

## **APPENDIX C**

### **MCAS 2008 INTER-SCORER CONSISTENCY TABLES**



## Appendix C

The tables in this appendix show the rates of agreement between scorers on double-scored items.

A. Standard MCAS Tests..... Appendix C, Page 2

B. MCAS-Alt ..... Appendix C, Page 10

## Appendix C

### A. Standard MCAS Tests

Tables CA-1 through CA-23 below show the percentages of inter-scorer agreement for both scorable and non-scorable responses to constructed-response items for the 2008 MCAS standard operational tests:

- English Language Arts/Reading
  - i. Language and Literature/Reading.....Appendix C, page 3
  - ii. Composition.....Appendix C, page 5
- Mathematics.....Appendix C, page 6
- Science and Technology/Engineering.....Appendix C, page 8

*English Language Arts/Reading**Language and Literature/Reading*

<b>Table CA-1:</b>	<b>Grade 3 Reading MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
3read 30	63.7	28.2	8.1
3read 43	67.2	26.4	6.5
<b>TOTAL</b>	<b>65.5</b>	<b>27.3</b>	<b>7.3</b>

<b>Table CA-2:</b>	<b>Grade 4 ELA Language and Literature MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
4read 08	69.9	26.9	3.2
4read 17	66.8	30.0	3.1
4read 26	66.5	30.4	3.2
4read 44	71.7	26.2	2.1
<b>TOTAL</b>	<b>68.7</b>	<b>28.4</b>	<b>2.9</b>

<b>Table CA-3:</b>	<b>Grade 5 ELA Language and Literature MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
5read 08	66.5	30.8	2.7
5read 18	64.8	32.4	2.8
5read 27	69.2	29.2	1.6
5read 43	65.2	31.3	3.5
<b>TOTAL</b>	<b>66.4</b>	<b>30.9</b>	<b>2.7</b>

<b>Table CA-4:</b>	<b>Grade 6 ELA Language and Literature MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
6read 08	66.4	26.3	7.3
6read 18	68.2	27.1	4.6
6read 27	63.3	30.6	6.1
6read 44	65.2	31.3	3.5
<b>TOTAL</b>	<b>65.8</b>	<b>28.8</b>	<b>5.4</b>

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<b>Table CA-5:</b>	<b>Grade 7 ELA Language and Literature MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
7read 08	69.3	24.7	6.0
7read 17	68.9	28.0	3.1
7read 26	69.3	26.7	4.0
7read 44	71.2	23.9	4.9
<b>TOTAL</b>	<b>69.7</b>	<b>25.8</b>	<b>4.5</b>

<b>Table CA-6:</b>	<b>Grade 8 ELA Language and Literature MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
8read 09	66.9	28.5	4.6
8read 19	68.1	28.4	3.6
8read 28	66.8	29.6	3.7
8read 45	70.7	24.0	5.4
<b>TOTAL</b>	<b>68.1</b>	<b>27.6</b>	<b>4.3</b>

<b>Table CA-7:</b>	<b>Grade 10 ELA Language and Literature MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
10read 08	63.7	34.4	2.0
10read 18	61.7	35.4	2.9
10read 27	67.1	30.9	2.1
10read 44	67.7	31.3	1.0
<b>TOTAL</b>	<b>65.1</b>	<b>33.0</b>	<b>2.0</b>

Composition

<b>Table CA-8:</b>	<b>Grade 4 ELA Composition MCAS 2008 Inter-Rater Agreement</b>					
	Dis = Discrepant					
	<b>Writing Topic Development</b>			<b>Writing Conventions</b>		
Agreement	Exact	Adjacent	Dis	Exact	Adjacent	Dis
Percentage	<b>63.2</b>	<b>35</b>	<b>1.8</b>	<b>69.3</b>	<b>29.5</b>	<b>1.2</b>

<b>Table CA-9:</b>	<b>Grade 7 ELA Composition MCAS 2008 Inter-Rater Agreement</b>					
	Dis = Discrepant					
	<b>Writing Topic Development</b>			<b>Writing Conventions</b>		
Agreement	Exact	Adjacent	Dis	Exact	Adjacent	Dis
Percentage	<b>61.9</b>	<b>34.6</b>	<b>3.5</b>	<b>67.2</b>	<b>30.4</b>	<b>2.4</b>

