for Mathematics, Grade 12; importance of alignment K-16]
 3. **Alignment with national curriculum documents** [Curriculum Focal Points published in 2006 by the National Council of Teachers of Mathematics (NCTM); Guidelines for Assessment and Instruction in Statistics Education published in 2005 by the American Statistical Association (ASA); College Board Standards for Success: Mathematics and Statistics (conventional courses document published in 2006, integrated courses document published in 2007) by the College Board]
-

Input/Review

During the past 12 months, the mathematics staff has coordinated the review and proposed revision of the North Carolina Mathematics Standard Course of Study. As part of the curriculum review and revision process, committees have included representatives from institutions of higher education, parents, business and industry leaders, district administrators, professional organization leadership, and teachers. Opportunities for input and participation have included:

- Initial survey of stakeholders in Fall 2006
 - Initial revision committee meeting in December 2006
 - Review and advisory panels
 - Textbook publishers
 - Curriculum writing committees
 - Elementary Mathematics/Science Institutes Summer 2007 (3)
 - Meredith Math Institutes Summer 2007 (2)
 - Middle School Mathematics and Science Leadership Institute Summer 2007
 - High School Mathematics Leadership Institute Summer 2007
 - NCCTM Regional Meetings Spring 2007 (3)
 - NCCTM Leadership Meeting October 2007
 - NCCTM Annual Meeting October 2007 (6 sessions)
 - Regional Meetings Middle/Secondary Division Spring 2007 (6) Fall 2007 (6)
 - Listserves and websites administered by DPI staff
 - Feedback survey after each draft (on-line)
-

Revision of the North Carolina Mathematics Standard Course of Study

- Outcomes** Two outcomes most apparent in the proposed revision of the North Carolina Standard Course of Study for Mathematics K-12 are
- Alignment with the 2006 Curriculum Focal Points document from the National Council of Teachers of Mathematics
 - Alignment with the College Board Standards for Mathematics and Statistics
 - Deeper refinement of the objectives which allows a focus on big ideas at each grade level, allowing more time for in-depth instruction and teaching for understanding

View the current draft at
http://community.learnnc.org/dpi/math/archives/2007/06/standard_course.php

Uses The revised *North Carolina Standard Course of Study for Mathematics K-12* will be used for the textbook selections in 2008-2009, ongoing revision and development of support documents in 2008-2009, planning and training in 2009-2010 and the revision of the North Carolina Testing Program for the 2010-2011 administration.

Timeline

School Year	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Content Standards	<ul style="list-style-type: none"> •Review current standards •Write or revise standards 	<ul style="list-style-type: none"> •Present to SBE (Jan.) •Disseminate to schools (spring) •Develop support materials 		<ul style="list-style-type: none"> •Transition year 	<ul style="list-style-type: none"> •Implementation Year
Textbooks/ Curriculum Materials	<ul style="list-style-type: none"> •Review and adjust textbook criteria 	<ul style="list-style-type: none"> •Textbook Call (Spring) •Textbook Review (Summer) 	<ul style="list-style-type: none"> •Textbook selection by schools 	<ul style="list-style-type: none"> •New textbooks in schools 	
Professional Development		<ul style="list-style-type: none"> •Develop professional development materials and dissemination plan 	<ul style="list-style-type: none"> •Leadership Institutes •On-line professional development modules 	<ul style="list-style-type: none"> •On-going professional development 	
EOG Pre3 through 8 Mathematics Assessments	<ul style="list-style-type: none"> •Current Edition (3rd Edition) •(2nd year) 	<ul style="list-style-type: none"> •Current Edition (3rd Edition) •Begin Item Development 	<ul style="list-style-type: none"> •Current Edition (3rd Edition) •Field Test Items Embedded 	<ul style="list-style-type: none"> •Current Edition (3rd Edition) •Field Test Items Embedded 	<ul style="list-style-type: none"> •New 4th Edition •New Standards
EOC Algebra I, Geometry, Algebra II	<ul style="list-style-type: none"> •Current Edition (1st year) 	TBD	TBD	TBD	TBD

EXECUTIVE SUMMARY

Title: High School Courses Taken in the Middle School Considerations Beyond Mathematics and Second Language

Type of Executive Summary:

- Action
- Action on First Reading
- Discussion
- Information

Policy Implications:

- Constitution _____
- General Statute # _____
- SBE Policy #HSP-M-001
- SBE Policy Amendment
- SBE Policy (New)
- APA # _____
- APA Amendment
- APA (New)
- Other _____

Presenter(s): Mr. Robert Logan (Associate Superintendent, Innovation and School Transformation), Mr. Edd Dunlap (Middle/Secondary Science Section Chief), and Dr. Eleanor Hasse (Secondary Science Consultant)

Description:

The GCS Committee has requested information on expanding the current policy HSP-M-001 that allows students to take high school mathematics and foreign language courses for high school credit while they are in middle schools.

Resources:

N/A

Input Process:

Zoomerang survey of science teachers and administrators; survey of state science supervisors from other states; library research; middle and secondary content consultants

Stakeholders:

Students, LEA and school personnel, business community

Timeline For Action:

This item is presented for discussion at the January 2008 meeting and will be returned for action at the February 2008 meeting.

Recommendations:

State Board members are requested to approve the expansion of existing policy to include science courses.

