## **Table 1: Summary of Differential Item Functioning (DIF) Analyses Results**

The analysis below shows the summary of DIF Analyses Results conducted in the 2015-2016 program year for the date range of September 1, 2011 through August 31, 2016. DIF analyses are generated for items on MTEL test forms that are taken by at least 100 candidates in both the focal and reference groups. Refer to the Technical Manual: DIF Analyses for a full description of test quality review, including the DIF analysis and review process.

Field Name	Total Items Tested	Number of Items Identified for C-Level DIF	Comparison Group	
Early Childhood (MA002)	103	1	M/F	
		1	W/B	
		6	W/H	
History (MA006)	141	5	M/F	
English (MA007)	191	4	M/F	
		5	W/B	
Mathematics (MA009)	163	3	M/F	
		5	W/H	
General Science (MA010)	70	5	M/F	
Physics (MA011)	77	3	M/F	
Biology (MA013)	75	6	M/F	
Earth Science (MA014)	76	4	M/F	
Music (MA016)	85	8	M/F	
Visual Art (MA017)	58	5	M/F	
Business (MA019)	75	4	M/F	
Health/Family and Consumer	73	9	M/F	
Sciences (MA021)				
Physical Education (MA022)	73	4	M/F	
French (MA026)	85	2	M/F	
Spanish (MA028)	57	3	M/F	
Mathematics (Middle School)	41	2	M/F	
(MA047)				
Middle School Humanities (MA050)	50	8	M/F	
Mathematics/Science (Middle School)	62	3	M/F	
(MA051)				
Mathematics (Elementary) (MA053)	54	4	M/F	
English as a Second Language	192	3	M/F	
(MA054)		1	W/H	
Sheltered English Immersion (MA056)	68	5	M/F	
Foundations of Reading (MA090)	170	5	M/F	

		1	W/B
Communication and Literacy Skills -	207	4	M/F
Reading Subtest (MA001)		2	W/B
		3	W/H
Communication and Literacy Skills -	167	6	M/F
Writing Subtest (MA001)		7	W/B
		5	W/H
Vocational Technical Literacy Skills -	40	2	M/F
Reading Subtest (MA091)			
Vocational Technical Literacy Skills -	24	2	M/F
Writing Subtest (MA091)			
General Curriculum Test - Multiple	104	8	M/F
Subjects (MA003)		1	W/H
General Curriculum Test –	89	4	M/F
Mathematics (MA003)		1	W/B
		0	W/H
Total	2763	160	

<sup>\*</sup>Note. Values represent an instance of an item flagging at the C level for DIF. One item may flag on more than one test form.

## Table 2: Differential Item Analysis (DIF) Outcomes

Following review by the Department; items identified by the DIF analysis based on ethnicity were forwarded to the MTEL Bias Review Committee for review. Table 2 summarizes the outcome of the review.

Note that items identified with the 2015-2016 DIF analysis that were previously identified and reviewed by a Bias Review Committee as part of 2013-2014 or 2014-2015 DIF activities were not included in the 2015-2016 Bias review.

FIELD	Number of Items MTEL Bias Revi Identified by Co	N of Items Deleted		
FIELD	White/Black	White/Hispanic	Potential Bias Identified	Other*
(MA002) Early	1	6	-	-
Childhood				
(MA007) English	5		-	-
(09) Mathematics		5	-	-
(MA054) English as a		1		
Second Language				
(MA090) Foundations	1		-	-
of Reading				
(MA001)				-
Communication and	7	5	3	
Literacy Skills -				
Writing subtest				
(03) General		1	-	-
Curriculum Multi-				
subject subtest				
(03) General	1		-	-
Curriculum –				
Mathematics subtest				

<sup>\*</sup>Items may have been deleted due to reasons other than potential bias, including topicality.