Friday, December 19, 2008

Math and Science in the South Caucasus | TIMSS 2007

TIMSS, Trends in International Mathematics and Science Study, has released their report for 2007. TIMSS is conducted every four years and it reports on mathematics and science education for 4th and 8th graders in 59 countries. In 2007 Georgia participated for the first time in the study. Armenia participated again in 2007 (you can read our previous blog posting about Armenia in TIMSS 2003 here).

So how did the countries of the South Caucuses fare? Armenia and Georgia fell below the international average in all subjects and grades except for one group. Armenian 4th graders performed just at the international average (500) in mathematics.

Codeland	4 th Gr	aders	8 th Graders		
Subject	Armenia	Georgia	Armenia	Georgia	
Mathematics	500	438	499	410	
Science	484	418	488	421	

Armenia did much better than Georgia in both math and science, but both of the South Caucasus countries were outscored by several former Soviet and Eastern European countries. In 4th grade math scores for example; Kazakhstan (549) and Russian (544) ranked 4th and 5th overall. Several former Soviet and Eastern European countries performed at or above the international average including: Latvia (537), Lithuania (530), Hungary (510), Slovenia (502) and Armenia (500). Below the international average were the Slovak Republic (496), the Czech Republic (486), Ukraine (469) and Georgia (438).

Georgia was outperformed by all other participating former Soviet Countries and Eastern European countries in both math and science for 4th and 8th graders. What should be done? Reader input and discussion is most welcome. How much the ongoing reforms have showed up in the test results in the Georgian case would be worth of further study.

On a positive note, Armenia is doing better than it was four years ago in all categories and at all grade levels.

Armenia

Subject	4 th Graders			8th Graders		
	2003	2007	% Increase	2003	2007	% Increase
Mathematics	456	500	8.80%	478	499	4.21%
Science	437	484	9.71%	461	488	5.53%