

Oregon Curriculum Matrix Summary

Oregon Student Assessment

Oregon’s content standards define what all students should know and be able to do. Statewide assessments are administered at grades 3-8 and high school in reading/writing and mathematics, and grades 5, 8, and high school in science. The Oregon Assessment of Knowledge and Skills (OAKS) is designed to show student progress toward meeting those standards.

Oregon Reading and Writing Assessments

The OAKS in reading and writing is administered yearly in grades 3-8 and grade 10. Ninth grade students may also take the test. Students in grades 11 and 12 who failed the test must retake the test to graduate.

Testing Priority Designation

Information necessary to make priority designations relative to reading and writing assessments was obtained from the Oregon Department of Education website. The reading assessment links within this site provided the number of reading assessment items per Score Reporting Category (SRC) for each grade level. The SRCs are aligned to the reading content standards and denoted in the reading and writing matrices. The number of reading assessment items for each SRC at each grade level was averaged. Standard deviations (STDs) were calculated for each grade level and subtracted from the mean. This number established the cut-off point between Medium (M) reading priority designations and High (H) reading priority designations. Reading content standards that were not tested were assigned a Low (L) priority designation. The reading priority designation results can be found in Table 1.

Assessed writing content standards are measured using a six-point scale rather than the number of assessment items per SRC. Therefore, the method used for determining writing priority designations was to compare the number of writing content standards under each core standard to the number of writing content standards eligible for assessment. This comparison revealed that in all grade levels except the third, either all the writing content standards under a core standard were eligible for assessment or all the content standards under a core standard were not eligible for assessment, which meant that there were no deviations. Using STDs as a method for determining writing priority designations in this situation was not appropriate. Therefore, all writing content standards eligible for state assessment were assigned a High (H) priority designation with the exception of one core standard in the third grade (Writing: Communicate supported ideas across the subject areas.). Sixty percent (compared to 100% or 0%) of these content standards under this core standard are eligible for assessment (three of five standards). In this situation, the content standards within this particular core standard were assigned a Medium (M) priority designation. The writing content standards that were not eligible for assessment were assigned a Low (L) priority designation.

Table 1. Reading Designation Data

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
3	10.75	1.94	8.81	0	1-8	>8
4	10.10	1.99	8.11	0	1-8	>8
5	9.67	2.18	7.48	0	1-7	>7
6	9.25	1.25	8.00	0	1-8	>8
7	9.25	1.25	8.00	0	1-8	>8
8	9.10	1.15	7.95	0	1-8	>8
High School	8.92	1.15	7.77	0	1-8	>8

ELA summary data are presented in Table 2.

Table 2. ELA Assessment Data Summary

Reading and Writing				OAKS			NESS*		
Grade	Content Area	Core Standards	Content Standards	H	M	L	H 1-19	M 20-38	L 39-50
3	3	25	89	27	6	56	72	12	5
4	3	28	85	32	3	50	68	11	6
5	3	28	93	30	8	55	68	20	5
6	3	28	91	44	2	45	63	22	6
7	3	28	89	40	2	47	66	19	4
8	3	28	93	39	1	53	67	24	2
9-12	3	28	109	43	2	64	74	30	5
Totals	21	193	649	255	24	370	478	138	33

Mathematics

Three mathematics core standards provide the major concepts that are the primary focus of teaching and learning in grades 3-8. Each of these core standards contains three to nine content standards, which provide the details necessary for assessment. The 2009 high school mathematics standards include three disciplines of mathematics – algebra, geometry and measurement, and statistics and probability. Within each strand there are two or three core standards.

Testing Priority Designation

Information necessary to make priority designations relative to mathematics assessments was obtained from the Oregon Department of Education website. The mathematics assessment link within this site provided the maximum number of Knowledge and Skill (SK) assessment items per SRC at each grade level. The number of mathematics SK assessment items per SRC at each grade level grade level was averaged. 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. Strands 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	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
3	12.00	1.73	10.27	0	1-10	>10
4	12.00	0.00	12.00	0	1-11	>11
5	12.00	0.00	12.00	0	1-11	>11
6	11.80	1.77	10.03	0	1-10	>10
7	12.00	3.00	9.00	0	1-9	>9
8	12.00	3.00	9.00	0	1-9	>9
HS	2009 test data not yet available					

Mathematics summary data are presented in Table 4.

