APPENDIX K DIFFERENTIAL ITEM FUNCTIONING RESULTS

Table K-1. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored—ELA

	Gr	oup	Item	Number		Number "Low		Number "High"			
Grade	Reference	Focal	Type	of Items	Total	Favo	ring	Total	Favor	ing	
	Kelelelice	i ocai			IOtai	Reference	Focal	IOtal	Reference	Focal	
			MC	24	1	1	0	0	0	0	
	Male	Female	OR	6	1	0	1	0	0	0	
			WP	1	0	0	0	0	0	0	
			MC	24	0	0	0	0	0	0	
	Not EL/FEL	EL/FEL	OR	6	0	0	0	0	0	0	
			WP	1	0	0	0	0	0	0	
			MC	24	0	0	0	0	0	0	
	Not Low Income	Low Income	OR	6	0	0	0	0	0	0	
•			WP	1	0	0	0	0	0	0	
3			MC	24	0	0	0	0	0	0	
		African American/Black	OR	6	0	0	0	0	0	0	
	\\/\a\:		WP	1	0	0	0	0	0	0	
	White		MC	24	0	0	0	0	0	0	
		Hispanic/Latino	OR	6	0	0	0	0	0	0	
		•	WP	1	0	0	0	0	0	0	
			MC	24	0	0	0	0	0	0	
	Students without Disabilities	Students with Disabilities	OR	6	0	0	0	0	0	0	
			WP	1	0	0	0	0	0	0 0 0 0 0 0 0 0 0 0	
			MC	24	1	1	0	0	0	0	
	Male	Female	OR	6	1	1	0	0	0	0	
		i omalo	WP	1	1	0	1	0	0	0	
			MC	24	2	2	0	0	0	0	
	Not EL/FEL	EL/FEL	OR	6	0	0	0	0	0	0	
			WP	1	0	0	0	0	0	0	
			MC	24	0	0	0	0	0	0	
	Not Low Income	Low Income	OR	6	0	0	0	0	0	0	
_			WP	1	0	0	0	0	0	0	
4			MC	24	1	1	0	0	0	0	
		African American/Black	OR	6	0	0	0	0	0	0	
		Jan	WP	1	0	0	0	0	0	0	
	White		MC	24	1	1	0	0	0	0	
		Hispanic/Latino	OR	6	0	Ö	0	0	0	0	
		i noparno/Launo	WP	1	0	0	0	0	0	0	
			MC	24	0	0	0	0	0	0	
	Ctudente without Dischilities	Students with Dischilities	OR	6	0	0	0	0	0	0	
	Students without Disabilities S	Students with Disabilities									

	Gr	oup	Item	Number		Number "Low	,		Number "High"	1
Grade	Reference	Focal	Type	of Items	Total	Favo	ring	Total	Favor	ing
	Reference	rucai			Total	Reference	Focal	IOtal	Reference	Focal
			MC	24	3	2	1	1	1	0
	Male	Female	OR	5	0	0	0	0	•	0
			WP	2	0	0	0	0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
			MC	24	1	1	0	0	•	0
	Not EL/FEL	EL/FEL	OR	5	0	0	0	0	•	0
			WP	2	0	0	0	0	•	0
			MC	24	0	0	0	0	•	0
	Not Low Income	Low Income	OR	5	0	0	0	0	•	0
5			WP	2	0	0	0	0	•	0
· ·			MC	24	1	1	0	0	•	0
		African American/Black	OR	5	0	0	0	0	•	0
	White		WP	2	0	0	0	0	•	0
	Willia		MC	24	1	1	0	0	•	0
		Hispanic/Latino	OR	5	0	0	0	0	•	0
			WP	2	0	0	0	0	•	U
			MC	24	0	0	0	0	•	0
	Students without Disabilities	Students with Disabilities	OR	5	0	0	0	0		0
			WP	2	0	0	0	0		<u>*</u>
			MC	24	3	3	0	0	•	-
	Male	Female	OR	5	0	0	0	0	•	0 0 0 0 0 0 0
			WP	2	0	0	0	0	•	0
			MC	24	3	3	0	0	•	0
	Not EL/FEL	EL/FEL	OR	5	0	0	0	0	· ·	0
			WP	2	0	0	0	0	•	0
			MC	24	1	1	0	0	•	0
	Not Low Income	Low Income	OR	5	0	0	0	0	•	0
6			WP	2	0	0	0	0	•	0
·			MC	24	2	2	0	0	•	Ū
		African American/Black	OR	5	0	0	0	0	•	0
	White		WP	2	0	0	0	0	•	0
	AALIIIG		MC	24	2	2	0	0	0	0
		Hispanic/Latino	OR	5	0	0	0	0	0	0
			WP	2	0	0	0	0	0	0
			MC	24	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	OR	5	0	0	0	0	0	0
			WP	2	0	0	0	0	0	0

