## APPENDIX K DIFFERENTIAL ITEM FUNCTIONING RESULTS

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

	Group			Number		Number "Low		Number "High"		
Grade	Reference	Focal	Item Type	of Items	Total	Favo	ring	Total	Favor	ing
	Reference	rocai	туре	Of Itemis	TOLAI	Reference	Focal	TOLAI	Reference	Foca
			SR	26	0	0	0	0	0	0
	Male	Female	CR	5	0	0	0	0	0	0
			ES	1	0	0	0	0	0	0
			SR	26	0	0	0	0	0	0
	Not Low Income	Low Income	CR	5	0	0	0	0	0	0
			ES	1	0	0	0	0	0	0
			SR	26	2	1	1	0	0	0
	Not EL/FEL	EL/FEL	CR	5	0	0	0	0	0	0
•			ES	1	0	0	0	0	0	0
3			SR	26	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	CR	5	0	0	0	0	0	0
			ES	1	0	0	0	0	0	0
			SR	26	1	0	1	1	1	0
		African American/Black	CR	5	0	0	0	0	0	0
			ES	1	0	0	0	0	0	0
	White		SR	26	2	1	1	0	0	0
		Hispanic/Latino	CR	5	0	0	0	0	0	0
		Thopamor Eathle	ES	1	0	0	0	0	0	Focal
			SR	26	3	3	0	0	0	0
	Male	Female	CR	5	1	1	0	0	0	0
			ES	1	0	0	0	0	0	
			SR	26	0	0	0	0	0	0
	Not Low Income	Low Income	CR	5	0	0	0	0	0	0
		2011 111001110	ES	1	0	0	0	0	0	0
			SR	26	0	0	0	0	0	0
	Not EL/FEL	EL/FEL	CR	5	0	0	0	0	0	0
	1101 22/1 22		ES	1	0	0	0	0	0	0
4			SR	26	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	CR	5	0	0	0	0	0	0
	Classific Williout Diodoliffico	Stadonto with Diodontiloo	ES	1	0	0	0	0	0	•
			SR	26	1	1	0	0	0	•
		African American/Black	CR	5	0	0	0	0	0	•
		/ IIIIodii / IIIIoiiodii/ Didok	ES	1	0	0	0	0	0	•
	White		SR	26	0	0	0	0	0	•
		Hispanic/Latino	CR	5	0	0	0	0	0	v
	F	Hispanic/Latino	ES	1	0	0	0	0	0	

	Gr	oup	Item	Number		Number "Low			Number "High"	
Grade	Reference	Focal	Type	of Items	Total	Favo	ring	Total	Favor	ing
	Reference	FUCAI	Турс		Total	Reference	Focal	TOtal	Reference	Focal
			SR	24	3	3	0	0	0	0
	Male	Female	CR	5	0	0	0	0		Favoring ce Focal
			ES	2	0	0	0	0		-
			SR	24	0	0	0	0	Reference         Foca           0         0           0 <t< td=""></t<>	
	Not Low Income	Low Income	CR	5	0	0	0	0		•
			ES	2	0	0	0	0	0	0
			SR	24	3	3	0	0	0	0
	Not EL/FEL	EL/FEL	CR	5	0	0	0	0	0	0
5			ES	2	0	0	0	0	0	0
5			SR	24	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	CR	5	0	0	0	0	0	0
			ES	2	0	0	0	0	0	0
			SR	24	2	1	1	0	0	0
		African American/Black	CR	5	0	0	0	0	0	0
	10 //- :4 -		ES	2	0	0	0	0	0	0
	White		SR	24	1	1	0	0	0	0
		Hispanic/Latino	CR	5	0	0	0	0	0	0
		•	ES	2	0	0	0	0	0	0
			SR	24	1	1	0	0	0	0
	Male	Female	CR	5	0	0	0	0	0	0
			ES	2	0	0	0	0	0	0
			SR	24	0	0	0	0	0	0
	Not Low Income	Low Income	CR	5	0	0	0	0	0	0
			ES	2	0	0	0	0	0	0 0 0 0 0 0 0 0 0 0 0 0
			SR	24	1	1	0	0	0	0
	Not EL/FEL	EL/FEL	CR	5	0	0	0	0	0	0
•			ES	2	0	0	0	0	0	0
6			SR	24	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	CR	5	0	0	0	0	0	0
			ES	2	0	0	0	0	0	0
			SR	24	2	1	1	0	0	0
		African American/Black	CR	5	1	1	0	0	0	0
	140 to		ES	2	0	0	0	0	0	0
	White		SR	24	0	0	0	0	0	0
		Hispanic/Latino	CR	5	0	0	0	0	0	0
	ſ	r iispariic/Laurio	ES	2	0	0	0	0	0	0