Audiovisual equipment requested for the presentation:

- Data Projector/Video (Videotape/DVD and/or Computer Data, Internet, Presentations-PowerPoint preferred)
Specify: _____
- Audio Requirements (computer or other, except for PA system which is provided)
Specify: _____
- Document Camera (for transparencies or paper documents – white paper preferred)

Motion By: _____ **Seconded By:** _____
Vote: Yes _____ No _____ Abstain _____

Approved _____ Disapproved _____ Postponed _____ Revised _____

*Person responsible for SBE agenda materials and SBE policy updates: Amy Betsill, 919-807-3817

**NORTH CAROLINA STATE BOARD OF EDUCATION
Policy Manual**

Policy Identification

Priority: High Student Performance

Category: Course for Credit

Policy ID Number: HSP-M-001

Policy Title: Policy defining "Course for Credit"

Current Policy Date: 05/03/2007

Other Historical Information: Previous board dates: 05/05/1988, 08/02/2001, 02/07/2002, 12/05/2002, 07/01/2004,11/04/2004

Statutory Reference: GS 115C-81

Administrative Procedures Act (APA) Reference Number and Category:

A credit course, one for which credit toward high school graduation is awarded and which qualifies as part of the instructional day:

- must consist of 150 clock hours of instruction in a traditional schedule or
- must consist of a minimum of 135 clock hours of instruction in a block schedule; developed curriculum guides, or Advanced Placement syllabi in which high school students are enrolled; and
- must be directed by a teacher.

Public University, Community College, and Private College Courses

- Courses taken for high school graduation requirements at community colleges and private or public colleges/universities are exempt from the 135 or 150 instructional hours with the exception of the following courses required for high school graduation, which must be taken at the high school or middle school where indicated:
 - English I, II, III, IV;
 - Algebra I, Algebra II, Geometry, and any higher level mathematics course with Algebra II as the prerequisite that will be used to fulfill the fourth mathematics requirement or Integrated Mathematics I, II, III (These mathematics courses may be taken in middle school.)
 - Biology, Earth/Environmental Science, and a physical science course that is used to fulfill the third science requirement;
 - Civics and Economics, US History, World Studies;
 - first year of a Second Language (This Second Language course may be taken in middle school.);

- second year of the same Second Language (This Second Language course may be taken in the middle school.); and
- one credit of Health/Physical Education.
- Beginning in the 2007-08 school year, students who pass mathematics or foreign language courses during grade 6-8 that are described in the *North Carolina Standard Course of Study* for grades 9-12 must achieve level III or IV on an EOC, if available, to meet that high school graduation requirement. High school mathematics and foreign language courses taken in grades 6-8 which do not have an EOC shall use high school course codes and shall be aligned to the *North Carolina Standard Course of Study* for grades 9-12. The courses will count toward graduation requirements, but the students' GPA will be computed with courses taken during the high school years.
- Students are strongly encouraged to complete at least one unit of mathematics credit in their final year of high school.
- Each local superintendent may grant a waiver to allow students to take the courses listed above at the Public University, Community College, and Private College and exempt them from the 135 or 150 instructional hour requirement, if these courses are not available to the student at his or her local high school. Courses taken at a Community College that have a corresponding end-of-course assessment at the high school require that the assessment be taken.
- Each local superintendent shall ensure that all required and elective courses have sufficient rigor, breadth, and depth to be awarded high school credit.

An online course qualifies for course credit if it meets the following requirements:

- The NC Standard Course of Study competency goals and objectives must be adopted, where available. Nationally validated standards for AP and IB must be used, where available.
- In the absence of a Standard Course of Study curriculum, the course must be designed such that a typical student would take 135-150 hours to complete. The principal, in consultation with a teacher certified in that content area, is ultimately accountable for determining whether the course is of sufficient depth and breadth and meets the state and/or nationally developed criteria for awarding credit.
- Where available, end-of-grade tests, end-of-course tests, and post assessment must be used as an indicator of student mastery.
- Where statewide assessments are not available, the course must be DPI staff-and/or peer-evaluated before posting.

Credit may not be awarded for school bus driving, office assistance, teacher assistance, or laboratory assistance.

High School Courses Taken in the Middle School Considerations Beyond Mathematics and Second Language

History

Current State Board of Education Policy HSP-M-001 adopted by the State Board of Education in May, 2007

- Beginning in the 2007-08 school year, students who pass mathematics or foreign language courses during grade 6-8 that are described in the *North Carolina Standard Course of Study* for grades 9-12 must achieve level III or IV on an EOC, if available, to meet that high school graduation requirement. High school mathematics and foreign language courses taken in grades 6-8 which do not have an EOC shall use high school course codes and shall be aligned to the *North Carolina Standard Course of Study* for grades 9-12. The courses will count toward graduation requirements, but the students' GPA will be computed with courses taken during the high school years.
 - Students are strongly encouraged to complete at least one unit of mathematics credit in their final year of high school.
-

Issues with Existing Policy

Timeline of Policy

- May 2007 Policy adopted for implementation School Year, 2007-08
 - Communication to Field—May 2007 & beyond
 - Registration for School Year 2007-08 had already occurred
 - Development of course codes to support policy
 - (May- September) Discussions on best way to code mathematics and second language course to support policy
 - Communications sent to field September 2007
 - After registration had occurred
-

Guiding Principles for High School Courses taken at Middle School

The following principles should be considered in allowing/offering high school courses to be taken in middle school:

- **Access and Equity** - Acceleration provides a cumulative educational advantage. Numerous studies have shown that opportunities for accelerated and rigorous courses have been inequitably distributed in the past. Districts should establish a coherent plan, extending across grade levels, which would enable a higher proportion of students to benefit from accelerated study. By treating all middle school students as potential participants they would expose all students to the documented benefits of a rigorous and challenging curriculum. LEAs accelerating students in any discipline should be required to review their policies and practices to be sure that they are promoting equity in access to these courses and that there are opportunities to enter advanced courses even for students who may not have been accelerated in the earlier grades.
-

High School Courses Taken in the Middle School Considerations Beyond Mathematics and Second Language

A further equity consideration is to ensure that middle schools offering high school courses have the resources to ensure that the courses are substantially equivalent to the same courses offered at the high school. This includes facilities, materials, participation in district wide common assessments, and teacher opportunities for professional development. Middle school teachers should plan with high school teachers of the same courses to ensure equitable opportunities to learn and appropriate preparation for advanced courses are offered to both groups of students.

