

North Carolina Curriculum Matrix Summary

Introduction

The Curriculum Matrix data in this resource kit is provided as a guide to help educators in planning curriculum and instruction. All interpretations of state standards, Common Core [State Standards](#), and state assessment program data that were needed to construct the correlations in this Matrix were conducted by content area specialists in each discipline and reviewed by research managers. Where and if necessary, interpretations of the learning statements used in the correlations were verified by third-party reviewers and/or officials of the state's department of education. Every effort has been made to ensure the accuracy of the crosswalk and summary data. However, some learning outcome statements are, by their nature, subject to interpretation and determination of intent by content area specialists. Educators should always exercise their own best judgment in determining how to apply the data.

Care was taken to ensure that all data used in the analyses was current at the time of publication, but all standards and assessment data remain subject to updates as states revise or update their state standards or assessment programs. The International Center welcomes your feedback, advice, and suggestions about the data provided. The Center also eagerly encourages users to help us keep the data current for all educators in their state by advising us of any such updates. Please address all comments to: International Center for Leadership in Education, 1587 Route 146, Rexford, NY 12148 or info@LeaderEd.com.

North Carolina Testing Program

The North Carolina End-of-Grade (EOG) Tests are designed to measure student performance on the goals, objectives, and grade-level competencies as specified in the North Carolina Standard Course of Study. The North Carolina End-of-Course (EOC) Tests are used to sample a student's knowledge of subject-related concepts as specified in the North Carolina Standard Course of Study.

Curriculum Matrix Priority Designations

English Language Arts

English language arts (ELA) students take EOG tests in reading comprehension in grades 3-8. Secondary English language arts students take the EOC test upon the completion of English I.

Testing Priority Designation

Information necessary to make ELA priority designations relative to assessments was obtained from the North Carolina Department of Public Instruction (NCDPI) website. The North Carolina EOG and EOC *Test Information Sheets* provided the number of test items per instructional goal on the state assessment. The test items per instructional goal at each grade level and English I course were averaged. Standard deviations (STD) were calculated for each grade level and course and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Objectives that were not tested were assigned a Low (L) priority designation. The results can be found in Table 1.

Table 1. English Language Arts Priority Designation Data

Grade/ Course	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
3	15.83	12.18	3.66	0	1-4	>4
4	16.42	11.33	5.09	0	1-5	>5
5	16.50	10.51	5.99	0	1-6	>6
6	5.62*	2.65	2.97	0	1-3	>3
7	5.46	2.63	2.83	0	1-3	>3
8	6.04	3.73	2.31	0	1-2	>22
English I	7.20*	4.40	2.80	0	1-3	>3

*Outliers were not used in this calculation.

The ELA summary data is presented in Table 2.

Table 2. English Language Arts Assessment Data Summary

English Language Arts			EOC/EOG			NESS ¹		
Grade/Course	Competency Goals	Objectives	H	M	L	H 1-19	M 20-38	L 39-50
3	3	38	14	6	18	30	7	1
4	3	40	15	6	19	33	5	2
5	3	40	17	5	18	29	10	1
6	6	16	14	2	0	13	3	0
7	6	16	14	2	0	12	4	0
8	6	16	14	2	0	14	2	0
English I	6	18	11	5	3	15	4	0
Totals	33	184	99	28	58	146	35	4

Mathematics

Mathematics students take EOG tests in grades 3-8. Secondary mathematics students who take Algebra I and Algebra II are required to take the EOC test upon the completion of each course.

Priority Designations

Information necessary to make mathematics priority designations relative to assessments was obtained from the North Carolina Department of Public Instruction (NCDPI) website. The North Carolina EOG and EOC *Test Information Sheets* provided the number of test items per instructional goal on the state assessment. The test items per instructional goal at each grade level and test-eligible course were averaged. Standard deviations (STD) were calculated for each grade level and course and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Objectives that were not tested were assigned a Low (L) priority designation. The results can be found in Table 3.