<b>Table CA-10:</b>	<b>Grade 10 ELA Composition MCAS 2008 Inter-Rater Agreement</b>					
	Dis = Discrepant					
	<b>Writing Topic Development</b>			<b>Writing Conventions</b>		
Agreement	Exact	Adjacent	Dis	Exact	Adjacent	Dis
Percentage	<b>60.0</b>	<b>34.0</b>	<b>6.5</b>	<b>66.3</b>	<b>28.0</b>	<b>5.3</b>

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### Mathematics

<b>Table CA-11:</b>	<b>Grade 3 Mathematics MCAS 2008 Constructed-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
3math 07	96.2	3.0	.80
3math 21	94.2	4.3	1.5
3math 28	93.1	5.1	1.8
3math 35	85.6	12.3	2.2
3math 42	88.0	9.7	2.3
<b>TOTAL</b>	<b>91.4</b>	<b>6.9</b>	<b>1.7</b>

<b>Table CA-12:</b>	<b>Grade 4 Mathematics MCAS 2008 Constructed-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
4math 10	78.1	18.9	3.0
4math 14	74.1	21.4	4.6
4math 24	83.7	15.0	1.3
4math 34	84.8	12.2	3.1
4math 38	77.9	17.7	4.3
<b>TOTAL</b>	<b>79.7</b>	<b>17.0</b>	<b>3.3</b>

<b>Table CA-13:</b>	<b>Grade 5 Mathematics MCAS 2008 Constructed-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
5math 10	76.5	18.7	4.8
5math 14	89.5	9.4	1.1
5math 24	78.0	19.6	2.4
5math 34	87.4	9.3	3.3
5math 38	81.4	15.6	3.1
<b>TOTAL</b>	<b>82.6</b>	<b>14.5</b>	<b>2.9</b>

<b>Table CA-14:</b>	<b>Grade 6 Mathematics MCAS 2008 Constructed-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
6math 10	82.1	14.7	3.2
6math 14	77.0	19.9	3.1
6math 24	80.7	15.8	3.5
6math 34	87.6	9.6	2.9
6math 38	85.5	11.5	3.0
<b>TOTAL</b>	<b>82.6</b>	<b>14.3</b>	<b>3.1</b>



Table CA-15:	Grade 7 Mathematics MCAS 2008 Constructed-Response Inter-Rater Agreement by Item		
	Exact	Adjacent	Discrepant
7math 13	82.2	15.1	2.7
7math 26	91.8	6.4	1.8
7math 37	87.3	9.6	3.1
7math 38	87.5	10.7	1.8
7math 48	78.9	15.7	5.4
<b>TOTAL</b>	<b>85.5</b>	<b>11.5</b>	<b>3.0</b>

Table CA-16:	Grade 8 Mathematics MCAS 2008 Constructed-Response Inter-Rater Agreement by Item		
	Exact	Adjacent	Discrepant
8math 13	81.8	16.1	2.1
8math 26	83.1	14.2	2.7
8math 37	86.5	11.2	2.3
8math 38	89.4	8.2	2.5
8math 48	83.6	12.1	4.3
<b>TOTAL</b>	<b>84.9</b>	<b>12.4</b>	<b>2.8</b>

Table CA-17:	Grade 10 Mathematics MCAS 2008 Constructed-Response Inter-Rater Agreement by Item		
	Exact	Adjacent	Discrepant
10math 20	80.7	17.6	1.6
10math 24	85.9	13.4	0.7
10math 25	87.0	11.6	1.4
10math 38	79.1	20.0	0.9
10math 51	87.3	12.0	0.6
10math 52	87.1	12.1	0.8
<b>TOTAL</b>	<b>84.5</b>	<b>14.5</b>	<b>1.0</b>

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### *Science and Technology/Engineering*

<b>Table CA-18:</b>	<b>Grade 5 Science and Technology/Engineering MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
5sci 22	65.9	30.2	3.9
5sci 23	75.1	19.7	5.2
5sci 45	70.5	26.8	2.8
5sci 46	64.0	31.2	4.9
5sci 47	67.1	29.5	3.4
<b>TOTAL</b>	<b>68.5</b>	<b>27.5</b>	<b>4.0</b>