- **Teacher Preparation** - Teachers of high school courses at the middle school should be licensed and fully qualified to teach the high school course.
- **Balanced Middle School Curriculum** - Research studies have shown that middle school students benefit from a balanced curriculum including adequate time for all disciplines while testing incentives have led to overemphasis on the tested subjects. It is important to accomplish acceleration by accelerating and compacting the middle school curriculum rather than omitting subjects or topics which will be needed later.
- **Rigor** – When making decisions to accelerate students in middle school the LEA should plan across schools and grade levels to ensure the rigor of the high school program throughout and including the final year. Numerous studies show the importance of rigor in the final year of high school to be an important factor in college success.

Rationale

SCIENCE

Rigorous high school science courses particularly Chemistry, Physics and AP Sciences are associated with readiness for and success in college level work in several recent studies (ACT, 2007; Adelman, 2006). Yet, many North Carolina students do not take these courses.

The intent of adopting a policy to allow high school science courses to be taken at the middle school should be to increase enrollment in physics, chemistry and other advanced science courses. Currently, three science courses are required for graduation and many students do not have room in their schedules to pursue more science. Others have not had their interest in science encouraged. Depending on how a new policy allowing high school science in middle school is written and implemented it could have a strong impact on future enrollments in higher level science in high school and beyond. Allowing some high school courses to be taken for high school credit at middle school while continuing to require three science courses in high school will be most likely to produce the stronger globally competitive scientific literacy that is needed in the 21st century.

High School Courses Taken in the Middle School Considerations Beyond Mathematics and Second Language

Current Programs

In North Carolina there are relatively few middle grades students taking high school level science courses compared to the numbers taking Algebra, but these courses are offered to some middle school students.

A small number of magnet middle schools offer Earth/Environmental Science to their higher performing 8th grade students. There are also eighth grade students taking physical science, a small group taking biology, and approximately 45 sixth, seventh, and eighth grade students taking chemistry.

Considerations for Implementation

Many of our middle schools have abandoned the balanced curriculum concept, opting instead to devote more instructional time to the tested areas of mathematics and reading. However, with end-of-grade science tests becoming operational in 2007-08, there will be pressure to increase focus on science. The principals who have been proactive in this effort should see reasonably acceptable achievement results from the first years of science testing. Those who have not dedicated sufficient instructional time to science may see lower science scores and ultimately devote more time and resources to this area. Without a strong preparation in elementary and middle school science, the majority of students will lack the background knowledge and experiences to be as successful as they could be in rigorous high school science courses.

Safeguards should be considered in four areas to ensure the quality and integrity of any high school courses offered in middle school. These are teacher preparation, laboratory facilities, instructional time and student assignment.

- **Teacher Preparation**—Teachers of high school science courses at the middle school should have the same license requirements and opportunities for further professional development in their content as those teaching the course at the high schools. Middle school science teachers should plan with the high school teachers of the same courses to ensure equitable opportunities to learn and appropriate preparation for advanced science courses are offered to both groups of students.
 - **Laboratory Facilities**—A laboratory component requires adequate facilities to engage students in appropriate activities. This component is embedded in the goals and objectives of the North Carolina Standard Course of Study and a laboratory science course is part of the minimum entrance requirement for the University of North Carolina. Laboratory experiences are also required to prepare students for success in AP and IB science courses. Though a middle school science room does not necessarily have to mirror a high school lab, a safe learning environment
-

High School Courses Taken in the Middle School Considerations Beyond Mathematics and Second Language

should be provided with the proper equipment, including technology, to enable middle school students to complete the same or similar laboratory investigations as would be completed by high school students in the same course.

- **Instructional Time**—High school courses offered in middle school should be held to the same standards as those offered at the high school. There should also be evidence that all students are given adequate opportunities to learn the Standard Course of Study for grade 6 – 8 in order to provide a solid foundation for students when they enroll in high school science courses.
 - **Student assignment**—Student assignment to advanced courses is often done haphazardly and reflects teacher and community cultural biases rather than best practices. Often perceived home environment is used as a proxy for achievement and those from wealthier families are more likely to be placed in accelerated courses than others with the same achievement scores. (Stone and Tuba, 1999; Stone, 1998) Middle schools accelerating students in any discipline should be required to review their policies and practices to be sure they are promoting equity in access to these courses.
-

Recommendations Recommendations for offering High School Science Courses in Middle School:

- 1) Teachers should be licensed and fully qualified to teach the high school course.
- 2) High school science courses should be in addition to, not in place of, the middle school standard course of study in science which may however be compacted. The middle school students will still need to be fully prepared for the 8th grade end-of-grade science test required by NCLB.
- 3) The course may be used to meet a particular high school science course requirement (such as the requirement for a biology course).
- 4) Encourage 3 credits in science to be taken during the high school years including chemistry, physics, and other advanced courses.
- 5) Courses should meet the same assessment and time requirements as required for credit in high school courses. (i.e. EOCs, 135 hours, and local requirements such as common assessments, benchmark testing.)
- 6) Laboratory facilities should meet safety requirements and state and national guidelines for laboratory equipment and expendables to allow the same opportunities for laboratory work as the high school laboratories in the LEA.
- 7) High school courses should be open to all middle school students, not just a selected group.

