

Appendix G

DIFFERENTIAL ITEM FUNCTIONING RESULTS

Table G-1. 2011 MCAS: Number of Items Classified as “Low” or “High” DIF, Overall and by Group Favored – ELA

Grade	Reference Group	Focal Group	Item Type	Number of Items	Number “Low”			Number “High”		
					Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
3	Male	Female	MC	36	3	3	0	0	0	0
	Male	Female	OR	5	0	0	0	0	0	0
	No Disability	Disability	MC	36	1	1	0	0	0	0
	No Disability	Disability	OR	5	0	0	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	36	4	4	0	0	0	0
	Not LEPFLEP	LEPFLEP	OR	5	0	0	0	0	0	0
	Not Low-Income	Low-Income	MC	36	2	2	0	0	0	0
	Not Low-Income	Low-Income	OR	5	0	0	0	0	0	0
	White	African American	MC	36	3	3	0	0	0	0
	White	African American	OR	5	0	0	0	0	0	0
	White	Hispanic	MC	36	2	2	0	0	0	0
	White	Hispanic	OR	5	0	0	0	0	0	0
4	Male	Female	MC	36	0	0	0	0	0	0
	Male	Female	OR	6	0	0	0	0	0	0
	No Disability	Disability	MC	36	3	3	0	0	0	0
	No Disability	Disability	OR	6	0	0	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	36	7	7	0	0	0	0
	Not LEPFLEP	LEPFLEP	OR	6	0	0	0	0	0	0
	Not Low-Income	Low-Income	MC	36	1	1	0	0	0	0
	Not Low-Income	Low-Income	OR	6	0	0	0	0	0	0
	White	African American	MC	36	6	6	0	0	0	0
	White	African American	OR	6	0	0	0	0	0	0
	White	Hispanic	MC	36	5	5	0	0	0	0
	White	Hispanic	OR	6	0	0	0	0	0	0
5	Male	Female	MC	36	3	3	0	0	0	0
	Male	Female	OR	4	0	0	0	0	0	0
	No Disability	Disability	MC	36	2	2	0	0	0	0
	No Disability	Disability	OR	4	0	0	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	36	7	7	0	0	0	0
	Not LEPFLEP	LEPFLEP	OR	4	0	0	0	0	0	0
	Not Low-Income	Low-Income	MC	36	2	2	0	0	0	0
	Not Low-Income	Low-Income	OR	4	0	0	0	0	0	0
	White	African American	MC	36	5	5	0	0	0	0

continued

Grade	Reference Group	Focal Group	Item Type	Number of Items	Number "Low"			Number "High"			
					Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal	
5	White	African American	OR	4	0	0	0	0	0	0	
	White	Hispanic	MC	36	5	5	0	0	0	0	
	White	Hispanic	OR	4	0	0	0	0	0	0	
6	Male	Female	MC	36	4	4	0	0	0	0	
	Male	Female	OR	4	0	0	0	0	0	0	
	No Disability	Disability	MC	36	2	2	0	0	0	0	
	No Disability	Disability	OR	4	0	0	0	0	0	0	
	Not LEPFLEP	LEPFLEP	MC	36	8	8	0	1	1	0	
	Not LEPFLEP	LEPFLEP	OR	4	0	0	0	0	0	0	
	Not Low-Income	Low-Income	MC	36	0	0	0	0	0	0	
	Not Low-Income	Low-Income	OR	4	0	0	0	0	0	0	
	White	African American	MC	36	4	4	0	0	0	0	
	White	African American	OR	4	0	0	0	0	0	0	
	White	Hispanic	MC	36	4	4	0	0	0	0	
	White	Hispanic	OR	4	0	0	0	0	0	0	
	7	Male	Female	MC	36	3	3	0	2	2	0
		Male	Female	OR	6	0	0	0	0	0	0
No Disability		Disability	MC	36	4	4	0	0	0	0	
No Disability		Disability	OR	6	0	0	0	0	0	0	
Not LEPFLEP		LEPFLEP	MC	36	10	10	0	2	2	0	
Not LEPFLEP		LEPFLEP	OR	6	0	0	0	0	0	0	
Not Low-Income		Low-Income	MC	36	1	1	0	0	0	0	
Not Low-Income		Low-Income	OR	6	0	0	0	0	0	0	
White		African American	MC	36	6	6	0	0	0	0	
White		African American	OR	6	0	0	0	0	0	0	
White		Hispanic	MC	36	6	6	0	1	1	0	
White		Hispanic	OR	6	0	0	0	0	0	0	
8	Male	Female	MC	36	2	2	0	1	1	0	
	Male	Female	OR	4	2	0	2	0	0	0	
	No Disability	Disability	MC	36	4	4	0	0	0	0	
	No Disability	Disability	OR	4	0	0	0	0	0	0	
	Not LEPFLEP	LEPFLEP	MC	36	9	8	1	4	4	0	
	Not LEPFLEP	LEPFLEP	OR	4	0	0	0	0	0	0	
	Not Low-Income	Low-Income	MC	36	4	4	0	0	0	0	

