## **APPENDIX I**

## **DIFFERENTIAL ITEM FUNCTIONING RESULTS**

Gr			Number "Low"			Number "High"			
	•	- Item	Number		Favoring			Favoring	
Reference	Focal	Туре	of Items	Total	Reference	Focal	Total	Number "High Favorir Reference 0 0 0 0 2 0 2 0 0 0 0 0 0 0 0 0	Focal
Male	Female	MC	40	3	3	0	0	0	0
Maic		OR	5	0	0	0	0	0	0
Students without	Students with	MC	40	0	0	0	0	0	0
Disabilities	Disabilities	OR	5	1	1	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	6	4	2	2	2	0
		OR	5	2	2	0	0	0	0
Not Economically	Economically	MC	40	0	0	0	0	0	0
Disadvantaged Disadvantaged	Disadvantaged	OR	5	0	0	0	0	0	0
White	African American	MC	40	2	1	1	0	0	0
		OR	5	0	0	0	0	0	0
	Hispanic	MC	40	0	0	0	0	0	0
		OR	5	0	0	0	0	0	0

## Table I-1. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored – High School Biology

Table I-2. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored – High School Chemistry

Group			Nhumber	Number "Low"			Number "High"			
Reference	Facal	Item Type	Number of Items	Total	Favoring		Total	Favoring		
Relefence	Focal	туре	of items	Total	Reference	Focal	Total	0	Focal	
Male	Female	MC	40	12	6	6	4	3	1	
Male	i emale	OR	5	1	0	1	0	<i>Favori.</i> <i>Reference</i> 3 0 0 0 0 0 0 0 0 0 0 0 0 0	0	
Students without	Students with	MC	40	0	0	0	0	0	0	
Disabilities	Disabilities	OR	5	0	0	0	0	0	0	
Not LEPFLEP	LEPFLEP	MC	40	0	0	0	0	0	0	
		OR	5	0	0	0	0	0	0	
Not Economically	Economically	MC	40	0	0	0	0	0	0	
Disadvantaged	Disadvantaged	OR	5	0	0	0	0	0	0	
	African	MC	40	0	0	0	0	0	0	
White	American	OR	5	0	0	0	0	0	0	
WIIIE	Hispanic	MC	40	0	0	0	0	al <u>Favori</u> Reference 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	
	Пізрапіс	OR	5	0	0	0	0		0	

Group		14	NI	Number "Low"			Number "High"		
Reference	Focal	- Item Type	Number of Items	Total	Favoring		Total	Favoring	
Reference					Reference	Focal	Total	Reference	Focal
Male	Female	MC	40	6	6	0	0	0	0
	I emale	OR	5	0	0	0	0	Total         Reference           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           1         1	0
Students without	Students with	MC	40	0	0	0	0	0	0
Disabilities	Disabilities	OR	5	1	1	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	7	6	1	0	0	0
		OR	5	1	1	0	0	0	0
Not Economically	Economically	MC	40	1	1	0	0	0	0
Disadvantaged	Disadvantaged	OR	5	0	0	0	0	0	0
	African American	MC	40	2	1	1	1	1	0
White		OR	5	0	0	0	0	0 0 0 0	0
	Hispanic	MC	40	2	2	0	0		0
	парапіс	OR	5	0	0	0	0	0	0

## Table I-3. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored – High School Introductory Physics

Table I-4. Number of Items Classified as "Low" or "High" DIF, Overalland by Group Favored – High School Technology/Engineering

	<i>,</i> ,		0			•	0		
Group			Niccostran	Number "Low"			Number "High"		
Reference	Facal	<ul> <li>Item</li> <li>Type</li> </ul>	Number of Items	Tatal	Favoring		Tatal	Favoring	
Relefence	Focal	туре	OF ILETINS	Total	Reference	Focal	Total	<i>Favorir</i> <i>Reference</i> 1 0 0 0 9 0 0 0 0 0 5 0 0 0	Focal
Male	Female	MC	40	11	9	2	1	1	0
Iviale	I emale	OR	5	0	0	0	0	0	0
Students without	Students with	MC	40	4	4	0	0	0	0
Disabilities	Disabilities	OR	5	1	1	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	13	6	7	11	9	2
		OR	5	2	1	1	0	0	0
Not Economically Disadvantaged	Economically	MC	40	3	3	0	0	0	0
	Disadvantaged	OR	5	0	0	0	0	0	0
	African American	MC	40	11	7	4	6	5	1
White		OR	5	0	0	0	0	0	0
VVIIILE	Hispanic	MC	40	6	4	2	0	0	0
		OR	5	0	0	0	0	0	0