High School Courses Taken in the Middle School Considerations Beyond Mathematics and Second Language

References

- ACT (2007). Rigor at risk: Reaffirming quality in the high school curriculum. [Electronic Version]. Retrieved October 1, 2007 from http://www.act.org/path/policy/pdf/rigor_report.pdf
- Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. [Electronic Version]. U.S. Department of Education. Retrieved October 1, 2007 from: <http://www.ed.gov/rschstat/research/pubs/toolboxrevisit/toolbox.pdf>
- Stone, C. (1998). Leveling the playing field: An urban school system examines equity in access to mathematics curriculum [Electronic Version]. *Urban Review*, 30, 295-307. Retrieved September 10, 2007 from <http://www.springerlink.com/content/n6280183714v15j6/>.
- Stone, C. B., & Turba, R. (1999). School counselors using technology for advocacy [Electronic Version]. *Journal of Technology in Counseling*, 1. Retrieved September 10, 2007 from http://jtc.colstate.edu/vol1_1/advocacy.htm.

EXECUTIVE SUMMARY

Title: More at Four Progress Report to the North Carolina General Assembly

Type of Executive Summary:

- Action
- Action on First Reading
- Discussion
- Information

Policy Implications:

- Constitution _____
- General Statute # _____
- SBE Policy # _____
- SBE Policy Amendment
- SBE Policy (New)
- APA # _____
- APA Amendment
- APA (New)
- Other House Bill 1473, Section 7.24 (c)

Presenter(s): Mr. John Pruette (Executive Director, Office of School Readiness)

Description:

SECTION 7.24.(c) of House Bill 1473 requires the Department of Public Instruction to submit an annual report on the status of the state-funded pre-kindergarten program "More at Four" to the Joint Legislative Commission on Governmental Operations, the Joint Legislative Education Oversight Committee, the Senate Appropriations Committee on Education, the House of Representatives Appropriations Subcommittee on Education, and the Fiscal Research Division. The report is due by February 1, 2008.

Resources:

State

Input Process:

Information collected from the More at Four Reporting System (MAFPLAN and MAFKIDS) and the annual external evaluation of the More at Four Program conducted by the Frank Porter Graham Child Development Institute were used to complete this report.

Stakeholders:

Early care and education system (public and private), K-12 public education system, State of North Carolina

Timeline For Action:

N/A

Recommendations:

N/A

Audiovisual equipment requested for the presentation:

- Data Projector/Video (Videotape/DVD and/or Computer Data, Internet, Presentations-PowerPoint preferred)
Specify: _____
- Audio Requirements (computer or other, except for PA system which is provided)
Specify: _____
- Document Camera (for transparencies or paper documents – white paper preferred)

Motion By: _____

Seconded By: _____

Vote: Yes _____ No _____

Abstain _____

Approved _____ Disapproved _____ Postponed _____ Revised _____

*Person responsible for SBE agenda materials and SBE policy updates: Jamie Woodlief, 919-981-5300



Public Schools of North Carolina
State Board of Education
Department of Public Instruction

Report to the Joint Legislative Education Oversight Committee

More at Four
Pre-Kindergarten Program

*Session Law 2007-323 and Section
7.24*

(House Bill 1473)

Date Due: February 1, 2008

Report #: 35

DPI Chronological Schedule, 2006-2007

STATE BOARD OF EDUCATION

HOWARD N. LEE
Chairman :: Raleigh

SHIRLEY E. HARRIS
Troy

JOHN A. TATE III
Charlotte

WAYNE MCDEVITT
Vice Chair :: Asheville

MELISSA E. BARTLETT
Raleigh

PATRICIA N. WILLOUGHBY
Raleigh

EULADA WATT
Charlotte

ROBERT "TOM" SPEED
Boone

BEVERLY PERDUE
Lieutenant Governor :: New Bern

KEVIN HOWELL
Raleigh

KATHY A. TAFT
Greenville

RICHARD MOORE
State Treasurer :: Kittrell

NC DEPARTMENT OF PUBLIC INSTRUCTION

June St. Clair Atkinson, Ed.D., State Superintendent
301 N. Wilmington Street :: Raleigh, North Carolina 27601-2825

