The Investment Case for 
EDUCATION AND EQUITY 
Executive Summary

unicef
“Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages.”

– Article 26, Universal Declaration of Human Rights
Education is a human right. The Convention on the Rights of the Child and the Universal Declaration of Human Rights recognize the essential role education plays in human and social development. As stated in article 26 of the Declaration, “Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages.”

Education is also one of the most wide-reaching and beneficial development investments. It delivers the opportunity to acquire essential work and life skills, lifts people out of poverty, and contributes to empowerment and health. Yet, education is facing a crisis.

Between 2000 and 2007, the number of primary-school-age children who were out of school was reduced from about 100 million to about 60 million. Since then, however, progress in providing education for all has stalled. In 2012, nearly 58 million primary-school-age children and about 63 million adolescents of lower secondary school age were still out of school, and 130 million children were not learning despite reaching Grade 4.

Children who are excluded are essentially from the most vulnerable and marginalized segments of society. They would most benefit from the empowerment education provides, but instead they face acute challenges to accessing education, which leads to a vicious cycle of persistent poverty and inequity. Many times, the cycle results from limited, inequitably distributed and inefficiently used funding.

The Investment Case for Education and Equity is a call for action: For progress to resume, there is a need to invest more, to invest more equitably, and to ensure that funds are more efficiently utilized. This publication identifies the obstacles to universal education and provides recommendations on how to address them.

Developed while the international community works on the post-2015 development agenda, The Investment Case for Education and Equity examines several of the main issues currently under international discussion, including: the achievement of universal primary education as a continuation of the unfinished Education for All (EFA) agenda; an emphasis on equity; a focus on learning; an increased emphasis on secondary education for an increasing number of primary-school leavers; and the goal to equip children and young people with skills adapted to the needs of the labour market in a fast-changing, increasingly globalized economy.

The publication is divided into four chapters:

Chapter 1 highlights the right of all children to quality basic education, underlines the far-reaching positive economic and social impact of investing in education, and analyses the benefits of education at different levels.

Chapter 2 describes the challenges to education access, completion and learning, using an equity lens to analyse who is excluded from education today.

Chapter 3 examines the barriers to education, first considering demographic and education funding trends, then analysing the distribution of resources from an equity perspective, and finally highlighting what is sometimes an inefficient transformation of resources into access and learning.

Chapter 4 considers options to remedy the issues and challenges highlighted in chapter 3, providing recommendations on how to improve funding and spending policies and suggesting ways to implement cost-effective interventions to address both access and learning issues.

While the publication mostly makes reference to developing countries, marginalization and exclusion issues touch all countries. There are, for instance, 2.6 million children of primary-school age who are out of school in developed countries. Hence, when a specific country is used as an example, it generally illustrates a range of countries facing the same issue.
One billion reasons to invest in education

There are approximately 1 billion primary and lower secondary school-age children in the world today. When children of pre-primary school age are included, the number is close to 1.4 billion. Many of these children remain excluded from education because of poverty, violence and war, ethnic origin, disability and gender.

Education is a powerful tool to break the cycle of poverty and disadvantage for individuals, families and countries. Many studies have validated the impact of education on individual incomes and economic growth. On average, one more year of education brings a 10 per cent increase in an individual’s earnings. In addition, higher education levels lead to higher economic growth for the nation as a whole. Based on the average of different studies, each additional year of education is associated with an 18 per cent higher gross domestic product (GDP) per capita. As the Education for All Global Monitoring Report 2013/4 states: "If all students in low-income countries left school with basic reading skills, 171 million people could be lifted out of poverty, which would be equivalent to a 12% cut in world poverty." Further analyses highlight several important points.

First, the effect of education on poverty is generally higher in lower-income countries. This means that investing in education in developing contexts is both efficient and good economics as well as the correct thing to do from a rights-based perspective. In addition, poverty reduction is faster in countries with greater income equality, which itself is related to education equity. Finally, women’s education tends to bring higher economic returns than men’s education, even though women are often the most excluded. This pleads for focused attention on enrolling and retaining both girls and boys from all population groups, including the most marginalized.

