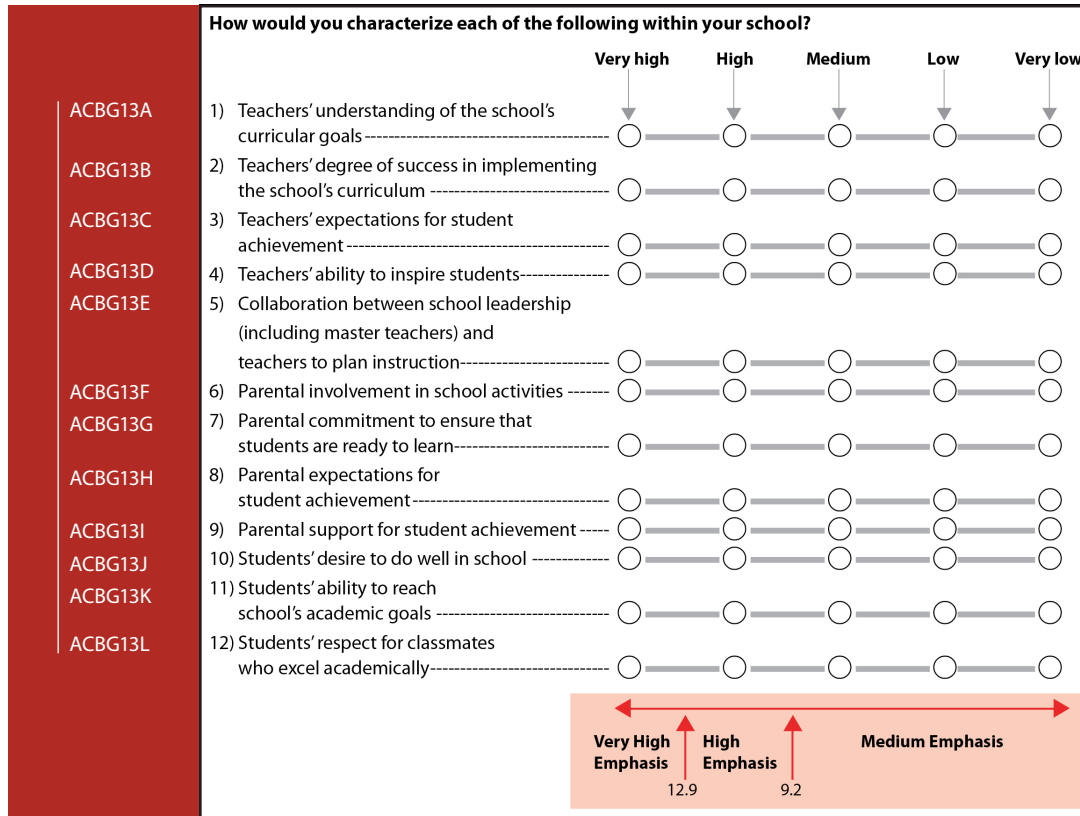


## School Emphasis on Academic Success – Principals’ Reports Scale

The *School Emphasis on Academic Success – Principals’ Reports* (EAS) scale was created based on principals’ responses characterizing the 12 aspects of school climate described below.

### Items in the PIRLS 2016 *School Emphasis on Academic Success – Principals’ Reports* Scale<sup>1</sup>



<sup>1</sup> For the purpose of scaling, categories in which there were very few respondents were combined. The categories “Low” and “Very low” were combined for all variables. The scale statistics that are reported herein reflect analysis of the items following collapsing.

**Item Parameters for the PIRLS 2016 School Emphasis on Academic Success - Principals' Reports Scale**

Item	delta	tau_1	tau_2	tau_3	Infit
ACBG13A	-1.31219	-3.35435	-0.01880	3.37315	1.07
ACBG13B	-0.96099	-3.90556	0.19733	3.70823	0.96
ACBG13C	-0.82391	-3.49024	0.00835	3.48189	0.89
ACBG13D	-0.59035	-3.43001	0.05756	3.37245	0.99
ACBG13E	-0.68959	-2.63930	-0.22702	2.86632	1.20
ACBG13F	1.15412	-2.48630	0.08282	2.40348	1.17
ACBG13G	1.42236	-2.80818	0.13531	2.67287	0.85
ACBG13H	0.00207	-2.69019	-0.24463	2.93482	1.09
ACBG13I	1.29200	-2.95076	0.10280	2.84796	0.91
ACBG13J	0.16604	-3.49673	0.03249	3.46424	0.87
ACBG13K	0.50539	-4.02618	0.21215	3.81403	0.87
ACBG13L	-0.16495	-3.14717	-0.20095	3.34812	1.14

