Poverty and education

Servaas van der Berg

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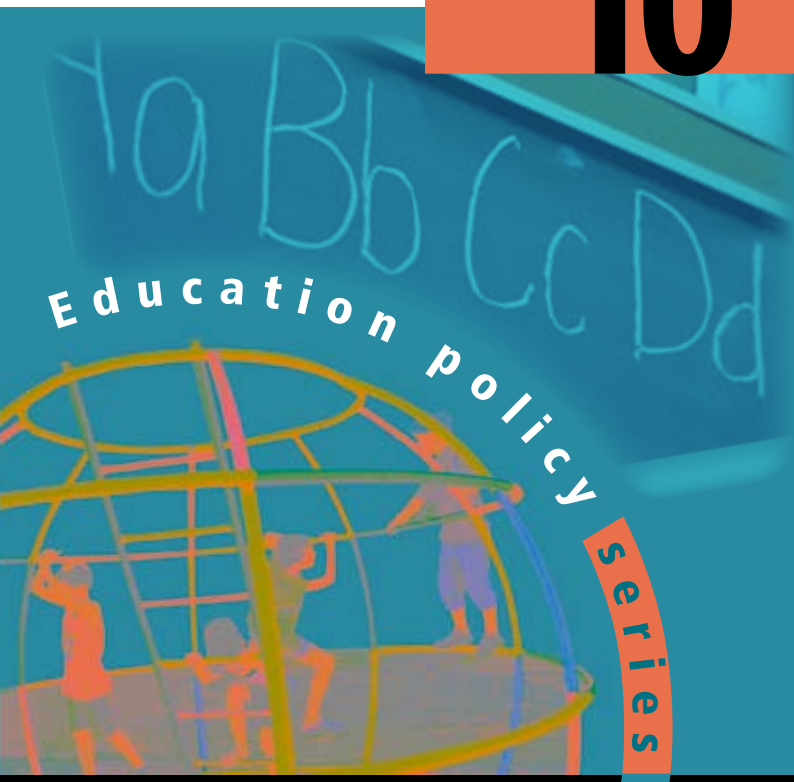

Education policy series

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Preface
Education Policy Series

The International Academy of Education and the International Institute for Educational Planning (UNESCO) are jointly publishing the Education Policy Series. The purpose of the series is to summarize what is known, based on research, about selected policy issues in the field of education.

The series was designed for rapid consultation 'on the run' by busy senior decision-makers in ministries of education, who rarely have time to read lengthy research reports, to attend conferences and seminars, or to become engaged in extended scholarly debates with educational policy research specialists.

The booklets have been (a) focused on policy topics that the Academy considers to be of high priority across many ministries of education – in both developed and developing countries, (b) structured for clarity – containing an introductory overview, a research-based discussion of around ten key issues considered to be critical to the topic of the booklet, and references that provide supporting evidence and further reading related to the discussion of issues, (c) restricted in length – requiring around 30-45 minutes of reading time; and (d) sized to fit easily into a jacket pocket – providing opportunities for readily accessible consultation inside or outside the office.

The authors of the series were selected by the International Academy of Education because of their expertise concerning the booklet topics, and also because of their recognised ability to communicate complex research findings in a manner that can be readily understood and used for policy purposes.

The booklets will appear first in English, and may be published in other languages.

Four booklets will be published each year and made freely available for download from the websites of the International Academy of Education and the International Institute for Educational Planning. A limited printed edition will also be prepared shortly after electronic publication.

This booklet

Two consistent research findings in the social sciences relate to the relationship between economic and education variables, and therefore between education and poverty. Educational research has consistently found home background (socio-economic status) to be an important determinant of educational outcomes, and economic research has shown that education strongly affects earnings.

Poverty is not simply the absence of financial resources. According to Amartya Sen, poverty is the lack of capability to function effectively in society. Inadequate education can thus be considered a form of poverty. *Absolute poverty* – the absence of adequate resources – hampers learning in developing countries through poor nutrition, health, home circumstances (lack of books, lighting or places to do homework) and parental education. It discourages enrolment and survival to higher grades, and also reduces learning in schools. The *relative poverty* perspective emphasizes exclusion from the mainstream in rich countries, which can reduce the motivation of the relatively poor and their ability to gain full benefits from education.

