

California 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.

English Language Arts

The California content standards for English language arts (ELA) include standards and benchmarks in grades 2-11 assessed by the Standardized Testing and Reporting (STAR) program for the California standards tests, and the California High School Exit Exam (CAHSEE). All students are required to pass the CAHSEE to receive a high school diploma.

Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the California State Department of Education website. Test blueprints at this site reveal the level of representation given on the test to each STAR and CAHSEE standard and benchmark. The ELA priority designations for the STAR program and CAHSEE were determined by averaging the number of test items per standard at each grade level. 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. Benchmarks 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
2	2.17	0.64	1.53	0	1-2	>2
3	2.00	0.86	1.14	0	1	>1
4	2.30	1.47	0.84	0	1	>1
5	2.88	1.37	1.52	0	1-2	>2
6	2.44	1.42	1.02	0	1	>1
7	2.68	1.00	1.68	0	1-2	>2
8	2.78	1.03	1.75	0	1-2	>2
9	2.17	1.18	0.99	0	1	>1
10	2.21	1.18	1.03	0	1	>1
11	2.89	1.43	1.46	0	1	>1
CAHSEE	1.95	11.64	0.31	0	1	>1

English language arts summary data is presented in Table 2.

Table 2. English Language Arts Assessment Data Summary

English Language Arts			NESS*			STAR		
Grade	Standards	Benchmarks	H 1-19	M 20-38	L 39-50	H	M	L
2	8	47	34	9	4	10	20	17
3	8	51	37	9	5	23	9	19
4	8	53	35	13	5	22	9	22
5	8	43	26	12	5	15	11	17
6	8	51	30	16	5	22	8	21
7	8	46	28	14	4	19	9	18
8	8	49	32	14	3	15	12	22
9	8	63	36	22	5	24	10	29
10	8	63	36	21	6	24	10	29
11	8	55	34	17	4	23	3	29
CAHSEE	6	45	23	20	2	25	3	17
Totals	86	566	351	167	48	222	104	240

Mathematics

The California content standards for mathematics include standards and benchmarks in grades 2-12 assessed by the Standardized Testing and Reporting (STAR) program for the California standards tests and CAHSEE. All students are required to pass the CAHSEE to receive a high school diploma.

Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the California State Department of Education website. Blueprints for each criterion-referenced test can be accessed at this site. Each blueprint reveals the level of representation given on the test to each STAR and CAHSEE standard and benchmark. The mathematics priority designations for the STAR program and CAHSEE were determined by averaging the number of test items per standard at each grade level. 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. Benchmarks 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
1	2.32	1.03	1.29	0	1	>1
3	1.81	1.18	0.63	0	1	>1
4	1.51	1.15	0.36	0	1	>1
5	2.41	1.89	0.52	0	1	>1
6	2.03	1.92	0.11	0	1	>1
7	1.62	1.51	0.11	0	1	>1
Grade 7 General Math Standards Test	1.68	1.02	0.66	0	1	>1
Algebra I	2.24	1.65	0.59	0	1	>1
Algebra II	2.31	1.40	0.91	0	1	>1
Geometry	3.00	1.56	1.46	0	1	>1
HS Summative Math Standards Test	1.46	0.72	0.76	0	1	>1
Integrated I	2.30	1.61	0.99	0	1	>1
Integrated II	2.25	1.37	0.88	0	1	>1
Integrated III	2.60	1.57	1.03	0	1	>1
CAHSEE	1.50	0.66	0.84	0	1	>1

Mathematics summary data are presented in Table 4.

Table 4. Mathematics Assessment Data Summary

Mathematics		NESS ¹			STAR		
Grade/Course	Standards & Benchmarks	H 1-16	M 17-42	L 43-70	H	M	L
2	35	23	11	1	20	8	7
3	49	38	11	0	15	21	13
4	55	38	15	2	19	24	12
5	38	27	10	1	14	13	11
6	50	40	10	0	12	20	18
7	55	36	16	3	13	27	15
7 General Math Standards Test	41	28	11	2	16	18	7
Algebra I	29	16	7	6	17	12	0
Algebra II	29	7	14	8	21	7	1
Geometry	22	15	6	1	18	4	0
HS Summative Math Standards Test	45	18	16	11	18	27	0
Integrated I	28	18	8	2	18	7	3
Integrated II	32	15	13	4	18	11	3
Integrated III	26	7	10	9	20	6	0
CAHSEE	98	58	29	11	22	31	45
Totals	632	384	187	61	261	236	135

Science

The California content standards for science include standards and benchmarks in grades 4-12 assessed by the Standardized Testing and Reporting (STAR) program for the California standards tests.

Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the California State Department of Education website. Blueprints for each criterion-referenced test can be accessed at this site. Each blueprint reveals the level of representation given on the test to each STAR and CAHSEE standard and benchmark. The science priority designations for the STAR program and CAHSEE were determined by averaging the number of test items per standard at each grade level. 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. Benchmarks 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
4	1.03	0.51	0.52	0	<1	>1
5	0.91	0.48	0.43	0	<1	>1
8	0.91	0.49	0.43	0	<1	>1
Life Science Standards Test	1.11	0.46	0.65	0	<1	>1
Biology/Life Sciences	0.75	0.50	0.25	0	<1	>1
Chemistry	1.01	0.68	0.33	0	<1	>1

Table 5. (Continued from page 3)

Grade/Course	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
Earth Science	1.12	0.58	0.55	0	<1	>1
Physics	1.25	0.67	0.58	0	<1	>1
Integrated Science 1	1.07	0.52	0.55	0	<1	>1
Integrated Science 2	1.08	0.58	0.50	0	<1	>1
Integrated Science 3	1.11	0.69	0.42	0	<1	>1
Integrated Science 4	1.03	0.65	0.38	0	<1	>1

Science summary data is presented in Table 6.

Table 6. Science Assessment Data Summary

Science			NESS ¹			STAR		
Grade/Course	Standards	Benchmarks	H 1-32	M 33-50	L 51-85	H	M	L
4	6	25	16	3	6	19	6	0
5	6	38	28	5	5	25	12	1
8	9	46	31	1	14	39	7	0
10 Life Science Standards Test	20	54	35	16	3	45	9	0
High School Biology/Life Sciences	11	81	49	20	12	47	17	17
High School Chemistry	12	87	31	11	45	35	25	27
High School Earth Sciences	10	60	17	17	26	35	14	11
High School Physics	6	63	23	25	15	34	14	15
Integrated Science 1	13	62	19	25	18	40	14	8
Integrated Science 2	14	70	34	15	21	37	20	13
Integrated Science 3	18	76	39	13	24	38	16	22
Integrated Science 4	18	83	31	24	28	34	22	27
Totals	143	745	353	175	217	428	176	141

Totals for English Language Arts, Mathematics, and Science

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

Table 7. Total Percentage for All Tested Levels in English Language Arts, Mathematics, and Science

	# of Standards/ Benchmarks	# of Standards/ Benchmarks Tested	% Standards/ Benchmarks Tested
English LA	566	326	57.60
Mathematics	632	497	78.64
Science	745	604	81.08
Total	1,943	1,427	73.45