



# EDUCATION

V I E W P O I N T P A P E R

*Benefits and Costs of the Education  
Targets for the Post-2015 Development Agenda*

UNICEF

# Benefits and Costs of the Education Targets for the Post-2015 Development Agenda

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Post-2015 Consensus

UNICEF

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## Psacharopoulos' Paper

The paper is an interesting piece with a good key idea – prioritization. On the other hand, prioritization does not mean necessarily that the list of targets should be short, as targets have an effect on each other; the long list of targets is a bit of a straw man.

Where the article seems to be getting it wrong is that the post-2015 agenda is not just a poor countries' (and aid) agenda; it is a sustainable development agenda that is relevant for every country. The article communicates the idea that that SDGs are equal to the MDGs, and therefore no recommendations are about what rich countries should do to help themselves and the world (or at least one or two suggestions, e.g. drop fossil fuel subsidies, are relegated outside the top five). This should be better balanced.

The suggestion UNICEF made on the need to use Primary Completion Rate rather than NER has not been taken into account. Primary Completion Rate is way better than NER for multiple reasons: i) it is the indicator the best aligned with the goal of primary completion (it captures at the same time both access to grade 1 and survival until the end of the cycle); ii) it is the most important indicator for the international community (in particular for GPE); iii) NER is inflated by high repetition rate (double count of the children enrolled as soon as they stay in the theoretical age group for the cycle); iv) very poor data quality in most African countries where birth registration is still not universal.

Psacharopoulos did not address properly the comment re: the calculation of cost-benefit calculation of pre-primary which is based on only one data point (Kenya, an outlier with a huge benefit-cost ratio). The way to take that into account is not scientifically explained (“I have halved the Kenya B-C Ratio”). That being said, we should still push for keeping a target on Pre-primary education.

*Table: Growth Models According to Countries' State of Economic Development d/  
(The dependent variable is the average annual GDP growth rate per capita, 1970-2003)*

	Low Income		Middle Income c/		High Income b/	
	[5]	[6]	[7]	[8]	[9]	[10]
Ln (GDP per Capita) 1970	-0.01 *** 2	-0.01 *** 4	-0.003	0.00 5	0.01 *** 5	0.01 *** 9
School-life Expectancy, 1970	0.00 ** 4		0.003 *		0.00 *** 2	
Gross Enrollment Rates, 1970						
Primary		0.02 * 8		0.01 6		0.01 0
Secondary, Orthogonal to Primary		0.00 3		0.04 *** 7		0.01 2

Higher, Orthogonal to Primary and Secondary		0.047		-0.000		0.021 *
Average Investment Rate, %	0.066	0.125 *	0.150 ***	0.088 **	0.067 **	0.120
Average Demographic Growth Rate, %	-0.179	-0.188	0.072	-0.163	-0.611 ***	-0.459 **
Constant	0.056 **	0.056 *	-0.008	0.022	0.137	0.188
Number of Observations	51	43	35	31	22	19
R2 or Pseudo R2 (%)	42.4	57.8	34.0	42.2	51.6 (a)	89

Notes: By convention, the sample has been split: a/ Low income countries are those whose GDP per capita in 1970 was less than 1,000 constant 2000 US dollars. b/ High income countries are those whose GDP per capita in 1970 was higher than 9,000 US\$. c/ Includes all other countries  
d/ The types of models have been chosen according to the results of the endogenous level tests carried out on the investment in physical capital variable: models [5] and [6] are estimated by triple least-squares; models [7] and [8] by Whites's MCO correcting for heteroscedasticity; model [9] by median regression; model [10] by the instrumental variable technique (the degree of openness of the economy and an indicator of financial maturity measured by the degree of credit rationing). The coefficients that are significant at the 10% threshold are followed by an \* (\*\* at the 5% threshold; \*\*\* at the 1% threshold).  
[Source: Brossard M., B. Foko, Education's Impact on Economic Growth (World Bank, UNESCO-Pôle de Dakar), 2006]

One of the highlights of the Psacharopoulos paper is "Improving school quality by increasing student test scores by one standard deviation, which has a benefit-cost ratio between 3.0 and 5.0." A closer look at the quality section of the paper reveals however, this benefit-cost ratio is estimated based on very sketchy evidence combining different study findings on costs, impact and monetary benefits from different parts of the world. The author himself admits that the evidence base is very weak on the quality aspects of education. Considering this, it seems a little risky to present this as one of the three positive highlights of the study. At least some caution should be added.