	Gr	oup	Item	Number		Number "Low			Number "High"	
Grade	Reference	Focal	Туре	of Items	Total	Favo	ring	Total	Favor	ing
	Reference	rucai			iotai	Reference	Focal	TOtal	Reference	Focal
			MC	26	4	3	1	0	0	0
	Male	Female	OR	4	0	0	0	0		
			WP	2 26	0	0	0	0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	Not EL/FEL	EL/FEL	MC OR	20 4	2 0	2 0	0 0	0 0		-
	NOT EL/T EL	LL/I LL	WP	2	0	0	0	0	•	•
			MC	26	Ö	Ö	Ö	Ö	•	0
	Not Low Income	Low Income	OR	4	0	0	0	0	0	0
			WP	2	0	0	0	0	0	0
7			MC	26	1	1	0	0	0	0
		African American/Black	OR	4	0	0	0	0	0	0
	AA/I-34 -		WP	2	0	0	0	0	0	0
	White		MC	26	1	1	0	0	0	0
		Hispanic/Latino	OR	4	0	0	0	0	0	0
		•	WP	2	0	0	0	0	0	0
			MC	26	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	OR	4	0	0	0	0		0
			WP	2	0	0	0	0		
			MC	24	2	2	0	0	0	0
	Male	Female	OR	5	1	1	0	0	0	0
			WP	2	0	0	0	0	0	0
			MC	24	3	3	0	0	0	0
	Not EL/FEL	EL/FEL	OR	5	0	0	0	0	0	0
			WP	2	0	0	0	0	0	0
			MC	24	0	0	0	0	0	0
8	Not Low Income	Low Income	OR	5	0	0	0	0	0	0
			WP	2	0	0	0	0	0	0
			MC	24	1	1	0	0	0	0
		African American/Black	OR	5	0	0	0	0	0	0
	White		WP	2	0	0	0	0	0	0
		112	MC	24	1	1	0	0	0	0
		Hispanic/Latino	OR	5	0	0	0	0	0	0

	Gr	oup	Ham Number			Number "Low"	,	Number "High"			
Grade	Deference	Facal	Item	Number of Items	Tatal	Favo	ring	Total	ing		
	Reference	Focal	Type	OI ILEIIIS	Total	Reference	Focal	Total	Reference	Focal	
	White	Hispanic/Latino	WP	2	0	0	0	0	0	0	
•			MC	24	0	0	0	0	0	0	
8	Students without Disabilities	Students with Disabilities	OR	5	0	0	0	0	0	0	
			WP	2	0	0	0	0	0	0	
			MC	21	1	1	0	0	0	0	
	Male	Female	OR	7	0	0	0	0	0	0	
			WP	2	0	0	0	0	0	0	
			MC	21	3	2	1	0	0 0		
	Not EL/FEL	EL/FEL	OR	7	0	0	0	0	0	0	
			WP	2	0	0	0	0	0	0 0 0 0	
			MC	21	0	0	0	0	0	0	
	Not Low Income	Low Income	OR	7	0	0	0	0	0	0	
40			WP	2	0	0	0	0	0	0	
10			MC	21	1	1	0	0	0	0	
		African American/Black	OR	7	0	0	0	0	0	0	
	\\/\ -;+~		WP	2	0	0	0	0	0	0	
	White		MC	21	1	0	1	0	0	0	
		Hispanic/Latino	OR	7	0	0	0	0	0	0	
			WP	2	0	0	0	0	0		
			MC	21	0	0	0	0	0	0	
	Students without Disabilities	Students with Disabilities	OR	7	0	0	0	0	0	0	
			WP	2	0	0	0	0	0	0	

