



How countries nurture Human Capital

Policies and programs that use and expand the evidence base

Interventions designed using existing empirical evidence or new analyses can help deliver higher returns to investments in human capital.

ABOUT THIS SERIES

This four-part series explores the strategies governments have deployed to overcome the myriad barriers to effectively invest in human capital. It focuses on a whole of government approach that (i) sustains efforts across political cycles; (ii) coordinates across government; and (iii) designs policies and programs that use and expand the evidence base.

While adopting any one of these strategies can help build human capital, countries that have implemented all three in tandem are often among those that have made major strides in improving human capital outcomes. In this series, we examine the various dimensions of this approach using country examples and conclude with a look at how success across all three strategies has led to meaningful gains and lasting benefits.



Pakistan: implementing lessons learned from years of research

The design of Pakistan's nationwide unconditional cash transfer program, the Benazir Income Support Program (BISP), launched in June 2008, benefited from years of prior research on cash transfer programs in Latin America and other regions. By directly transferring the benefits to the female heads of the households, BISP aimed not only to reduce poverty but also to empower women. To date, more than US\$3 billion has been disbursed to 5.4 million beneficiary households.¹ Quantitative and qualitative analyses suggest that women gain more bargaining power by receiving BISP benefits, with a significant share (64 percent) of female beneficiaries reporting control over the funds, and women beneficiaries reporting feeling less dependent on their husbands. Gains in promoting female mobility and changing community perceptions towards the mobility of women have also been reported. In turn, this has contributed to women's ability to invest in children's education, improve food intake for the household, and gain better mobility in urban areas and resources for fuel in rural areas. BISP has also been found to significantly reduce children's malnutrition and has had a positive impact on adult monthly food consumption.

These and other lessons from the implementation and evaluation of BISP have fed back into the design of human capital-focused operations in the country through BISP itself and through other provincial initiatives. For instance, a review of the adequacy of benefit amounts under BISP is being conducted to strengthen its poverty impact. World Bank lending operations currently under development are also trying to utilize the targeting method established and utilized by BISP. Ongoing evaluation will further improve the BISP program.

In addition to the stimulation of the demand-side of education via BISP, the government of Pakistan also sought to address supply-side challenges. Between 2005 and 2012, **Pakistan developed a public-private partnership program** in which for-profit private schools waived tuition costs for poorer students in exchange for a per-student subsidy from the government. By 2012, the program covered one million students. One program began in 2005 in Punjab province included a built-in accountability and evaluation

component—participating schools had to ensure that a minimum percentage of their students passed a biannual standardized academic test. Schools that failed to reach the minimum pass rate two times in a row were dropped from the program.

Recent research has shown that this accountability mechanism has worked. Schools threatened with losing access to subsidies almost always managed to raise student scores to meet the minimum pass rate needed to keep the funds. As a result, student learning in these schools was higher and teachers performed better.²

Chile: programmatic improvements and expansion based on evidence

Evidence-based improvements over time have helped drive the success, sustainability, and expansion of Chile Crece Contigo (ChCC), Chile's multisectoral early childhood education and development program that supports children and their families. ChCC has shown positive effects on child development, with significant impact on the health and welfare of low-income Chileans. The Chilean government collects statistics on ChCC outcomes to inform future decision-making. As a result, the program continues to be adjusted and improved in response to new evidence and data. After operating successfully since its countrywide implementation in 2008, ChCC has recently expanded to provide coverage to children up to 9 years old. It has also served as a basis for the design of similar initiatives in several other Latin American countries such as Colombia, Peru, and Uruguay.

Poland: reforms based on international testing

Between 2000 and 2012, there was an impressive transformation in test score performance among Poland's youth. The proportion of students at the top performance level increased, and the share of poor performers declined. Students from poor and well-off socioeconomic backgrounds alike saw performance improvements. Poland's Programme for International Student Assessment (PISA) scores



Among other benefits, Pakistan's Benazir Income Support Program has contributed to women's ability to invest in their children's education.

Photo: Curt Carnemark/World Bank

are now above the OECD average and at the same levels as countries such as Finland and Germany. All this has been achieved with stable levels of education spending, at about 5 percent of GDP, which is below the OECD average. As a result, PISA scores in mathematics, reading, and science jumped 30 points—equivalent to an additional year of schooling.³

The reason for this success lies in a series of comprehensive education reforms put into motion in the early 1990s. Successive administrations introduced standardized examinations at the end of primary, lower and upper-secondary education; transferred significant responsibilities from the central to the local governments; reformed the curriculum; and invested in teachers' professional development and expanded their freedom to choose textbooks.

