

Ohio 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.

Ohio Achievement Tests (OAT) and Ohio Graduation Tests (OGT)

Ohio Achievement Tests are required assessments that measure students on what they know and are able to do in mathematics, reading, writing, science, and social studies.

The Ohio Graduation Tests are aligned to Ohio's Academic Content Standards in reading, writing, mathematics, science, and social studies that students in high school must take to demonstrate proficiency before graduation from high school.

Curriculum Matrix Priority Designations

English Language Arts

The Ohio Reading Achievement Tests assess the following standards: Reading Process, Reading Application – Informational, Technical, and Persuasive Text, Reading Application - Literary Text, and Acquisition of Vocabulary. These standards are tested in grades 3-8. Writing Application, Writing Process, and Writing Conventions are standards tested in grades 4-7 on the Ohio Writing Achievement Test. The OGT assesses all of the above standards.

Testing Priority Designation

Information necessary to make ELA priority designations relative to assessments was obtained from the Ohio Department of Education's website. The OAT and OGT blueprints provided the number of test score points per standard eligible for state assessment. The score points per standard at each grade level were averaged. Standard deviations (STD) 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. Learning indicators 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	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
3	12.36	2.20	10.16	0	1-10	>10
4 - Reading	11.75	2.22	9.53	0	1-10	>10
4 - Writing	13.00	1.22	11.72	0	1-12	>12
5	12.00	2.22	9.78	0	1-10	>10
6	12.88	2.51	10.37	0	1-10	>10
7 - Reading	12.25	2.31	9.94	0	1-10	>10
7 - Writing	13.67	3.84	9.77	0	1-10	>10
8	12.63	2.48	10.15	0	1-10	>10
High School - Reading	13.25	2.69	10.56	0	1-11	>11
High School - Writing	16.00	4.90	11.10	0	1-11	>11

English language arts summary data are presented in Table 2.

Table 2. English Language Arts Assessment Data Summary

Grade	Standards	Indicators	OAT/OGT			NESS ¹		
			H	M	L	H 1-19	M 20-38	L 39-50
3	8	91	21	8	62	76	12	3
4	8	84	36	29	19	68	13	3
5	8	85	26	8	51	67	15	3
6	8	82	23	8	51	65	16	1
7	8	81	43	25	13	66	14	1
8	8	79	22	6	51	63	15	1
9	8	76	58	6	12	58	16	2
10	8	76	59	5	12	57	17	2
Totals	64	654	288	95	271	520	118	16

Mathematics

The following mathematics standards are assessed on the OAT and OGT: Number, Number Sense and Operations; Measurement, Geometry and Spatial Sense; Patterns, Functions, and Algebra; and Data Analysis and Probability.

Testing Priority Designation

Information necessary to make mathematics priority designations relative to assessments was obtained from the Ohio Department of Education’s website. The OAT and OGT blueprints provided the number of test score points per standard eligible for state assessment. The score points per standard at each grade level were averaged. Standard deviations (STD) 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. Learning indicators 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	10.60	2.01	8.59	0	1-9	>9
4	10.60	2.09	8.51	0	1-9	>9
5	10.60	2.01	8.59	0	1-9	>9
6	10.10	2.11	7.99	0	1-8	>8
7	10.20	0.55	9.65	0	1-10	>10
8	9.20	0.80	8.40	0	1-8	>8
High School	8.90	0.89	8.01	0	1-8	>8

Mathematics summary data are presented in Table 4.

Table 4. Mathematics Assessment Data Summary

Grade	Standards	Indicators	OAT/OGT			NESS ¹		
			H	M	L	H 1-16	M 17-42	L 43-70
3	6	45	45	0	0	29	14	2
4	6	47	41	4	2	30	15	2
5	6	45	44	0	1	32	12	1
6	6	43	36	6	1	28	14	1
7	6	46	26	16	4	28	14	4
8	6	51	41	10	0	25	22	4
9	6	38	30	8	0	16	17	5
10	6	39	22	11	6	16	20	3
Totals	48	354	285	55	14	204	128	22

Science

The following science standards are assessed on the OAT and OGT: Science and Technology, Scientific Inquiry, Scientific Ways of Knowing, Earth and Space Science, Life Sciences, and Physical Sciences.

Testing Priority Designation

Information necessary to make science priority designations relative to assessments was obtained from the Ohio Department of Education's website. The Ohio Achievement Test and OGT blueprints provided the number of test score points per standard eligible for state assessment. The score points per standard at each grade level grade were averaged. Standard deviations (STD) 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. Learning indicators that were not tested were assigned a Low (L) priority designation. The results can be found in Table 5 below.

Table 5. Science Priority Designation Data

Grade	Mean	STD	Mean - STD	Designations		
				L = Low	M = Medium	H = High
4 - 5	8.17	3.63	4.54	0	1-5	>5
6 - 8	8.00	3.82	4.15	0	1-4	>4
High School	8.00	3.70	4.30	0	1-4	>4

Science summary data are presented in Table 6.

Table 6. Science Assessment Data Summary

Science			OAT/OGT			NESS ¹		
Grade	Standards	Indicators	H	M	L	H 1-32	M 33-50	L 51-85
4	6	33	26	7	0	22	6	5
5	6	34	25	9	0	22	5	7
6	6	33	23	8	2	25	4	4
8	6	35	29	4	2	15	5	15
9	6	53	33	13	7	28	9	16
10	6	49	34	14	1	33	13	3
Totals	36	237	170	55	12	145	42	50

**Total Percentages for OAT/OGT Tested
English Language Arts, Mathematics, and Science**

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

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

	# of Indicators Assessed	# of Indicators	% of Indicators Assessed
English Language Arts	383	694	55.19
Mathematics	340	354	96.05
Science	225	237	94.94
TOTAL	948	1,285	73.78

Common Core State Standards (CCSS) to OAT/OGT Alignment Data

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

The results that follow provide Ohio teachers, curriculum planners, and administrators with information relevant to the status of the Ohio standards and learning indicators compared to the CCSS. Considerations the Ohio Department of Education 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 Ohio education stakeholders during this time of decision making.

The following scale served as a guide to determine the indicators to CCSS alignment:

- 1** = A word-for-word alignment (rarely possible)
- 2** = Not a word-for-word alignment, but the Depth of Knowledge (DOK) and skills described in each standard have *the same meaning* (used most often)
- 3** = Not a word-for-word alignment, but the DOK and skills described have *essentially the same meaning* (somewhat a stretch for an alignment; justification may be arguable)