Table K-2. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored—Mathematics

		Group	ltem	Number		Number "Low"		Number "High"		
Grade	Reference	Focal	Тур	of Items	Total	Favori		Total		
			e MC	16	2	Reference	Focal	1	Reference	
	Male	Female	OR	24	4	3	1	0	0	•
			MC	16	0	0	0	0	0	0
	Not EL/FEL	EL/FEL	OR	24	0	0	0	0	0	0
			MC	16	0	0	0	0	0	0
	Not Low Income	Low Income	OR	24	0	Ô	0	0	0	0
3			MC	16	1	1	0	Ö	0	0
		African American/Black	OR	24	3	1	2	Ö	0	0
	White		MC	16	0	0	0	Ö	0	0
		Hispanic/Latino	OR	24	ĺ	1	Ö	Ö	Ō	Favoring ence Focal
	Objects with and Disabilities	Otodonto villo Dio Illitio	MC	16	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	OR	24	0	0	0	0	0	0
	Male	Fomalo	MC	11	1	0	1	0	0	0
	Male	Female	OR	29	3	2	1	0	0	0
	Not EL/FEL	EL/FEL	MC	11	0	0	0	0	0	0
	NOTEL/FEL	EL/FEL	OR	29	0	0	0	0	0	0
	Not Low Income	Low Income	MC	11	0	0	0	0	0	0
4	Not Low Income	Low income	OR	29	0	0	0	0	0	0
-		African American/Black	MC	11	2	1	1	0	0	0
	White	/ tilledil / tillelledil / black	OR	29	3	2	1	0	0	0
	VVIIIC	Hispanic/Latino	MC	11	1	0	1	0	0	0
		Thopatho/Laurio	OR	29	0	0	0	0	0	voring re Focal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	Students without Disabilities	Students with Disabilities	MC	11	0	0	0	0	0	-
			OR	29	1	0	1	0	0	
	Male	Female	MC	17	2	1	1	0	0	
			OR	23	1	1	0	1	1	0
	Not EL/FEL	EL/FEL	MC	17	0	0	0	0	0	0
			OR	23	1	1	0	0	0	-
	Not Low Income	Low Income	MC	17	0	0	0	0	0	U
5			OR	23	0	0	0	0	0	U
		African American/Black	MC	17	U	0	0	0	0	U
	White		OR MC	23 17	4 0	4 0	0	0	0	0
		Hispanic/Latino	OR	23	1	U 1	0	0	0	0
			MC	23 17	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	OR	23	0	0	0	0	0	0
	Ctacine maioa Dicabillace	Claterio mai Diodomico	UK	۷۵	U	U	U	U	U	

		Group	Item	Number		Number "Low"		Number "High"			
Grade	Reference	Focal	Typ e	of Items	Total	Favori Reference	ing Focal	Total	Favorii Reference		
			MC	15	2	2	0	0	()	n ocai	
	Male	Female	OR	25	3	2	1	Õ	0	0	
			MC	15	1	1	Ö	Ö	0	Õ	
	Not EL/FEL	EL/FEL	OR	25	0	0	0	Ö	0	Ö	
	Mat I am Income	Laurinaana	MC	15	0	0	0	0	0	0	
c	Not Low Income	Low Income	OR	25	0	0	0	0	0	0	
6		African American/Black	MC	15	1	0	1	0	0	0	
	White	Amcan American/Black	OR	25	0	0	0	0	0	0	
	vvriite	Hispanic/Latino	MC	15	0	0	0	0	0	0	
		пізрапіс/цації	OR	25	0	0	0	0	0	0	
	Students without Disabilities	Students with Disabilities	MC	15	1	1	0	0	0	0	
	Students without Disabilities	Students with Disabilities	OR	25	0	0	0	0	0	0	
	Male	Female	MC	19	5	3	2	0	0	0	
	iviale	remale	OR	21	1	1	0	0	0	0	
	Not EL/FEL	EL/FEL	MC	19	0	0	0	0	0	0	
	NOT EL/T EL		OR	21	0	0	0	0	0	-	
	Not Low Income	Low Income	MC	19	0	0	0	0	0	0	
7	NOT LOW INCOME	Low moome	OR	21	0	0	0	0	0	0	
		African American/Black	MC	19	1	1	0	0	0	0	
	White	7 unoun 7 unonoun Black	OR	21	0	0	0	0	0	0	
		Hispanic/Latino	MC	19	1	1	0	0	0	0	
			OR	21	0	0	0	0	0	Focal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	Students without Disabilities	Students with Disabilities	MC	19	1	1	0	0	0		
			OR	21	0	0	0	0	0		
	Male	Female	MC	21	0	0	0	0	0		
			OR	19	1	0	1	0	0	0	
	Not EL/FEL	EL/FEL	MC	21	0	0	0	0	0	0	
			OR	19	0	0	0	0	0	U	
	Not Low Income	Low Income	MC OR	21 19	0	0 0	0 0	0 0	0	•	
8			MC	21	U 1	0	U 1	0	0	0	
		African American/Black	OR	21 19	0	0	0	0	0	0	
	White		MC	19 21	0	0	0	0	0	0	
		Hispanic/Latino	OR	19	0	0	0	0	0	0	
			MC	21	0	0	0	0	0	0	
	Students without Disabilities	Students with Disabilities	OR	19	0	0	0	0	0	0	
			UK	IJ	U	U	U	U	U	U	