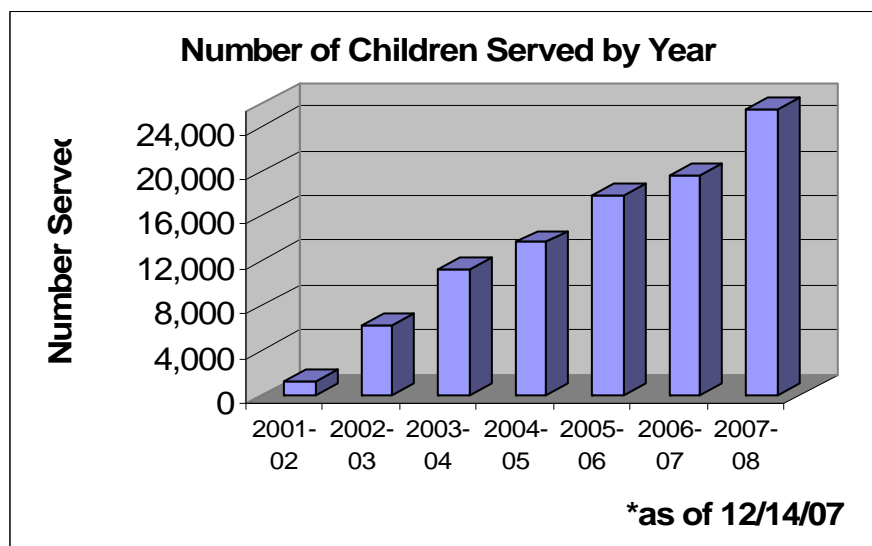
In compliance with federal law, NC Public Schools administers all state-operated educational programs, employment activities and admissions without discrimination because of race, religion, national or ethnic origin, color, age, military service, disability, or gender, except where exemption is appropriate and allowed by law.

Visit us on the Web:: www.ncpublicschools.org

Pre-kindergarten for North Carolina's at-risk four-year-olds

More at Four is North Carolina's state-funded pre-kindergarten program to prepare at-risk four-year-olds for success in school. Pre-kindergarten is a research-proven strategy for school readiness. Without this opportunity, the young children served by More at Four would enter kindergarten less prepared for school success and lagging behind their peers.

More at Four has served 25,445 children in SFY 2007-08, as of December 16, 2007. The program is available in all 100 counties. Children served have factors that put them at risk of school failure, with family income as the primary risk factor, and will be entering kindergarten the following year.



More at Four's goal is to first reach those at-risk four-year-olds who are unserved. Among the children served in SFY 2007-08, as of December 14, 88 percent were unserved when enrolled and almost 60 percent had never been served in any preschool or child care setting.

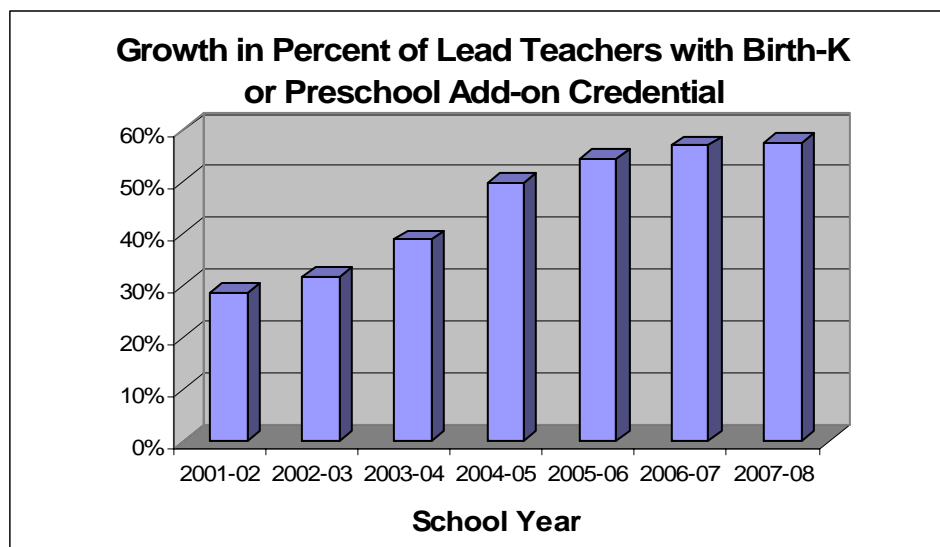
Children's language, literacy, math and social skills are improving substantially

The More at Four Year 6 Report conducted by FPG Child Development Institute and published January, 2008, examined children's growth over time from the beginning of the More at Four pre-k program through the end of kindergarten for two cohorts of children (2003-04 MAF children and 2005-06 MAF children). The results indicated that children exhibited substantial developmental growth throughout this time period across all skill areas - language/literacy, math, general cognitive knowledge, and social skills. The evaluation reports that its "findings are consistent with a number of other large-scale studies that have found that pre-k participation was associated with sustained gains in language/literacy, math and social skills as well as greater gains for children at greater risk." (Peisner-Feinberg and Schaaf, 2008)

A commitment to high quality

More at Four is recognized as one of two highest-quality state pre-kindergarten programs nationally by the National Institute for Early Education Research (NIEER), by meeting ten of ten pre-k quality benchmarks. More at Four's high-quality program standards include licensed teachers with specialized training and ongoing professional development, small class size, staff-to-child ratio, research-based and comprehensive curricula and a focus on the whole child and family.

Over 57.8 percent of More at Four lead teachers now hold a Birth-Kindergarten (B-K) license, Preschool Add-on license or provisional B-K license, as standards require, up from 28.6 percent in 2002-03. Furthermore, 81.6 percent hold at least a bachelor's degree. Teachers not meeting the standard are required to work toward licensure and are supported as they further their education. More at Four provides funding to the T.E.A.C.H. Early Childhood® Project to provide scholarships for teachers and teacher assistants, as well as to support health insurance costs for some teachers.



The North Carolina Office of School Readiness (OSR) continues to provide extensive, ongoing professional development and technical assistance for local More at Four programs to promote ongoing quality improvement. In 2006-07, the Teacher Licensure Unit was created to offer comprehensive support to teachers in the private sector working to obtain a Birth-Kindergarten teaching license. Currently, in excess of 200 private child care teachers are enrolled in OSR's Beginning Teacher Support Program, ensuring rigorous teacher licensure requirements are being met regardless of program setting.

