

# Appendix E—DIFFERENTIAL ITEM FUNCTIONING RESULTS

**Table E-1. 2009 MEPA: Number of Items Classified into DIF Categories  
within Subgroup Comparisons, by Session and Item Type—Spring 2009 Administration**

Grade span	Administration	Male/Female DIF Class									White/Black DIF Class									White/Hispanic DIF Class								
		All			MC			CR			All			MC			CR			All			MC			CR		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
K-2	Session A	30	0	0	16	0	0	14	0	0	28	2	0	15	1	0	13	1	0	28	2	0	15	1	0	13	1	0
	Session B	31	1	0	16	0	0	15	1	0	30	2	0	16	0	0	14	2	0	32	0	0	16	0	0	16	0	0
3-4	Session 1:2	40	3	0	19	3	0	21	0	0	41	2	0	21	1	0	20	1	0	41	2	0	20	2	0	21	0	0
	Session 2:3	37	4	0	23	3	0	14	1	0	41	0	0	26	0	0	15	0	0	39	2	0	24	2	0	15	0	0
5-6	Session 1:2	40	3	0	20	2	0	20	1	0	27	13	3	12	7	3	15	6	0	32	8	3	15	4	3	17	4	0
	Session 2:3	38	3	0	24	2	0	14	1	0	36	4	1	21	4	1	15	0	0	35	5	1	20	5	1	15	0	0
7-8	Session 1:2	39	2	2	18	2	2	21	0	0																		
	Session 2:3	40	1	0	25	1	0	15	0	0	34	7	0	19	7	0	15	0	0	34	7	0	20	6	0	14	1	0
9-12	Session 1:2	39	4	0	20	2	0	19	2	0	33	8	2	14	6	2	19	2	0	32	9	2	12	8	2	20	1	0
	Session 2:3	37	4	0	24	2	0	13	2	0	31	10	0	18	8	0	13	2	0	32	9	0	17	9	0	15	0	0

All = all items, MC = multiple-choice, CR = constructed-response. A = negligible DIF, B = low DIF, C = high DIF

\* Note that blanks are caused by the lack of sufficient number of students.

**Table E-2. 2009 MEPA: Number of Items Classified into DIF Categories  
within Subgroup Comparisons, by Session and Item Type—Fall 2009 Administration**

Grade span	Administration	Male/Female DIF Class									White/Black DIF Class									White/Hispanic DIF Class								
		All			MC			CR			All			MC			CR			All			MC			CR		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
K-2	Session A	30	0	0	16	0	0	14	0	0										23	5	2	11	4	1	12	1	1
	Session B																											
3-4	Session 1:2	40	3	0	20	2	0	20	1	0																		
	Session 2:3																											
5-6	Session 1:2	36	7	0	16	6	0	20	1	0																		
	Session 2:3																											
7-8	Session 1:2	36	7	0	17	5	0	19	2	0																		
	Session 2:3																											
9-12	Session 1:2	38	5	0	18	4	0	20	1	0																		
	Session 2:3	30	9	2	18	6	2	12	3	0																		

All = all items, MC = multiple-choice, CR = constructed-response. A = negligible DIF, B = low DIF, C = high DIF

\* Note that blanks are caused by the lack of sufficient number of students.

**Table E-3. 2009 MEPA: Number and Proportion of Items Classified into Each DIF Category by Item Type and Direction of Advantage—Male Versus Female Comparison Spring 2009 Administration**

Grade span	Administration	Item Type	Negligible DIF				Low DIF				High DIF			
			Favor female	Favor male	N	%	Favor female	Favor male	N	%	Favor female	Favor male	N	%
K-2	Session A	MC	7	9	16	1	0	0	0	0	0	0	0	0
		CR	11	3	14	1	0	0	0	0	0	0	0	0
K-2	Session B	MC	10	6	16	1	0	0	0	0	0	0	0	0
		CR	9	6	15	0.94	1	0	1	0.06	0	0	0	0
3-4	Session 1:2	MC	11	8	19	0.86	1	2	3	0.14	0	0	0	0
		CR	14	7	21	1	0	0	0	0	0	0	0	0
3-4	Session 2:3	MC	13	10	23	0.88	0	3	3	0.12	0	0	0	0
		CR	8	6	14	0.93	1	0	1	0.07	0	0	0	0
5-6	Session 1:2	MC	15	5	20	0.91	2	0	2	0.09	0	0	0	0
		CR	14	6	20	0.95	1	0	1	0.05	0	0	0	0
5-6	Session 2:3	MC	17	7	24	0.92	0	2	2	0.08	0	0	0	0
		CR	8	6	14	0.93	1	0	1	0.07	0	0	0	0
7-8	Session 1:2	MC	12	6	18	0.82	1	1	2	0.09	1	1	2	0.09
		CR	13	8	21	1	0	0	0	0	0	0	0	0
7-8	Session 2:3	MC	17	8	25	0.96	0	1	1	0.04	0	0	0	0
		CR	9	6	15	1	0	0	0	0	0	0	0	0
9-12	Session 1:2	MC	14	6	20	0.91	1	1	2	0.09	0	0	0	0
		CR	6	13	19	0.9	2	0	2	0.1	0	0	0	0
9-12	Session 2:3	MC	11	13	24	0.92	0	2	2	0.08	0	0	0	0
		CR	7	6	13	0.87	2	0	2	0.13	0	0	0	0

MC = multiple-choice, CR = constructed-response; N = number

\* Note that blanks are caused by the lack of sufficient number of students.

**Table E-4. 2009 MEPA: Number and Proportion of Items Classified into Each DIF Category by Item Type and Direction of Advantage—Male Versus Female Comparison  
Fall 2009 Administration**

Grade span	Administration	Item Type	Negligible DIF				Low DIF				High DIF			
			Favor female	Favor male	N	%	Favor female	Favor male	N	%	Favor female	Favor male	N	%
K-2	Session A	MC	8	8	16	1	0	0	0	0	0	0	0	0
		CR	12	2	14	1	0	0	0	0	0	0	0	0
K-2	Session B	MC												
		CR												
3-4	Session 1:2	MC	8	12	20	0.91	0	2	2	0.09	0	0	0	0
		CR	16	4	20	0.95	1	0	1	0.05	0	0	0	0
3-4	Session 2:3	MC												
		CR												
5-6	Session 1:2	MC	8	8	16	0.73	2	4	6	0.27	0	0	0	0
		CR	11	9	20	0.95	0	1	1	0.05	0	0	0	0
5-6	Session 2:3	MC												
		CR												
7-8	Session 1:2	MC	9	8	17	0.77	4	1	5	0.23	0	0	0	0
		CR	7	12	19	0.9	2	0	2	0.1	0	0	0	0
7-8	Session 2:3	MC												
		CR												
9-12	Session 1:2	MC	11	7	18	0.82	2	2	4	0.18	0	0	0	0
		CR	10	10	20	0.95	1	0	1	0.05	0	0	0	0
9-12	Session 2:3	MC	8	10	18	0.69	1	5	6	0.23	0	2	2	0.08
		CR	6	6	12	0.8	3	0	3	0.2	0	0	0	0

MC = multiple-choice, CR = constructed-response; N = number

\* Note that blanks are caused by the lack of sufficient number of students.