	O	Group	ltom	Number		Number "Low	,		Number "High"			
Grade	Defenses	Feed			T-4-1	Favo	ring	T-4-1	Favor	ing		
	Reference	FOCAI	Type	oi items	lotai	Reference	Focal	lotai	Reference	Focal		
			SR	24	4	3	1	0	0	0		
	Male	Female		5	1	1	0	0	0	0		
				2	0	0	0	0	0	0		
				24	0	0	0	0	0	0		
	Not Low Income	Low Income		5	0	0	0	0	0	0		
				2	0	0	0	0	0	0		
			SR	24	2	2	0	Total Reference  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0		
	Not EL/FEL	EL/FEL	Type   Of Items   Total   Reference   Focal	0	0	0						
7 8			ES	2	0	0	0	0	0	0		
1			SR	24	0	0	0	0	0	0		
	Students without Disabilities	Students with Disabilities	CR	5	0	0	0	0	0	0		
				2	0	0	0	0	0	0		
				24	1	0	1	0	0	0		
		African American/Black	CR	5	0	0	0	0	0	0		
	140.3		ES	2	0	0	0	0	0	0		
	White			24	1	1	0	0	0	0		
		Hispanic/Latino			0	0	0	0	0	0		
		·			0	0	0	0	0	0		
					6	5	1	0	0	0		
	Male	Female		5	0	0	0	0	0	0		
					0	0	0	0	0	0		
					0	0	0	0	0	0		
	Not Low Income	Low Income		5	0	0	0	0	0	0		
					0	0	0	0	0			
					0	0	0	1	1	0		
	Not EL/FEL	EL/FEL			0	0	0	0	0	0		
					0	0	0	0	0	0		
8					0	0	0	0	0	0		
	Students without Disabilities	Students with Disabilities		5	0	0	0	0	0	0		
					-		-		•	0		
					1	1	-			0		
		African American/Black			0	0	•		*	•		
		. and an another production					•	•	•	•		
	White					1	1	•	*	•		
		Hispanic/Latino				0		•	*	0		
		HISPANIC/LATINO										

	Gr	oup				Number "Low	,		Number "High"	1
Grade	Deference	Facel	Item	Number of Items	Tatal	Favo	ring	Tatal	Favoring	
	Reference	Focal	Type	oi items	Total	Reference	Focal	Total	Reference	Focal
			SR	21	1	1	0	0	0	0
	Male	Female	CR	7	1	1	0	1	1	0
			ES	2	0	0	0	0	0	0
			SR	21	1	1	0	0	0	0
	Not Low Income	Low Income	CR	7	0	0	0	0	0	0
			ES	2	0	0	0	0	0	0
			SR	21	3	3	0	0	0	0
	Not EL/FEL	EL/FEL	CR	7	1	1	0	0	0	0
10			ES	2	0	0	0	0	0	0
10			SR	21	0	0	0	0	0 0 0 0	0
	Students without Disabilities	Students with Disabilities	CR	7	0	0	0	0	0	0
			ES	2	0	0	0	0	0	<b>Focal</b>
			SR	21	4	3	1	0	0	0
		African American/Black	CR	7	1	1	0	0	0	0
	White		ES	2	0	0	0	0	0	0
	VVIIILE		SR	21	2	1	1	0	0	0
		Hispanic/Latino	CR	7	1	1	0	0	0	0
			ES	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		
	1.0.0.0.0.0		e			Reference	Focal		Reference	
	Male	Female	SR	16	0	0	0	0	0	
	maio	Tomalo	CR	24	2	1	1	0	0	·
	Not Low Income	Low Income	SR	16	2	1	1	0	0	•
	Trock Low Income	Low mooning	CR	24	0	0	0	0	0	0
	Not EL/FEL	EL/FEL	SR	16	0	0	0	0	0	0
3			CR	24	0	0	0	0	0	0
•	Students without Disabilities	Students with Disabilities	SR	16	0	0	0	0	0	0
	Ctadonic Wandat Bloadinaco	Stadonio Wan Biodomaco	CR	24	0	0	0	0	0	0
		African American/Black	SR	16	3	1	2	0	0	·
	White	7 tillodil 7 tillollodil 7 Didok	CR	24	2	2	0	0	0	•
	VVIIILO	Hispanic/Latino	SR	16	3	1	2	0	0	Favoring
		Thopamo, Eduno	CR	24	2	1	1	0	0	
	Male	Female	SR	20	1	1	0	0	0	
	Maio	Tomalo	CR	20	2	2	0	0	0	
	Not Low Income	Low Income	SR	20	0	0	0	0	0	•
	Not Edw modifie	Low moonio	CR	20	0	0	0	0	0	•
	Not EL/FEL	EL/FEL	SR	20	0	0	0	0	0	(
4	110( 22/1 22		CR	20	0	0	0	0	0	C
7	Students without Disabilities	lities Students with Disabilities	SR	20	2	1	1	0	0	(
	Otadonto Without Disabilities		CR	20	0	0	0	0	0	0
		African American/Black	SR	20	2	0	2	0	0	0
	White	/ Indan / Indinan / Black	CR	20	1	1	0	0	0	•
	Wille	Hispanic/Latino	SR	20	0	0	0	0	0	-
		r noparno/Launo	CR	20	0	0	0	0	0	
	Male	Female	SR	18	1	1	0	0	0	
	Maio	Tomale	CR	22	4	3	1	0	0	•
	Not Low Income	Low Income	SR	18	0	0	0	0	0	•
	NOT FOR IIICOILIE	LOW INCOME	CR	22	0	0	0	0	0	•
	Not EL/FEL	EL/FEL	SR	18	0	0	0	0	0	(
5	NOCEE/I EE		CR	22	0	0	0	0	0	(
J	Students without Disabilities	Students with Disabilities	SR	18	0	0	0	0	0	(
	Gladents without Disabilities	Gludente with Disabilities	CR	22	0	0	0	0	0	C
		African American/Black	SR	18	0	0	0	0	0	C
	White	Amoan American/Diack	CR	22	1	1	0	0	0	C
	AALIIG	Hispanic/Latino	SR	18	0	0	0	0	0	C
		i iispailio/Latiilo	CR	22	0	0	0	0	0	0

