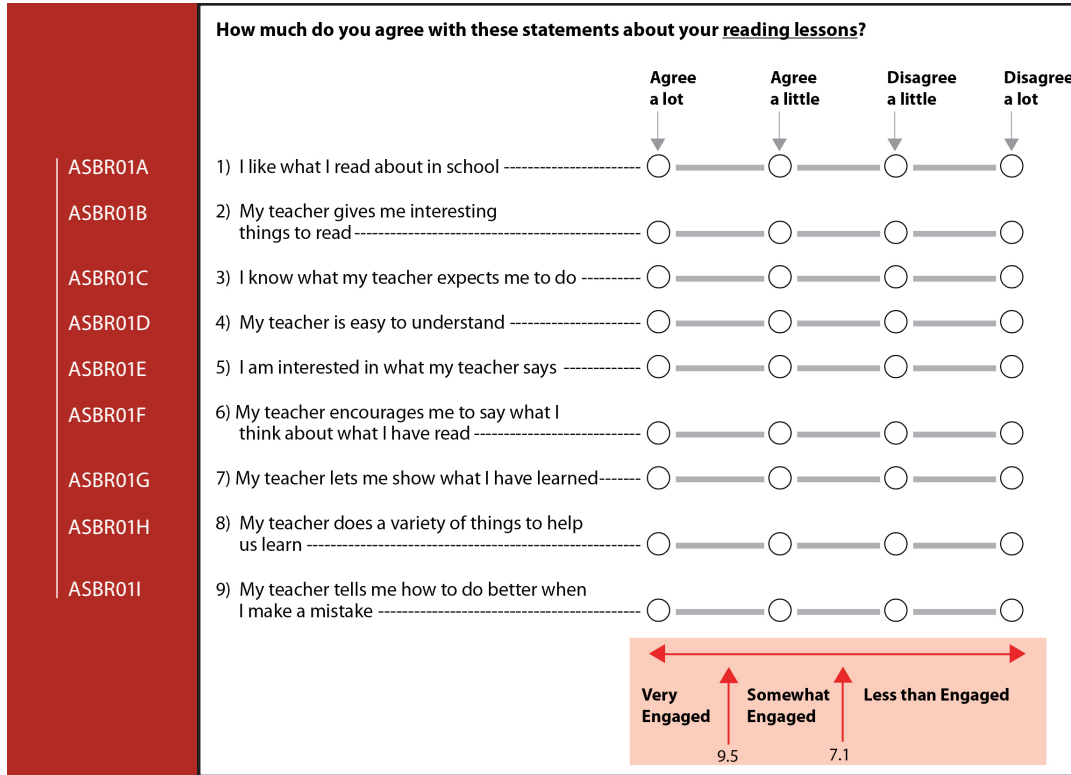


Students Engaged in Reading Lessons Scale

The *Students Engaged in Reading Lessons* (ERL) scale was created based on students' degree of agreement with the nine statements described below.

Items in the PIRLS 2016 *Students Engaged in Reading Lessons* Scale



Item Parameters for the PIRLS 2016 Students Engaged in Reading Lessons Scale

Item	delta	tau_1	tau_2	tau_3	Infit
ASBR01A	0.21864	-0.59198	-0.74411	1.33609	1.06
ASBR01B	0.25459	-0.68288	-0.46758	1.15046	0.94
ASBR01C	0.06439	-0.36656	-0.61903	0.98559	1.19
ASBR01D	-0.12990	-0.58489	-0.54402	1.12891	1.04
ASBR01E	-0.02167	-0.56053	-0.56022	1.12075	0.95
ASBR01F	0.35783	-0.55558	-0.43518	0.99076	1.04
ASBR01G	0.13972	-0.56265	-0.42458	0.98723	1.01
ASBR01H	-0.53069	-0.08820	-0.47557	0.56377	0.98
ASBR01I	-0.35291	-0.16188	-0.43241	0.59429	1.00