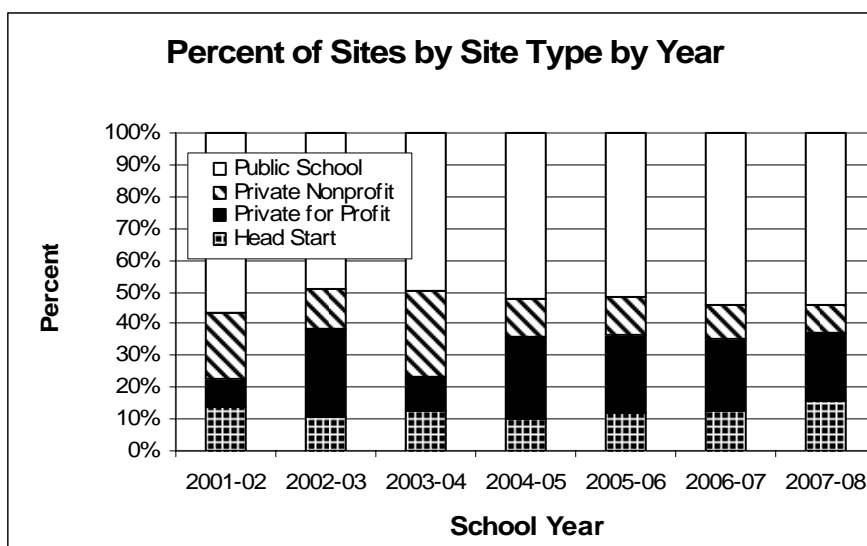
Professional development workshops available throughout the 2007-08 year cover the following topics: curricula, developmental screening, inquiry-based science, outdoor learning, and *Foundations: Early Learning Standards for North Carolina Preschoolers*. Also this year, over 1,200 More at Four teachers and administrators attended the NCaeyc/OSR-More at Four 2007

Annual Study Conference. In addition to numerous workshops, this conference provided a pre-conference session for More at Four teachers that focused in-depth on intentional instruction in the early childhood classroom.

Collaboration for school readiness

More at Four fosters coordination and collaboration within North Carolina’s early care and education system. Communities develop collaborative plans for implementing More at Four classrooms locally, with shared leadership from Smart Start and the public schools and broad representation from early childhood service providers. At the state and local levels, More at Four works closely with Smart Start, the public schools, Head Start, licensed child care providers, the Division of Child Development, services for children with disabilities ages birth to five, and other relevant programs to create a more coordinated system of early care and education services.

Local communities implement More at Four pre-kindergarten classrooms in a variety of sites, including public schools, licensed for-profit and nonprofit child care centers, and Head Start programs, according to locally determined needs and resources.



The NC Office of School Readiness

The North Carolina Office of School Readiness (OSR) provides funding, policy development and planning, standards, professional development and technical assistance to support the provision of high-quality pre-kindergarten and preschool programs locally and to better coordinate and integrate all state and federally-funded preschool programs. The OSR supports preschool programs in both public schools and licensed child care centers.

Created in 2005 and placed administratively in the Department of Public Instruction effective July 1, 2006, the OSR has become an integral part of North Carolina's education system reflecting the understanding that early childhood programs must have integral relationships with and transitions to public schools. It advances our vision for North Carolina around school readiness - where all children are ready for success in school and all schools are ready for all children.

More at Four financial information

Over 95 percent of state appropriations for More at Four support classroom operations. The average state operating cost per slot is \$4,450 per year, about half the cost of high-quality pre-k. At the local level, communities contribute other resources to support the full cost of serving children in a high-quality program (these resources are typically underreported, especially in-kind resources.) State funds also help enhance teacher quality, through scholarships and professional development.

Table I. More at Four Budget for SFY 2007-08, as of December 16, 2007¹

Budget Category	Budgeted Amount	% of Total
Classroom Start-Up (one-time allocation)	6,501,329	4.6 %
Classroom Operations	127,062,935	90.3 %
Subtotal - Classroom Funds	133,564,264	94.9%
T.E.A.C.H.® Scholarships	1,938,000	1.5%
Professional Development	1,294,743	.9%
External Evaluation and Database	916,665	.6%
Administrative Costs	2,922,037	2.1%
Transferred to Subsidy ²	--	--
Total Budget	140,635,709	100 %

Table II. Estimated Other Resources Supporting More at Four at the Local Level Projected for SFY 2006-07, as reported as of December 16, 2007³

Type of Funds	Projected Amount	% of Total
Smart Start ⁴	\$14,449,754	27%

¹ Actual expenditures are unknown until the end of the state fiscal year.

² Legislation requires that any funds for slots unfilled by Jan. 31 shall be transferred to child care subsidy.

³ Actual expenditures of other resources accessed at the local level are unknown until the end of the state fiscal year. These resources are typically underreported, especially in-kind resources.

⁴ Other resources accessed from Smart Start in SFY 2006-07 represent the budgeted amounts as reported by More at Four contractors. Smart Start budgeted contributions may also be reported under subsidy.

Pre-School Disabilities	\$3,418,178	7%
Subsidy	\$2,982,060	6%
Head Start	\$9,656,071	18%
Title I	\$7,974,956	15%
City/County Appropriations	\$9,233,156	17%
Other	\$5,139,827	10%
Total	\$ 52,854,002	100 %

A smart investment for progress in education

More at Four has grown over six years to serve more children every year and is effectively reaching its target at-risk population. By providing a nationally recognized high-quality program, More at Four is enabling these at-risk children to achieve significant growth over the school year in language and literacy skills, math skills, general knowledge and behavioral skills — skills that prepare them to do well in kindergarten. These children would enter kindergarten at a significant disadvantage compared to their peers without this opportunity.