continued

Grade	Reference Group	Focal Group	Item Type	Number of Items	Number "Low"			Number "High"		
					Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
8	Not Low-Income	Low-Income	OR	4	0	0	0	0	0	0
	White	African American	MC	36	10	9	1	0	0	0
	White	African American	OR	4	0	0	0	0	0	0
	White	Hispanic	MC	36	7	7	0	1	1	0
	White	Hispanic	OR	4	0	0	0	0	0	0
10	Male	Female	MC	36	6	6	0	0	0	0
	Male	Female	OR	6	1	0	1	0	0	0
	No Disability	Disability	MC	36	1	1	0	0	0	0
	No Disability	Disability	OR	6	0	0	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	36	12	12	0	2	2	0
	Not LEPFLEP	LEPFLEP	OR	6	0	0	0	0	0	0
	Not Low-Income	Low-Income	MC	36	1	1	0	0	0	0
	Not Low-Income	Low-Income	OR	6	0	0	0	0	0	0
	White	African American	MC	36	7	7	0	0	0	0
	White	African American	OR	6	0	0	0	0	0	0
	White	Hispanic	MC	36	4	4	0	0	0	0
	White	Hispanic	OR	6	0	0	0	0	0	0

Table G-2. 2011 MCAS: Number of Items Classified as “Low” or “High” DIF, Overall and by Group Favored – Mathematics

Grade	Reference Group	Focal Group	Item Type	Number of Items	Number “Low”			Number “High”		
					Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
3	Male	Female	MC	26	0	0	0	0	0	0
	Male	Female	OR	10	0	0	0	0	0	0
	No Disability	Disability	MC	26	1	1	0	0	0	0
	No Disability	Disability	OR	10	1	1	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	26	3	2	1	0	0	0
	Not LEPFLEP	LEPFLEP	OR	10	1	1	0	0	0	0
	Not Low-Income	Low-Income	MC	26	0	0	0	0	0	0
	Not Low-Income	Low-Income	OR	10	0	0	0	0	0	0
	White	African American	MC	26	6	5	1	0	0	0
	White	African American	OR	10	1	1	0	0	0	0
	White	Hispanic	MC	26	1	1	0	0	0	0
	White	Hispanic	OR	10	1	1	0	0	0	0
4	Male	Female	MC	32	3	3	0	0	0	0
	Male	Female	OR	10	0	0	0	0	0	0
	No Disability	Disability	MC	32	0	0	0	0	0	0
	No Disability	Disability	OR	10	0	0	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	32	3	3	0	0	0	0
	Not LEPFLEP	LEPFLEP	OR	10	1	1	0	0	0	0
	Not Low-Income	Low-Income	MC	32	0	0	0	0	0	0
	Not Low-Income	Low-Income	OR	10	0	0	0	0	0	0
	White	African American	MC	32	3	2	1	0	0	0
	White	African American	OR	10	0	0	0	0	0	0
	White	Hispanic	MC	32	4	3	1	0	0	0
	White	Hispanic	OR	10	1	1	0	0	0	0
5	Male	Female	MC	32	3	3	0	0	0	0
	Male	Female	OR	10	0	0	0	0	0	0
	No Disability	Disability	MC	32	2	2	0	0	0	0
	No Disability	Disability	OR	10	0	0	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	32	3	2	1	0	0	0
	Not LEPFLEP	LEPFLEP	OR	10	0	0	0	0	0	0
	Not Low-Income	Low-Income	MC	32	1	1	0	0	0	0
	Not Low-Income	Low-Income	OR	10	0	0	0	0	0	0
	White	African American	MC	32	4	4	0	0	0	0