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

Scale Transformation Constants for the PIRLS 2016 Students Engaged in Reading Lessons Scale

Scale Transformation Constants	
A = 7.347685	Transformed Scale Score = 7.347685 + 1.442440 • Logit Scale Score
B = 1.442440	

Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2016 Students Engaged in Reading Lessons Scale

Raw Score	Transformed Scale Score	Cutpoint
0	2.54080	
1	3.94030	
2	4.57040	
3	4.98984	
4	5.31080	
5	5.57732	
6	5.80694	
7	6.01513	
8	6.20800	
9	6.39051	
10	6.56630	
11	6.73824	
12	6.91081	
13	7.08114	7.1
14	7.25473	
15	7.43394	
16	7.62129	
17	7.81965	
18	8.03231	
19	8.26228	
20	8.51711	
21	8.80348	
22	9.13146	
23	9.51587	9.5
24	9.98157	
25	10.57734	
26	11.42874	
27	13.13080	

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 Students Engaged in Reading Lessons Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item								
			ASPR01A	ASPR01B	ASPR01C	ASPR01D	ASPR01E	ASPR01F	ASPR01G	ASPR01H	ASPR01I
Australia	0.84	44	0.61	0.72	0.59	0.66	0.75	0.67	0.65	0.67	0.65
Austria	0.85	46	0.63	0.73	0.61	0.66	0.72	0.72	0.70	0.70	0.64
Azerbaijan	0.83	44	0.55	0.70	0.55	0.63	0.73	0.69	0.69	0.68	0.71
Bahrain	0.84	44	0.59	0.67	0.61	0.66	0.72	0.69	0.69	0.67	0.64
Belgium (Flemish)	0.80	39	0.58	0.69	0.51	0.60	0.67	0.63	0.68	0.63	0.63
Belgium (French)	0.84	45	0.63	0.74	0.68	0.67	0.71	0.66	0.57	0.70	0.64
Bulgaria	0.85	46	0.64	0.76	0.55	0.62	0.63	0.70	0.74	0.71	0.72
Canada	0.84	44	0.60	0.71	0.61	0.67	0.73	0.68	0.65	0.65	0.65
Chile	0.88	50	0.63	0.74	0.69	0.70	0.74	0.72	0.72	0.72	0.72
Chinese Taipei	0.89	52	0.61	0.74	0.73	0.68	0.75	0.75	0.76	0.76	0.74
Czech Republic	0.85	45	0.65	0.70	0.57	0.67	0.69	0.69	0.65	0.69	0.70
Denmark	0.85	46	0.67	0.74	0.58	0.59	0.71	0.74	0.72	0.72	0.63
Egypt	0.79	40	0.63	0.60	0.46	0.66	0.71	0.71	0.70	0.58	0.60
England	0.84	44	0.63	0.71	0.62	0.65	0.72	0.65	0.65	0.67	0.66
Finland	0.86	48	0.62	0.72	0.61	0.72	0.73	0.70	0.70	0.72	0.70
France	0.83	42	0.67	0.73	0.55	0.58	0.72	0.65	0.67	0.62	0.64
Georgia	0.72	35	0.56	0.69	0.49	0.64	0.47	0.47	0.69	0.66	0.64
Germany	0.85	46	0.63	0.75	0.61	0.73	0.69	0.71	0.67	0.66	0.66
Hong Kong SAR	0.89	52	0.66	0.78	0.70	0.68	0.78	0.74	0.73	0.72	0.71
Hungary	0.86	48	0.65	0.71	0.64	0.69	0.74	0.70	0.66	0.72	0.70
Iran, Islamic Rep. of	0.82	42	0.64	0.65	0.52	0.68	0.73	0.63	0.70	0.64	0.64
Ireland	0.83	44	0.64	0.76	0.59	0.64	0.75	0.64	0.62	0.65	0.63
Israel	0.87	49	0.67	0.77	0.59	0.66	0.77	0.71	0.71	0.69	0.71
Italy	0.78	37	0.66	0.71	0.49	0.57	0.69	0.59	0.59	0.58	0.60