Our state's commitment to high-quality pre-kindergarten also benefits children beyond those who are funded by More at Four. With 1,830 classrooms across the state, the reach is wide. The programs that participate in More at Four, whether public schools, licensed child care or Head Start, commit to high standards and ongoing quality improvement, and over 21 percent of children served in those classrooms are funded by sources other than More at Four.

Furthermore, progress continues in the effort to expand high-quality pre-kindergarten opportunities through the creation and implementation of common *North Carolina Pre-Kindergarten Program Standards* across settings and auspices. These standards are modeled on the More at Four standards and support the implementation of *Foundations: Early Learning Standards for North Carolina Preschoolers*. The Office of School Readiness and the Division of Child Development have partnered to implement a process to provide special state recognition to classrooms serving four-year-olds that meet the state standards, regardless of funding sources supporting those classrooms. Scheduled to be piloted in spring of 2008, the recognition will be available to programs for four-year-olds in all early childhood education settings - including public schools, Head Start and child care. The recognition will help spotlight high-quality pre-k throughout the state and provide important information for families and communities.

With over six years of investment in a state-funded pre-kindergarten program for at-risk four-year-olds, the program is proving successful. Yet, significant challenges remain for the program's future. Foremost among those challenges is a sustainable system of funding. While the state provides about half of the full cost of a high-quality pre-kindergarten program, local communities continue to face increasing funding challenges as the program expands and as local

resources available to support the full cost of the program are increasingly stretched. Legislative changes for SFY 2007-08, including a 10% per slot funding increase and special provision language allowing counties with "a documented lack of available resources" to appeal to the Office of School Readiness for a higher reimbursement rate have proved beneficial to program growth. However, long-term sustainability of the program will likely require additional or alternate funding strategies.

2003-07 More at Four Evaluation Highlights

The most recent evaluation of the program (published January, 2008) describes findings on the quality of the program and the longitudinal outcomes for two separate cohorts of children over the pre-k and kindergarten years. Specifically, this evaluation identifies:

- Key characteristics of the local More at Four programs and to what extent they have changed over time,
- The quality of the More at Four pre-k and kindergarten programs attended by children, and
- The longitudinal outcomes from pre-k through kindergarten for children who attended More at Four.

Characteristics and Population Served

The evaluation findings for the More at Four Pre-K Program for 2003-07 show that even as the program has grown substantially each year, it has maintained the provision of services in accord with the program guidelines. Moreover, the program has continued to serve the target population, high-risk and unserved children who are likely to benefit from such an intervention.

Outcomes

Children served have exhibited significant growth from pre-k through kindergarten in multiple skill areas. These findings are consistent with other large-scale studies that have found pre-k participation to be associated with sustained gains as well as greater gains for children at greater risk.

- Skill areas include language and literacy (receptive language, rhyming, story and print concepts, naming letters), math measures (applied problems, counting task), general knowledge measures (color knowledge, social awareness), and the social skills measure.
- The most at-risk students continue to make the most gains. However, the gap in skills, while narrowing, is not closed.
- For Spanish speaking children, growth occurred for skills assessed in both English and Spanish.
- The quality of pre-kindergarten classrooms was significantly higher than kindergarten classrooms for the each cohort served. Yet, children exhibited continued growth throughout the kindergarten year suggesting that the pre-k experience prepared these at-risk children for school success.

In sum, "these findings suggest that experiences such as those provided in the More at Four Program may offer an important and ameliorative experience for children who otherwise may not have such opportunities in the pre-k year" (Peisner-Feinberg and Schaaf, 2008).

Other Resources Accessed by Contractor

More at Four Program, FY 2007-08 (as of 12/14/07)			Sources of Other Resources						
Contractor	# of Slots	# of Children Served	Subsidy	Title I	Smart Start	Preschool Disabilities	Local Apprpr	Head Start	Other
Alamance-Burlington School System	386	305	X	X	X	X		X	
Alexander County Partnership for Children	109	43	X		X	X		X	X
Alleghany County Schools	58	59		X	X	X			X
Anson County Partnership for Children	180	168		X	X				
Ashe County School System	146	149	X	X		X	X	X	
Avery County Public Schools	104	91		X		X			X
Beaufort/Hyde Partnership for Children	135	141			X				X
Bertie County Schools	172	106		X	X				X
Bladen County Schools	292	267		X			X		X
Brunswick County Partnership for Children	395	302	X	X	X	X	X		X
Buncombe County Partnership for Children	288	304	X	X	X	X		X	
Burke County Partnership for Children	452	468	X		X	X			X
Cabarrus County Partnership for Children	410	424			X		X		X
Caldwell County Smart Start	126	116			X		X	X	X
NE Community Development Corp. (Camden)	36	38			X				X
Carteret County Schools	135	136		X				X	
Caswell County Schools	83	75		X			X		X
Catawba County Partnership for Children	241	242		X	X	X	X		X
Chatham County Partnership for Children	253	206		X	X				X
Edenton-Chowan Board of Education	45	46					X		
Cleveland County Partnership for Children	505	552		X	X	X		X	
Columbus County Schools	399	299				X	X		X
Craven County Board of Education	154	144		X	X		X	X	X
Cumberland County Partnership for Children	2,093	1,445			X		X	X	X
Currituck County Schools	34	35							X
Dare County Schools	90	37		X			X		
Davidson County Partnership for Children	369	372		X		X	X		X
Davie County Schools	159	172		X		X		X	X
Duplin County Schools	157	163		X	X	X		X	X
Durham Partnership for Children	388	362		X	X			X	
Smart Start of Forsyth County	560	582		X	X			X	
Franklin/Granville/Vance Partnership	90	56			X				X
Gaston County Schools	860	848	X		X		X		X
Gates County Board of Education	46	37	X			X			X
Granville County Schools	150	91			X		X		X
Guilford County Partnership for Children, Inc.	1,918	1,930		X	X			X	
Halifax Warren SmartStart Partnership for Children	319	317		X	X				X

