

Arkansas 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.

Arkansas State Testing Program

Beginning with the 2007-08 school year, the state-mandated criterion-referenced testing was combined with norm-referenced testing, presently the Stanford Achievement Test, Tenth Edition (SAT-10), to form the Augmented Benchmark Examinations at grades 3-8.

The Augmented Benchmark Examinations include the CRT component, which focuses on measuring student performance on items specifically developed by Arkansas teachers and the Arkansas Department of Education that align with the Arkansas Mathematics and English Language Arts Curriculum Frameworks. Added to this is the NRT component, which focuses on rank ordering student performance based on national norms; it contains items in the subsections of reading comprehension, mathematics problem solving, and language.

Additionally, in grades 5 and 7, the Augmented Benchmark Examinations contain a science portion, which includes CRT items that align specifically to the Arkansas Science Curriculum Frameworks and NRT items in science.

Curriculum Matrix Priority Designations

English Language Arts

The Arkansas *English Language Arts Curriculum Framework* (revised for grades 3-8, and revised and amended for grades 9-12) represents the content that has been identified as essential for all students to know and will be included on the state assessment.

Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Arkansas Department of Education website. It provided the number of test items for each content standard and identified each test-eligible Student Learning Expectation (SLE). The number of test items per content standard at each grade level/course was averaged. Standard deviations (STD) were calculated for each grade level/course and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. SLEs 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	2.00	1.55*	0.45	0	1	>1
4	2.60	1.63*	0.97	0	1	>1
5	2.75	0.83*	1.92	0	1-2	>2
6	2.40	1.50*	0.90	0	1	>1
7	3.25	1.64*	1.61	0	1-2	>2
8	3.40	2.58*	0.82	0	1	>1
11	11.00	2.00*	9.00	0	1-9	>9

*Outliers were not used in these calculations.

English Language Arts summary data is presented in Table 2.

Table 2. English Language Arts Assessment Data Summary

English Language Arts			NESS ¹			Benchmark Exams/ Literacy Exam		
Grade/ Course	Standards	Student Learning Expectations	H 1-19	M 20-38	L 39-50	H	M	L
3	12	134	94	31	9	13	3	118
4	12	130	90	26	14	18	2	110
5	12	117	85	25	7	18	4	95
6	12	117	81	28	8	20	2	95
7	12	118	83	26	9	19	4	95
8	12	118	78	30	10	19	2	97
11	12	103	53	35	15	15	4	84
Totals	84	837	564	201	72	122	21	694

Mathematics

The Arkansas *Mathematics Curriculum Framework* (revised and amended for Algebra I and Geometry) represents the content that has been identified as essential for all students to know and will be included on the state assessment.

Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Arkansas Department of Education website. It provided the number of test items for each content standard and identified each test-eligible Student Learning Expectation (SLE). The number of test items per content standard at each grade level/course was averaged. Standard deviations (STD) were calculated for each grade level/course and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. SLEs that are not tested were assigned a Low (L) priority designation. Algebra I and Geometry end-of-course tests had no variance in the number of test items per content standard. Therefore, each test-eligible SLE for these courses was assigned a High (H) 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
3	6.00	1.10	4.90	0	1-5	>5
4	6.00	1.10	4.90	0	1-5	>5
5	6.00	0.89	5.11	0	1-5	>5
6	6.00	0.89	5.11	0	1-5	>5
7	6.00	1.10	4.90	0	1-5	>5
8	6.00	1.41	4.59	0	1-5	>5
Algebra I	13.00	0.00	13.00	0	0	>1-13
Geometry	13.00	0.00	13.00	0	0	>1-13

Mathematics summary data is presented in Table 4.

Table 4. Mathematics Assessment Data Summary

Mathematics			NESS ¹			Benchmark Exams/ End-of-Course Exams		
Grade/ Course	Standards	Student Learning Expectations	H 1-16	M 17-42	L 43-70	H	M	L
3	17	59	36	21	2	17	10	32
4	17	56	38	16	2	18	11	27
5	17	49	29	18	2	20	11	18
6	17	50	32	15	3	17	9	24
7	17	57	32	22	3	19	10	28
8	17	52	32	16	4	17	9	26
Algebra 1	5	43	15	20	8	30	0	13
Geometry	5	34	20	12	2	27	0	7
Totals	112	400	234	140	26	165	60	175

Science

The Arkansas *Science Curriculum Framework* represents the content that has been identified as essential for all students to know and will be included on the state assessment.

Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Arkansas Department of Education website. It provided the number of test items for each content standard and identified the test-eligible Student Learning Expectations (SLE). The number of test items per content standard was averaged. Standard deviations (STD) were calculated for each grade level/course and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. SLEs that are 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
5	9.50	3.20	6.30	0	1-6	>6
7	9.75	3.96	5.79	0	1-6	>6
Biology	4.64	2.99	1.65	0	1-2	>2

Science summary data is presented in Table 6.

Table 6. Science Assessment Data Summary

Science			NESS ¹			Benchmark Exams/ End-of-Course Exams		
Grade/ Course	Standards	Student Learning Expectations	H 1-32	M 33-50	L 51-85	H	M	L
5	10	83	49	11	23	27	4	52
7	10	85	57	20	8	32	2	51
Biology	15	97	61	15	21	52	6	39
Totals	35	265	167	46	52	111	12	142

Totals for English Language Arts, Mathematics, and Science

Table 7 presents the number of SLEs compared to the number of student learning expectations tested. Using this data, the percentage of student learning expectations tested was calculated.

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

	Number of Student Learning Expectations	Number of Student Learning Expectations Tested	Percent of Student Learning Expectations Tested
English Language Arts	837	143	17.10%
Mathematics	400	226	56.5%
Science	265	125	47.0%
TOTALS	1,502	514	34.3%

Common Core State Standards (CCSS) to Content Standards/SLEs Alignment Data

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

The results that follow provide Arkansas teachers, curriculum planners, and administrators with information relevant to the status of the SLEs compared to the CCSS. Considerations the Arkansas 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 Arkansas education stakeholders during this time of decision making.

The following scale served as a guide to determine the SLE 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)
- 4 = Not a word-for-word alignment, but the DOK and/or skills described have *some similarity* (considered non-alignment)
- 5 = No alignment

CCSS to Arkansas English Language Arts Content Standards and SLEs Alignment Data

The English Language Arts (ELA) CCSS is divided into strands. A specific strand follows each CCSS strand of the College and Career Readiness Standards (CCRS). Numbered standards follow the CCRS in each strand. Therefore, the overall organization of the ELA CCSS is: strand, CCRS, and CCSS.