<b>Table CA-19:</b>	<b>Grade 8 Science and Technology/Engineering MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
8sci 22	69.8	24.4	5.8
8sci 23	77.1	15.9	6.9
8sci 45	70.6	22.2	7.2
8sci 46	76.7	19.2	4.0
8sci 47	73.8	20.5	5.7
<b>TOTAL</b>	<b>73.6</b>	<b>20.4</b>	<b>5.9</b>

<b>Table CA-20:</b>	<b>High School Biology Science and Technology/Engineering MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
HSBio15	78.1	19.6	2.3
HSBio30	76.7	20.2	3.1
HSBio44	79.8	17.4	2.8
HSBio58	73.3	24.5	2.3
HSBio59	58.2	34.4	7.4
<b>TOTAL</b>	<b>73.2</b>	<b>23.2</b>	<b>3.6</b>

<b>Table CA-21:</b>	<b>High School Chemistry Science and Technology/Engineering MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
HSChem15	81.2	16.8	2.0
HSChem30	69.0	26.9	4.1
HSChem44	75.2	22.3	2.5
HSChem58	85.7	13.1	1.2
HSChem59	79.8	18.0	2.2
<b>TOTAL</b>	<b>78.2</b>	<b>19.4</b>	<b>2.4</b>

<b>Table CA-22:</b>	<b>High School Introductory Physics Science and Technology/Engineering MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
HSPHys15	63.1	32.6	4.3
HSPHys30	63.7	31.1	5.2
HSPHys44	70.8	25.4	3.7
HSPHys58	80.7	17.0	2.3
HSPHys59	85.3	13.0	1.8
<b>TOTAL</b>	<b>72.7</b>	<b>23.8</b>	<b>3.5</b>

<b>Table CA-23:</b>	<b>High School Technology/Engineering Science and Technology/Engineering MCAS 2008 Open-Response Inter-Rater Agreement by Item</b>		
	<b>Exact</b>	<b>Adjacent</b>	<b>Discrepant</b>
HSTech15	86.0	12.2	1.8
HSTech30	68.2	26.5	5.3
HSTech49	50.9	35.9	13.3
HSTech66	75.8	20	4.3
HSTech67	58.7	31.1	10.2
<b>TOTAL</b>	<b>67.9</b>	<b>25.1</b>	<b>7.0</b>

## Appendix C

### B. MCAS-Alt

Tables CB-1 through CB-4 below show the 2008 MCAS-Alt number and percentage of exact agreements on two or more scores in every scoring dimension area for each content area strand.

**Note:** Only records with at least two scores for the content area/strand/scoring dimension area were used.

Table CB-1 shows 2008 MCAS-Alt inter-scorer consistency data, for students at all grade levels combined, in each scoring dimension for each content area strand (reporting category).

**Table CB-1: 2008 MCAS-Alt Inter-Scorer Consistency by Strand and Scoring Dimension**

Strand	Dimension	Number of Portfolios with at least Two Scores	Number of Exact Scores	Percent of Exact Scores
<b>English Language Arts/Reading</b>				
Language	Complexity	2284	2216	97.02
	Skills	2284	2140	93.7
	Independence	2284	2104	92.12
	Self-Evaluation	2284	2204	96.5
	Generalized Performance	2284	2028	88.79
Literature	Complexity	2317	2251	97.15
	Skills	2317	2167	93.53
	Independence	2317	2146	92.62
	Self-Evaluation	2317	2251	97.15
	Generalized Performance	2317	2007	86.62
Composition	Complexity	1406	1363	96.94
	Skills	1406	1322	94.03
	Independence	1406	1292	91.89
	Self-Evaluation	1406	1353	96.23
	Generalized Performance	1406	1235	87.84
<b>Mathematics</b>				
Number Sense and Operations	Complexity	2261	2182	96.51
	Skills	2261	2116	93.59
	Independence	2261	2114	93.5
	Self-Evaluation	2261	2201	97.35
	Generalized Performance	2261	2016	89.16
Patterns, Relations, and Algebra	Complexity	1055	1012	95.92
	Skills	1055	972	92.13
	Independence	1055	966	91.56
	Self-Evaluation	1055	1018	96.49
	Generalized Performance	1055	939	89
Geometry	Complexity	712	683	95.93
	Skills	712	662	92.98
	Independence	712	650	91.29
	Self-Evaluation	712	691	97.05
	Generalized Performance	712	655	91.99
Measurement	Complexity	597	573	95.98
	Skills	597	529	88.61
	Independence	597	530	88.78
	Self-Evaluation	597	564	94.47
	Generalized Performance	597	539	90.28
Data Analysis, Statistics, and Probability	Complexity	1007	980	97.32
	Skills	1007	946	93.94
	Independence	1007	938	93.15
	Self-Evaluation	1007	979	97.22
	Generalized Performance	1007	899	89.28

