Missouri
Curriculum Matrix Summary

Missouri Assessment Program

The Missouri Assessment Program (MAP) is designed to identify the knowledge, skills, and competencies that Missouri students should acquire. Further, MAP is also used to assess how schools are doing to ensure the learning success of students.

Communication Arts

The communication arts Grade-Level Expectations (GLEs) are organized according to Strand, Big Idea, and Concept. Each GLE is aligned to the Show-Me Standards and to the benchmarks from the Frameworks for Curriculum Development.

Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Missouri Department Elementary and Secondary Education (DESE) Web site. It provided the Communications Arts test blueprint. This blueprint revealed the percent of test items in each Communication Arts Strand at each grade level. The percent of test items per Strand at each MAP tested grade level was averaged. Standard deviations (STD) at each grade level were calculated and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Strands not tested were assigned a Low (L) priority designation. The results can be found in Table 1 below.

Table 1: Communication Arts Priority Designation Data

Grade	Mean	STD	Mean – STD	Designations		
3	33.33	22.85	10.48 = 10	L = 0	M = 1- 10	H = >10
4	33.33	30.10	3.23 = 3	L = 0	M = 1- 3	H = >3
5	33.67	28.33	5.33 = 5	L = 0	M = 1- 5	H = >5
6	33.33	28.08	5.25 = 5	L = 0	M = 1- 5	H = >5
7	33.33	21.65	11.67 = 12	L = 0	M = 1- 12	H = >12
8	33.33	27.78	5.58 = 6	L = 0	M = 1- 6	H = >6
English II	33.33	23.52	9.81 = 10	L = 0	M = 1- 10	H = >10

Communication Arts summary data are presented in Table 2.

Table 2. Communication Arts Assessment Data Summary

Communication Arts		Concepts	MAP			NESS*		
Grade	**Strands**		**H**	**M**	**L**	**H 1-19**	**M 20-38**	**L 39-50**
3	3	30	12	1	17	24	6	0
4	3	30	12	1	17	24	6	0
5	3	30	12	1	17	23	7	0
6	3	30	12	1	17	24	6	0
7	3	30	12	1	17	23	7	0
8	3	30	12	1	17	23	7	0
English II	3	30	12	1	17	24	6	0
Totals	21	210	84	7	119	165	45	0

Mathematics

The mathematics GLEs are organized according to Strand, Big Idea, and Concept.

Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Missouri DESE Web site. It provided the Mathematics test blueprint. This blueprint revealed the percent of test items in each Mathematics Strand at each grade level. The percent of test items per Strand at each MAP tested grade level was averaged. Standard deviations (STD) at each grade level were calculated and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Strands not tested were assigned a Low (L) priority designation. The results can be found in Table 3 below.

Table 3: Mathematics Priority Designation Data

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
3	20	7.64	12.36 = 12	L = 0	M = 1- 12	H = >12
4	20	2.89	17.11 = 17	L = 0	M = 1-17	H = >17
5	20	0.00	20.00 = 20	L = 0	M = 1- 20	H = >20
6	20	0.00	2.000 = 20	L = 0	M = 1- 20	H = >20
7	20	0.00	20.00 = 20	L = 0	M = 1- 20	H = >20
8	20	5.00	15.00 = 15	L = 0	M = 1- 15	H = >15
Algebra I	20	5.00	1.005 = 15	L = 0	M = 1- 15	H = >15

Mathematics summary data are presented in Table 4.

Table 4. Mathematics Assessment Data Summary.

Mathematics		Concepts	MAP			NESS*		
Grade	Strands		H	M	L	H 1-16	M 17-42	L 43-70
3	6	30	26	4	0	18	11	1
4	6	33	29	4	0	20	12	1
5	6	31	31	0	0	17	14	0
6	6	32	32	0	0	19	11	2
7	6	33	33	0	0	20	13	0
8	6	24	18	6	0	12	11	1
Algebra I	6	27	17	10	0	13	13	1
Totals	42	210	186	24	0	119	85	6

Science

Science GLEs are in revision. Testing of the 2004 version of the science GLEs will stop at the end of the 2008-2009 school year. Version 2.0 of the science GLE will begin during the 2009-2010 school year. Therefore, the data below relates to each science GLE version. The 2004 version of the science GLEs will be removed before testing of the 2.0 version begins in the Spring of 2009. The science GLEs (2004 Version and Version 2.0) are organized according to Strand, Big Idea, and Concept.

Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Missouri DESE Web site. It provided the Science test blueprint which was the same for both the 2004 and 2.0 versions of the GLEs. This blueprint revealed the percent of test items in each Science Strand at each grade level. The percent of test items per Strand at each MAP tested grade level was averaged. Standard deviations (STD) at each grade level were calculated and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Strands not tested were assigned a Low (L) priority designation. The results can be found in Table 5 below.

Table 5: Science (GLE Version 2.0) Priority Designation Data

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
5	12.50	4.64	7.86	L = 0	M = 1- 8	H = >8
8	12.50	5.78	6.92	L = 0	M = 1-7	H = >7
Biology	12.50	6.46	6.04	L = 0	M = 1-7	H = >7

Table 6: Science (GLE 2004 Version) Priority Designation Data

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
5	12.50	4.64	7.86	L = 0	M = 1- 8	H = >8
8	12.50	5.78	6.92	L = 0	M = 1-7	H = >7
Biology	12.50	6.46	6.04	L = 0	M = 1-7	H = >7

Science Version 2.0 summary data are presented in Table 7. Science assessments based from GLE 2.0 will begin 2009-2010 school year.

Table 7. Science (GLE Version 2.0) Assessment Data Summary.

Science		Concepts	MAP			NESS*		
Grade	Strands		H	M	L	H 1-32	M 33-50	L 51-85
5	8	30	25	5	0	16	4	10
8	8	33	27	6	0	21	4	8
Biology	8	97	84	13	0	70	12	15
Totals	24	160	136	24	0	107	20	33

Science GLE 2004 Version summary data are presented in Table 8. Science assessments based from GLE 2004 Version will stop at the end of the 2008-2009 school year.

Table 8. Science (GLE 2004 Version) Assessment Data Summary.

Science		Concepts	MAP			Essential Skills Survey		
Grade	Strands		H	M	L	H 1-35	M 36-70	L 70+
5	8	58	52	6	0	44	13	1
8	8	82	44	38	0	57	22	3
Biology	8	206	192	14	0	117	52	37
Totals	24	346	288	58	0	218	87	41

Totals for Communication Arts, Mathematics, and Science

Table 9 presents the number of indicators of progress compared to the number of indicators of progress tested. Using this data, the percentage of Student Learning Expectations tested was calculated.

Table 9. Totals and Percentages for English Language Arts, Mathematics, and Science.

	Concepts	Concepts Tested	% Concepts Tested
Communication Arts	210	91	43.4%
Mathematics	210	210	100%[1]
Science (GLE 2004 Version)	346	346	100%[1]
Science (GLE 2.0 Version)	160	160	100%[1]
TOTAL[2]	580	461	79.5%
TOTAL[3]	766	647	84.5%

[1] Data available from the DESE do not indicate specifically which GLEs within the mathematics and science Concepts are tested or not tested. That data, if available, would likely reflect a lower percentage of GLEs tested.
[2] This total only includes the percentages for the science GLE 2004 version.
[3] This total only includes the percentages for the science GLE 2.0 version.

References

Department of Elementary and Secondary Education: http://www.dese.mo.gov/index.html

Assessments and Curriculum: http://www.dese.mo.gov/divimprove/curriculum/unitindex.html

Assessment: http://www.dese.mo.gov/divimprove/assess/
Curriculum: http://www.dese.mo.gov/divimprove/curriculum/

Research and Technical Information: http://www.dese.mo.gov/divimprove/assess/tech/

***The National Essential Skills Study** asked participants to identify what they believe are the 20 to 30 most important topics in English language arts, mathematics, science, and social studies. The topics compiled for each content area were adapted from national standards as identified by the National Council of Teachers of English, the National Council of Teachers of Mathematics, the National Research Council, and the National Council for the Social Studies, and from various state standards. All topics were reviewed by teams of subject-specialist teachers. In all, 50 English language arts, 70 mathematics, 85 science, and 60 social studies topics were identified for incorporation in NESS.