

Universal basic skills should become the primary development goal

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Later this year, the UN will set the post-2015 Sustainable Development Goals. This column argues that lots targets will make it hard for policymakers to enact real change. Instead, the primary post-2015 goals should focus on young people achieving basic skills. Basic skills, in turn, will help address issues of poverty and limited healthcare as well as help foster the new technologies needed to improve sustainable growth.

Later this year, the UN will set the post-2015 Sustainable Development Goals. These goals will follow on from the previous Millennium Development Goals. The plethora of targets that is likely to emerge will make it hard to use them either as policy levers for change or as a means of charting progress. Instead, because knowledge capital is of utmost importance for inclusive world development, the primary post-2015 development goal should be that all youth achieve at least basic skills. The boost to future prosperity would be immense.

In preparation for the UN Special Summit on Sustainable Development which is to take place in New York in September, ministers and education officials from a wide range of countries and international agencies are convening for the World Education Forum in Incheon, Korea, this week to discuss a new set of development goals for education.

From Millennium Development Goals to Sustainable Development Goals

It is difficult to fault the Sustainable Development Goals as noble ambitions (see United Nations 2014) – end poverty everywhere, combat climate change, and more. But it is also clear that setting a long list of goals, many of which are hard to quantify, will inhibit future policy action. There are also historical reasons to believe that what is not measured will not get done.

The previous Millennium Development Goals were clearer on measureable goals. In education they called for universal access to primary schooling. And they showed real progress was possible: primary school enrolment rates in South Asia rose from 78% in 1999 to 94% in 2012 and from 59% to 79% in sub-Saharan Africa. But these past policies have met with mixed success. While they have substantially expanded worldwide access to schooling, in many countries they have not secured the hoped-for improvements in economic wellbeing.

The simple explanation for this is that these policies did not sufficiently emphasise or appreciate the importance of learning outcomes or cognitive skills. The best available evidence shows that many of the students appeared not to learn anything. The evidence on international achievement tests showed dismal levels of knowledge for many of the countries that improved in school access – seat time is not the same as learning. This is a huge problem, because history shows that it is these skills that drive economic growth (Hanushek and Woessmann 2015a). But these skills are not measured by simple school attainment, and access to schools alone turns out to be a very incomplete and ineffective goal for development.

Skills, not just access to school

In a new report (Hanushek and Woessmann 2015b), we measure skills based on the achievements of youth on international assessments of learning outcomes. Using data from 76 countries, we focus on the portion of the population that lacks the basic skills needed for full participation in today's global economy. A straightforward and useful definition of basic skills is acquisition of at least Level 1 skills (420 points) on the OECD's Programme for International Student Assessment (see OECD 2013). This level of skill corresponds to what might today be called modern functional literacy, and it provides a measuring rod for judging the skills needed for economic participation.

Based on that framework, a clear and measurable development goal is that all youth obtain basic skills. This goal, which directly promotes inclusive development, incorporates two components: full enrolment of youth in secondary school and achievement that provides a basis for economic and social participation. Moreover, because progress can be readily measured on a consistent basis across countries, it can be used to direct attention and resources toward long-run economic development.

