e Safe and Orderly School (SOS) scale was created based on teachers' degree of agreement with the ve statements described below. See

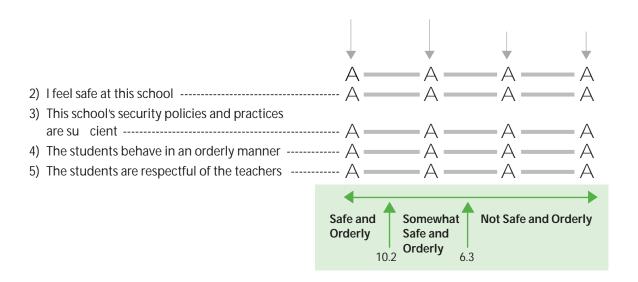


Exhibit 2: Item Parameters for the TIMSS 2011 Safe and Orderly School Scale, Fourth Grade¹

ATBG07A	-2.26237	-1.12460	1.12460
ATBG07B	-3.17099	-1.29869	1.29869
ATBG07C	-2.15923	-1.47798	1.47798
ATBG07D	-0.81209	-1.96331	1.96331
ATBG07E	-1.29088	-1.92179	1.92179

¹ For the purpose of scaling, the categories "Disagree a little" and "Disagree a lot" were combined because there were very few respondents in each of these categories.

Exhibit 3: Scale Transformation Constants

Scale Transformation Constants $\frac{A = 10.16412}{B = 0.99938}$ Transformed Scale Score = 10.16412 + 0.99938 • Logit Scale Score

Exhibit 4: Equivalence Table of the Raw Score and the Transformed Scale Score

Raw Score	Transformed Scale Score	Cutpoint	Raw S
0	4.10350		6
1	5.45215		7
2	6.23413	6.3	8
3	6.86733		9
4	7.45783		10
5	8.06028		

Raw Score	Transformed Scale Score	Cutpoint
6	8.71051	
7	9.43748	
8	10.28418	10.2
9	11.28901	
10	12.78819	

Exhibit 5: Cronbach's Alpha Reliability Coe cient and Principal Components Analysis of the Items in the TIMSS 2011 Safe and Orderly School Scale, Fourth Grade

	or searc, roar tri						
		Percent of	Factor Loadings for Each Item				
Country	Reliability Coefficient	Variance Explained	ATBG07A	ATBG07B	ATBG07C	ATBG07D	ATBG07E
Armenia	0.78	54	0.75	0.78	0.78	0.73	0.62
Australia	0.84	61	0.77	0.80	0.70	0.83	0.81
Austria	0.76	52	0.77	0.71	0.70	0.72	0.69
Azerbaijan	0.65	43	0.70	0.74	0.62	0.54	0.64
Bahrain	0.76	52	0.69	0.75	0.76	0.74	0.67
Belgium (Flemish)	0.71	48	0.65	0.74	0.72	0.69	0.64
Chile	0.83	60	0.76	0.80	0.83	0.76	0.72
Chinese Taipei	0.84	61	0.79	0.84	0.80	0.71	0.76
Croatia	0.72	50	0.71	0.74	0.71	0.70	0.68
Czech Republic	0.76	52	0.57	0.74	0.73	0.78	0.78
De							

Exhibit 5: Cronbach's Alpha Reliability Coe Orderly School Scalede and	cient and Principal Components Analysis of the Items in the TIMSS 2011 Safe and

hibit 6: Relationship	Between TIMSS 2	2011 Fourth Grad	le Safe and Order	ly School Scale	and TIMSS 2011	Achievement (Co	ntinued),sav