

PIRLS 2011

The PIRLS 2011 Could Do Early Literacy Tasks When Began Primary School Scale

The Could Do Early Literacy Tasks When Began Primary School (ELT) scale was created based on parents' responses to how well their children could do the five tasks described below. See [Creating and Interpreting TIMSS and PIRLS 2011 Context Questionnaire Scales](#) for more information on how the scales were formed.

Exhibit 1: Items in the PIRLS 2011 Could Do Early Literacy Tasks When Began Primary School Scale

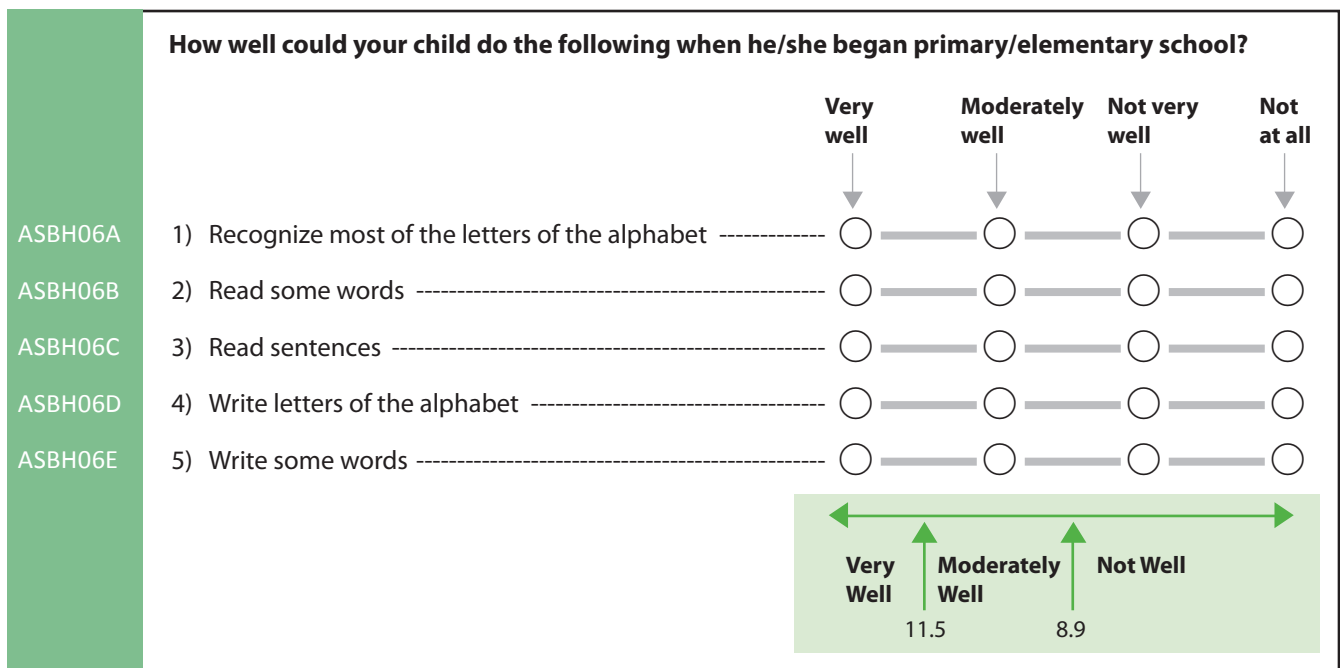


Exhibit 2: Item Parameters for the PIRLS 2011 Could Do Early Literacy Tasks When Began Primary School Scale

Item	delta	tau_1	tau_2	tau_3
ASBH06A	-3.06203	-3.08685	-0.06099	3.14784
ASBH06B	-1.26389	-2.78261	-0.20076	2.98337
ASBH06C	0.39147	-2.39021	-0.24261	2.63282
ASBH06D	-2.35126	-3.12703	-0.07239	3.19942
ASBH06E	-0.96893	-2.83739	-0.22341	3.06080

Exhibit 3: Scale Transformation Constants

Scale Transformation Constants

$$A = 10.08844$$

$$B = 0.69495$$

$$\text{Transformed Scale Score} = 10.08844 + 0.69495 \cdot \text{Logit Scale Score}$$

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

Raw Score	Transformed Scale Score	Cutpoint	Raw Score	Transformed Scale Score	Cutpoint
0	4.84360		8	9.28676	
1	5.90522		9	9.69685	
2	6.60260		10	10.12111	
3	7.16958		11	10.56229	
4	7.64888		12	11.03019	
5	8.08185		13	11.54563	11.5
6	8.49059		14	12.16664	
7	8.88806	8.9	15	13.18017	

