

IEA Studies and the Post 2015 Millennium goals

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IEA GA October 2014

International Association for the Evaluation of Educational Achievement



Overview

- The Millennium goals
- The POST 2015 Millennium Goals
- Measuring trends for the goals
- IEA studies
- Questions



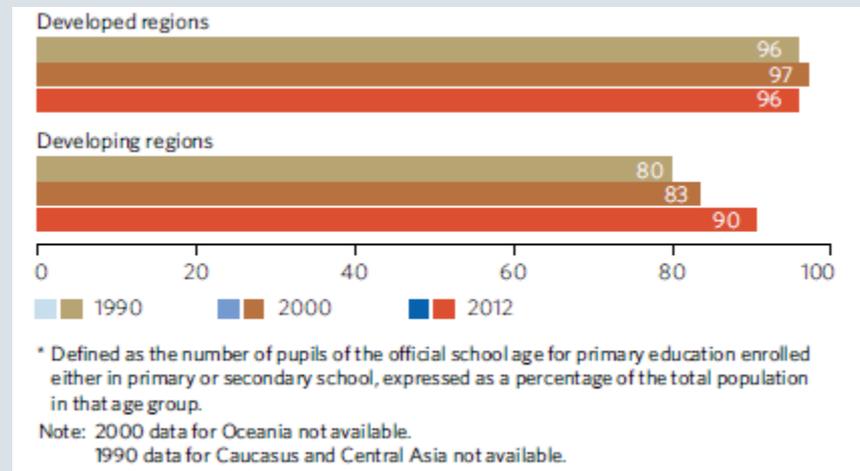
The millennium goals

- The UN defined eight millennium goals to be achieved by 2015
- Goal number 2 was:
“Achieve universal primary education”
or as target 3:
“Ensure that all boys and girls complete a full course of primary schooling”



The millennium goals

- The millennium goals had a lot of positive impacts for the emphasis on education



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The millennium goals

- But the strong emphasis on quantity (enrollment rates) and no emphasis on quality (educational outcome) has lead to some undesirable results
 - In many countries the quality of education is alarmingly low, with many children leaving primary school lacking the expected levels in reading, writing and numeracy skills¹
 - In South Asia the heavy investments made to achieve the MDG2 resulted in a rise of net enrollment rates in primary schools from 75% to 89% from 2000 to 2010, but learning outcomes were very low at every level of education²

¹ Post-2015 Education MDGS. Development Institute, 2012.

² Student learning in South Asia: challenges, opportunities, and policy priorities. Directions in development; human development. Washington, DC: World Bank Group, 2014.



The millennium goals

- In Mozambique achievement scores decreased from 516.7 to 476 (reading) and from 530.0 to 483.8 (math), respectively from 2000 to 2007¹
- In Uganda the pupils/class ratio increased from 44 in 1996 to 82 in 1999 after the free education for all program Universal Primary Education (UPE) was introduced in 1997²
- In Nigeria the net enrollment in primary education increased from 68.0% in 1990 peaking at 95.0% in 2000 and dropping to 80.8% in 2008¹ but the achievement (even of the corresponding cohort) dropped significantly³

¹ SACMEQ Policy Issues Series, no. 2, 2010. ² EFA Country report Uganda, 2000.

³ Nigeria Millennium Development Goals 2013 Report, 2013.



POST2015 Millennium goals

- As a consequence new goals will be defined for the period 2015 to 2030
- The goals shall focus not only on quantity but also quality of education
- To achieve this expert groups were convened to discuss goals, targets, indices and benchmarks
- IEA experts were invited and participated in the discussion



POST2015 Millennium goals

- IEA was participating in three different expert groups:
 - “**Reading indicators** for monitoring the post-2015 education agenda” hosted by the World bank and UIS
 - “**Numeracy Indicators** for monitoring the post-2015 education agenda” hosted by the GIZ and UIS
 - “**Global Citizenship Education (GCE) and Education for Sustainable Development (ESD)**” hosted by the UNESCO HQ



POST2015 Millennium goals

- A high level of agreement was that:
 - Outcomes should be measured at the end of primary education (for literacy and numeracy)
 - Additionally earlier measurement would be desirable for earlier interventions
 - High quality of the data used for monitoring is very important
 - The data must be comparable across countries
 - Although the goals should be universal, targets could be country specific



POST2015 Millennium goals

- IEA studies and IEA data were always mentioned as points of reference
- The high quality data was very much appreciated
- Also all current documents also reference to IEA study data



POST2015 Millennium goals

- There are different ideas how gathering data world wide can be accomplished
- One suggestion of IEA was to link regional assessments (as SAQMEC, PASEC, TERCE) to TIMSS and PIRLS by administering these surveys in parallel in two countries for each region
- This would generate a data base of more than 100 countries on one metric



How to measure goals?

- Global goals shall be defined
 - “All children should be able to literate /be numerate by the end of primary school”
- Indicators shall be developed (based on an agreement on content (number concepts, geometric shapes,..))
 - For this TIMSS or PIRLS could be used
- Benchmarks need to be identified
 - Reaching the lowest benchmark in TIMSS



How to measure goals?