Perhaps most fundamental, was the introduction of the comprehensive lower secondary *gimnazjum* in 1999, which delayed selection between general and vocational tracks and effectively added one year of exposure to the general curriculum for those students who, prior to the reform, would have been in vocational school. **Taking effect after the first PISA test in 2000, in which Poland performed poorly relative to EU and OECD averages, this change has been rigorously evaluated and shown to have had a significant positive effect on student performance.**

Vietnam: utilizing international benchmarks

Similarly, by **effectively benchmarking its student assessment system against international good practices, Vietnam was able to assess the effectiveness of its education system.**

Participating for the first time in the 2012 PISA, the country's 15-year olds ranked 17th in mathematics, 8th in science, and 19th in reading among 65 participating nations, placing Vietnam above the OECD average. Following PISA 2012, Vietnam changed the legal framework for its large-scale exams to diversify testing methods, improve item quality, and pave the way for competency-based assessment—reiterating its commitment to evidence-based policy design. Among the top 10 worldwide in science in the

Existing evidence and new analyses can help identify successful interventions and also aid in their design.

PAKISTAN:

-  nationwide unconditional cash transfer program benefited from years of research from other regions
-  over US\$3 billion disbursed to 5.2 million households since 2008
-  analyses show gains in education, nutrition, consumption and women's economic empowerment
-  lessons learned helped design other human capital-focused operations

2015 PISA, Vietnam's average score was 32 points higher than the OECD average—equivalent to about one year of schooling.⁴

The Strategic Impact Evaluation Fund: measuring impact to inform improvements

The World Bank's Strategic Impact Evaluation Fund (SIEF) supports scientifically rigorous research that measures the impact of programs and policies to improve education, health, access to quality water and sanitation, and early childhood development in low- and middle-income countries. A selection of SIEF evaluations is included on the following page.

Evaluation focus	Informed program, related program, or measurement
Bangladesh (Early childhood)	
Evaluated low-cost integrated interventions that targeted pregnant women and parents with children under age three to improve nutrition and child stimulation.	Save the Children (implementer) discussing use of results with Ministry of Health
Bulgaria (Early childhood)	
Measured the effectiveness of offering free preschool for selected beneficiaries, and providing a conditional financial grant for some selected communities (both jointly and independently) to understand how policymakers can increase the number of Roma children attending preschool and improve children's cognitive and socio-emotional development	The Ministry of Education and Science and the implementing NGO decided to support further longitudinal analysis and cognitive measurement of the experimental sample as they leave kindergarten.
Djibouti (Workfare and Nutrition)	
Examined the effectiveness of linking child nutrition and workfare as a means of reducing malnutrition in young children.	Results helped build policymaker support for continuing workfare program in the national roll-out
Kenya (Clinic inspections)	
Evaluated whether increased monitoring and providing information to patients about the clinics that serve them can strengthen the quality of care in private and public facilities.	Based on the instruments used during the baseline survey, the government collaborated with the evaluation team on a new regulatory framework for monitoring private and public health facilities to promote patient safety standards.
Malawi (Training volunteer teachers)	
Studied the effects of teacher incentives and training, parental education, and learning materials for children on their physical, emotional, and cognitive development and their readiness for primary school.	The Ministry of Gender has adopted curriculum developed for the teacher and parent training.
Mexico (Mobile teachers)	
Evaluated the effects of mobile pedagogical assistants sent to underperforming remote primary schools to give parents information about the schools and provide classroom support to teachers on student learning.	Government has decided to expand program based on results of the evaluation. Had the results not been positive, the program would have been shut down.
Nepal (Information on nutrition)	
Evaluated the effectiveness of providing information alone, or information and cash, on improved nutrition for pregnant women and young children.	The government adopted the training model and materials to ensure that easy-to-understand and better-informed nutritional information is reaching the country's poorest and most remote communities.
Niger (Early childhood)	
Evaluated the effectiveness of the cash transfers and the value-added of the parenting training on nutrition, health and cognitive development of children under the age of five.	Training and mentoring of the staff delivering the stimulation program in the national roll-out. Government decision to design complementary pilot approaches for water and sanitation and health
Pakistan (School grants)	
Determined whether making loans available to private schools that serve low-income students would lead schools to make investments that improve student learning.	Tameer microfinance bank in Pakistan is testing a new loan product for private schools that serve poor students.

*not all evaluations are shown.

Source: Adapted from the World Bank Strategic Impact Evaluation Fund

ENDNOTES

- 1 World Bank. 2016. Reaching the Poorest through Strengthening the Social Safety Net System in Pakistan. <http://www.worldbank.org/en/country/pakistan/brief/reaching-the-poorest-through-strengthening-the-social-safety-net-system-in-pakistan>
- 2 Barrera-Osorio, Felipe, Raju, Dhushyanth, Marcus, Aliza [eds.]. 2012. *Pakistan: Can low-cost private schools improve learning? (English)*. From evidence to policy. World Bank Group.
- 3 Wes, Marina, and Bodewig, Christian. 2016. Poland's Education System: Leading in Europe. <http://www.worldbank.org/en/news/opinion/2016/01/22/polands-education-system-leading-in-europe>
- 4 Kataoka, Sachiko. 2019. Vietnam's Human Capital: Remarkable Education Success and Future Challenges. World Bank.



The Human Capital Project is a global effort to accelerate more and better investments in people for greater equity and economic growth. The Project is helping create the political space for national leaders to prioritize transformational investments in health, education, and social protection. The objective is rapid progress toward a world in which all children are well-nourished and ready to learn, can attain real learning in the classroom, and can enter the job market as healthy, skilled, and productive adults.

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