continued

Grade	Reference Group	Focal Group	Item Type	Number of Items	Number "Low"			Number "High"		
					Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
5	White	African American	OR	10	2	1	1	0	0	0
	White	Hispanic	MC	32	2	2	0	0	0	0
	White	Hispanic	OR	10	0	0	0	0	0	0
6	Male	Female	MC	32	4	4	0	0	0	0
	Male	Female	OR	10	1	0	1	0	0	0
	No Disability	Disability	MC	32	0	0	0	0	0	0
	No Disability	Disability	OR	10	1	1	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	32	2	2	0	0	0	0
	Not LEPFLEP	LEPFLEP	OR	10	1	1	0	0	0	0
	Not Low-Income	Low-Income	MC	32	1	1	0	0	0	0
	Not Low-Income	Low-Income	OR	10	0	0	0	0	0	0
	White	African American	MC	32	1	1	0	0	0	0
	White	African American	OR	10	1	1	0	0	0	0
	White	Hispanic	MC	32	1	1	0	0	0	0
	White	Hispanic	OR	10	1	1	0	0	0	0
	7	Male	Female	MC	32	1	0	1	1	1
Male		Female	OR	10	0	0	0	0	0	0
No Disability		Disability	MC	32	0	0	0	0	0	0
No Disability		Disability	OR	10	0	0	0	0	0	0
Not LEPFLEP		LEPFLEP	MC	32	3	3	0	1	1	0
Not LEPFLEP		LEPFLEP	OR	10	1	1	0	0	0	0
Not Low-Income		Low-Income	MC	32	0	0	0	0	0	0
Not Low-Income		Low-Income	OR	10	0	0	0	0	0	0
White		African American	MC	32	2	1	1	0	0	0
White		African American	OR	10	0	0	0	0	0	0
White		Hispanic	MC	32	1	1	0	0	0	0
White		Hispanic	OR	10	0	0	0	0	0	0
8	Male	Female	MC	32	8	7	1	2	2	0
	Male	Female	OR	10	3	2	1	0	0	0
	No Disability	Disability	MC	32	2	2	0	0	0	0
	No Disability	Disability	OR	10	0	0	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	32	5	2	3	1	1	0
	Not LEPFLEP	LEPFLEP	OR	10	1	1	0	0	0	0
	Not Low-Income	Low-Income	MC	32	0	0	0	0	0	0

continued

Grade	Reference Group	Focal Group	Item Type	Number of Items	Number "Low"			Number "High"		
					Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
8	Not Low-Income	Low-Income	OR	10	0	0	0	0	0	0
	White	African American	MC	32	5	4	1	2	2	0
	White	African American	OR	10	1	1	0	0	0	0
	White	Hispanic	MC	32	2	2	0	0	0	0
	White	Hispanic	OR	10	1	1	0	0	0	0
10	Male	Female	MC	32	1	1	0	1	1	0
	Male	Female	OR	10	0	0	0	0	0	0
	No Disability	Disability	MC	32	0	0	0	0	0	0
	No Disability	Disability	OR	10	0	0	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	32	10	4	6	2	2	0
	Not LEPFLEP	LEPFLEP	OR	10	1	1	0	0	0	0
	Not Low-Income	Low-Income	MC	32	1	0	1	0	0	0
	Not Low-Income	Low-Income	OR	10	0	0	0	0	0	0
	White	African American	MC	32	2	1	1	1	1	0
	White	African American	OR	10	1	1	0	0	0	0
	White	Hispanic	MC	32	2	2	0	0	0	0
	White	Hispanic	OR	10	0	0	0	0	0	0

Table G-3. 2011 MCAS: Number of Items Classified as “Low” or “High” DIF, Overall and by Group Favored – STE

Grade	Reference Group	Focal Group	Item Type	Number of Items	Number “Low”			Number “High”		
					Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
5	Male	Female	MC	38	3	3	0	1	1	0
	Male	Female	OR	4	0	0	0	0	0	0
	No Disability	Disability	MC	38	2	2	0	0	0	0
	No Disability	Disability	OR	4	0	0	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	38	6	6	0	0	0	0
	Not LEPFLEP	LEPFLEP	OR	4	0	0	0	0	0	0
	Not Low-Income	Low-Income	MC	38	5	4	1	0	0	0
	Not Low-Income	Low-Income	OR	4	0	0	0	0	0	0
	White	African American	MC	38	2	2	0	0	0	0
	White	African American	OR	4	0	0	0	0	0	0
	White	Hispanic	MC	38	3	3	0	0	0	0
	White	Hispanic	OR	4	0	0	0	0	0	0
	8	Male	Female	MC	38	6	6	0	0	0
Male		Female	OR	4	0	0	0	0	0	0
No Disability		Disability	MC	38	3	3	0	0	0	0
No Disability		Disability	OR	4	0	0	0	0	0	0
Not LEPFLEP		LEPFLEP	MC	38	7	6	1	3	2	1
Not LEPFLEP		LEPFLEP	OR	4	1	1	0	0	0	0
Not Low-Income		Low-Income	MC	38	2	2	0	0	0	0
Not Low-Income		Low-Income	OR	4	0	0	0	0	0	0
White		African American	MC	38	7	6	1	1	1	0
White		African American	OR	4	1	1	0	0	0	0
White		Hispanic	MC	38	5	4	1	0	0	0
White		Hispanic	OR	4	0	0	0	0	0	0