		Group	Item	Number		Number "Low"			Number "High	
Grade	Reference	Focal	Тур	of Items	Total	Favori		Total	Favorii	
	11010101100		е			Reference	Focal			Focal
	Male	Female	SR	16	2	2	0	0	-	0
	Maio	. omaio	CR	24	2	0	2	0	•	0
	Not Low Income	Low Income	SR	16	0	0	0	0	ŭ	0
	Trock Low Income	Low modifie	CR	24	0	0	0	0	•	0
	Not EL/FEL	EL/FEL	SR	16	0	0	0	0	•	0
6	, ==		CR	24	1	0	1	0	ū	0
·	Students without Disabilities	Students with Disabilities	SR	16	0	0	0	0	•	0
			CR	24	0	0	0	0	•	0
		African American/Black	SR	16	1	0	1	0	ū	0
	White		CR	24	2	1	1	0	ū	0
	***************************************	Hispanic/Latino	SR	16	0	0	0	0	•	0
			CR	24	1	0	1	0		0
	Male	Female	SR	17	2	0	2	0	-	0
	Walo	1 omaio	CR	23	4	4	0	0	-	0
	Not Low Income	Low Income	SR	17	0	0	0	0	-	0
	Not Low Income	Low moome	CR	23	0	0	0	0	-	0
	Not EL/FEL	EL/FEL	SR	17	1	0	1	0	•	0
7	NOT EL/I EL	LL/1 LL	CR	23	0	0	0	0	ū	0
•	Students without Disabilities	Students with Disabilities	SR	17	0	0	0	0	ū	0
	Ottachts Without Disabilities	Students with Disabilities	CR	23	0	0	0	0	ŭ	0
		African American/Black	SR	17	2	0	2	0	ŭ	0
	White	Amenican/black	CR	23	1	0	1	0	-	0
	VVIIICE	Hispanic/Latino	SR	17	1	0	1	0	ū	0
		i iispanio/Latino	CR	23	0	0	0	0	-	0
	Male	Female	SR	16	2	2	0	0	0	0
	Male	remale	CR	24	2	1	1	1	1	0
	Not Low Income	Low Income	SR	16	0	0	0	0	0	0
	NOT LOW ITCOME	Low income	CR	24	0	0	0	0	0	0
	Not EL/FEL	EL/FEL	SR	16	0	0	0	0	0	0
8	INULEL/FEL	LL/FEL	CR	24	0	0	0	0	0	0
O	Students without Disabilities	Students with Disabilities	SR	16	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	CR	24	0	0	0	0	0	0
		African American/Black	SR	16	0	0	0	0	0	0
	White	AIIICAH AIIICHCAH/DIACK	CR	24	2	2	0	0	0	0
	vviiile	Higherial ating	SR	16	0	0	0	0	Reference	0
		Hispanic/Latino	CR	24	1	1	0	0	0	0

