

## Students Like Reading Scale

The *Students Like Reading* (SLR) scale was created based on students' responses to the ten items described below.

### Items in the PIRLS 2016 *Students Like Reading* Scale

		What do you think about reading? Tell how much you agree with each of these statements.			
		Agree a lot	Agree a little	Disagree a little	Disagree a lot
ASBR06A	1) I like talking about what I read with other people -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR06B	2) I would be happy if someone gave me a book as a present -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR06C*	3) I think reading is boring* -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR06D	4) I would like to have more time for reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR06E	5) I enjoy reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR06F	6) I learn a lot from reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR06G	7) I like to read things that make me think -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR06H	8) I like it when a book helps me imagine other worlds -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		* Reverse coded			
		How often do you do these things <u>outside of school</u> ?			
		Every day or almost every day	Once or twice a week	Once or twice a month	Never or almost never
ASBR05A	1) I read for fun -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR05B	2) I read to find out about things I want to learn -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Item Parameters for the PIRLS 2016 Students Like Reading Scale**

Item	delta	tau_1	tau_2	tau_3	Infit
ASBR06A	0.34442	-0.46997	-0.35824	0.82821	1.12
ASBR06B	-0.11815	-0.20564	-0.36880	0.57444	0.92
* ASBR06C	0.07123	-0.25296	0.13935	0.11361	1.27
ASBR06D	0.31398	-0.56008	-0.11801	0.67809	0.89
ASBR06E	-0.17844	-0.19317	-0.35192	0.54509	0.72
ASBR06F	-0.57533	-0.50890	-0.23851	0.74741	0.90
ASBR06G	-0.11502	-0.39988	-0.24307	0.64295	0.95
ASBR06H	-0.45737	0.03019	-0.28447	0.25428	1.02
ASBR05A	0.40723	-0.22541	-0.47027	0.69568	1.18
ASBR05B	0.30745	-0.62547	-0.19966	0.82513	1.13

\* Reverse coded

**Scale Transformation Constants for the PIRLS 2016 Students Like Reading Scale**

Scale Transformation Constants	
A = 8.281596	Transformed Scale Score = 8.281596 + 1.704604 • Logit Scale Score
B = 1.704604	

**Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2016 Students Like Reading Scale**

Raw Score	Transformed Scale Score	Cutpoint
0	2.55082	
1	4.26783	
2	5.03823	
3	5.54349	
4	5.92440	
5	6.23597	
6	6.50253	
7	6.73682	
8	6.95316	
9	7.15371	
10	7.34241	
11	7.52243	
12	7.69637	
13	7.86639	
14	8.03431	
15	8.20182	8.3
16	8.37054	
17	8.54211	
18	8.71838	
19	8.90141	
20	9.09362	
21	9.29790	
22	9.51573	
23	9.75594	
24	10.02472	
25	10.33319	10.3
26	10.69833	
27	11.15205	
28	11.75519	
29	12.66304	
30	14.58422	

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

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**Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2016 Students Like Reading Scale**