Kazakhstan	0.80	40	0.54	0.66	0.59	0.64	0.66	0.68	0.67	0.57	0.62
Kuwait	0.79	38	0.59	0.67	0.52	0.59	0.67	0.63	0.65	0.60	0.60
Latvia	0.83	43	0.62	0.71	0.60	0.67	0.71	0.62	0.66	0.66	0.66
Lithuania	0.81	40	0.62	0.71	0.60	0.62	0.64	0.65	0.64	0.60	0.62
Macao SAR	0.85	46	0.68	0.74	0.65	0.66	0.71	0.69	0.69	0.66	0.62
Malta	0.81	41	0.61	0.69	0.64	0.55	0.69	0.65	0.65	0.62	0.65
Morocco	0.76	35	0.53	0.56	0.54	0.61	0.64	0.64	0.67	0.56	0.55
Netherlands	0.81	41	0.60	0.69	0.54	0.63	0.71	0.61	0.67	0.65	0.62
New Zealand	0.83	43	0.63	0.73	0.60	0.65	0.73	0.65	0.64	0.67	0.63
Northern Ireland	0.83	42	0.61	0.72	0.57	0.66	0.71	0.65	0.66	0.64	0.64
Norway (5)	0.83	43	0.62	0.71	0.57	0.66	0.69	0.72	0.66	0.63	0.62
Oman	0.83	44	0.59	0.68	0.51	0.67	0.72	0.69	0.69	0.70	0.66
Poland	0.86	48	0.66	0.75	0.66	0.63	0.74	0.68	0.71	0.69	0.68
Portugal	0.79	39	0.63	0.70	0.49	0.60	0.67	0.63	0.64	0.58	0.64
Qatar	0.87	49	0.65	0.73	0.68	0.71	0.74	0.69	0.69	0.72	0.68
Russian Federation	0.81	40	0.56	0.68	0.59	0.65	0.68	0.62	0.64	0.65	0.65
Saudi Arabia	0.82	42	0.48	0.64	0.56	0.67	0.70	0.71	0.71	0.69	0.66
Singapore	0.85	45	0.63	0.72	0.61	0.67	0.74	0.68	0.65	0.68	0.68
Slovak Republic	0.84	44	0.64	0.73	0.59	0.65	0.71	0.66	0.66	0.69	0.64
Slovenia	0.85	46	0.65	0.73	0.64	0.70	0.60	0.68	0.68	0.72	0.70
South Africa	0.84	44	0.62	0.70	0.65	0.64	0.62	0.66	0.70	0.69	0.66
Spain	0.80	40	0.61	0.70	0.47	0.57	0.70	0.66	0.65	0.66	0.63
Sweden	0.86	47	0.63	0.72	0.61	0.70	0.71	0.72	0.69	0.71	0.65
Trinidad and Tobago	0.83	42	0.60	0.69	0.61	0.66	0.73	0.66	0.62	0.63	0.64
United Arab Emirates	0.85	45	0.62	0.72	0.61	0.68	0.71	0.68	0.69	0.69	0.64
United States	0.86	47	0.60	0.74	0.62	0.69	0.76	0.71	0.67	0.67	0.68
Benchmarking Participants											
Buenos Aires, Argentina	0.83	44	0.60	0.68	0.55	0.56	0.70	0.67	0.72	0.72	0.71
Ontario, Canada	0.84	45	0.61	0.71	0.63	0.70	0.74	0.70	0.64	0.65	0.65
Quebec, Canada	0.83	43	0.54	0.71	0.60	0.65	0.75	0.64	0.69	0.65	0.65
Denmark (3)	0.83	43	0.66	0.73	0.59	0.51	0.73	0.70	0.72	0.65	0.59
Norway (4)	0.82	42	0.63	0.72	0.54	0.62	0.71	0.70	0.63	0.59	0.62
Moscow City, Russian Fed.	0.83	43	0.61	0.73	0.59	0.66	0.73	0.60	0.63	0.67	0.66
Enq/Afr/Zulu - RSA (5)	0.81	40	0.63	0.68	0.63	0.61	0.62	0.66	0.64	0.62	0.63
Andalusia, Spain	0.79	39	0.58	0.67	0.46	0.55	0.68	0.63	0.68	0.67	0.64
Madrid, Spain	0.81	41	0.61	0.70	0.51	0.61	0.65	0.67	0.67	0.66	0.66
Abu Dhabi, UAE	0.85	45	0.61	0.71	0.59	0.69	0.71	0.70	0.68	0.72	0.64
Dubai, UAE	0.84	44	0.63	0.71	0.62	0.63	0.71	0.66	0.69	0.66	0.64

