

Engaging Teaching in Mathematics Lessons (E-IT)

Items in the TIMSS 2015 Students' Views on Engaging Teaching in Mathematics Lessons Scale, Eighth Grade

1	Disagree
1	Disagree
1	Disagree
1	Disagree
1	Disagree
1	Disagree
1	Disagree
1	Disagree
1	Disagree
1	Disagree

Item Parameters for the TIMSS 2015 Science Lesson Engaging Mathematics Items Scale, Eig h Code

Item	Intercept	Difficulty 1	Difficulty 2	Difficulty 3	Item Variance
1	-0.2070	-1.33	-0.371	1.333	1.3
1	0.077	-1.31	-0.037	1.771	0.
1	0.02	-1.22	-0.270	1.710	1.0
1	0.7777	-1.23	-0.102	1.717	1.0
1	-0.10037	-1.221	-0.37	1.1101	0.
1	-0.231	-0.73	-0.070	1.3732	0.7
1	0.27	-1.2	-0.377	1.013	1.07
1	-0.133	-1.1723	-0.337	1.770	0.
1	-0.307	-1.0732	-0.17	1.372	0.3
1	-0.131	-1.031	-0.0207	1.3373	0.

Scale Transformation Constants for the TIMSS 2015 Science Lesson Engaging Mathematics Items Scale, Eig h Code

203	
1.1071	

Equivalence Table of Raw and Transformed Scale Scores for the TIMSS 2015 Students' Views on Engaging Teaching in Mathematics Lessons Scale, Eighth Grade

Raw Score	Transformed Scale Score	Cutpoint
0	3.54710	
1	4.77380	
2	5.35650	
3	5.75348	
4	6.05996	
5	6.31688	
6	6.54073	
7	6.74318	
8	6.93105	
9	7.10903	
10	7.28056	
11	7.44836	
12	7.61467	
13	7.78151	
14	7.95117	
15	8.12401	8.2
16	8.30286	
17	8.48885	
18	8.68366	
19	8.88834	
20	9.10416	
21	9.33228	
22	9.57401	
23	9.83140	
24	10.10784	
25	10.40917	10.4
26	10.74435	
27	11.13328	
28	11.61366	
29	12.28584	
30	13.60366	

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the TIMSS 2015 Students' Views on Engaging Teaching in Mathematics Lessons Scale, Eighth Grade



Relationship Between the TIMSS 2015 Students' Views on Engaging Teaching in Mathematics Lessons Scale, Eighth Grade, and TIMSS 2015 Mathematics Achievement

Country	Pearson's Correlation with Mathematics Achievement		Variance in Mathematics Achievement Accounted for by Difference Between Regions of the Scale (%)
	(r)	(r ²)	
Australia	0.16	0.03	0.03
Bahrain	0.13	0.02	0.02
Botswana (9)	0.18	0.03	0.04
Canada	0.10	0.01	0.01
Chile	0.12	0.01	0.01
Chinese Taipei	0.24	0.06	0.05
Egypt	0.13	0.02	0.02
England	0.14	0.02	0.02
Georgia	0.17	0.03	0.02
Hong Kong SAR	0.13	0.02	0.01
Hungary	0.10	0.01	0.01
Iran, Islamic Rep. of	0.07	0.01	0.01
Ireland	0.04	0.00	0.00
Israel	0.03	0.00	0.00
Italy	0.08	0.01	0.01
Japan	0.18	0.03	0.02
Jordan	0.09	0.01	0.01
Kazakhstan	0.16	0.03	0.02
Korea, Rep. of	0.23	0.05	0.03
Kuwait	0.05	0.00	0.00
Lebanon	0.11	0.01	0.01
Lithuania	0.12	0.01	0.01
Malaysia	0.12	0.01	0.01
Malta	0.12	0.01	0.01
Morocco	0.07	0.01	0.01
New Zealand	0.14	0.02	0.02
Norway (9)	0.19	0.04	0.03
Oman	0.16	0.03	0.03
Qatar	0.20	0.04	0.04
Russian Federation	0.13	0.02	0.01
Saudi Arabia	0.12	0.01	0.01
Singapore	0.13	0.02	0.02
Slovenia	0.20	0.04	0.03
South Africa (9)	0.04	0.00	0.00
Sweden	0.17	0.03	0.03
Thailand	0.01	0.00	0.00
Turkey	0.14	0.02	0.02
United Arab Emirates	0.19	0.04	0.03
United States	0.12	0.01	0.02
International Median	0.13	0.02	0.02
Benchmarking Participants			
Buenos Aires, Argentina	0.05	0.00	0.00
Ontario, Canada	0.11	0.01	0.02
Quebec, Canada	0.15	0.02	0.02
Norway (8)	0.14	0.02	0.02
Abu Dhabi, UAE	0.14	0.02	0.02
Dubai, UAE	0.16	0.03	0.02
Florida, US	0.08	0.01	0.01

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015