

# Minnesota 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](mailto:info@LeaderEd.com).

## Minnesota State Testing Program

The Minnesota Comprehensive Assessments (MCAs) are the state tests that assist school districts in measuring student progress in the achievement of Minnesota's academic standards. The MCAs are also used to measure Adequate Yearly Progress (AYP) required for *No Child Left Behind*.

## English Language Arts

The *Minnesota K-12 Academic Standards in Language Arts – 2005* represent the content that has been identified as essential for all students to know and be included on the state assessment. English language arts students are assessed in grades 3-8 and high school on the MCA-II. The 2010 *Minnesota K-12 Academic Standards - English Language Arts* are now available. The new standards must be implemented by Minnesota public schools no later than the 2012-13 school year.

## Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Minnesota Department of Education's website. The *MCA-II Test Specifications for Reading* identified the test-eligible benchmarks and provided the number of test items for each benchmark. The English language arts priority designations for the assessments were determined by calculating the average number of assessment items per benchmark at each grade level. Standard deviations (STDs) were calculated for each grade level and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Benchmarks that were not tested were assigned a Low (L) priority designation. The results for the calculated priority designations can be found in Table 1.

**Table 1. English Language Arts Priority Designation Data**

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
3	6.11	1.97	4.14	0	1- 4	>4
4	7.00	2.65	4.35	0	1- 4	>4

**Table 1. English Language Arts Priority Designation Data** (Continued from page 1)

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
5	6.33	1.76	4.57	0	1- 5	>5
6	5.70	1.73	3.97	0	1-4	>4
7	5.45	2.19	3.27	0	1- 3	>3
8	7.13	3.22	3.91	0	1-4	>4
10	9.29	4.80	4.48	0	1-4	>4

English language arts summary data are presented in Table 2.

**Table 2. English Language Arts Assessment Data Summary**

Grade	Standards	Benchmarks	NESS <sup>i</sup>			MCA-II		
			H 1-19	M 20-38	L 39-50	H	M	L
3	11	47	34	9	4	8	4	35
4	11	50	35	11	4	14	1	35
5	11	53	37	12	4	12	2	39
6	11	56	37	14	5	10	2	44
7	11	60	41	14	5	8	4	48
8	10	64	43	17	4	9	3	52
9-12	9	74	51	21	2	24	2	48
Totals	74	404	278	98	28	85	18	301

## Mathematics

The *Minnesota K-12 Academic Standards in Mathematics – 2007 Revision* represents the content that has been identified as essential for all students to know and be included on the state assessment. The *Minnesota Comprehensive Assessment Series III* (MCA-III) are used for grades 3-8 and the *Minnesota Comprehensive Assessment Series II* (MCA-II) are used for grades 9-11.

### Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Minnesota Department of Education website. The *MCA-II Test Specifications for Mathematics, Grades 3-8* identified the test-eligible benchmarks and provided the number of test items for each. The *MCA-II Test Specifications for Grade 11 Mathematics* identified the test-eligible sub-standards and provided the number of test items for each. Mathematics priority designations for grades 3-8 were determined by calculating the average number of assessment items per benchmark at each grade level (sub-standards were used for grade 11). Standard deviations (STDs) were calculated for each grade level and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Because all the mathematics standards are eligible for assessment, there were no Low (L) designations assigned. The results for the calculated priority designations can be found in Table 3.

**Table 3. Mathematics Priority Designation Data**

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
3	6.11	1.97	4.14	0	1- 4	>4
4	7.00	2.65	4.35	0	1- 4	>4

**Table 3. Mathematics Priority Designation Data (Continued from page 2)**

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
5	6.33	1.76	4.57	0	1- 5	>5
6	5.70	1.73	3.97	0	1- 4	>4
7	5.45	2.19	3.27	0	1- 3	>3
8	7.13	3.22	3.91	0	1- 4	>4
9-11	9.29	4.80	4.48	0	1- 4	>4

Mathematics summary data are presented in Table 4.

**Table 4. Mathematics Assessment Data Summary**

Grade	Standards	Benchmarks	NESS <sup>1</sup>			MCA-III (Gr. 3-8) MCA-II (Gr. 9-11)		
			H 1-16	M 17-42	L 43-70	H	M	L
3	9	26	17	9	0	20	6	0
4	9	30	15	11	4	26	4	0
5	9	28	17	10	1	25	3	0
6	10	33	26	7	0	30	3	0
7	11	34	25	8	1	31	3	0
8	8	35	12	20	3	35	0	0
9-11	11	71	30	29	12	59	12	0
<b>Totals</b>	67	257	142	94	21	220	37	0

## Science

The *K-12 Minnesota Academic Standards in Science, 4/24/07* represent the standards and benchmarks that have been identified as essential for all students to know and be included on the state assessment, the *Minnesota Comprehensive Assessment Series II (MCA-II)* for grades K-12.

### Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Minnesota Department of Education website. Science priority designations for the assessments were determined by calculating the average number of items per benchmark at each grade. Standard deviations (STDs) were calculated for each grade level and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Standards that were not tested or were listed with an “NA” were given a Low (L). The results for the calculated priority designations can be found in Table 5.

**Table 5. Science Priority Designation Data**

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
3-5	2.31	0.50	1.81 = 2	0	1-2	>2
6-8	2.24	0.42	1.80 = 2	0	1-2	>2
9-12	2.31	0.90	1.41 = 2	0	1-2	>2

Science summary data are presented in Table 6.

**Table 6. Science Assessment Data Summary**

Grade	Standards	Benchmarks	NESS <sup>1</sup>			MCA-II		
			H 1-32	M 33-50	L 51- 85	H	M	L
<b>Grade 3</b>	8	18	9	5	4	6	11	1
<b>Grade 4</b>	11	27	17	5	5	10	13	4
<b>Grade 5</b>	7	19	11	3	5	3	13	3
<b>Grade 6</b>	8	31	22	4	5	8	22	1
<b>Grade 7</b>	11	43	26	10	7	5	34	4
<b>Grade 8</b>	10	29	14	7	8	10	16	3
<b>Grades 9-12</b>	21	97	65	15	17	16	26	55
<b>Totals</b>	76	264	164	49	51	58	135	71

### Totals for English Language Arts, Mathematics, and Science

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

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

	Benchmarks	Benchmarks Tested	% of Benchmarks Tested
<b>English Language Arts</b>	404	92	23.00
<b>Mathematics</b>	257	257	100.00
<b>Science</b>	264	193	73.00
<b>Totals</b>	925	542	59.00