

North Dakota Curriculum Matrix Summary

North Dakota State Assessment

The North Dakota State Assessments (NDSA) are criterion referenced tests administered to students in grades 3-8 and 11 in English language arts and mathematics. The assessments benchmarks are aligned to the state content standards.

English Language Arts

The English language arts curriculum includes the following components: Content Standard, topic, grade-level benchmark expectation, and achievement standard. The state content standards panoptically delineate the basis upon which local school districts define their curriculum. Each school district chooses the teaching methods, strategies, and instructional materials appropriate to advance the English language arts curriculum.

Priority Designation

Information necessary to make priority designations with respect to assessment was obtained from the North Dakota State Department of Education. The North Dakota Department of Education Web page can be accessed at www.dpi.state.nd.us. Each blueprint revealed the level of representation given on the test. The 2005 test blueprints for English language arts were aligned with the content standard benchmarks.

The English Language Arts priority designations for the North Dakota State Assessment Test were determined by first calculating the mean for the number of items tested (4.3). Secondly, the standard deviation (3.4) was returned and subtracted from the mean (resulting in .9). This number, one standard deviation below the mean, was rounded to the nearest whole (1) and became the discriminator between Medium (M) and High (H) priorities. Benchmarks that were not tested were given a Low (L) designation. Benchmarks with one test item were given an M priority designation. Benchmarks aligned with more than one test item were given an H priority designation. The English Language Arts summary data are presented in Table 1 below.

Table 1. North Dakota English Language Arts NDSA Data Summary

English Language Arts			NDSA			*Curriculum Survey		
	Standards	Benchmarks	H	M	L	H 1-35	M 36-70	L 71+
Grade 3	6	48	30	8	10	37	9	2
Grade 4	6	51	29	1	21	32	16	3
Grade 5	6	51	31	3	17	33	15	3
Grade 6	6	41	22	1	18	26	8	7
Grade 7	6	45	19	1	25	25	15	5
Grade 8	6	48	18	1	29	27	13	8
English 11	6	36	13	3	20	23	8	5
Totals	42	320	162	18	140	203	84	33

Mathematics

The *North Dakota Mathematics Content and Achievement Standards* provides a framework for the mathematical skills and knowledge that students in Grades K-12 are expected to attain. These content standards offer local school districts the core in the mathematics fundamentals and a guide for developing the district level curriculum. *The North Dakota Mathematics Content and Achievement Standards* reference the National Council of Teachers of Mathematics', *Principles and Standards for School Mathematics* as well as standards from other states.

Priority Designations

Information necessary to make priority designations with respect to assessment was obtained from the North Dakota State Department of Education. The North Dakota Department of Education Web page can be accessed at www.dpi.state.nd.us. Each blueprint revealed the level of representation given on the North Dakota State Assessment Test. The 2005 test blueprints for mathematics were aligned with the content standard benchmarks.

The mathematics priority designations for the North Dakota State Assessment Test were determined by first calculating the mean for the number of items tested (1.9). Secondly, the standard deviation (1.2) was returned and subtracted from the mean (resulting in .7). This number, one standard deviation below the mean, was rounded to the nearest whole (1) and became the discriminator between Medium (M) and High (H) priorities. Benchmarks that were not tested were given a Low (L) designation. Benchmarks with one test item were given an M priority designation. Benchmarks aligned with more than one test item were given an H priority designation. The mathematics summary data are presented in Table 2 below.

Table 2. North Dakota Mathematics NDSA Data Summary

Mathematics			NDSA			*Curriculum Survey		
	Standards	Benchmarks	H	M	L	H 1-35	M 36-70	L 71+
Grade 3	5	48	12	15	21	44	3	1
Grade 4	5	42	15	9	18	39	3	0
Grade 5	5	50	9	3	38	46	4	0
Grade 6	5	38	11	4	23	37	1	0
Grade 7	5	38	11	4	23	35	3	0
Grade 8	5	33	15	7	11	32	1	0
Grade 9-10	5	57	24	16	17	46	10	1
Grade 11-12	5	19	Not Assessed			9	9	1
Totals	40	325	97	58	151	288	34	3

Science

The *North Dakota Science Content and Achievement Standards* specify what skills and knowledge all students in Grades K-12 are expected to attain. These content standards offer local school districts the core in the science fundamentals and a guide for developing the district level curriculum. *The North Dakota Science Content and Achievement Standards* are based on the National Science Education Standards and reference Project 2061, the National Science Teachers Association's Pathways guides, and standards from other states.

Priority Designations

State testing of the North Dakota Science Content and Achievement Standards does not begin until the Fall of 2006. No test data were available so priority designations could not be determined for the North Dakota State Assessment in science at this time. This document will be revised on an annual basis and these designations will be calculated for reference to the state testing program when the science test data become available. The science summary data are presented in Table 3 below.

Table 3. North Dakota Science NDSA Data Summary

Science			NDSA			*Curriculum Survey		
	Standards	Benchmarks	H	M	L	H 1-35	M 36-70	L 71+
Grade 3	8	21	Science testing begins in the Fall of 2006			12	5	4
Grade 4	8	27				17	6	4
Grade 5	8	23				16	5	2
Grade 6	8	26				18	5	3
Grade 7	8	24				19	5	0
Grade 8	8	24				11	10	3
Grade 9-10	8	41				24	6	11
Grades 11-12	8	40				24	5	11
Totals	64	226				141	47	38

**North Dakota Curriculum Matrix Summary
Totals for NDSA Tested English Language Arts,
Mathematics and Science**

Table 4 below summarizes the data for English language arts, mathematics, and science assessed by the NDSA.

Table 4. Totals for All NDSA Tested Grade Levels in English Language Arts, Mathematics, and Science.

North Dakota State Assessment			NDSA 2005			*Curriculum Survey		
	Standards	Benchmarks	H	M	L	H 1-35	M 36-70	L 71+
English Language Arts	42	320	162	18	140	203	84	33
Mathematics	40	325	97	58	151	288	34	3
Science	64	226	Testing in the Fall of 2006			141	47	38
Grand Totals	146	871	259	74	291	632	165	74

*Curriculum Survey in the preceding charts refers to the International Center for Leadership in Education's *Survey of Essential Skills*, a forced-ranking by approximately 20,000 adults of the 100 proficiencies deemed most important for high school graduates in each of English, math, and science. Proficiencies ranked 1-35 in each subject were assigned a High (H) rating. Items ranked 36-70 were assigned a Medium (M) rating; and proficiencies ranked 71+ were assigned a Low (L) rating. A complete description of the *Survey of Essential Skills* is provided elsewhere in this resource kit.

**North Dakota Curriculum Matrix Summary
Total Percentages for NDSA Tested
English Language Arts, Mathematics and Science**

Table 5 below presents the number of NDSA benchmarks compared to the number of benchmarks tested. Using this data, the percentages of NDSA benchmarks tested were calculated.

Table 5. Total Percentages for All NDSA Tested Grade Levels in English Language Arts, Mathematics, and Science.

	# Of Content Standard Benchmarks	# Of Content Standard Benchmarks Tested	% Of Content Standard Benchmarks Tested
English LA	320	180	57%
Mathematics	325	155	48%
Science	226	NA	NA
Totals	867	302	48%*

*This percentage does not include the science standards and benchmarks.

Information Sources

The North Dakota Department of Education
www.dpi.state.nd.us
 Content Standards
www.dpi.state.nd.us/standard/content.shtm
 Standards-based Assessments
www.dpi.state.nd.us/standard/asments/index.shtm