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

Relationship Between the PIRLS 2016 Students Engaged in Reading Lessons 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 (η^2)
	(r)	(r ²)	
Australia	0.02	0.00	0.00
Austria	0.02	0.00	0.00
Azerbaijan	0.14	0.02	0.02
Bahrain	0.17	0.03	0.03
Belgium (Flemish)	0.04	0.00	0.00
Belgium (French)	-0.01	0.00	0.00
Bulgaria	0.06	0.00	0.01
Canada	0.09	0.01	0.01
Chile	0.12	0.01	0.03
Chinese Taipei	0.09	0.01	0.01
Czech Republic	-0.06	0.00	0.01
Denmark	0.15	0.02	0.03
Egypt	0.15	0.02	0.02
England	0.04	0.00	0.01
Finland	0.08	0.01	0.01
France	-0.01	0.00	0.00
Georgia	0.14	0.02	0.03
Germany	0.12	0.01	0.03
Hong Kong SAR	0.11	0.01	0.02
Hungary	0.05	0.00	0.00
Iran, Islamic Rep. of	0.08	0.01	0.02
Ireland	0.03	0.00	0.00
Israel	-0.09	0.01	0.00
Italy	0.06	0.00	0.01
Kazakhstan	0.04	0.00	0.00
Kuwait	0.13	0.02	0.03
Latvia	0.03	0.00	0.00
Lithuania	0.09	0.01	0.02
Macao SAR	0.10	0.01	0.01
Malta	0.19	0.04	0.05
Morocco	0.10	0.01	0.01
Netherlands	0.05	0.00	0.01
New Zealand	-0.01	0.00	0.00
Northern Ireland	-0.01	0.00	0.00
Norway (5)	0.05	0.00	0.00
Oman	0.15	0.02	0.04
Poland	-0.04	0.00	0.01
Portugal	0.09	0.01	0.01
Qatar	0.16	0.03	0.04
Russian Federation	-0.01	0.00	0.00
Saudi Arabia	0.16	0.03	0.04
Singapore	0.03	0.00	0.01
Slovak Republic	-0.08	0.01	0.00
Slovenia	-0.03	0.00	0.00
South Africa	0.16	0.03	0.04
Spain	0.03	0.00	0.00
Sweden	0.04	0.00	0.01
Trinidad and Tobago	0.09	0.01	0.01
United Arab Emirates	0.17	0.03	0.04
United States	0.08	0.01	0.01
International Median	0.07	0.01	0.01
Benchmarking Participants			
Buenos Aires, Argentina	0.02	0.00	0.00
Ontario, Canada	0.11	0.01	0.02
Quebec, Canada	0.06	0.00	0.01
Denmark (3)	0.05	0.00	0.01
Norway (4)	0.04	0.00	0.01
Moscow City, Russian Fed.	0.02	0.00	0.00
Eng/Afr/Zulu - RSA (5)	0.04	0.00	0.01
Andalusia, Spain	0.04	0.00	0.00
Madrid, Spain	-0.02	0.00	0.00
Abu Dhabi, UAE	0.16	0.03	0.04
Dubai, UAE	0.13	0.02	0.04

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