

e Students Like Learning Earth Science (SLE) scale was created based on students' degree of agreement to the ve statements described below. is scale was administered in countries where the sciences are taught as separate subjects. See **2011 2011**





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

ltem	delta	tau_1	tau_2	tau_3
22	1.41752	1.3 340	0.31 04	1.70244
22 *	0. 02 0	1.06	0.22402	1.2 401
22, *	1.00767	1.17070	0.23415	1.404 5
22	1.6 210	1.1 210	0.41371	1.5 5 1
_ 224	1.23026	1.277 3026		

Exhibit 6: Relationship Between the TIMSS 2011 Students Like Learning Earth Science Scale, Eighth Grade, and TIMSS 2011 Science Achievement

Country	Pearson's Correlation with Science Achievement		Variance in Science Achievement Accounted for by Difference
	(r)	(r ²)	Between Regions of the Scale (ŋ²)
4.	0.16	0.02	0.03
L4 N	0.25	0.06	0.05
ы * а ј	0.24	0.06	0.05
-i 4 07	0.02	0.00	0.01