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2016

**Scale Transformation Constants for the PIRLS 2016 School Emphasis on Academic Success - Principals' Reports Scale**

Scale Transformation Constants	
A = 9.088617	Transformed Scale Score = 9.088617 + 1.147876 • Logit Scale Score
B = 1.147876	

**Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS  
2016 School Emphasis on Academic Success - Principals' Reports Scale**

Raw Score	Transformed Scale Score	Cutpoint
0	1.06095	
1	2.49562	
2	3.26563	
3	3.84274	
4	4.33403	
5	4.77520	
6	5.18627	
7	5.57770	
8	5.95426	
9	6.31720	
10	6.66619	
11	7.00120	
12	7.32360	
13	7.63552	
14	7.93995	
15	8.24014	
16	8.53923	
17	8.83993	
18	9.14415	9.2
19	9.45276	
20	9.76546	
21	10.08096	
22	10.39737	
23	10.71295	
24	11.02647	
25	11.33774	
26	11.64774	
27	11.95831	
28	12.27223	
29	12.59338	
30	12.92713	12.9
31	13.28181	
32	13.66669	
33	14.10420	
34	14.63433	
35	15.35698	
36	16.74931	

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2016

**Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2016 School Emphasis on Academic Success - Principals' Reports Scale**

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item											
			ACBG13A	ACBG13B	ACBG13C	ACBG13D	ACBG13E	ACBG13F	ACBG13G	ACBG13H	ACBG13I	ACBG13J	ACBG13K	ACBG13L
Australia	0.93	56	0.75	0.78	0.78	0.68	0.63	0.61	0.81	0.77	0.82	0.80	0.80	0.72
Austria	0.83	37	0.43	0.60	0.73	0.34	0.27	0.66	0.82	0.63	0.78	0.62	0.71	0.41
Azerbaijan	0.89	46	0.74	0.75	0.68	0.72	0.72	0.68	0.72	0.62	0.64	0.62	0.61	0.57
Bahrain	0.91	51	0.67	0.76	0.79	0.81	0.64	0.66	0.68	0.64	0.73	0.77	0.81	0.58
Belgium (Flemish)	0.83	36	0.41	0.52	0.47	0.41	0.34	0.67	0.82	0.65	0.81	0.58	0.68	0.64
Belgium (French)	0.84	38	0.52	0.61	0.49	0.55	0.41	0.66	0.77	0.65	0.77	0.68	0.70	0.53
Bulgaria	0.90	50	0.49	0.73	0.71	0.69	0.54	0.78	0.78	0.63	0.84	0.75	0.80	0.65
Canada	0.88	45	0.54	0.67	0.69	0.64	0.50	0.68	0.73	0.72	0.77	0.71	0.70	0.60
Chile	0.92	54	0.71	0.72	0.80	0.76	0.72	0.73	0.74	0.78	0.75	0.78	0.70	0.65
Chinese Taipei	0.89	46	0.58	0.52	0.74	0.73	0.57	0.61	0.72	0.68	0.68	0.80	0.81	0.64
Czech Republic	0.85	38	0.54	0.58	0.59	0.61	0.60	0.53	0.71	0.57	0.63	0.74	0.73	0.52
Denmark	0.91	50	0.73	0.68	0.75	0.61	0.54	0.55	0.82	0.72	0.71	0.83	0.74	0.75
Egypt	0.91	50	0.66	0.66	0.68	0.59	0.65	0.70	0.77	0.75	0.74	0.74	0.79	0.70
England	0.90	47	0.64	0.72	0.65	0.71	0.65	0.66	0.77	0.75	0.74	0.67	0.72	0.51
Finland	0.89	46	0.58	0.61	0.73	0.72	0.57	0.58	0.77	0.74	0.71	0.71	0.71	0.63
France	0.85	39	0.40	0.61	0.56	0.58	0.48	0.63	0.70	0.66	0.72	0.77	0.74	0.59
Georgia	0.87	41	0.68	0.69	0.66	0.66	0.61	0.61	0.68	0.65	0.71	0.61	0.53	0.54
Germany	0.84	38	0.52	0.60	0.66	0.49	0.40	0.63	0.78	0.58	0.73	0.64	0.70	0.55
Hong Kong SAR	0.87	42	0.64	0.66	0.62	0.65	0.62	0.65	0.67	0.61	0.68	0.71	0.73	0.47
Hungary	0.88	45	0.43	0.68	0.61	0.71	0.39	0.69	0.81	0.72	0.81	0.72	0.68	0.66
Iran, Islamic Rep. of	0.91	50	0.67	0.71	0.65	0.70	0.58	0.73	0.81	0.68	0.79	0.78	0.69	0.67
Ireland	0.89	47	0.58	0.62	0.75	0.63	0.40	0.58	0.82	0.81	0.81	0.81	0.72	0.54
Israel	0.86	41	0.71	0.71	0.69	0.67	0.66	0.50	0.66	0.60	0.67	0.69	0.60	0.46