## **OWG Paper in Light of the Copenhagen Consensus Center Benefit-Cost Analysis**

We need a specific target on the increase of learning outcomes. Backed by Psacharopoulos who proposes "increasing student test scores by one standard deviation, which has a benefit-cost ratio between 3 and 5". If using "standard deviation" is too technical for a global target, it could be removed and we could push for "% of countries that improved learning outcomes as measured by standardized test scores" (using the list of LMTF-approved regional and international learning surveys; it is the way we did for our SP). If there is a prioritization to do in terms of number of targets, I would add one specifically on learning outcomes and accept to drop 4.e (on young and adult vocational training), 4.f

(knowledge, skills, curricula.) and 4.g (schools with safe learning environment) for the double reason of i) lesser importance compared to the others and ii) measurability issues (see point below)

### ***Type of Targets***

The global targets such as “by 2030 ensure complete secondary education for all” do not make sense and should be replaced by “by 2030 increase by x% of...” type of target because i) feasibility issue: e.g. on average in Sub-Saharan Africa, only 15% complete secondary education, in Niger, Somalia, Tanzania it is even lower than 5% and 15 years period is definitely too short for reaching 100% for a lot of countries (even if they break record in terms of progress); ii) the use of “increase by x%” target work for all countries regardless of their baseline value and iii) rates of return (measured by impact on economic growth) of the different levels of education vary according to the wealth of the countries (primary education has the highest rate of returns in low income countries, secondary education has the highest rate of returns in middle income countries, and higher education has the highest rate of returns in high income countries, see table below)

For some domains, there is a trade-off between economic perspective and equity (human rights approach) perspective, e.g. investing in education for children with disabilities is less cost-effective in terms of number of children enrolled in school for X million dollar (as it is more costly to provide the right infrastructure and support to enroll children with disabilities) but it makes a lot of sense with an equity perspective. Also, as pointed by Psacharopoulos, cost-benefit calculations rely on a lot of uncertain assumptions and data and largely vary across context (see e.g. the calculation from pre-primary that vary tremendously according to world region). Then, I suggest that i) overall cost-benefit should not be the only factor considered when deciding on targets.

### ***Measurability Issue***

Some targets are too vague in their wording and are not supported by clear indicators (“quality pre-primary education”; “relevant knowledge and skills”; “safe and healthy learning environment” ...). Also the target 4.C “increase by x% of the proportion of children able to access and complete pre-primary education” raise measurability issue for the completion component. Better to replace by “increase by x% of the proportion of children who access pre-primary education” because i) it then become measurable and ii) drop-out rate in pre-primary education are marginal.

5. c target: “by 2030 ensure equal access to education at all levels” should specify we are talking about gender equality

The preliminary cost-benefit assessment (the color coding) of the targets does not seem to be fully consistent with or supported by the findings of the education paper. For instance, though “universal, free” part of the primary/secondary target is assessed as “poor (red),” no relevant evidence is presented in the education paper. Also, while the “safe and healthy

learning environment” target is assessed as “phenomenal (dark green),” again no direct evidence is found in the paper. Rather, the paper cites different sets of evidence that shows insignificant effects of school quality enhancing interventions such as infrastructure improvement. The majority of the OWG members would look at the benefit-cost assessment only, rather than background papers including this one. The assessment should be done more rigorously based on the evidence provided by the background papers.

DRAFT - NOT FINAL

This paper was written by UNICEF, a United Nations Program that provides long-term humanitarian and developmental assistance to children and mothers in developing countries. The project brings together more than 50 top economists, NGOs, international agencies and businesses to identify the goals with the greatest benefit-to-cost ratio for the next set of UN development goals.

For more information visit [post2015consensus.com](http://post2015consensus.com)

## COPENHAGEN CONSENSUS CENTER

Copenhagen Consensus Center is a think tank that investigates and publishes the best policies and investment opportunities based on how much social good (measured in dollars, but also incorporating e.g. welfare, health and environmental protection) for every dollar spent. The Copenhagen Consensus was conceived to address a fundamental, but overlooked topic in international development: In a world with limited budgets and attention spans, we need to find effective ways to do the most good for the most people. The Copenhagen Consensus works with 100+ of the world's top economists including 7 Nobel Laureates to prioritize solutions to the world's biggest problems, on the basis of data and cost-benefit analysis.