Education can reduce poverty in a number of ways. Firstly, more educated people are more likely to get jobs, are more productive, and earn more. Secondly, though international literature finds no simple causal relationship between educational attainment and the economic growth of a country, recent research shows that *quality-adjusted education* is important for economic growth. More and better education improves a poor country's economic growth and thereby generates economic opportunities and incomes. Thirdly, education (particularly of girls) brings social benefits that improve the situation of the poor, such as lower fertility, improved health care of children, and greater participation of women in the labour market.

The home background of pupils is the single most important factor influencing educational outcomes. Poverty is strongly correlated with a range of other home background variables, including parental educational attainment, thus it is difficult to separate the effects of limited financial resources from other home background factors. Analyses of international educational assessment studies have shown that while socio-economic

gradients (between home background and achievement) differ greatly among countries, some schools manage to reduce the gradient by improving performance of poor students.

High financial costs of schooling make education less affordable to the poor, who are very cost sensitive (demand is price elastic). Opportunity costs of education are often also high (for example, children may work in agriculture or do domestic chores such as fetching water). In many societies, the benefits of education may be low or not well understood, particularly for girls.

Lack of educational resources in poor schools sometimes hampers learning. Despite financial incentives, good teachers usually prefer to teach in richer schools. The correct resource combination may also be important. Without good textbooks or classroom resources, more teachers cannot necessarily improve the quality of learning.

There appears to be a limit to what schools alone can do to overcome the effects of poverty on education. Educational interventions throughout the world show at best modest success. Successful interventions seem to deal well with a specific context, rather than offering models that can be copied. A benevolent economic environment that accentuates the gains from education may be necessary for many educational interventions to have a strong effect on poverty.

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1 What is poverty?

The concept of poverty, when applied in both developing and developed country contexts, needs to be broadened beyond a uni-dimensional concentration on a person's lack of financial resources.

It is widely agreed that the relationship between poverty and education operates in two directions: poor people are often unable to obtain access to an adequate education, and without an adequate education people are often constrained to a life of poverty. However, before addressing the interrelationships between poverty and education, it is important to discuss the concept of *poverty*.

Poverty has many dimensions and does not merely entail low levels of income or expenditure. The work of Amartya Sen (1992, 2001) has broadened our understanding of poverty by defining it as a condition that results in an absence of the freedom to choose arising from a lack of what he refers to as the *capability* to function effectively in society. This multidimensional interpretation moves far beyond the notion of poverty as being solely related to a lack of financial resources. For example, Sen's viewpoint would suggest that inadequate education could, in itself, be considered as a form of poverty in many societies.

When considering poverty's linkages with a lack of sufficient financial resources it is useful to consider the two distinct components of absolute and relative poverty. *Absolute poverty* is the absence of financial resources required to maintain a certain minimal standard of living. For example, an absolute poverty line can be set, based on factors such as the financial resources needed for the most basic needs

or the income level required to purchase basic food needs (Fields, 2000; Deaton, 1997). Such poverty lines need to be adjusted for inflation if they are to be used at different time points. A poverty line commonly used by the World Bank for making international comparisons is US$1 per person per day, or sometimes US$2 per person per day. This kind of absolute poverty line provides a fixed yardstick against which to measure change. For example, to see whether a country is making any progress in reducing poverty, or to compare several countries or several regions.

In contrast, *relative poverty* is seen as poverty that is partly determined by the society in which a person lives. Someone who may not be regarded as poor in Bangladesh may (with the same financial resources) be considered as poor in Sweden.

By absolute poverty standards, such as the designation of US$1 per person per day, few people in developed countries may be considered poor – yet a considerable proportion of the population in these countries might be considered to be relatively poor because they are excluded from the mainstream of economic and social life. Such people might experience poverty via sources such as social marginalization, lack of education, low income, poor language skills, and other factors that prevent a genuine integration into mainstream society.