- Then targets can be set.
 - Within 5 years the percentage of students reaching the lowest benchmark should increase by x%
- Targets could be identified for individual countries to make them meaningful and reachable for ALL countries
- Targets and consequently trends are to be defined for the period of 2015 to 2030



Benchmarks in TIMSS

Exhibit 2.3: Trends In Percentages of Students Reaching the International Benchmarks of Mathematics Achievement (Continued)

TIMSS 2011
Mathematics **4th Grade**

Country	Intermediate International Benchmark (475)				Low International Benchmark (400)			
	Percent of Students				Percent of Students			
	2011	2007	2003	1995	2011	2007	2003	1995
Singapore	94	92	91	89	99	98	97	96
Korea, Rep. of	97			94	100			99
Hong Kong SAR	96	97	94	87	99	100	99	97
Chinese Taipei	93	92	92		99	99	99	
Japan	93	89	89	89	99	98	98	98
England	78	79	75	54	93	94	93	82
Russian Federation	82	81	76		97	95	95	
United States	81	77	72	71	96	95	93	92
Lithuania	79	77	79		96	94	96	
Belgium (Flemish)	89		90		99		99	
Australia	70	71	64	61	90	91	88	86
Denmark	82	76			97	95		
Hungary	70	67	76	72	90	88	94	91
Ireland	77			73	94			91
Portugal	80			37	97			70
Slovak Republic	69	63			90	88		
Germany	81	78			97	96		
Italy	69	67	65		93	91	89	
Netherlands	88	84	89	87	99	98	99	99
Czech Republic	72	59		79	93	88		95
Slovenia	72	67	55	45	94	92	84	77
New Zealand	58	61	61	51	85	85	86	78
Sweden	69	68			93	93		
Austria	70	69		77	95	93		94

SOURCE: IEA'S TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY - TIMSS 2011

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Benchmarks in PIRLS

Exhibit 2.3: Trends in Percentages of Students Reaching the International Benchmarks of Reading Achievement

Country	Advanced International Benchmark (625)			High International Benchmark (550)			Intermediate International Benchmark (475)			Low International Benchmark (400)		
	Percent of Students			Percent of Students			Percent of Students			Percent of Students		
	2011	2006	2001	2011	2006	2001	2011	2006	2001	2011	2006	2001
Singapore	24	19 ▲	12 ▲	62	58	45 ▲	87	86	76 ▲	97	97	90 ▲
Russian Federation	19	19	5 ▲	63	61	39 ▲	92	90	80 ▲	99	98	96 ▲
England	18	15 ▲	20	54	48 ▲	54	83	78 ▲	82	95	93 ▲	94
Hong Kong SAR	18	15 ▲	5 ▲	67	62 ▲	39 ▲	93	92	81 ▲	99	99	97 ▲
United States	17	12 ▲	15 ▲	56	47 ▲	50 ▲	86	82 ▲	80 ▲	98	96 ▲	94 ▲
New Zealand	14	13	14	45	45	45	75	76	74	92	92	90
Chinese Taipei	13	7 ▲		55	43 ▲		87	84 ▲		98	97	
Denmark	12	11		55	52		88	85 ▲		99	97 ▲	
Hungary	12	14	10 ▲	48	53 ▼	49	81	86 ▼	85 ▼	95	97 ▼	98 ▼
Bulgaria	11	16 ▼	17 ▼	45	52 ▼	54 ▼	77	82	83 ▼	93	95	95
Italy	10	14 ▼	11	46	52 ▼	48	85	87	83	98	98	97
Germany	10	11	9	46	52 ▼	47	85	87	83	98	97	97
Sweden	9	11	15 ▼	47	53 ▼	59 ▼	85	88	90 ▼	98	98	98 ▼
Czech Republic	8		7	50		45 ▲	87		83 ▲	98		97
Slovak Republic	8	8	5 ▲	44	43	34 ▲	82	80	76 ▲	96	94	94
Slovenia	8	6 ▲	3 ▲	42	37 ▲	25 ▲	79	76 ▲	67 ▲	95	94	91 ▲
Poland	7	7		39	36		77	73 ▲		95	93	
Romania	7	4 ▲	9	32	27 ▲	35	65	61	69	86	84	88
Netherlands	7	6	10 ▼	48	49	54 ▼	90	91	92	100	99	99
Lithuania	6	5	9 ▼	39	43 ▼	48 ▼	80	86 ▼	85 ▼	97	99 ▼	98 ▼
France	5	5	7 ▼	35	35	37	75	76	77	95	96	95
Austria	5	8 ▼		39	45 ▼		80	84 ▼		97	98	
Spain	4	5		31	31		72	72		94	94	

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2011

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TIMSS and PIRLS

- TIMSS and PIRLS seem to be quite suitable for measuring POST 2015 literacy and numeracy achievement
 - Because the data is of highest quality
 - The new initiatives of TIMSS Numeracy and PIRLS Literacy that expand the scale further seem especially suit lower achieving countries
 - It is proven that trends of benchmarks can be measures reliably with TIMSS and PIRLS



ICCS

- ICCS already has already overlap with what experts defined as global citizenship competencies
- Also ICCS delivers high quality data
- There is no other international study in that area that could be used for measuring GCE competencies.
- Also ICCS measures trends over time reliably



Questions

- How are the POST 2015 millennium goals for education discussed in your country?
- How can IEA studies contribute to measuring the POST 2015 millennium goals for education?
 - Consequences for IEA studies
 - Advantages/disadvantages
- Please suggest some actions that IEA can do in regards to securing its involvement.