**FIGURE 1** Relationship between the percentage of the population living on less than US$2 a day and the average years of education among the population of 25- to 34-year-olds

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Students attend pre-primary classes at Shilchari Para Kendra in Rangamati, south-east Bangladesh. Studies indicate that pre-primary school can increase school enrolment and improve learning outcomes.

A contextualized investment balance between education levels, adapted to the specific country situation, is necessary. In low-income countries, for example, primary education has the strongest influence on national economic growth. For middle-income countries, secondary education – which includes general and technical and vocational programmes – has the most significant impact on national economic growth, whereas for high-income countries, tertiary education is the most influential.

At the same time, in low-income countries, tertiary education provides high earning gains (private economic returns) to the individuals who access it. But those who benefit from these gains are almost exclusively from the wealthiest segments of society. Thus, it creates little upward mobility and provides little in the way of economic returns for society as a whole. Primary education, on the other hand, is accessed by different income groups much more equally. Since primary education also provides the highest economic benefits to the country as a whole, the primary level should be given particular attention in low-income countries.

Pre-primary education is also an important factor because studies show that it has the potential to increase primary school enrolment, raise learning outcomes and provide significant individual and social returns.

FIGURE 2  Private economic rates of return in low-income countries and world average, by level of education (%)

Social economic rates of return in low-income countries and world average, by level of education (%)

While education benefits are often measured in economic terms, such as increased national and individual income and reduced poverty, there are also far-reaching effects in terms of human development outcomes.

Many observed social advances are linked to women’s education. Women’s education is associated with delayed childbirth, lower fertility rates, significantly higher prenatal care and lower child mortality. Women with a primary education have, on average, 0.7 fewer live births than women with no education. The effects of secondary education are even greater. Women with a secondary education have, on average, 2.3 fewer children than women with no education. It is also estimated that from 1970 to 2009, about half of the reduction in mortality of children under age 5 could be traced to increases in the average years of education attained by women of reproductive age.

The benefits of education are felt long after a person’s youth and continue through all age groups, with higher gains for women than for men – a further argument for gender equality in education. In developing countries outside sub-Saharan Africa, for example, the mortality rates for women with at least primary education are 36 per cent lower than for women with less than primary education. The mortality rates for more educated men are 23 per cent lower than for men with less than primary education. In sub-Saharan Africa, the mortality rates of adult women with a primary education are 14 per cent lower than for women with less than primary education; this difference is 12 per cent for men.

Education also increases knowledge about HIV and AIDS. On average, completion of lower secondary education boosts HIV and AIDS knowledge by close to 50 per cent as compared with people with no education.

Higher education levels lead to higher empowerment and civic engagement, including the understanding of and support for democracy and conflict resolution, participation in civic life, tolerance for people of different races or religions, concern for the environment, and adaptation to climate change. For example, the Education for All Global Monitoring Report 2013/4 finds: “In Latin America, people with secondary education were 47% less likely than those with primary education to express intolerance for people of a different race. In the Arab States, people with secondary education were 14% less likely than those with only primary

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This young girl’s education has been interrupted by two years of violence in the Central African Republic. In November 2014 she hoped to return to school and to a more peaceful future.

For women, education is associated with rejection of harmful practices, including genital mutilation and cutting, and spousal abuse. In Mauritania, for example, 79 per cent of unschooled women aged 15–49 viewed genital cutting favourably in 2007, but only 41 per cent of those with lower secondary education and 21 per cent of women with tertiary education did. In Ethiopia, 79 per cent of women aged 15–49 and without an education felt that their husbands were justified in beating them under certain conditions, while this percentage dropped to 22 per cent for women with tertiary education.

The social benefits of education are many and vary for each level of education. In turn, each level of education has a different public cost, which increases with the level of education. In sub-Saharan Africa, social benefit-to-cost ratios are higher for primary than for lower secondary education. This is in line with the economic analysis that shows that, in low-income countries, investments in the lowest levels of education are the most cost-effective.

Beyond gender equity, education equity in general produces high social returns. For instance, a doubling in the level of educational inequality is associated with a doubling in the probability of conflict in many low- and middle-income countries.