Both absolute and relative poverty are relevant for education. Lack of financial resources may limit school attendance among the absolutely poor in developing countries. The relatively poor in developed countries, however, often feel excluded from the school community, or the whole school community itself may feel excluded from the wider society. Such exclusion affects their ability to gain the full benefits from education or to translate the benefits of education into remunerative employment. This also has a potential impact on motivation to participate or to do well in education. Thus both absolute and relative poverty impact on education, as will be discussed in following sections of this booklet. Where absolute poverty is considered, the focus will be on developing (poor) countries. In contrast, where relative poverty is considered, the focus will usually be on developed (rich) countries (even though relative poverty is also widely present in poor countries).

2 Education reduces poverty in rich and poor countries

Better educated people have a greater probability of being employed, are economically more productive, and therefore earn higher incomes.

Throughout the world it has been found that the probability of finding employment rises with higher levels of education, and that earnings are higher for people with higher levels of education. A better educated household is less likely to be poor.

The impact of education on earnings and thus on poverty works largely through the labour market, though education can also contribute to productivity in other areas, such as peasant farming (Orazem, Glewwe & Patrinos, 2007: 5). In the labour market, higher wages for more educated people may result from higher productivity, but also perhaps from the fact that education may act as a signal of ability to employers, enabling the better educated to obtain more lucrative jobs. Middle-income countries – which frequently have well developed markets for more educated labour – are particularly likely to see the benefits of education translated into better jobs and higher wages. In Chile, for instance, between one quarter and one third of household income differences can be explained by the level of education of household heads (Ferreira & Litchfield, 1998, p. 32).

It was previously thought that the returns to education (the quantified benefits of investing in education) were highest at primary levels. This belief provided a strong case for expanding investment in primary rather than higher levels of education (Psacharopoulos & Patrinos 2004). However, new evidence seems more mixed. While some studies continue to show higher returns for primary education, there is now also

much evidence that investment in education at secondary or even tertiary levels may bring even higher returns in some countries. This could indicate that returns to education vary with factors such as the level of development, the supply of educated workers, and shifts in the demand for such workers in the development process. It is well known that the demand for more educated labour rises as a country develops (Murphy & Welch, 1994). This increase in demand for highly skilled workers requires educational output to adjust accordingly, raising the relative returns to higher levels of education (Goldin & Katz, 1999).

Nevertheless, the absolutely poor in developing countries usually have low education levels. Some may still not even have access to primary education or may not complete their primary education. Universal primary education is therefore crucially important to reduce poverty. However, there are also examples of countries where the rapid expansion of education has resulted in lowering education quality, suggesting that countries face a trade-off between quantity and quality in the short to medium term. In such cases, the impact of education on poverty reduction may be small, and a lot of effort must go into protecting and enhancing the quality of education.

In developed countries there are sometimes groups of students who are excluded from the social mainstream. Some of the factors associated with this include poverty (especially relative poverty), language, ethnic minority status, or immigrant status (Schnepf, 2004). Although these factors may all separately contribute to social disadvantage and social exclusion, they often interact. Thus social exclusion is a common feature of many educationally 'at risk' students, both poor and non-poor.

Social mobility varies across countries in the developed world. Generally, education improves job prospects for poor groups, although upward social mobility is more difficult for groups that are also otherwise socially marginalized, such as immigrant communities or ethnic minorities. Even among such groups though, education lowers poverty, but the returns to education may be smaller than for non-minority members due to discrimination.

3 Education's linkages with economic growth

Education stimulates economic growth and the development of poor countries, when both the quantity and the quality of education are considered. This also makes it possible for individuals to earn more.

The evidence showing that the quantity of education makes a difference to economic growth is not as strong as is often thought (Filmer & Pritchett, 1999; Pritchett, 2001). In fact, the recent international literature (for example, Pritchett, 1996; Temple, 2001; Krueger & Lindahl, 2001) shows no simple causal relationship between education and economic growth. Education is often poorly measured, and the impacts do not always show up as statistically significant in cross-country growth regressions (Levine & Renelt, 1992). This may be because large variations in the *quality* of education make it difficult to measure its impact across different countries. Research in this field has been hampered by suspect data and difficulties in specifying or measuring human capital and technology variables. Maddison (1989, pp. 77-78) made the following remark:

…the economic impact of better education is not easy to measure. Education is correlated with intelligence and family background, and its quality varies a good deal from country to country, so that it would be hazardous to assume that the quality of labour input rises pari passu with levels of education. Indeed all assumptions about the average contribution of education to growth must be very rough.