Exhibit 5: Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2011 Could Do Early Literacy Tasks When Began Primary School Scale**

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Factor Loadings for Each Item				
			ASBH06A	ASBH06B	ASBH06C	ASBH06D	ASBH06E
Australia	0.90	73	0.79	0.89	0.84	0.86	0.88
Austria	0.89	70	0.83	0.88	0.81	0.83	0.85
Azerbaijan	0.92	75	0.82	0.89	0.86	0.87	0.88
Belgium (French)	0.88	68	0.80	0.87	0.79	0.82	0.84
Bulgaria	0.93	78	0.85	0.92	0.86	0.88	0.90
Canada	0.90	71	0.77	0.88	0.84	0.83	0.88
Chinese Taipei	0.89	71	0.83	0.87	0.85	0.85	0.80
Colombia	0.88	68	0.79	0.85	0.83	0.82	0.84
Croatia	0.90	73	0.80	0.89	0.86	0.84	0.88
Czech Republic	0.91	74	0.80	0.90	0.86	0.85	0.89
Denmark	0.89	71	0.80	0.89	0.82	0.82	0.87
Finland	0.91	75	0.79	0.91	0.88	0.84	0.89
France	0.86	65	0.75	0.86	0.77	0.81	0.84
Georgia	0.91	74	0.81	0.90	0.87	0.85	0.87
Germany	0.89	69	0.81	0.88	0.80	0.83	0.83
Hong Kong SAR	0.91	73	0.79	0.89	0.88	0.87	0.82
Hungary	0.92	75	0.84	0.90	0.86	0.87	0.85
Indonesia	0.91	73	0.82	0.88	0.86	0.84	0.87
Iran, Islamic Rep. of	0.91	74	0.84	0.89	0.86	0.86	0.86
Ireland	-	-	-	-	-	-	-

Exhibit 5: Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2011 Could Do Early Literacy Tasks When Began Primary School Scale (Continued)**

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Factor Loadings for Each Item				
			ASBH06A	ASBH06B	ASBH06C	ASBH06D	ASBH06E
Israel	0.89	72	0.77	0.90	0.84	0.84	0.89
Italy	0.89	70	0.82	0.88	0.79	0.84	0.85
Lithuania	0.88	69	0.79	0.87	0.85	0.79	0.84
Malta	0.91	74	0.81	0.89	0.86	0.85	0.88
Morocco	0.89	69	0.81	0.87	0.83	0.81	0.85
Netherlands	0.91	75	0.83	0.90	0.86	0.85	0.88
New Zealand	0.90	71	0.78	0.88	0.83	0.84	0.88
Northern Ireland	0.91	74	0.81	0.89	0.85	0.86	0.88
Norway	0.91	74	0.83	0.91	0.83	0.86	0.88
Oman	0.88	69	0.78	0.88	0.83	0.79	0.85
Poland	0.92	77	0.85	0.91	0.88	0.87	0.89
Portugal	0.89	69	0.79	0.88	0.81	0.82	0.85
Qatar	0.90	72	0.78	0.88	0.85	0.84	0.87
Romania	0.93	79	0.87	0.92	0.87	0.88	0.90
Russian Federation	0.91	73	0.80	0.90	0.89	0.83	0.86
Saudi Arabia	0.90	72	0.79	0.89	0.84	0.83	0.88
Singapore	0.91	73	0.80	0.89	0.87	0.84	0.87
Slovak Republic	0.90	72	0.82	0.90	0.83	0.85	0.86
Slovenia	0.92	76	0.84	0.91	0.86	0.87	0.88
Spain	0.92	76	0.84	0.90	0.88	0.87	0.87
Sweden	0.91	75	0.83	0.90	0.86	0.85	0.89
Trinidad and Tobago	0.86	64	0.70	0.84	0.84	0.78	0.84
United Arab Emirates	0.90	72	0.79	0.89	0.84	0.83	0.88
Sixth Grade Participants							
Botswana	0.88	68	0.77	0.85	0.83	0.81	0.85
Honduras	0.83	60	0.72	0.81	0.80	0.74	0.80
Kuwait	0.93	78	0.85	0.91	0.89	0.87	0.90
Morocco	0.87	65	0.77	0.85	0.80	0.78	0.83
Benchmarking Participants							
Alberta, Canada	0.90	72	0.77	0.89	0.85	0.84	0.89
Ontario, Canada	0.90	73	0.77	0.89	0.86	0.84	0.89
Quebec, Canada	0.89	70	0.78	0.88	0.82	0.83	0.88
Maltese - Malta	0.93	79	0.85	0.93	0.89	0.87	0.91
Eng/Afr (5) - RSA ^a	0.89	69	0.79	0.86	0.83	0.83	0.85
Andalusia, Spain	0.92	75	0.83	0.90	0.88	0.86	0.87
Abu Dhabi, UAE	0.91	73	0.81	0.90	0.85	0.84	0.88
Dubai, UAE	0.90	72	0.78	0.88	0.85	0.84	0.88