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item									
			ASBR06A	ASBR06B	ASBR06C*	ASBR06D	ASBR06E	ASBR06F	ASBR06G	ASBR06H	ASBR06I	ASBR06J
Australia	0.88	49	0.53	0.73	0.77	0.78	0.84	0.68	0.71	0.66	0.67	0.55
Austria	0.86	45	0.54	0.67	0.65	0.71	0.83	0.66	0.62	0.67	0.74	0.58
Azerbaijan	0.68	33	0.34	0.63	0.24	0.69	0.75	0.74	0.69	0.67	0.28	0.42
Bahrain	0.83	41	0.55	0.66	0.40	0.75	0.80	0.73	0.70	0.64	0.48	0.56
Belgium (Flemish)	0.87	47	0.56	0.73	0.76	0.77	0.85	0.66	0.69	0.60	0.69	0.47
Belgium (French)	0.86	45	0.56	0.73	0.53	0.74	0.81	0.68	0.71	0.63	0.63	0.61
Bulgaria	0.89	50	0.66	0.72	0.55	0.78	0.83	0.72	0.73	0.68	0.71	0.66
Canada	0.86	45	0.52	0.70	0.70	0.77	0.83	0.66	0.68	0.61	0.63	0.55
Chile	0.88	49	0.64	0.75	0.47	0.76	0.85	0.73	0.80	0.69	0.60	0.67
Chinese Taipei	0.89	51	0.59	0.62	0.64	0.84	0.86	0.79	0.72	0.67	0.66	0.67
Czech Republic	0.88	47	0.63	0.72	0.69	0.70	0.83	0.69	0.62	0.63	0.71	0.64
Denmark	0.85	44	0.62	0.71	0.69	0.71	0.84	0.64	0.75	0.66	0.50	0.48
Egypt	0.84	44	0.64	0.67	0.40	0.71	0.81	0.81	0.79	0.67	0.48	0.55
England	0.87	47	0.58	0.71	0.72	0.75	0.84	0.68	0.69	0.64	0.69	0.52
Finland	0.89	50	0.64	0.76	0.75	0.71	0.84	0.64	0.76	0.71	0.69	0.53
France	0.84	43	0.53	0.69	0.60	0.71	0.80	0.66	0.67	0.59	0.64	0.60
Georgia	0.72	36	0.48	0.74	0.32	0.72	0.80	0.67	0.55	0.66	0.17	0.56
Germany	0.88	49	0.57	0.75	0.73	0.72	0.85	0.68	0.68	0.70	0.72	0.56
Hong Kong SAR	0.89	50	0.58	0.72	0.60	0.80	0.84	0.76	0.72	0.74	0.65	0.63
Hungary	0.87	46	0.67	0.73	0.65	0.76	0.83	0.63	0.68	0.66	0.65	0.48
Iran, Islamic Rep. of	0.71	33	0.51	0.63	0.33	0.68	0.74	0.65	0.57	0.70	0.31	0.45
Ireland	0.87	48	0.56	0.75	0.75	0.75	0.85	0.67	0.68	0.63	0.69	0.54
Israel	0.89	51	0.59	0.73	0.58	0.80	0.85	0.74	0.77	0.67	0.70	0.65
Italy	0.86	45	0.58	0.71	0.70	0.77	0.82	0.63	0.63	0.61	0.58	0.62
Kazakhstan	0.74	36	0.58	0.66	0.14	0.67	0.77	0.62	0.66	0.63	0.63	0.44
Kuwait	0.78	36	0.57	0.64	0.42	0.69	0.74	0.68	0.66	0.57	0.47	0.47
Latvia	0.89	50	0.61	0.77	0.69	0.79	0.84	0.69	0.68	0.62	0.71	0.63
Lithuania	0.86	44	0.62	0.74	0.65	0.69	0.79	0.67	0.60	0.62	0.65	0.60
Macao SAR	0.86	45	0.55	0.66	0.54	0.79	0.83	0.70	0.67	0.67	0.59	0.63
Malta	0.84	42	0.56	0.72	0.58	0.73	0.81	0.68	0.64	0.57	0.64	0.45
Morocco	0.71	30	0.48	0.54	0.33	0.64	0.69	0.68	0.61	0.56	0.40	0.47
Netherlands	0.88	48	0.59	0.70	0.73	0.76	0.85	0.68	0.72	0.64	0.70	0.54
New Zealand	0.86	45	0.55	0.71	0.53	0.76	0.82	0.70	0.73	0.66	0.64	0.58
Northern Ireland	0.87	47	0.56	0.76	0.71	0.76	0.83	0.66	0.68	0.61	0.67	0.53
Norway (5)	0.87	46	0.63	0.73	0.73	0.75	0.84	0.63	0.69	0.63	0.62	0.50
Oman	0.78	36	0.52	0.61	0.32	0.67	0.75	0.73	0.66	0.65	0.46	0.52
Poland	0.90	53	0.63	0.77	0.70	0.73	0.86	0.71	0.72	0.66	0.75	0.69
Portugal	0.84	43	0.59	0.66	0.58	0.69	0.80	0.66	0.69	0.62	0.64	0.61
Qatar	0.83	42	0.57	0.70	0.31	0.74	0.80	0.76	0.72	0.67	0.47	0.59
Russian Federation	0.85	43	0.56	0.73	0.62	0.76	0.81	0.65	0.63	0.58	0.64	0.54
Saudi Arabia	0.77	37	0.47	0.63	0.23	0.73	0.79	0.72	0.71	0.59	0.49	0.52
Singapore	0.84	44	0.50	0.73	0.64	0.80	0.83	0.74	0.66	0.61	0.32	0.60
Slovak Republic	0.88	48	0.64	0.71	0.65	0.71	0.83	0.66	0.64	0.67	0.72	0.66
Slovenia	0.86	45	0.59	0.77	0.65	0.74	0.83	0.63	0.60	0.66	0.61	0.56
South Africa	0.75	36	0.55	0.69	0.08	0.69	0.74	0.69	0.69	0.65	0.38	0.50
Spain	0.86	45	0.56	0.66	0.63	0.74	0.82	0.69	0.69	0.62	0.62	0.64
Sweden	0.88	49	0.63	0.72	0.75	0.71	0.85	0.68	0.72	0.68	0.72	0.51
Trinidad and Tobago	0.82	39	0.58	0.65	0.49	0.75	0.81	0.64	0.68	0.60	0.48	0.50
United Arab Emirates	0.81	40	0.56	0.67	0.38	0.74	0.79	0.74	0.70	0.63	0.43	0.56
United States	0.87	46	0.59	0.71	0.61	0.77	0.82	0.68	0.71	0.64	0.65	0.59
<b>Benchmarking Participants</b>												
Buenos Aires, Argentina	0.87	47	0.57	0.75	0.54	0.79	0.83	0.68	0.73	0.65	0.68	0.61
Ontario, Canada	0.87	47	0.52	0.72	0.70	0.79	0.84	0.67	0.70	0.62	0.66	0.59
Quebec, Canada	0.84	42	0.52	0.68	0.69	0.75	0.82	0.60	0.61	0.60	0.65	0.54
Denmark (3)	0.83	41	0.56	0.68	0.67	0.71	0.83	0.63	0.73	0.64	0.43	0.45
Norway (4)	0.85	43	0.58	0.72	0.68	0.72	0.80	0.64	0.70	0.60	0.55	0.51
Moscow City, Russian Fed.	0.86	45	0.61	0.75	0.69	0.76	0.81	0.64	0.60	0.56	0.68	0.52
Eng/Afr/Zulu - RSA (5)	0.76	37	0.59	0.71	0.20	0.71	0.78	0.69	0.65	0.61	0.39	0.50
Andalusia, Spain	0.86	46	0.55	0.69	0.63	0.73	0.83	0.71	0.70	0.63	0.63	0.63
Madrid, Spain	0.86	46	0.57	0.67	0.68	0.73	0.82	0.70	0.68	0.61	0.64	0.64
Abu Dhabi, UAE	0.82	40	0.57	0.66	0.34	0.75	0.80	0.74	0.69	0.62	0.48	0.55
Dubai, UAE	0.83	42	0.57	0.71	0.51	0.75	0.80	0.72	0.68	0.61	0.47	0.56