Table 3. Mathematics Priority Designation Data

Grade/Course	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
3	12.51*	3.50	9.01	0	1-9	>9
4	12.71*	9.43	9.00	0	1-9	>9
5	16.15	5.15	11.00	0	1-11	>11
6	15.17	4.02	11.15	0	1-11	>11
7	17.79	4.23	13.56	0	1-14	>14
8	16.15	8.34	7.81	0	1-8	>8
Algebra I	21.70	2.76	13.94	0	1-14	>14
Algebra II	40.40	17.60	22.80	0	1-23	>23

*Outliers were not used in this calculation.

The mathematics summary data is presented in Table 4.

Table 4. Mathematics Assessment Data Summary

Mathematics			EOC/EOG			NESS ¹		
Grade/ Course	Competency Goals	Objectives	H	M	L	H 1-16	M 17-42	L 43-70
3	5	17	10	5	2	11	5	1
4	5	17	8	4	5	13	3	1
5	5	15	10	5	0	10	4	1
6	5	23	17	6	0	16	6	1
7	5	17	15	2	0	13	4	0
8	5	14	7	7	0	8	4	2
Algebra I	4	12	6	4	2	2	5	5
Algebra II	2	15	10	5	0	1	12	2
Geometry	3	9	4	3	2	6	1	2
Totals	39	139	87	41	11	80	44	15

Science

Science students take EOG tests in grades 5 and 8. Secondary science students who take biology and physical science are required to take the EOC test on the completion of each course.

Testing Priority Designations

Information necessary to make science priority designations relative to assessments was obtained from the North Carolina Department of Public Instruction (NCDPI) website. The North Carolina EOG and EOC *Test Information Sheets* provided the number of test items per instructional goal on the state assessment. The test items per instructional goal at each grade level and test eligible course were averaged. Standard deviations (STD) were calculated for each grade level and course and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Objectives that were not tested were assigned a Low (L) priority designation. The results can be found in Table 5.

Table 5. Science Priority Designation Data

Grade/Course	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
5	22.10	1.21	20.89	0	1-21	>21
8	16.16	6.96	9.20	0	1-9	>9
Biology I	22.56	4.45	18.11	0	1-18	>18
Physical Science	15.20	4.66	10.54	0	1-11	>11

The science summary data is presented in Table 6.

Table 6. Science Assessment Data Summary

Grade/Course	Science		EOG/EOG			NESS ¹		
	Competency Goals	Objectives	H	M	L	H 1-32	M 33-50	L 51-85
5	4	27	14	13	0	16	5	6
8	7	46	32	9	5	39	5	2
Biology	5	23	20	3	0	15	3	5
Physical Science	6	23	21	2	0	9	7	7
Totals	22	119	87	27	5	79	20	20

Total Percentages for EOG/EOC Tested English Language Arts, Mathematics, and Science

Table 7 presents the number of objectives compared to the number of objectives assessed. Using this data, the percentage of objectives assessed was calculated.

Table 7. Totals and Percentages for English Language Arts, Mathematics, and Science

	Number of Objectives	Number of Objectives Tested	Percent of Objectives Tested
English LA	184	127	69.03
Mathematics	139	128	92.09
Science	119	114	95.80
TOTALS	443	369	83.30

Common Core State Standards (CCSS) to EOG/EOC Alignment Data

International Center content area specialists crosswalked English language arts and mathematics CCSS to the North Carolina English language arts and mathematics objectives. The purpose of this study was to determine the number and percent of the CCSS that are aligned/non-aligned to the objectives. The same process was also used to determine the number and percent of the objectives that are aligned/non-aligned to the CCSS.

The results that follow provide North Carolina teachers, curriculum planners, and administrators with information relevant to the status of the North Carolina Standard Course of Study compared to the CCSS. Considerations the North Carolina Department of Public Instruction will make include whether to adjust the current curriculum to align with the CCSS or abandon the current curriculum and replace it with the CCSS. The information in the following alignment tables may assist North Carolina education stakeholders during this time of decision making.