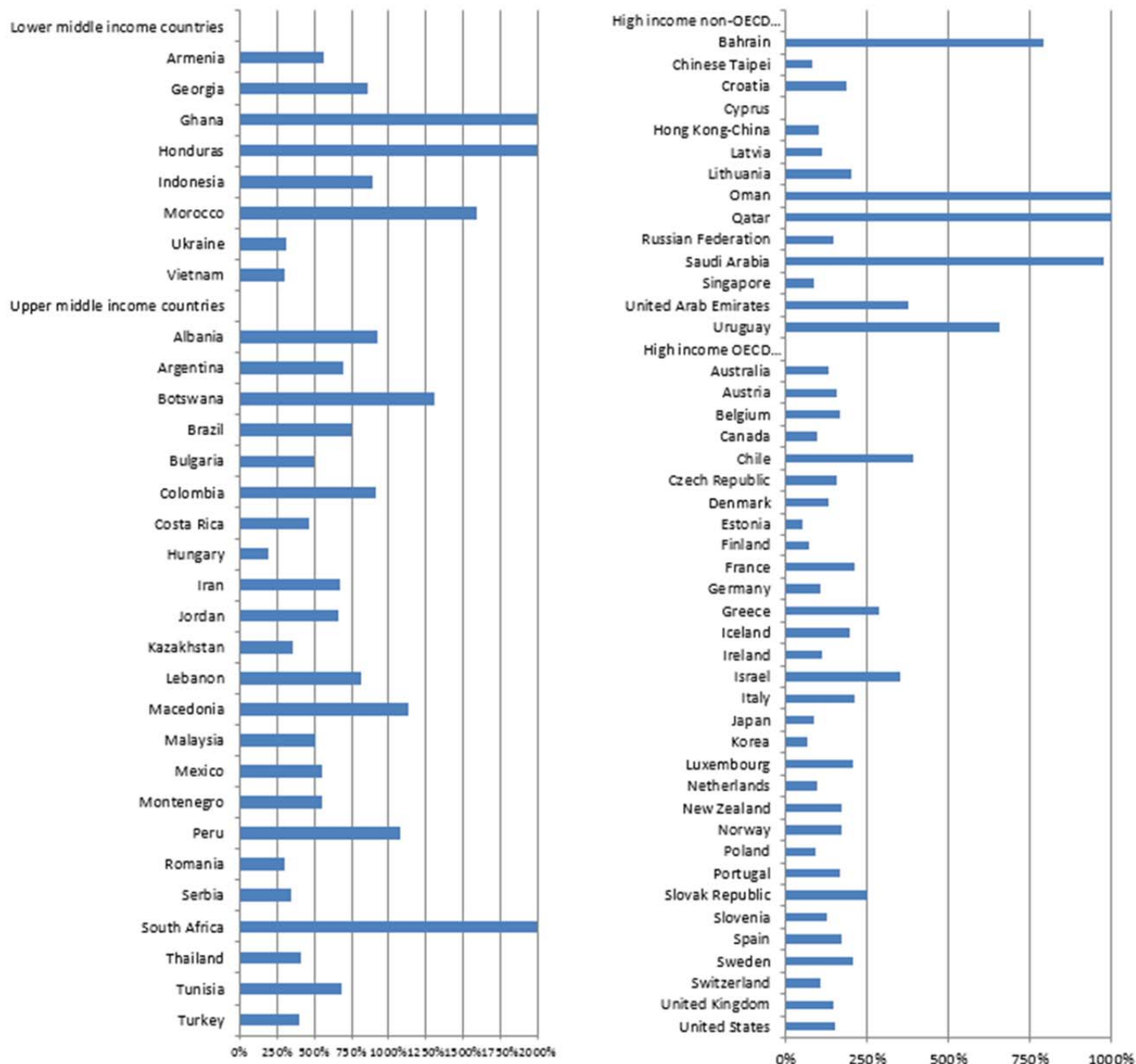
Economic impacts of achieving universal basic skills by 2030

Our analysis extends previous considerations of development goals that emphasise skills (Filmer et al. 2006, Pritchett 2013) by focusing on the economic benefits to a broad array of countries that accrue to meeting alternative goals. Because earlier research has shown the causal relationship between a nation's aggregate skills – what we refer to as its knowledge capital – and its long-run growth rate (Hanushek and Kimko 2000; Hanushek and Woessmann 2008, 2012), it is possible to estimate how education policies will affect each nation's expected economic performance. The changes needed in order to reach universal achievement of basic skills can be assessed for each of the 76 countries that currently have data on school enrolment and on achievement. The impact on GDP as countries move toward universal basic skills can then be estimated directly from the historical achievement-growth relationship.

The analysis incorporates the dynamics of educational reform policies and their impact on the skills of each country's workforce. Skill changes are based on achieving universal basic skills in response to the changing performance of each country's schools over a 15-year period ending in 2030. Over time, the knowledge capital of the nation improves as better-educated youth enter the labour force. The more skilled workforce leads to increased economic growth and other social outcomes. Building on our previous work (Hanushek and Woessmann 2011), the economic value of the policy change is calculated as the difference between the GDP expected with the current workforce and the GDP expected with the improved workforce, calculated over the expected lifetime of a child born today. Because the benefits of growth are spread out over future decades, near-term gains are weighted more heavily than those farther in the future. Specifically, all future values are discounted back to 2015 at a 3% discount rate so that the future economic benefits can be compared in present value terms.

The economic impact of achieving universal basic skills is displayed in the figure. Countries are placed into the income categories of lower middle income, upper middle income, high income non-OECD, and high income OECD. Based on the assumption that each of the 76 nations reaches the goal of all youth attaining at least basic skills, Figure 1 shows the average present value of the increases in discounted future GDP, expressed relative to the country's current GDP.

Figure 1. Effect on GDP of achieving universal basic skills (in % of current GDP)



Notes: Discounted value of future increases in GDP until 2095 due to a reform that achieves full participation in secondary school and brings each student at least to minimum of 420 PISA points, expressed as a percentage of current GDP. Value is 3881% for Ghana, 2016% for Honduras, 2624% for South Africa, 1427% for Oman, and 1029% for Qatar. See Hanushek and Woessmann (2015b) for details.