\*Reverse coded

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

**Relationship Between the PIRLS 2016 *Students Like Reading* 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	0.12	0.01	0.03
Austria	0.11	0.01	0.02
Azerbaijan	0.18	0.03	0.03
Bahrain	0.18	0.03	0.03
Belgium (Flemish)	0.14	0.02	0.02
Belgium (French)	0.11	0.01	0.01
Bulgaria	0.10	0.01	0.03
Canada	0.14	0.02	0.02
Chile	0.07	0.01	0.00
Chinese Taipei	0.20	0.04	0.03
Czech Republic	0.12	0.01	0.02
Denmark	0.23	0.05	0.04
Egypt	0.29	0.09	0.09
England	0.18	0.03	0.04
Finland	0.25	0.06	0.06
France	0.09	0.01	0.01
Georgia	0.12	0.01	0.02
Germany	0.25	0.06	0.07
Hong Kong SAR	0.19	0.04	0.04
Hungary	0.17	0.03	0.04
Iran, Islamic Rep. of	0.20	0.04	0.05
Ireland	0.18	0.03	0.04
Israel	-0.01	0.00	0.00
Italy	0.07	0.00	0.01
Kazakhstan	0.05	0.00	0.00
Kuwait	0.17	0.03	0.03
Latvia	0.06	0.00	0.01
Lithuania	0.05	0.00	0.01
Macao SAR	0.24	0.06	0.05
Malta	0.18	0.03	0.04
Morocco	0.23	0.06	0.06
Netherlands	0.20	0.04	0.04
New Zealand	0.08	0.01	0.01
Northern Ireland	0.20	0.04	0.05
Norway (5)	0.22	0.05	0.05
Oman	0.24	0.06	0.06
Poland	0.08	0.01	0.01
Portugal	0.01	0.00	0.00
Qatar	0.16	0.03	0.03
Russian Federation	0.03	0.00	0.00
Saudi Arabia	0.19	0.04	0.03
Singapore	0.22	0.05	0.05
Slovak Republic	0.16	0.02	0.02
Slovenia	0.14	0.02	0.02
South Africa	0.22	0.05	0.04
Spain	0.09	0.01	0.01
Sweden	0.21	0.04	0.05
Trinidad and Tobago	0.12	0.01	0.02
United Arab Emirates	0.19	0.04	0.04
United States	0.08	0.01	0.01
<b>International Median</b>	<b>0.16</b>	<b>0.03</b>	<b>0.03</b>
<b>Benchmarking Participants</b>			
Buenos Aires, Argentina	-0.09	0.01	0.01
Ontario, Canada	0.16	0.03	0.02
Quebec, Canada	0.12	0.01	0.02
Denmark (3)	0.15	0.02	0.02
Norway (4)	0.14	0.02	0.02
Moscow City, Russian Fed.	0.11	0.01	0.01
Eng/Afr/Zulu - RSA (5)	0.05	0.00	0.00
Andalusia, Spain	0.08	0.01	0.01
Madrid, Spain	0.06	0.00	0.01
Abu Dhabi, UAE	0.22	0.05	0.05
Dubai, UAE	0.12	0.01	0.02

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