Italy	0.86	40	0.63	0.69	0.55	0.77	0.70	0.51	0.64	0.52	0.62	0.71	0.59	0.56
Kazakhstan	0.90	49	0.56	0.66	0.67	0.74	0.69	0.67	0.79	0.64	0.77	0.71	0.77	0.66
Kuwait	0.92	54	0.71	0.74	0.78	0.77	0.61	0.66	0.76	0.70	0.65	0.82	0.81	0.74
Latvia	0.86	40	0.53	0.68	0.57	0.65	0.55	0.76	0.70	0.48	0.71	0.71	0.70	0.43
Lithuania	0.89	45	0.64	0.67	0.68	0.75	0.68	0.67	0.73	0.53	0.70	0.67	0.67	0.62
Macao SAR	0.79	32	0.51	0.61	0.60	0.71	0.40	0.49	0.70	0.55	0.52	0.71	0.50	0.41
Malta	0.88	44	0.63	0.74	0.71	0.65	0.59	0.61	0.71	0.73	0.73	0.66	0.67	0.47
Morocco	0.90	48	0.68	0.73	0.75	0.69	0.70	0.67	0.76	0.63	0.72	0.65	0.71	0.62
Netherlands	0.85	38	0.53	0.62	0.72	0.77	0.58	0.43	0.58	0.57	0.54	0.71	0.62	0.63
New Zealand	0.91	50	0.71	0.75	0.78	0.68	0.64	0.67	0.72	0.67	0.76	0.70	0.76	0.63
Northern Ireland	0.90	49	0.59	0.73	0.75	0.73	0.74	0.52	0.66	0.65	0.71	0.78	0.78	0.67
Norway (5)	0.90	49	0.67	0.79	0.74	0.71	0.63	0.72	0.76	0.66	0.74	0.58	0.74	0.62
Oman	0.88	44	0.62	0.66	0.69	0.71	0.63	0.61	0.76	0.64	0.69	0.69	0.68	0.59
Poland	0.87	42	0.60	0.66	0.47	0.67	0.57	0.65	0.77	0.70	0.71	0.67	0.66	0.57
Portugal	0.89	46	0.55	0.68	0.69	0.63	0.59	0.73	0.71	0.72	0.77	0.75	0.69	0.59
Qatar	0.89	47	0.64	0.69	0.75	0.74	0.60	0.68	0.79	0.63	0.71	0.62	0.71	0.61
Russian Federation	0.87	41	0.58	0.73	0.70	0.70	0.56	0.63	0.64	0.47	0.74	0.65	0.72	0.55
Saudi Arabia	0.92	53	0.68	0.74	0.68	0.75	0.74	0.68	0.75	0.71	0.76	0.80	0.75	0.71
Singapore	0.93	56	0.67	0.74	0.79	0.74	0.61	0.69	0.84	0.80	0.78	0.81	0.79	0.66
Slovak Republic	0.86	41	0.52	0.67	0.63	0.61	0.64	0.64	0.71	0.58	0.67	0.71	0.72	0.52
Slovenia	0.85	38	0.60	0.64	0.54	0.73	0.66	0.57	0.66	0.36	0.64	0.63	0.68	0.61
South Africa	0.90	49	0.62	0.58	0.67	0.65	0.69	0.70	0.75	0.64	0.77	0.77	0.80	0.69
Spain	0.90	48	0.61	0.74	0.77	0.64	0.57	0.67	0.80	0.78	0.79	0.67	0.66	0.54
Sweden	0.91	52	0.58	0.67	0.76	0.74	0.60	0.69	0.79	0.83	0.77	0.81	0.70	0.65
Trinidad and Tobago	0.90	49	0.57	0.63	0.67	0.65	0.58	0.77	0.79	0.64	0.76	0.79	0.79	0.68
United Arab Emirates	0.92	53	0.72	0.76	0.78	0.75	0.67	0.67	0.74	0.69	0.76	0.74	0.76	0.62
United States	0.93	56	0.67	0.73	0.72	0.77	0.59	0.76	0.82	0.81	0.81	0.81	0.79	0.69
<b>Benchmarking Participants</b>														
Buenos Aires, Argentina	0.90	50	0.69	0.78	0.66	0.63	0.58	0.71	0.81	0.73	0.80	0.76	0.76	0.50
Ontario, Canada	0.88	45	0.54	0.68	0.74	0.67	0.42	0.63	0.69	0.77	0.76	0.77	0.71	0.58
Quebec, Canada	0.88	43	0.68	0.69	0.58	0.70	0.64	0.73	0.70	0.65	0.75	0.55	0.61	0.55
Denmark (3)	0.90	50	0.73	0.67	0.75	0.61	0.54	0.56	0.82	0.72	0.73	0.83	0.73	0.73
Norway (4)	0.90	49	0.66	0.79	0.74	0.73	0.63	0.73	0.76	0.66	0.74	0.58	0.74	0.62
Moscow City, Russian Fed.	0.84	37	0.66	0.76	0.62	0.73	0.66	0.49	0.63	0.25	0.65	0.57	0.63	0.44
Eng/Afr/Zulu - RSA (5)	0.90	48	0.46	0.56	0.69	0.71	0.67	0.70	0.80	0.61	0.80	0.79	0.76	0.71
Andalusia, Spain	0.88	44	0.58	0.75	0.74	0.61	0.60	0.72	0.75	0.77	0.75	0.62	0.61	0.39
Madrid, Spain	0.91	52	0.61	0.69	0.76	0.67	0.61	0.73	0.83	0.84	0.83	0.71	0.75	0.62
Abu Dhabi, UAE	0.89	46	0.74	0.76	0.80	0.77	0.61	0.54	0.66	0.56	0.64	0.72	0.69	0.59
Dubai, UAE	0.93	57	0.73	0.76	0.83	0.78	0.72	0.74	0.72	0.74	0.77	0.76	0.79	0.69