Exhibit 5: Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2011 Could Do Early Literacy Tasks When Began Primary School Scale (Continued)**

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Factor Loadings for Each Item				
			ASBH06A	ASBH06B	ASBH06C	ASBH06D	ASBH06E
prePIRLS Participants							
Botswana	0.87	66	0.77	0.84	0.82	0.81	0.82
Colombia	0.88	69	0.79	0.85	0.84	0.82	0.84
South Africa	0.86	64	0.76	0.83	0.82	0.78	0.80

** England and the United States did not administer the Home Questionnaire.

A dash (–) indicates that the item was not administered or comparable data was not available.

◊ Republic of South Africa (RSA) tested 5th grade students receiving instruction in English (ENG) or Afrikaans (AFR).

Exhibit 6: Relationship Between the PIRLS 2011 Could Do Early Literacy Tasks When Began Primary School Scale and PIRLS 2011 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	0.22	0.05	0.04
Austria	0.06	0.00	0.01
Azerbaijan	0.06	0.00	0.00
Belgium (French)	0.10	0.01	0.01
Bulgaria	0.36	0.13	0.10
Canada	0.27	0.07	0.06
Chinese Taipei	0.31	0.09	0.09
Colombia	0.19	0.03	0.03
Croatia	0.31	0.10	0.09
Czech Republic	0.18	0.03	0.03
Denmark	0.34	0.12	0.10
Finland	0.40	0.16	0.15
France	0.22	0.05	0.04
Georgia	0.24	0.06	0.04
Germany	0.08	0.01	0.01
Hong Kong SAR	0.38	0.15	0.13
Hungary	0.13	0.02	0.02
Indonesia	0.27	0.07	0.06
Iran, Islamic Rep. of	0.12	0.01	0.01
Ireland	–	–	–
Israel	0.05	0.00	0.01
Italy	0.12	0.01	0.01
Lithuania	0.45	0.20	0.18
Malta	0.27	0.07	0.06
Morocco	0.25	0.06	0.07
Netherlands	0.16	0.03	0.03

Exhibit 6: Relationship Between the PIRLS 2011 Could Do Early Literacy Tasks When Began Primary School Scale and PIRLS 2011 Achievement (Continued)**

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)	
New Zealand	0.17	0.03	0.03
Northern Ireland	0.13	0.02	0.02
Norway	0.29	0.08	0.06
Oman	0.33	0.11	0.10
Poland	0.32	0.10	0.09
Portugal	0.18	0.03	0.03
Qatar	0.26	0.07	0.07
Romania	0.34	0.12	0.07
Russian Federation	0.35	0.13	0.11
Saudi Arabia	0.30	0.09	0.07
Singapore	0.43	0.18	0.15
Slovak Republic	0.19	0.03	0.02
Slovenia	0.29	0.09	0.09
Spain	0.34	0.11	0.10
Sweden	0.35	0.12	0.10
Trinidad and Tobago	0.34	0.11	0.09
United Arab Emirates	0.24	0.06	0.05
International Median	0.26	0.07	0.06
Sixth Grade Participants			
Botswana	0.29	0.09	0.08
Honduras	0.17	0.03	0.03
Kuwait	0.25	0.06	0.07
Morocco	0.26	0.07	0.07
Benchmarking Participants			
Alberta, Canada	0.25	0.06	0.06
Ontario, Canada	0.28	0.08	0.07
Quebec, Canada	0.23	0.05	0.04
Maltese - Malta	0.22	0.05	0.04
Eng/Afr (5) - RSA ^o	0.18	0.03	0.03
Andalusia, Spain	0.34	0.11	0.11
Abu Dhabi, UAE	0.30	0.09	0.08
Dubai, UAE	0.17	0.03	0.03
prePIRLS Participants			
Botswana	0.29	0.09	0.09
Colombia	0.19	0.04	0.04
South Africa	0.12	0.01	0.01

** England and the United States did not administer the Home Questionnaire.

A dash (-) indicates that the item was not administered or comparable data was not available.

o Republic of South Africa (RSA) tested 5th grade students receiving instruction in English (ENG) or Afrikaans (AFR).