More at Four Program, FY 2007-08 (as of 12/14/07)									
Contractor	# of Slots	# of Children Served	Subsidy	Title I	Smart Start	Preschool Disabilities	Local Approprr	Head Start	Other
Harnett County Partnership for Children	268	244			X				
Henderson County Partnership for Children	144	152	X		X			X	X
Hertford County Public Schools	117	113		X		X		X	X
Hoke County Schools	252	192		X	X		X		
Hyde County Schools	36	36				X			X
Iredell County Partnership for Young Children	249	260	X		X				
Partnership for Children of Johnston County	421	435			X				X
Jones County Partnership for Children	74	75		X	X	X			
Lee County Partnership for Children	304	257		X	X	X	X		
Lenoir-Greene Partnership for Children	333	340			X				
Partnership for Children of Lincoln & Gaston Co.	221	209							X
Community Action Opportunities (Madison Co.)	40	40						X	X
Martin County Schools	73	74		X		X			
McDowell County Schools	185	163	X	X	X	X	X	X	X
Charlotte-Mecklenburg Schools	1,706	1,809			X				X
Intermountain Children (Mitchell County)	53	67							X
Montgomery County Partnership for Children	240	234	X		X				X
Moore County Schools	47	48			X				
Down East Partnership for Children (Nash/Edgecombe)	532	549	X	X	X		X		X
New Hanover County Schools	594	624		X	X	X	X	X	X
Northampton County Schools	144	134		X	X	X		X	
Onslow County Schools	664	54		X		X		X	X
Orange County Partnership for Young Children	161	162	X		X			X	
Pamlico County Schools	57	58				X	X		X
Elizabeth City-Pasquotank Public Schools	107	107		X					
Pender County Schools	125	130		X	X			X	
Perquimans County Schools	45	45		X		X			X
Person County Partnership for Children	109	114		X	X			X	
Pitt County Public Schools	403	325		X					
Polk County Schools	100	105		X			X	X	
Randolph County Partnership for Children	316	281			X		X		
Region A Partnership for Children (Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain Counties)	510	476	X	X	X	X	X	X	X
Richmond County Schools	241	248			X	X	X	X	
Public Schools of Robeson County	781	669	X	X	X	X	X	X	X
Rockingham Co. Partnership for Children, Inc.	284	294			X		X		
Rowan Partnership for Children	248	237			X				X
Rutherford County Schools	291	277						X	X

More at Four Program, FY 2007-08 (as of 12/14/07)			Sources of Other Resources						
Contractor	# of Slots	# of Children Served	Subsidy	Title I	Smart Start	Preschool Disabilities	Local Appropr	Head Start	Other
Sampson County Partnership for Children	371	398			X		X		
Scotland County Schools	180	213		X			X		X
Stanly County School System	297	242		X		X	X		
Stokes Partnership for Children, Inc.	255	237		X		X	X	X	X
Surry County Early Childhood Partnership, Inc.	264	281	X	X	X	X	X	X	X
Transylvania County Schools	60	62		X			X	X	
Tyrrell County Schools	18	18			X	X	X		
Union County Public Schools	467	408	X				X		X
Vance County Schools	114	92		X	X	X	X		
Wake County SmartStart	970	1,008			X				
Washington County Schools	100	102		X		X	X		X
Watauga County Schools	106	112	X	X	X	X	X		X
The Partnership for Children of Wayne County, Inc.	630	635	X		X		X	X	X
Wilkes County Schools	512	530		X	X	X		X	X
Wilson County Partnership for Children	216	134	X		X				X
Yadkin County Schools	158	161			X			X	X
Region D Child Care, Inc. (Yancey County)	52	47	X						
TOTAL	27,582	25,445	22	50	59	37	39	35	55

SECTION 7.24.(c) The Department of Public Instruction shall submit a report by February 1, 2008, to the Joint Legislative Commission on Governmental Operations, the Joint Legislative Education Oversight Committee, the Senate Appropriations Committee on Education, the House of Representatives Appropriations Subcommittee on Education, and the Fiscal Research Division. This final report shall include the following:

- (1) The number of children participating in the program.
- (2) The number of children participating in the program who have never been served in other early education programs, such as child care, public or private preschool, Head Start, Early Head Start, or early intervention programs.
- (3) The expected expenditures for the programs and the source of the local match for each grantee.
- (4) The location of program sites and the corresponding number of children participating in the program at each site.
- (5) A comprehensive cost analysis of the program, including the cost per child served by the program.
- (6) The status of the NC Prekindergarten initiatives as outlined in this section.

Note: The numbers in this report are reflective of the More at Four Program as of December, 16, 2007. Due to ongoing expansion activities, numbers will change dramatically before the February 1, 2008 due date. Therefore, an updated version will be submitted to the board in mid-January.