Grade		Group	Item	Number		Number "Low" Favori	na	Number "High"		
Grade	Reference	Focal	Typ e	of Items	Total	Reference	Focal	Total	Reference	Focal
	Male	Female	SR	22	0	0	0	0	0	0
	wate	remale	CR	20	1	1	0	0	0	0
	Not Low Income	Low Income	SR	22	0	0	0	0	0	0
	Not Low income	Low income	CR	20	0	0	0	0	0	oring
	Not EL/FEL	EI /EEI	SR	22	1	0	1	0	0	0
40	NOI EL/FEL	EL/FEL	CR	20	0	0	0	0	0	0
10	Students without Disabilities	Ctudente with Dischilities	SR	22	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	CR	20	0	0	0	0	0	0
		African American/Dlock	SR	22	1	0	1	0	0	0
	\\/hito	African American/Black	CR	20	1	1	0	0	0	0
	White	Hispanic/Latino	SR	22	0	0	0	0	0	0
		·	CR	20	0	0	0	0	0	0

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

0		Group	Item	Number		Number "Lov			Number "High"	
Grade	Reference	Focal	Туре	of Items	Total	Favo Reference	ring Focal	Total	Favori Reference	ng Focal
	Male	Famala	SR	20	1	1	0	0	0	0
	Male	Female	CR	21	3	2	1	0	0	0
	Not Low Income	Low Income	SR	20	0	0	0	0	0	0
	Not Low Income	LOW IIICOINE	CR	21	0	0	0	0	0	0
	Not EL/FEL	EL/FEL	SR	20	0	0	0	0	0	0
5	NOT LETT LE	EL/I EL	CR	21	0	0	0	0	0	0
·	Students without Disabilities	Students with Disabilities	SR	20	1	0	1	0	0	0
	Claderile Wallout Bloadillilos	Cladorilo War Bloadingo	CR	21	0	0	0	0	0	0
		African American/Black	SR	20	0	0	0	0	0	0
	White	7 tillodil 7 tillollodil/Black	CR	21	1	1	0	0	0	0
	· · · · · · · · · · · · · · · · · · ·	Hispanic/Latino	SR	20	0	0	0	0	0	0
			CR	21	1	1	0	0	0	0
	Male	Female	SR	26	3	3	0	0	0	0
		· omalo	CR	15	3	2	1	0	0	0
	Not EL/FEL	EL/FEL	SR	26	0	0	0	0	0	0
			CR	15	0	0	0	0	0	0
	Not Low Income	Low Income	SR	26	0	0	0	0	0	0
8			CR	15	0	0	0	0	0	0
	Students without Disabilities	Students with Disabilities	SR	26	U	U	Ü	0	0	0
			CR	15 20	U	U	0	0	0	0
		African American/Black	SR	26	U	0	0	0	0	0
	White		CR	15 26	1	1	U	U	U	U
		Hispanic/Latino	SR	26	0	U	U	0	U	0
		nispanic/Launo	CR	15	U	U	U	U	U	U

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

		Group	Item	Number		Number "Lo		Number "High"		
Grade	Reference	Focal	Туре	of Items	Total	Favor Reference	ring Focal	Total	Favori Reference	ng Focal
	Male	Female	SR	27	1	1	0	1	1	0
	waie	remale	CR	15	3	3	0	0	0	0
	Not Low Income	Low Income	SR	27	0	0	0	0	0	0
	NOT LOW INCOME	Low income	CR	15	0	0	0	0	0	0
	Not EL/FEL	EL/FEL	SR	27	0	0	0	0	0	0
HS	NOLEL/FEL		CR	15	0	0	0	0	0	0
по	Students without Disabilities	Students with Disabilities	SR	27	0	0	0	0	0	0
	Students without disabilities	Students with Disabilities	CR	15	1	0	1	0	0	0
		African American/Black	SR	27	0	0	0	0	0	0
	White	Amcan American/black	CR	15	0	0	0	0	0	0
	vviile	Highania/Latina	SR	27	0	0	0	0	0	0
		Hispanic/Latino	CR	15	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 "Low"		Number "High"		
Grade	Reference	Focal	Туре	of Items	Total	Favoi Reference	ing Focal	Total	Favori Reference	ng Focal
	Male	Female	SR CR	21 21	2	1 0	1 2	2	2 0	0
	Not Low Income	Low Income	SR CR	21 21	0	0 0	0	0 0	0 0	0 0
HS	Not EL/FEL	EL/FEL	SR CR	21 21	0	0 0	0	0 0	0 0	0 0
	Students without Disabilities	Students with Disabilities	SR CR	21 21	0	0	0	0 0	0 0	0
	White	Hispanic/Latino	SR CR	21 21	1 1	0 1	1 0	0	0 0	0 0