The Students Like Learning Physics (SLP) scale was created based on students' degree of agreement to the five statements described below. This scale was administered in countries where the sciences are taught as

Exhibit 1: Items in the TIMSS 2011 Students Like Learning Physics Scale, Eighth Grade

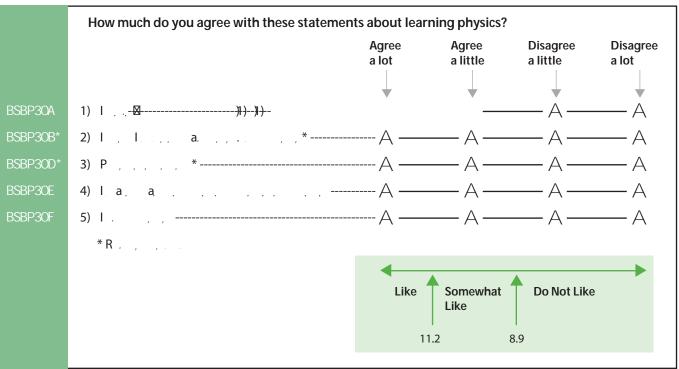


Exhibit 2: Item Parameters for the TIMSS 2011 Students Like Learning Physics Scale, Eighth Grade

Fire	4 1	<u>1</u> 1\1	<u>1</u> _1\ 2	<i>ī</i> ī/ 3
BSBP30A	0.93300	1.16148	0.28499	1.44647
BSBP30B*	0.53900	0.97837	0.08635	1.06472
BSBP30D*	0.62675	1.06742	0.11477	1.18219
BSBP30E	1.19913	1.06040	0.37488	1.43528
BSBP30F	0.71425	1.08411	0.23580	1.31991

<sup>\*</sup>R . , , . .

## **Exhibit 3: Scale Transformation Constants**

	A_ A			
A = 10.02753	To	C 2 C	= 10.02753 + 1.18787 - L	C 2 C
	Та, "	. 3 d 3,	= 10.02/33 + 1.16/6/ - L	3 a 3,