

TIMSS 2011

The TIMSS 2011 Student
Engaged in Mathematics
Learning Scale, Fifth Grade

The Student Engaged in Mathematics Learning (EML) scale is a 5-item Likert-type scale of agreement with the statements described below. See [Creating and Interpreting TIMSS and PIRLS 2011 Context Questionnaire Scales](#) for more information about the scale's development.

How much do you agree with these statements about your mathematics lessons?

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
1) I know what my teacher expects me to do -----	△	△	△	△
2) I think of things not related to the lesson* -----	△	△	△	△
3) My teacher is easy to understand -----	△	△	△	△
4) I am interested in what my teacher says -----	△	△	△	△
5) My teacher gives me interesting things to do -----	△	△	△	△

* Reverse coded

Engaged 10.2 Somewhat Engaged 7.4 Not Engaged

Exhibit 5: Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the TIMSS 2011 Students Engaged in Mathematics Lessons Scale, Fourth Grade



Exhibit 6: Relationship Between the TIMSS 2011 Students Engaged in Mathematics Lessons Scale, Fourth Grade, and TIMSS 2011 Mathematics Achievement

Country	A		A
	(r)	(r ²)	B (r ²)
Armenia	0.25	0.06	0.06
Australia	0.16	0.03	0.03
Austria	0.04	0.00	0.00
Azerbaijan	0.24	0.06	0.04
Bahrain	0.17	0.03	0.04
Belgium (Flemish)	0.09	0.01	0.01
Chile	0.19	0.04	0.04
Chinese Taipei	0.12	0.01	0.01
Croatia	0.06	0.00	0.01
Czech Republic	0.05	0.00	0.01
Denmark	0.11	0.01	0.01
England	0.01	0.00	0.00
Finland	0.10	0.01	0.01
Georgia	0.17	0.03	0.04
Germany	0.08	0.01	0.01
Hong Kong SAR	0.16	0.03	0.03
Hungary	0.22	0.05	0.06
Iran, Islamic Rep. of	0.13	0.02	0.02
Ireland	0.11	0.01	0.01
Italy	0.13	0.02	0.02
Japan	0.07	0.00	0.01
Kazakhstan	0.17	0.03	0.04
Korea, Rep. of	0.20	0.04	0.03
Kuwait	0.17	0.03	0.04
Lithuania	0.11	0.01	0.02
Malta	0.24	0.06	0.06
Morocco	0.25	0.06	0.06
Netherlands	0.09	0.01	0.01
New Zealand	0.04	0.00	0.01
Northern Ireland	0.09	0.01	0.01
Norway	0.07	0.00	0.01
Oman	0.27	0.07	0.08
Poland	0.15	0.02	0.03
Portugal	0.20	0.04	0.03
Qatar	0.24	0.06	0.08
Romania	0.25	0.06	0.08
Russian F0.084			

Country	A		A
	(r)	(r ²)	B (r ²)
Serbia	0.11	0.01	0.01
Singapore	0.18	0.03	0.04
Slovak Republic	0.12	0.01	0.02
Slovenia	0.10	0.01	0.02
Spain	0.18	0.03	0.04
Sweden	0.04	0.00	0.00
Thailand	0.15	0.02	0.03
Tunisia	0.23	0.05	0.05
Turkey	0.33	0.11	0.13
United Arab Emirates	0.18	0.03	0.05
United States	0.14	0.02	0.03
Yemen	0.21	0.05	0.04
	0.15	0.02	0.03
B			
Botswana	0.35	0.12	0.12
Honduras	0.03	0.00	0.00
Yemen	0.12	0.01	0.02
B			
Alberta, Canada	0.14	0.02	0.02
Ontario, Canada	0.11	0.01	0.02
Quebec, Canada	0.16	0.03	0.03
Abu Dhabi, UAE	0.18	0.03	0.04
Dubai, UAE	0.16	0.02	0.04