Considerable heterogeneity exists both within and across the income groupings of countries, with the largest gains typically coming in the lowest income group. The heterogeneity reflects both the current enrolment rates and the current achievement

levels of countries. Thus Ghana, for example, has the lowest enrolment rate in secondary schools (46%) and also the lowest achievement levels for those in school (291 Programme for International Assessment points). It is extraordinarily unlikely that Ghana could move quickly enough to meet the universal skills goal in 15 years; but if it did, it would see a gain over the lifetime of somebody born today that in present value terms was 38 times its current GDP. This is equivalent to an average annual increase in discounted future GDP of 83%. The goal is more realistic for a number of other middle income countries, and the results would still be stunning.

Rich countries would gain, too

A development goal of universal basic skills would also have meaning for high income OECD countries. High income countries have generally been left out of previous development discussions. While most of these countries have achieved nearly universal access to secondary schools, all continue to have a portion of their population that fails to achieve basic skills. On average, these countries would see a 3.5% higher discounted average GDP over the next 80 years, which is almost exactly the average percentage of GDP they devote to public primary and secondary school expenditure. The present value of gains for the high income OECD countries averages a nontrivial 1.6 times current GDP. Such improvements are entirely realistic. For example, Poland was able to reduce the share of underperforming students by one third from 22 to 14% within just a decade.

And, of course, more ambitious improvements can have much larger potential gains. The calculations involving the movement of all students to basic skills are lower bound estimates, because they assume that the improvement in schools does not affect anybody with higher skills. This targeted improvement is quite unrealistic. Past history indicates that school reforms that lead to improved performance at the lower end of the distribution invariably also help those higher in the distribution. Such increases in knowledge capital for nations will have even greater economic and social impacts than developed here.

Improving quality has greater impact than expanding enrolment

It is also instructive to decompose the economic gains into their sources. Table 1 summarises the improvement in future GDP under three scenarios:

- Increasing the quality of schools for all current students so that they reach basic skills;
- Expanding access to schools to universal enrolment at current quality levels; and
- Simultaneously increasing enrolment and ensuring basic skills for all.

It is not surprising that the gains from expanded access are small for the high income OECD countries, given that their average enrolment rate for secondary schools is already 98%. But even in the lowest income countries considered here, where the enrolment rate averages just 75%, the gains from improving the current quality of schools are three times as large as those from expanding enrolment at the current quality.

Table 1. Gains from policy outcomes as percent of current GDP

	All current students to basic	Full enrollment at current quality	Universal basic skills
Lower middle income countries	627%	206%	1302%
Upper middle income countries	480%	134%	731%
High income non-OECD countries	362%	60%	473%
High income OECD countries	142%	19%	162%

The gains from achieving the full goal – meeting universal access while simultaneously ensuring all get basic skills – are large across the world. While the gains in the lower middle income countries might be difficult to realise over the 15 years reflected in the projections, even taking 30 years to reach the ultimate goal would have very substantial economic benefits.

The importance of knowledge capital for inclusive world development

A great strength of the universal basic skills goal is the contribution it would make to inclusive growth. The goal would ensure that a wide variety of countries participate in the enhanced economic wellbeing. Further, within each country, it would reduce the variation in earnings currently observed, and would allow many now at the bottom to engage productively in the labour market. But if countries wish to improve their achievement, there is no substitute for measuring achievement outcomes and evaluating policies on the basis of achievement.

The inclusive growth made possible through universal achievement of basic skills has tremendous potential as a way to address issues of poverty and limited healthcare, and to foster the new technologies needed to improve the sustainability of growth. No substitute for improved skills has been identified that offers similar possibilities of facilitating the inclusive growth needed to address the full range of development goals.

References

Filmer, D, A Hasan, and L Pritchett (2006), "A Millennium Learning Goal: Measuring real progress in education", Working Paper Number 97, Washington DC: Center for Global Development, August.

Hanushek, EA, and DD Kimko (2000), "Schooling, labor force quality, and the growth of nations", American Economic Review 90(5):1184-1208, December.

Hanushek, EA, and L Woessmann (2008), "The role of cognitive skills in economic development", Journal of Economic Literature 46(3): 607-668, September.

Hanushek, EA, and L Woessmann (2011), "How much do educational outcomes matter in OECD countries?", Economic Policy 26(67): 427-491, July.

Hanushek, EA, and L Woessmann (2012), "Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation", Journal of Economic Growth 17(4): 267-321, December.

Hanushek, EA, and L Woessmann (2015a), The knowledge capital of nations: Education and the economics of growth, Cambridge, MA: MIT Press.

Hanushek, EA, and L Woessmann (2015b), Universal basic skills: What countries stand to gain, Paris: Organisation for Economic Co-operation and Development.

OECD (2013), PISA 2012 results: What students know and can do – Student performance in mathematics, reading and science (Volume I), Paris: Organisation for Economic Co-operation and Development.

Pritchett, L (2013), The rebirth of education: Schooling ain't learning, Washington, DC: Center for Global Development.

United Nations (2014), Open Working Group proposal for Sustainable Development Goals. <https://sustainabledevelopment.un.org/content/documents/1579SDGs%20Propo..>

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