SOURCE: IEA's Progress in International Reading Literacy Study - PIRLS 2016

**Relationship Between the PIRLS 2016 School Emphasis on Academic Success - Principals' Reports Scale and PIRLS 2016 Reading Achievement**

Country	Pearson's Correlation with Reading Achievement		Variance in Reading Achievement Accounted for by Difference Between Regions of the Scale ( $\eta^2$ )
	(r)	(r <sup>2</sup> )	
Australia	0.24	0.06	0.06
Austria	0.22	0.05	0.04
Azerbaijan	-0.04	0.00	0.02
Bahrain	0.29	0.08	0.06
Belgium (Flemish)	0.15	0.02	0.02
Belgium (French)	0.26	0.07	0.05
Bulgaria	0.35	0.12	0.08
Canada	0.20	0.04	0.04
Chile	0.22	0.05	0.03
Chinese Taipei	0.13	0.02	0.01
Czech Republic	0.12	0.01	0.00
Denmark	0.13	0.02	0.02
Egypt	0.22	0.05	0.03
England	0.18	0.03	0.02
Finland	0.09	0.01	0.01
France	0.05	0.00	0.00
Georgia	0.07	0.01	0.00
Germany	0.31	0.10	0.08
Hong Kong SAR	0.15	0.02	0.00
Hungary	0.29	0.09	0.04
Iran, Islamic Rep. of	0.21	0.04	0.03
Ireland	0.17	0.03	0.04
Israel	0.12	0.01	0.02
Italy	0.02	0.00	0.01
Kazakhstan	0.09	0.01	0.01
Kuwait	0.23	0.05	0.04
Latvia	0.16	0.03	0.02
Lithuania	0.26	0.07	0.07
Macao SAR	0.16	0.02	0.02
Malta	0.06	0.00	0.00
Morocco	0.34	0.11	0.12
Netherlands	0.12	0.01	0.01
New Zealand	0.18	0.03	0.03
Northern Ireland	0.10	0.01	0.00
Norway (5)	0.16	0.02	0.02
Oman	0.25	0.06	0.05
Poland	0.14	0.02	0.01
Portugal	0.26	0.07	0.05
Qatar	0.15	0.02	0.03
Russian Federation	0.18	0.03	0.04
Saudi Arabia	0.26	0.07	0.05
Singapore	0.19	0.04	0.03
Slovak Republic	0.30	0.09	0.04
Slovenia	0.08	0.01	0.00
South Africa	0.11	0.01	0.03
Spain	0.17	0.03	0.02
Sweden	0.20	0.04	0.03
Trinidad and Tobago	0.27	0.07	0.05
United Arab Emirates	0.30	0.09	0.08
United States	0.19	0.03	0.03
<b>International Median</b>	<b>0.18</b>	<b>0.03</b>	<b>0.03</b>
<b>Benchmarking Participants</b>			
Buenos Aires, Argentina	0.23	0.05	0.06
Ontario, Canada	0.17	0.03	0.03
Quebec, Canada	0.17	0.03	0.02
Denmark (3)	0.08	0.01	0.01
Norway (4)	0.11	0.01	0.01
Moscow City, Russian Fed.	0.09	0.01	0.02
Eng/Afr/Zulu - RSA (5)	0.19	0.04	0.03
Andalusia, Spain	0.20	0.04	0.02
Madrid, Spain	0.21	0.05	0.05
Abu Dhabi, UAE	0.20	0.04	0.04
Dubai, UAE	0.38	0.14	0.11

SOURCE: IEA's Progress in International Reading Literacy Study - PIRLS 2016