Because educational quality differs so greatly between countries, recent research that shows the effect of *quality-adjusted education* is particularly important (Barro & Lee, 2001; Hanushek & Kimko, 2000; Hanushek & Zhang, 2006; Hanushek & Wößmann, 2007). Such research demonstrates quite conclusively that education of a good quality promotes economic growth. The impact of high and sustained levels of economic growth on a society and on general development can in turn be very large. An increase in the economic growth rate of developing countries can reduce poverty dramatically, as has recently been seen in countries such as China and India. In this way, better education can translate into sustained growth which can reduce poverty drastically.

There is also a relative aspect to the economic gains countries make from an educated labour force because competition for jobs and international competition between firms and countries are influenced by relative productivity. Education is thus very important to the economic performance and the international competitiveness of countries. Education not only has a direct productivity impact in the labour market, but its impact also operates in another way: a lack of adequate skills derived from education is sometimes an important constraint on the growth of countries. This applies to very poor countries, where the workforce may lack basic literacy and numeracy skills, and to developed countries that may face specific shortages of high-level skills, such as medical specialists or information technology experts.

Londoño (1996) argues that inadequate education has been the most important factor holding back Latin American economic growth and thereby sustaining high levels of inequality and poverty. He is optimistic that improved education can bring a large and relatively quick reduction in poverty. An important choice is also which education level to expand. Gemmelt (1996) finds that primary education is most important for economic growth in low income developing countries, secondary education for middle income developing countries, and tertiary education for rich countries.

4 Education improves general living standards

Education, particularly of girls, brings other social benefits besides higher incomes, which apply not only to the educated individuals.

Some of the advantages that education provides (externalities) both improve the living standards of communities and contribute to the social and economic development of countries. The benefits of education result in changes in people's behaviour as a consequence of the knowledge gained. A long list of such benefits can be identified (Wolfe & Haveman, 2002), but not all of these changes in behaviour necessarily have an impact on poverty.

Frequently, these benefits to a society are particularly large when female education improves. It is well known, for instance, that lower fertility is strongly linked to higher female education. Mothers' education is also an important determinant of health care and sanitation in a household. This is reflected in, among other things, infant and child mortality levels that are much lower for the children of better educated mothers (Schultz, 1999). Better health status (for instance, lower levels of stunting) is in turn translated into greater success at school, thereby bringing positive feedback to education itself in the next generation. Similarly, parental education – and again, particularly that of the mother – also influences the support that parents can give to children, improving the quality and success of education in the next generation.

The education of girls has a further strong and very important effect on the role of women in society. It tends

to draw more women into the labour market. This increase in female labour force participation expands income-earning opportunities for many households and better utilises the labour, skills, and talents of women.

Education is seen as one of the most important ways of combating HIV and AIDS, both in developed and particularly developing countries.

These effects of education on wider development influence poverty in a narrower or 'money-metric' sense as well as in the broader 'choice limitation' sense in which Sen uses the term.

In addition, there are other positive developmental impacts of education which may not be so clearly linked to poverty but which are nevertheless important. These include the fact that education improves the functioning, or even the sustainability, of democracy in poor and rich countries alike, and that higher levels of education seem to reduce crime.

5 Home background greatly influences educational outcomes

The home background of pupils is the single most important factor influencing educational outcomes in most developed and developing countries.

A large volume of educational literature, much of it following in the wake of Coleman's 1966 Equality of Educational Opportunity Report, wrestles with the question of what role the school can play to overcome disadvantages associated with the home background of students, particularly among the poor.

Poverty is strongly correlated with a range of home background variables, including parental education, which also influence children's educational outcomes. Thus it may be difficult to separate these influences and to know the extent to which the education of poor children is being held back by too few financial resources rather than other home background factors. Because such factors are so difficult to disentangle, researchers often treat all mechanisms operating via socio-economic status as a single effect.