Finally, one of the most important effects of education is the cascading benefits it offers to future generations, particularly in breaking the cycle of education and economic poverty. Acting as a virtuous cycle, education lifts future generations at both the national level and the family level – for example, children of educated mothers are much more likely to go to school than children of mothers without schooling.

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2 Ibid., p. 17.
Crisis at the foundation: Poor learning and high inequity in education

Of 650 million primary-school-age children, approximately 28 million never enter school, 92 million do not reach fourth grade, and 130 million do not learn the basics of reading and numeracy despite reaching Grade 4. In some Sahelian countries, almost half of the school-age population does not access school at all and, in many other countries, this percentage is between 10 per cent and 50 per cent. Completion of lower secondary (basic) education also remains below 50 per cent in a wide array of countries, including Bangladesh, Burkina Faso, Haiti, Iraq, the Lao People’s Democratic Republic and Suriname.

Learning levels are low in many countries, and failure to learn starts early. On average, students in low-income countries who were tested for reading fluency could only read 12 words per minute in Grade 1 and 23 per minute in Grade 2, whereas a speed of 45 words per minute is considered to be the minimum for reading comprehension.

FIGURE 4 Average years of education at age 23–27 for 32 low-income countries, by subgroups*

* The ‘most deprived group’ may be related to income, location, gender or ethnicity.

Additionally, pre-primary education, which helps prepare young children to succeed in school, is mostly found in higher-income countries. In low-income countries, on average, gross enrolment ratios in pre-primary education are only 19 per cent, and in lower middle-income countries, they average 50 per cent.

Children who are excluded from education do not come from all segments of the population equally. Within the same developing country, some groups of children may have education levels close to those of industrialized countries, while others are almost entirely excluded from education. Excluded children often come from the poorest populations. They also tend to come from rural areas, are girls, or face discrimination because of ethnic origin, language, disability or because they are part of nomadic or pastoralist groups.

As an example, in 2010, the wealthiest 20 per cent of students in Cambodia completed, on average, 8.2 years of education, while the poorest 20 per cent only completed 3.4 years. Challenges do not only affect the countries that suffer from the highest disadvantages regarding education. Viet Nam, for example, is doing comparatively well, and universal lower secondary completion has basically been achieved for the wealthiest children. However, at the current pace of progress, Viet Nam’s poorest children are not expected to achieve universal lower secondary completion before 2060.

Inequities also persist in many developed countries. In 2009, in the United States, the high school drop-out rate for students in low-income families was about five times greater than the drop-out rate of their peers.
A 12-year-old girl helps out at a recycling warehouse in Turkey where her mother and sister work. Her family fled Syria because of conflict in the country. She attended Grade 6 in Syria but does not attend school in Turkey.

Fragile or conflict-affected contexts also account for a large share of out-of-school children. The percentage of out-of-school children living in conflict-affected countries rose from 42 per cent in 2008 to 50 per cent in 2011. Studies predict that half of the countries emerging from violent conflict will relapse into conflict within the next five years. It is therefore impossible to remedy the issue of out-of-school children without investing in education that provides learning opportunities for children in conflict and emergency situations and mitigates the risk of further conflict.

An estimated 90 per cent of children with disabilities in the developing world do not go to school. Furthermore, children with disabilities – including learning, speech, physical, cognitive, sensory or emotional difficulties – who are enrolled in school are likely to drop out or fail to learn at much higher rates than their peers without disabilities.

Factors of exclusion tend to compound. In many countries, there is little difference in the education received by the wealthiest boys and the wealthiest girls. However, the inequalities between boys’ and girls’ educational opportunities widen as poverty and vulnerabilities increase. In Iraq, for instance, 2.6 times more boys than girls from the poorest income quintiles complete lower secondary education. In Honduras, the poorest boys are at a disadvantage, with twice as many girls from the poorest quintile completing lower secondary education.

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Barriers to education and learning progress

Despite the economic and social benefits of education, many barriers to ensuring universal education and learning still exist. These barriers are primarily related to demographic trends, low funding, inequitable resource distribution and the limited effectiveness of spending.

