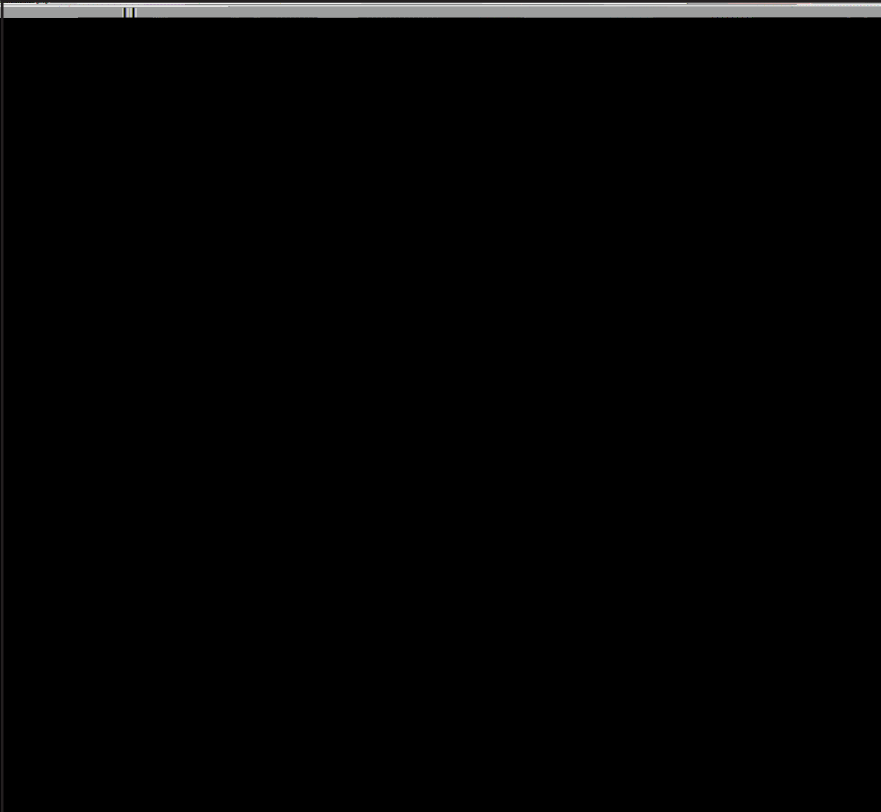


Students' Views on Engaging Teaching in Biology Lessons Scale, Eighth Grade

The Students' Views on Engaging Teaching in Biology Lessons (EBL) scale was created based on students' degree of agreement with the ten statements described below.

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



BSBB23A
BSBB23B
BSBB23C
BSBB23D
BSBB23E
BSBB23F
BSBB23G
BSBB23H
BSBB23I
BSBB23J

Item Parameters for the TIMSS 2015 Students' Views on Engaging Teaching in Biology Lessons Scale, Eighth Grade

Item	delta	tau_1	tau_2	tau_3	Infit
BSBB23A	0.23712	-1.80522	-0.57382	2.37904	1.35
BSBB23B	0.09871	-1.66400	-0.60548	2.26948	0.89
BSBB23C	-0.05390	-1.55671	-0.51000	2.06671	1.04
BSBB23D	0.50295	-1.83407	-0.36609	2.20016	1.04
BSBB23E	-0.13674	-1.46308	-0.64174	2.10482	0.78
BSBB23F	-0.40148	-1.23377	-0.73035	1.96412	0.79
BSBB23G	0.15844	-1.78687	-0.61699	2.40386	1.00
BSBB23H	-0.16665	-1.62319	-0.56659	2.18978	0.88
BSBB23I	-0.01693	-1.59071	-0.58844	2.17915	0.91
BSBB23J	-0.22152	-1.30447	-0.81869	2.12316	0.93

Scale Transformation Constants for the TIMSS 2015 Students' Views on Engaging Teaching in Biology Lesson Scale, Eighth Grade

Scale Transformation Constants

A = 7.952108

B = 0.927987

(&)! '(% \$ '(+ ' "# * \$ '(

Raw Score	Transformed Scale Score	Cutpoint
0	3.68279	
1	4.72056	
2	5.21810	
3	5.55682	
4	5.82253	
5	6.04443	
6	6.23952	
7	6.41702	
8	6.58151	
9	6.74042	
10	6.89504	
11	7.04799	
12	7.20164	
13	7.35828	
14	7.52021	
15	7.69015	7.7
16	7.86991	
17	8.06292	
18	8.27115	
19	8.49677	
20	8.73848	
21	8.99364	
22	9.25822	
23	9.52944	
24	9.80777	
25	10.09786	10.0



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

Country	Pearson's Correlation with Science Achievement		Variance in Science Achievement for by Difference Between Region Scale ²
	(r)	(r ²)	
Georgia	0.17	0.03	0.02
Hungary	0.03	0.00	0.01
Kazakhstan	0.12	0.01	0.01
Lebanon	0.17	0.03	0.03
Lithuania	-0.06	0.00	0.00
Malta	0.21	0.04	0.05
Morocco	0.06	0.00	0.00
Russian Federation	0.03	0.00	0.00
Slovenia	0.04	0.00	0.00
Sweden	0.07	0.01	0.01
International Median	0.07	0.00	0.01

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