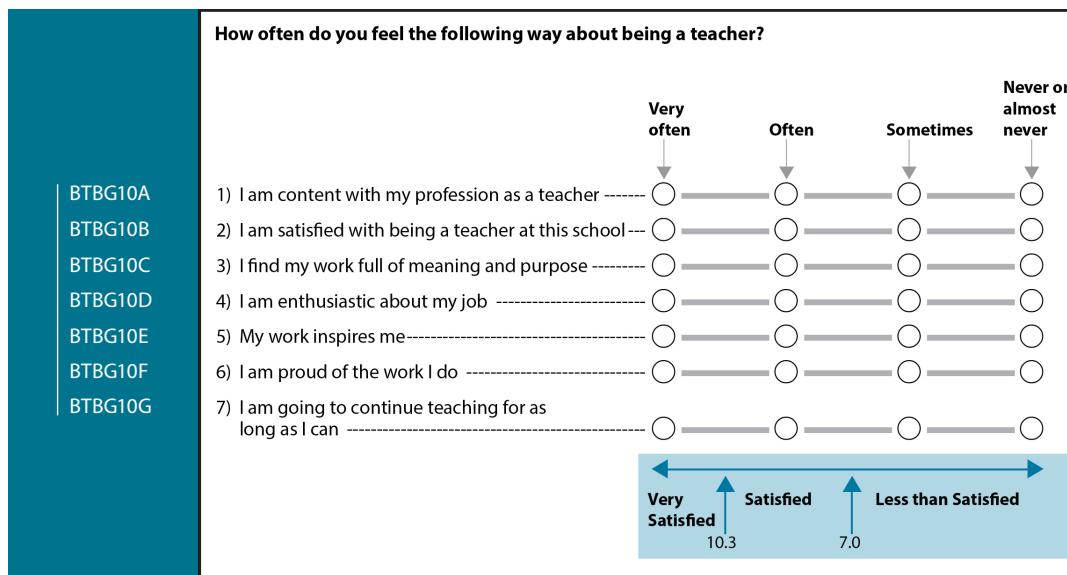


# Teacher Job Satisfaction Scale, Eighth Grade

The Teacher Job Satisfaction (TJS) scale was created based on how often teachers responded positively to the seven statements described below.

## Items in the TIMSS 2015 Teacher Job Satisfaction Scale, Eighth Grade<sup>1</sup>



<sup>1</sup> For the purpose of scaling, categories in which there were very few respondents were combined. The categories "Sometimes" and "Never or almost never" were combined for all variables. The scale statistics that are reported herein reflect analysis of the items following collapsing.

**Item Parameters for the TIMSS 2015 Teacher Job Satisfaction Scale, Eighth Grade**

Item	delta	tau_1	tau_2	Infit
BTBG10A	0.14816	-1.72080	1.72080	0.99
BTBG10B	0.39021	-1.65209	1.65209	1.34
BTBG10C	-0.51295	-1.72738	1.72738	1.06
BTBG10D	-0.27152	-1.81713	1.81713	0.85
BTBG10E	0.32148	-1.74038	1.74038	0.89
BTBG10F	-0.47731	-1.60579	1.60579	0.96
BTBG10G	0.40193	-1.26209	1.26209	1.27

**Scale Transformation Constants for the TIMSS 2015 Teacher Job Satisfaction Scale, Eighth Grade**

**Scale Transformation Constants**

A = 8.635655

B = 0.874431

Transformed Scale Score = 8.635655 + 0.874431 • Logit Scale Score

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

**Equivalence Table of Raw and Transformed Scale Scores for the TIMSS  
2015 Teacher Job Satisfaction Scale, Eighth Grade**

Raw Score	Transformed Scale Score	Cutpoint
0	4.73467	
1	5.83713	
2	6.44235	
3	6.91770	7.0
4	7.34908	
5	7.76911	
6	8.20415	
7	8.65502	
8	9.10176	
9	9.52415	
10	9.93219	
11	10.34781	10.3
12	10.80981	
13	11.40090	
14	12.49436	

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 Teacher Job Satisfaction Scale, Eighth Grade**