The sheer size of the school-age population in many countries is a major obstacle to achieving education for all. Countries with a higher proportion of children in the population will need to mobilize a proportionately higher share of funding for their education. In 2030, in order to achieve basic education for all – including pre-primary, primary and lower secondary – education systems will need to enrol 619 million additional children and adolescents between the ages of 3 and 15 (roughly the ages of pre-primary to lower secondary education). The largest challenge will be in sub-Saharan Africa, which is already the region with the largest number of out-of-school children. Sub-Saharan Africa will need to provide basic education to a total of 444 million children aged 3–15, 2.6 times more than the number of children enrolled in pre-primary, primary and lower secondary in 2012 (169 million).

Resources allocated to education are far too limited in many countries. The proportion of the GDP that actually flows through the government budget is a major determinant of overall available resources. In many low-income countries, there is a large non-formal economy, which by definition, does not contribute to the public revenue acquired by taxation. In this context, if a country does not have natural resources, such as oil, it tends to have limited money available in its budget. An international benchmark of 20 per cent of the GDP for the government budget is considered to be the minimum required to achieve all the Millennium Development Goals – yet, in some countries, such as Afghanistan, Ethiopia and Sierra Leone, the total government budget is as low as about 10 per cent of the GDP.

FIGURE 5 Funding gaps for primary education in 16 countries, comparing actual and needed primary education expenditures as a percentage of GDP

Source: Authors’ calculations based on data from the World Bank, the UNESCO Institute for Statistics (UIS) and the Education for All Global Monitoring Report.
Furthermore, donor countries have provided far less overall official development assistance than the 0.7 per cent of their GDPs they had committed in 1970 and reiterated in the Monterrey Consensus of the International Conference on Financing for Development. Education also continues to receive a limited share of government spending in various countries. The indicative benchmark set by the EFA-Fast Track Initiative (now known as the Global Partnership for Education) was 20 per cent for just the education share of the budget. This is still widely accepted as a reasonable target, particularly in countries with large numbers of school-age children and low enrolment rates. However, countries such as the Central African Republic and Myanmar are far below this level, allocating less than 10 per cent of their budget to education.

While domestic resources for education are often insufficient, external resources have also decreased. According to analyses by UNESCO’s Education for All Global Monitoring Report team, there is an estimated US$26 billion yearly gap in resources for education just for the achievement of universal basic education. After a significant increase between 2000 and 2009, official


4 Taking into account additional teacher and infrastructure needs to enrol all children, as well as the cost of reaching and enrolling marginalized children, and after accounting for existing external resources.
development assistance to education has decreased by 10 per cent since then. This is especially troubling for countries such as Afghanistan, Comoros and Liberia, where about a third of education resources come from external aid.

While not minimizing the importance of supporting health, during the 2010–2012 period, on average, external aid to health amounted to US$20 billion a year, compared with only US$13 billion a year for education.\(^5\) This trend does not reflect the relative importance of education and health in developing countries’ government budgets: On average in low-income countries, 9.2 per cent of the budget is devoted to health and 16.3 per cent to education, indicating that donors do not give the same priority to education as governments do.

Finally, the resources allocated for education in humanitarian contexts are less than 2 per cent of global humanitarian funding. This is of particular concern because half of the out-of-school population lives in fragile and conflict-affected countries, and education mitigates the effects and the risk of future conflict.

Not only are education resources too limited, but distribution of the resources is often inequitable. This is particularly true for the breakdown of funding by level of education. By prioritizing higher levels of education – both in terms of the share of the education budget and with regard to public spending per student – some low-income countries are allocating most of their resources to educate those who were already the most advantaged at birth.

On average, the poorer a country is, the higher the level of inequity. This greater level of inequity occurs in lower-income countries because of inequalities in educational attainment and the significantly higher unit costs of higher levels of education. The numbers are striking: On average, in low-income countries, 46 per cent of public education resources are allocated to educate the 10 per cent of students who are most educated. In lower-middle income countries, the percentage is 26 and in upper middle-income and high-income countries, the percentage is 13. In Malawi for example, 68 per cent of all public resources for education are directed to the top 10 per cent of educated students. Hence, only 32 per cent is allocated to education for the remaining 90 per cent.