Grade		Group		Number		Number "Low" Favoring			Number "High" Favoring		
	Reference	Focal	Typ e	of Items	Total	Reference	Focal	Total	Reference	Focal	
	Male	Female	MC	20	3	2	1	0	0	0	
	Male	remale	OR	22	1	0	1	0	0	0	
	Not EL/FEL	EL/FEL	MC	20	1	0	1	0	0	0	
	NOLEL/FEL	CL/FCL	OR	22	1	0	1	0	0	0	
	Not Low Income	Low Income	MC	20	0	0	0	0	0	0	
40	Not Low income	Low income	OR	22	0	0	0	0	0	0	
10		African American/Black	MC	20	2	1	1	0	0	0	
	White	/ Internative Diack	OR	22	0	0	0	0	0	0	
	VVIIIC	I lianania/Latina	MC	20	0	0	0	0	0	0	
		Hispanic/Latino	OR	22	0	0	0	0	0	0	
	Students without Disabilities	Students with Disabilities	MC	20	0	0	0	0	0	0	
	Students without Disabilities	Students with Disabilities	OR	22	0	0	0	0	0	0	

Table K-3. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored—STE

		Group	ltom	Number		Number "Lo	w"	Nu	mber "High"	
Grade	Reference	Focal	Item	Number of Items	Total	Favo	ring	Total	Favori	ng
	Reference	rocai	Туре		TOLAI	Reference	Focal	I Olai	Reference	Focal
	Male	Female	MC	22	2	1	1	1	1	0
	Male	remale	OR	19	2	1	1	0	0	0
	Not EL/FEL	El /EEl	MC	22	0	0	0	0	0	0
	NOT EL/FEL		OR	19	0	0	0	0	0	0
	Not Low Income	Low Income African American/Black Hispanic/Latino	MC	22	0	0	0	0	0	0
5	Not Low income	Low income	OR	19	0	0	0	0	0	0
J		African American/Black Hispanic/Latino Students with Disabilities Female EL/FEL	MC	22	0	0	0	0	0	0
	White	Allicali Allielicali/black	OR	19	2	2	0	0	0	0
	vviille	Highania/Latina	MC	22	0	0	0	0	0	0
		Hispanic/Latino	OR	19	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	MC	22	1	1	0	0	0	0
	Students without Disabilities	Students with Disabilities	OR	19	0	0	0	0	0	0
	Male	Camala	MC	20	3	3	0	0	0	0
	Male	remale	OR	21	5	3	2	0	0	0
	Not EL/FEL	CI /CCI	MC	20	0	0	0	0	0	0
	NOI EL/FEL	EL/FEL	OR	21	2	2	0	0	0	0
	Not Law Income	Laurinaana	MC	20	0	0	0	0	0	0
0	Not Low Income	Low Income	OR	21	0	0	0	0	0	0
8		African American/Plack	MC	20	1	1	0	0	0	0
	White	African American/Black	OR	21	1	1	0	0	0	0
	vvriite	Llianania/Latina	MC	20	0	0	0	0	0	0
		Hispanic/Latino	OR	21	0	0	0	0	0	0
	Ctudente without Dischilities	Ctudente with Disabilities	MC	20	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	OR	21	1	0	1	0	0	0

Table K-4. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored—Biology

		Group	Item	Number		Number "Low"		Number "High"		
Grade	Reference	Focal	Туре	of Items	Total	Favor Reference	ring Focal	Total	Favorii Reference	ng Focal
	Mala	Female	MC	21	0	0	0	0	0	0
	Male	remale	OR	21	1	1	0	0	Favoring	0
	Not EL/FEL	EL/FEL	MC	21	0	0	0	0	0	0
	NOI EL/FEL	EL/FEL	OR	21	0	0	0	0	0	0
	Not Low Income	Lawlaces	MC	21	0	0	0	0	0	0
ш	Not Low Income	Low Income	OR	21	0	0	0	0	0	0
HS		African American/Black	MC	21	0	0	0	0	0	0
	Milita	African American/Black	OR	21	0	0	0	0	0	0
	White	Historia/Latina	MC	21	0	0	0	0	0	0
		Hispanic/Latino	OR	21	0	0	0	0	0	0
	Charles to without Disabilities	Chudanta with Disabilities	MC	21	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	OR	21	0	0	0	0	0	0

Table K-5. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored—Introductory Physics

		Group	Item	Number		Number "Lov				
Grade	Reference	Focal	Туре	of Items	Total	Favor Reference	ing Focal	Total	Favorii Reference	ng Focal
	Male	Female	MC OR	28 14	5 1	3	2	0	0	0
	Not EL/FEL	EL/FEL	MC OR	28 14	3 0	1	2	0	0	0
HS	Not Low Income	Low Income	MC OR	28 14	0	0	0	0	0	0
	White	Hispanic/Latino	MC	28	1	0	1	0	0	0
	Students without Disabilities	Students with Disabilities	OR MC	14 28	0 1	1	0	0	0	0
	Olddenia williodi Disabiillies	Oludents with Disabilities	OR	14	0	0	0	0	0	0