Table G-4. 2011 MCAS: Number of Items Classified as “Low” or “High” DIF, Overall and by Group Favored – High School Biology

Reference Group	Focal Group	Item Type	Number of Items	Number “Low”			Number “High”		
				Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
Male	Female	MC	40	0	0	0	0	0	0
Male	Female	OR	5	0	0	0	0	0	0
No Disability	Disability	MC	40	1	1	0	0	0	0
No Disability	Disability	OR	5	0	0	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	9	6	3	3	3	0
Not LEPFLEP	LEPFLEP	OR	5	1	1	0	0	0	0
Not Low-Income	Low-Income	MC	40	2	2	0	0	0	0
Not Low-Income	Low-Income	OR	5	0	0	0	0	0	0
White	African American	MC	40	1	1	0	1	1	0
White	African American	OR	5	0	0	0	0	0	0
White	Hispanic	MC	40	2	2	0	0	0	0
White	Hispanic	OR	5	0	0	0	0	0	0

Table G-5. 2011 MCAS: Number of Items Classified as “Low” or “High” DIF, Overall and by Group Favored – High School Chemistry

Reference Group	Focal Group	Item Type	Number of Items	Number “Low”			Number “High”		
				Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
Male	Female	MC	40	6	2	4	0	0	0
Male	Female	OR	5	0	0	0	0	0	0
No Disability	Disability	MC	40	3	2	1	3	3	0
No Disability	Disability	OR	5	2	2	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	7	4	3	13	7	6
Not LEPFLEP	LEPFLEP	OR	5	2	2	0	2	2	0
Not Low-Income	Low-Income	MC	40	12	7	5	5	4	1
Not Low-Income	Low-Income	OR	5	0	0	0	0	0	0
White	African American	MC	40	10	6	4	4	4	0
White	African American	OR	5	1	1	0	1	1	0
White	Hispanic	MC	40	14	7	7	2	0	2
White	Hispanic	OR	5	3	3	0	1	1	0

Table G-6. 2011 MCAS: Number of Items Classified as “Low” or “High” DIF, Overall and by Group Favored – High School Introductory Physics

Reference Group	Focal Group	Item Type	Number of Items	Number “Low”			Number “High”		
				Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
Male	Female	MC	40	5	5	0	0	0	0
Male	Female	OR	5	1	0	1	0	0	0
No Disability	Disability	MC	40	1	1	0	0	0	0
No Disability	Disability	OR	5	0	0	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	9	7	2	1	1	0
Not LEPFLEP	LEPFLEP	OR	5	0	0	0	0	0	0
Not Low-Income	Low-Income	MC	40	1	1	0	0	0	0
Not Low-Income	Low-Income	OR	5	0	0	0	0	0	0
White	African American	MC	40	6	4	2	0	0	0
White	African American	OR	5	0	0	0	0	0	0
White	Hispanic	MC	40	2	2	0	0	0	0
White	Hispanic	OR	5	0	0	0	0	0	0

Table G-7. 2011 MCAS: Number of Items Classified as “Low” or “High” DIF, Overall and by Group Favored – High School Technology/Engineering

Reference Group	Focal Group	Item Type	Number of Items	Number “Low”			Number “High”		
				Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
Male	Female	MC	40	11	10	1	1	1	0
Male	Female	OR	5	2	0	2	0	0	0
No Disability	Disability	MC	40	3	2	1	0	0	0
No Disability	Disability	OR	5	1	1	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	12	5	7	7	5	2
Not LEPFLEP	LEPFLEP	OR	5	2	2	0	1	1	0
Not Low-Income	Low-Income	MC	40	3	1	2	1	1	0
Not Low-Income	Low-Income	OR	5	1	1	0	0	0	0
White	African American	MC	40	10	6	4	5	3	2
White	African American	OR	5	2	1	1	1	1	0
White	Hispanic	MC	40	3	1	2	3	3	0
White	Hispanic	OR	5	1	1	0	0	0	0