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\(^5\) Based on Organisation for Economic Co-operation and Development (OECD) data for education (total amount) and the sum of amounts devoted to health (general) from Population Policies/Programs and Reproductive Health extracted from the OECD database in October 2014, www.oecd.org/dac/stats/aidtohealth.htm.
religious concerns and the opportunity costs of schooling, including the loss of wages from child labour. Policies that result in high repetition rates often lead to greater risks that children will drop out, particularly the poorest children. Drop-out rates also increase at puberty as children face more risks and challenges, such as child labour and child marriage. Disability is also a significant obstacle to participation in education.

Given the inequities highlighted above and since wealth and education levels are highly correlated, children from the poorest quintile benefit about 10 times less from public education spending than children from the wealthiest quintile in some low-income countries.

Low public spending per student means that families must cover a large share of education expenses, often adversely affecting the least-advantaged and poorest families. A most troubling pattern in several low- and middle-income countries is that household spending for education represents a significantly higher share of education costs at the primary level, where there is the highest proportion of poor students, than at the tertiary level, which is accessed almost exclusively by the wealthiest students and leads to the highest private income returns.

Compounding the issue is the fact that the resources available at a given level of education are not always equitably allocated across regions and schools. Often the poorest areas have the largest number of pupils per class and suffer from unequal and inefficient distribution of other education resources, such as textbooks. Additionally, within a given school, the early grades – the most crucial for learning and for preventing or reversing inequities – tend to be those that receive the fewest and least qualified teachers.

Additionally, resources are not sufficient to ensure results. Simply increasing the number of educational opportunities available – the ‘supply side’ of education – may not be enough to enrol the most marginalized students because these students also face challenges in their environments – the ‘demand side’ of education. Reasons for non-attendance include safety, gender, religious concerns and the opportunity costs of schooling, including the loss of wages from child labour. Policies that result in high repetition rates often lead to greater risks that children will drop out, particularly the poorest children. Drop-out rates also increase at puberty as children face more risks and challenges, such as child labour and child marriage. Disability is also a significant obstacle to participation in education.

With regard to learning, the impact of measurable inputs, such as teacher qualifications, training, textbooks or school funding related to learning outcomes, is limited. These measurable inputs correspond to the largest share of the costs of education. This does not mean that inputs do not matter, but rather suggests that the way resources translate into learning in the classroom can be even more important than the resources themselves. Hence, there is a need to improve accountability at all levels, particularly at the school level.

An analysis of effective learning time and school inspection practices suggested that accountability systems are weak in many countries. In Mali, for example, effective learning time was found to be only 70 per cent of what was predicted in the curriculum. And in Uganda, school inspectors, who were overseeing more than 700 teachers each, could not provide appropriate pedagogic supervision to ensure a quality learning environment.

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The way forward

Identifying barriers to education is an excellent initial step, which will help generate paths to bring more children into school. But it is also essential to allocate more money for education and to target education spending on methods that provide greater access to learning opportunities for the most marginalized children. First, the low level of education funding must be addressed. It is both necessary and possible for governments to mobilize more resources for their domestic budgets. However, this will take time, especially in countries with a large non-formal sector and no oil resources.

Another way to increase funding for education is to ensure that government budgets allocate sufficient resources. And while increasing domestic resources for education is essential, raising external resources is also necessary to fill the gap. Traditional donors are encouraged to increase their level of aid to education. In low-income countries, they are encouraged to focus investments on basic education. Non-traditional donors, especially from the private sector, need to be cultivated.

These donors may find tremendous opportunities to leave their imprint. Just 5 per cent of the annual profits of the five highest-earning public companies in the world would be sufficient to raise US$12.6 billion annually – almost half of the estimated gap in external funding for basic education. Five per cent of the profits of the 15 highest-earning public companies would suffice to close the entire gap.

In humanitarian situations, the UNICEF Strategic Plan 2014–2017 calls for a 10 per cent share for education in global humanitarian aid. This benchmark is essential to build resilience in the education system and give children affected by conflict and emergencies the

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6 This value was determined based on consultations and is now part of the final results framework of the UNICEF Strategic Plan, 2014–2017, approved by the UNICEF Executive Board in June 2014.
opportunity to not only survive, but to develop the tools they need to create a future of peace and dignity.