(Table CB-1 continued on next page)

**Table CB-1: 2008 MCAS-Alt Inter-Scorer Consistency by Strand and Scoring Dimension**

Strand	Dimension	Number of Portfolios with at least Two Scores	Number of Exact Scores	Percent of Exact Scores
<b>Science and Technology/Engineering</b>				
Earth and Space Science	Complexity	306	289	94.44
	Skills	306	289	94.44
	Independence	306	284	92.81
	Self-Evaluation	306	302	98.69
	Generalized Performance	306	285	93.14
Life Science	Complexity	323	307	95.05
	Skills	323	302	93.5
	Independence	323	298	92.26
	Self-Evaluation	323	316	97.83
	Generalized Performance	323	299	92.57
Physical Sciences	Complexity	258	243	94.19
	Skills	258	234	90.7
	Independence	258	237	91.86
	Self-Evaluation	258	253	98.06
	Generalized Performance	258	247	95.74
Technology/Engineering	Complexity	130	123	94.62
	Skills	130	122	93.85
	Independence	130	120	92.31
	Self-Evaluation	130	122	93.85
	Generalized Performance	130	117	90
High School End-of-Course Science and Technology/Engineering	Complexity	2520	2426	96.27
	Skills	2520	2355	93.45
	Independence	2520	2313	91.79
	Self-Evaluation	2520	2417	95.91
	Generalized Performance	2520	2365	93.85

Table CB-2 shows 2008 MCAS-Alt inter-scorer consistency data for each content area overall.

**Table CB-2: 2008 MCAS-Alt Inter-Scorer Consistency By Content Area**

Content Area	Number of Portfolios with At Least Two Scores	Number of Portfolios with Two Scores in Exact Agreement	Percentage of Portfolios with Two Scores in Exact Agreement
English Language Arts/Reading	30035	28079	93.49
Mathematics	28160	26354	93.59
Science and Technology/Engineering	17685	16665	94.23

Table CB-3 shows 2008 MCAS-Alt inter-rater consistency data for each scoring dimension over all strands. The percentage of exact agreement exceeded 92 percent for all dimension scores except Generalized Performance, indicating that in at least 9 of 10 dimensions that were double-scored, two scorers agreed. This rate of agreement has risen steadily since 2001 due to increased clarity in scoring dimension rubrics, improved training of scorers, and scoring rules that minimize errors.

## Appendix C

**Table CB-3: 2008 MCAS-Alt  
Inter-Rater Consistency by Scoring Dimension**

Scoring Dimension	Number of Portfolios with At Least Two Scores	Number of Portfolios with Two Scores in Exact Agreement	Percentage of Portfolios with Two Scores in Exact Agreement
Level of Complexity	15176	14648	96.52
Demonstration of Skills and Concepts	15176	14156	93.28
Independence	15176	13992	92.20
Self-Evaluation*	15176	14671	96.67
Generalized Performance*	15176	13631	89.82

\*Note: Generalized Performance and Self-Evaluation are not calculated in the final performance level.

Table CB-4 shows the overall inter-scorer consistency rate for the 2008 MCAS-Alt in all scoring dimension areas combined.

**Table CB-4: 2008 MCAS-Alt  
Aggregate Inter-Scorer Consistency  
in All Scoring Dimension Areas Combined**

Double-Scores	Exact Agreement	Inter-Scorer Consistency
75880	71098	93.7