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item						
			BTBG10A	BTBG10B	BTBG10C	BTBG10D	BTBG10E	BTBG10F	BTBG10G
Australia	0.93	72	0.87	0.79	0.89	0.91	0.90	0.78	0.78
Bahrain	0.90	65	0.84	0.72	0.74	0.85	0.87	0.80	0.80
Botswana (9)	0.87	57	0.67	0.68	0.77	0.82	0.85	0.84	0.64
Canada	0.90	63	0.83	0.75	0.78	0.86	0.85	0.70	0.77
Chile	0.87	58	0.76	0.70	0.74	0.79	0.80	0.82	0.72
Chinese Taipei	0.93	72	0.85	0.77	0.87	0.90	0.83	0.88	0.81
Egypt	0.85	55	0.82	0.63	0.70	0.82	0.68	0.80	0.70
England	0.90	62	0.78	0.70	0.81	0.84	0.85	0.76	0.74
Georgia	0.87	56	0.76	0.69	0.67	0.72	0.78	0.85	0.76
Hong Kong SAR	0.93	69	0.83	0.81	0.82	0.85	0.85	0.88	0.79
Hungary	0.90	64	0.80	0.72	0.83	0.82	0.85	0.83	0.73
Iran, Islamic Rep. of	0.86	56	0.76	0.49	0.69	0.86	0.85	0.75	0.78
Ireland	0.91	67	0.84	0.74	0.87	0.87	0.85	0.79	0.75
Israel	0.92	68	0.84	0.74	0.83	0.87	0.85	0.84	0.79
Italy	0.89	62	0.80	0.74	0.67	0.85	0.82	0.84	0.75
Japan	0.91	65	0.83	0.75	0.84	0.81	0.88	0.79	0.72
Jordan	0.90	64	0.83	0.72	0.78	0.88	0.85	0.81	0.74
Kazakhstan	0.89	60	0.78	0.74	0.75	0.82	0.80	0.77	0.78
Korea, Rep. of	0.94	73	0.84	0.81	0.87	0.86	0.90	0.89	0.81
Kuwait	0.90	64	0.81	0.73	0.79	0.86	0.81	0.79	0.80
Lebanon	0.86	55	0.73	0.74	0.75	0.74	0.77	0.75	0.73
Lithuania	0.92	67	0.83	0.81	0.78	0.87	0.87	0.85	0.74
Malaysia	0.92	69	0.82	0.78	0.83	0.88	0.87	0.85	0.78
Malta	0.94	75	0.89	0.77	0.88	0.91	0.89	0.85	0.86
Morocco	0.88	58	0.77	0.69	0.74	0.84	0.83	0.80	0.65
New Zealand	0.91	67	0.81	0.75	0.84	0.87	0.86	0.81	0.76
Norway (9)	0.92	68	0.86	0.79	0.80	0.88	0.89	0.79	0.74
Oman	0.90	64	0.80	0.69	0.71	0.87	0.86	0.81	0.83
Qatar	0.88	58	0.80	0.73	0.74	0.82	0.84	0.74	0.67
Russian Federation	0.91	65	0.81	0.79	0.78	0.84	0.85	0.81	0.74
Saudi Arabia	0.85	56	0.80	0.51	0.70	0.87	0.80	0.78	0.72
Singapore	0.95	76	0.89	0.80	0.88	0.91	0.90	0.90	0.82
Slovenia	0.91	65	0.83	0.67	0.84	0.88	0.87	0.81	0.73
South Africa (9)	0.91	66	0.77	0.73	0.85	0.86	0.89	0.81	0.77
Sweden	0.89	61	0.83	0.74	0.69	0.84	0.84	0.75	0.74
Thailand	0.90	64	0.79	0.79	0.79	0.78	0.84	0.85	0.75
Turkey	0.88	59	0.79	0.54	0.74	0.88	0.84	0.78	0.75
United Arab Emirates	0.89	62	0.79	0.75	0.74	0.83	0.84	0.79	0.75
United States	0.92	69	0.84	0.78	0.87	0.88	0.88	0.76	0.79
<b>Benchmarking Participants</b>									
Buenos Aires, Argentina	0.86	55	0.79	0.50	0.82	0.80	0.86	0.77	0.57
Ontario, Canada	0.91	65	0.85	0.79	0.84	0.86	0.85	0.65	0.79
Quebec, Canada	0.89	61	0.83	0.66	0.70	0.86	0.86	0.79	0.75
Norway (8)	0.91	66	0.82	0.74	0.83	0.87	0.87	0.79	0.76
Abu Dhabi, UAE	0.89	62	0.81	0.77	0.69	0.82	0.84	0.82	0.75
Dubai, UAE	0.91	65	0.81	0.75	0.79	0.86	0.86	0.79	0.77
Florida, US	0.91	66	0.85	0.68	0.87	0.87	0.88	0.67	0.82

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

**Relationship Between the TIMSS 2015 Teacher Job Satisfaction Scale, Eighth Grade, and TIMSS 2015 Achievement**

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

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