For education to provide the promise of equity for all children, the international community and governments must significantly reallocate their current resources in some cases. Pro-equity policies are necessary if the goals set in the Education for All agenda are to be achieved. This means that policies must be tailored to the economic situation of each country. In low-income countries, investments must be targeted in priority to basic education. In middle-income countries, investments should prioritize secondary, technical and vocational education. In high-income countries, investment should be aimed primarily at tertiary education.

Pro-equity policies may also require consideration of non-formal or ‘second-chance’ programmes to give excluded children and youth opportunities. Given the inter-generational impact of education, second-chance programmes may be an essential tool to break the cycle of poverty and exclusion without having to wait a generation. Prioritizing formal and informal basic education programmes in low-income countries may require a difficult political balancing act. The demands of more powerful, urban and educated youth who seek access to higher levels of education must be weighed against the needs of the most marginalized and vulnerable segments of the population who remain excluded from even the most basic levels of education.

Pro-equity policies also include geographical reallocation of resources based on strong political will. For example, in just a few years, Togo improved geographical equity in how it distributes teachers to schools. Bangladesh has implemented a ‘positive discrimination’ policy, allocating more public resources per student in the poorest areas than in the wealthiest, proving that it is possible to achieve equity goals even in difficult contexts.

When faced with significant resource constraints, the best way to ensure that the trade-offs are pro-equity

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may be to turn current practices upside down: provide more resources to the poorest areas and allocate more and better qualified teachers to the early grades.

Enrolling more children in school also requires ‘demand-side’ interventions that actively remove the barriers disadvantaged children face, including child labour, child marriage, violence and discrimination. It also requires a better understanding of children’s specific situations and environments. To gain this understanding, more information on the details of children’s lives should be integrated into national data systems and household surveys. In particular, more information is needed on children with disabilities, a critical data gap around the world.

The analysis of a number of studies in developing countries shows that the provision of school uniforms, access to preschool, and the abolition of school fees are cost-effective interventions to improve access and retention in basic education. Building schools near students has high immediate costs, but once the fact that one school can serve children for many years is taken into account, the intervention is cost-effective in the long term.

Implementation challenges also need to be carefully considered with regard to school construction in sparsely populated areas and teaching and training for multi-grade classes. Addressing potential issues with procurement and financial management is also necessary, especially when it comes to construction and textbook purchase and delivery.

Importantly, resources are not always transformed into effective learning. Therefore, building strong accountability structures is essential to improving the ways resources are transformed into learning. Creating these systems will require targeting inspections and support to low-performing schools and increasing transparency and community involvement, for instance, using information feedback tools for schools. During the 1990s, for example, the Government of Uganda learned that only 13 per cent of school grants were reaching primary schools. In response, the Government launched a monthly newspaper campaign that published the transfer of funds and asked school principals to post the entire budget. As a result, the percentage of school grants that reached primary schools rose to more than 80.

Pedagogic, health, nutrition and financial interventions can also boost learning. Country-specific evidence-based assessment of these kinds of interventions will help identify the most cost-effective options. In addition, solutions for improved, more equitable and efficient policies for education and learning need to be contextualized based on in-depth education sector analyses that identify the specific challenges and constraints that countries face. The analyses should inform comprehensive education sector plans, in which evidence is translated into implemented policies that are locally owned and relevant.

Addressing the learning crisis also requires the strengthening of learning assessment systems at the country level, particularly in the early grades.

In conclusion, removing barriers, ensuring accessibility, and providing good learning opportunities are all required to give all children their birthright: quality education. The international community and governments must affirm and deliver on their commitment to equitable, inclusive education.
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Cover photograph:
Students in a classroom in Kursa Primary School in the Afar region of Ethiopia. © UNICEF/ETHA_201300488/Ose

Published by UNICEF
Education Section, Programme Division
3 United Nations Plaza
New York, NY 10017

www.unicef.org/publications

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January 2015