Table 4. Mathematics Assessment Data Summary

Mathematics			OAKS			NESS*		
Grade	Standards	Learning Objectives	H	M	L	H 1-16	M 17-42	L 43-70
3	3	21	14	0	7	12	9	0
4	3	19	16	0	3	15	4	0
5	3	22	19	0	3	15	7	0
6	3	19	16	0	3	18	1	0
7	3	17	3	14	0	13	4	0
8	3	20	17	0	3	9	11	0
HS	8	39	Data not yet available			17	19	3
Totals	26	157	85	14	19	99	55	3

Science

All students in grades 5 and 8 are required to take the science assessment. All questions contained in the science assessment are aligned with three SRCs: physical science, life science, and earth and space science.

Testing Priority Designation

Information necessary to make priority designations relative to science assessments was obtained from the Oregon Department of Education website. The science assessment link within this site provided the maximum number of SK assessment items per SRC at each grade level. The number of test eligible content standards per SRC was determined. This data was averaged. 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. Strands 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	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
5	1.66	0.41	1.26	0	1	>1
8	3.66	1.08	2.59	0	1-3	>3
9-10	7.00	0.71	6.29	0	1-6	>6

Science summary data are presented in Table 6.

Table 6. Science Assessment Data Summary

Science			OAKS			NESS*		
Grade	Standards	Learning Objectives	H	M	L	H 1-32	M 33-50	L 51-85
5	4	11	4	1	6	6	3	2
8	4	18	9	2	7	11	2	5
High School	4	32	16	5	11	20	8	4
Totals	12	61	29	8	24	37	13	11

Totals for English Language Arts, Mathematics, and Science

Table 7 presents the total number of content standards compared to the number of content standards tested. Using this data, the percentage of content standards tested was calculated for each discipline and the totals were combined for all three disciplines.

Table 7. Totals and Percentages for Reading/Writing, Mathematics, and Science

	# Grade Level Content Standards	# of Grade Level Content Standards Tested	% of Grade Level Content Standards Tested
Reading/Writing	649	279	43
Mathematics	157	99	63
Science	61	37	61
TOTAL	867	415	48

References

Oregon Department of Education

<http://www.ode.state.or.us/>

English Language Arts

Curriculum and Instruction - <http://www.ode.state.or.us/search/page/?id=1617>

Standards - <http://www.ode.state.or.us/search/page/?id=1613>

Assessment - <http://www.ode.state.or.us/search/page/?id=1614>

Mathematics

Curriculum and Instruction - <http://www.ode.state.or.us/search/page/?id=1360>

Standards - <http://www.ode.state.or.us/search/page/?id=1527>

Assessment - <http://www.ode.state.or.us/search/results/?id=239>

Science

Curriculum and Instruction - <http://www.ode.state.or.us/search/page/?id=1583>

Standards - <http://www.ode.state.or.us/search/page/?id=1577>

Assessment - <http://www.ode.state.or.us/search/results/?id=240>

Standards and Assessment

<http://www.ode.state.or.us/search/page/?id=232>

Assessment Blueprints

<http://www.ode.state.or.us/search/page/?id=496>

***NESS (National Essential Skills Study)** in the preceding subject summary charts refers to the *International Center for Leadership in Education's* 2007-08 national survey, a forced-ranking by approximately 13,000 adults of the proficiencies deemed most important for high school graduates in each of English Language Arts, Math, and Science.

- English Language Arts proficiencies ranked 1-19 were assigned a High (H) rating; items ranked 20-38 were assigned a Medium (M) rating; and items ranked 39-50 were assigned a Low (L) rating.
- Math proficiencies ranked 1-16 were assigned a High (H) rating; items ranked 17-42 were assigned a Medium (M) rating; and items ranked 43-70 were assigned a Low (L) rating.
- Science proficiencies ranked 1-32 were assigned a High (H) rating; items marked 33-50 were assigned a Medium (M) rating; and items ranked 51-85 were assigned a Low (L) rating.

Where English Language Arts, Math, and Science proficiencies overlapped across indicators in other subjects (for example an English Language Arts proficiency within a Science indicator), the rating of H, M, or L was designated to the proficiency in the subject of focus. A complete description of the *National Essential Skills Study* is provided elsewhere in this resource kit.

