

Indiana Curriculum Matrix Summary

Indiana Statewide Testing for Educational Progress-Plus and End-of-Course Assessment

Indiana Statewide Testing for Educational Progress (ISTEP+) measures the academic performance of students in English language arts and mathematics in grades 3-8 and the End-of-Course Assessment (ECA) in English 10 and Algebra 1. ISTEP+ science assessment is given in grades 4 and 6. The ISTEP+ EAC is given in Biology 1.

English Language Arts

Information necessary to make priority designations relative to English Language Arts (ELA) assessments was obtained from the Indiana Department of Education website. The ELA ISTEP+ link provided a percent range of test items per reporting standard. The median of each range at each grade level was used to determine test priority designations. The median percentage of test items per standard was averaged. Standard deviations (STD) were calculated for each grade level or course and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Standards 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

	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
Grade 3	16.67	3.92	12.75	0	1-13	>13
Grade 4	16.67	3.92	12.75	0	1-13	>13
Grade 5	16.83	3.23	13.61	0	1-14	>14
Grade 6	16.67	3.19	13.47	0	1-13	>13
Grade 7	16.67	4.65	12.02	0	1-12	>12
Grade 8	15.00	4.90	10.10	0	1-10	>10
Grade 10	20.20	10.45	10.45	0	1-10	>10

Table 2 contains the summary of the priority designations at each grade level.

Table 2. Indiana ISTEP+/ECA English Language Arts Data Summary

English Language Arts			ISTEP+/ECA			NESS ¹		
Grade	Standards	Learning Expectations	H	M	L	H 1-19	M 20-38	L 39-50
Grade 3	7	68	40	8	20	48	13	7
Grade 4	7	65	34	7	24	35	25	5
Grade 5	7	61	32	5	24	37	17	7
Grade 6	7	64	35	6	23	31	26	7
Grade 7	7	61	34	10	17	32	26	3
Grade 8	7	62	24	17	21	31	29	2
Grade 10	7	67	35	4	28	46	15	6
Totals	49	448	234	57	157	260	151	37

Mathematics

Information necessary to make priority designations relative to mathematics assessments was obtained from the Indiana Department of Education website. The mathematics ISTEP+ link provided a percent range of test items per reporting standard. The median of each range at each grade level was used to determine test priority designations. The median percentage of test items per standard was averaged. Standard deviations (STD) were calculated for each grade level or course and subtracted from the mean. This number established

the cut-off point between Medium (M) priority designations and High (H) priority designations. Standards that were not tested were assigned a Low (L) priority designation. The mathematics priority designation results can be found in Table 3.

Table 3. Mathematics Priority Designation Data

	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
Grade 3	16.67	4.89	11.78	0	1-12	>12
Grade 4	15.00	2.74	12.26	0	1-12	>12
Grade 5	14.29	1.71	12.58	0	1-13	>13
Grade 6	14.29	2.16	12.13	0	1-12	>12
Grade 7	14.29	3.11	11.18	0	1-11	>11
Grade 8	14.29	3.26	11.03	0	1-11	>11
Algebra 1	20.00	2.89	17.11	0	1-17	>17

Table 4 contains the summary of the priority designations at each grade level.

Table 4. Indiana Mathematics ISTEP+/ECA Data Summary

	Mathematics		ISTEP+/ECA			NESS ¹		
	Standards	Learning Expectations	H	M	L	H 1-16	M 17-42	L 43-70
Grade 3	6	61	54	7	0	39	19	3
Grade 4	7	58	44	14	0	44	13	1
Grade 5	7	50	46	4	0	34	15	1
Grade 6	7	60	54	6	0	42	16	2
Grade 7	7	51	42	9	0	32	15	4
Grade 8	7	50	41	9	0	25	23	2
Algebra 1	9	54	37	9	8	19	26	9
Totals	56	384	318	58	8	235	127	22

Science

Information necessary to make priority designations relative to science assessments was obtained from the Indiana Department of Education website. The science ISTEP+ link provided a percent range of test items per reporting standard. The median of each range at each grade level was used to determine test priority designations. The median percentage of test items per standard was averaged. Standard deviations (STD) were calculated for each grade level or course and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Standards 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

	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
Grade 4	16.50	5.92	10.58	0	1-11	>11
Grade 6	16.833	5.77	11.10	0	1-11	>11
Biology 1	20.00	1.15	18.85	0	1-19	>19

Table 6 contains the summary of the priority designations at each grade level.

Table 6. Indiana ISTEP+/EAC Data Summary

Science			ISTEP+/ECA			NESS ¹		
	Standards	Learning Expectations	H	M	L	H 1-32	M 33-50	L 51-85
Grade 4	6	52	43	9	0	34	8	10
Grade 6	7	68	56	12	0	38	18	12
Biology 1	2	51	41	10	0	44	7	0
Totals	15	171	140	31	0	116	33	22

Table 7 summarizes the data for English Language Arts, Mathematics, and Science assessed by the ISTEP+ and ECA.

Table 7. Total for All ISTEP+

Indiana Academic Standards			ISTEP+/ECA			NESS ¹		
Grade	Academic Standards	Learning Expectations	H	M	L	H	M	L
ELA	49	448	234	57	157	260	151	37
Math	56	384	318	58	8	235	127	22
Science	15	171	140	31	0	116	33	22
TOTAL	120	1003	692	146	165	611	311	81

Table 8 contains a summary of total data for English Language Arts, Mathematics, and Science. This table shows comparisons between the total number of grade level/course learning expectations and the total number of grade level/course learning expectations tested.

Table 8. Percentage of Learning Expectations Tested

	Learning Expectations	Learning Expectations Tested	Percent of Learning Expectations Tested
English Language Arts	448	291	64.9
Mathematics	384	376	97.9
Science	171	171	100.0
TOTAL	1003	838	83.5

Resources

Indiana Department of Education

<http://www.doe.in.gov/>

Indiana's Academic Standards

<http://dc.doe.in.gov/Standards/AcademicStandards/index.shtml>

ISTEP+InfoCenter

<http://www.doe.in.gov/istep/>

2009 ISTEP+ Results (State Reports)

<http://www.doe.in.gov/istep/2009/index.html>

¹NESS (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.

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- 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.