Educational outcomes generally improve as the socio-economic status (SES) of children rises "in all countries, at all age levels, and for all subjects" (UNESCO EFA, 2004, p. 48). This has come to be referred to as the *socio-economic gradient* (Willms, 2006). SES is usually measured as a constructed variable that includes parental education. Most studies do not separately distinguish the effects of parental education, financial resources, and other home background factors. Thus it is not clear whether there is also a socio-economic

gradient *for children of parents with a similar education* (that is, if higher parental incomes always improve educational outcomes for given levels of parental education). In other words, it is not clear exactly what the impact of financial resources is, separate from other factors.

An analysis of two large international educational assessment studies, PISA (the Programme for International Student Assessment) and TIMSS (the Third International Maths and Science Study), shows that the socio-economic gradient differs greatly among countries. However, there is also evidence that some schools can reduce the gradient by improving the performance of poor students. However, it also appears that the poverty level of the whole school community has an *additional* negative effect, over and above the poverty level of an individual, even for schools with similar resources. Thus, children attending schools where most students are poor are at an even greater disadvantage than poor children attending more affluent schools (Willms, 2006, p. 68).

6 Absolute poverty reduces the ability to learn

In developing countries, widespread absolute poverty hampers education through poor nutrition and health, low parental education, limited financial resources for education, and poor home circumstances.

Absolute poverty (where people have very few resources and where their most basic needs are not met) is most common in developing countries, particularly in rural areas, although pockets of absolute poverty also exist in developed countries. It results in poor home circumstances for learning (for example, no books, lighting, or places to do homework), affects children's physical wellbeing and ability to learn, is associated with low parental education, and limits resources for investing in education.

Poor nutrition affects the ability of children to learn: Studies have shown that stunted children (children who are short for their age) are less likely to enrol in schools, and if they enrol, are more likely to drop out (UNESCO EFA, 2006, p. 111). The EFA Global Monitoring Report (UNESCO EFA, 2006, p. 127) states that more than a quarter of children below five years of age in sub-Saharan Africa are underweight due to poor diet and malnutrition, making them more vulnerable to disease and less able to concentrate at school. There is ample evidence that early nutritional and health status as well as nutrition when children are already at school have strong beneficial effects on their ability to learn (Orazem, Glewwe & Patrinos, 2007, pp. 25-28). Conversely, poorly fed children find it difficult to concentrate at school, which

provides strong support for school feeding schemes in poor countries and communities.

Home circumstances are often not conducive to learning in many poor communities. These include factors such as a lack of lighting, spending much time on domestic chores, having no desk or table to work on, or an absence of books in the home. These home circumstances may also feature insecure or unstable environments and financial insecurity – often leading to anxiety and emotional stress, which may be increased by violence and abuse in some homes. All of these challenges in poor communities, taken together with the impact of lower levels of parental education results in children having little assistance with homework and less motivation to learn.

Some households that may not be poor at a particular point in time are vulnerable to poverty due to economic shocks such as bad harvests, unemployment, or the death of a breadwinner. Like poverty, vulnerability often also translates into poor educational results and intermittent participation in school.

7 Poverty reduces educational enrolment

High financial and opportunity costs of education (for example, children who work on farms or in households) and limited perceived benefits of education sometimes limit the demand for education among the poor in developing countries.

Many studies in developing countries have shown that access to education differs depending on income level. Systematic investigation of this difference across countries is now easier using Demographic and Health Surveys, which have been carried out in many developing countries. Such studies show large differences in enrolment in Grade 1 in many countries, but also that fewer poor children remain in school to higher grades (Filmer & Pritchett, 1999 & 2001; Orazem, Glewwe & Patrinos, 2007, p. 18).

More affluent people in urban settings are often better located to gain access to schools as there are sometimes few schools in the poorest rural areas of developing countries. This is reflected in the lower proportion of students starting school.

In addition to access, there is the further problem of limited demand for education among the poor in developing countries. The demand for education depends on a number of things, such as the financial and opportunity costs of education, the quality of education, and its perceived benefits.

The financial costs of schooling are often high, making it difficult for poor parents to afford schooling for their children. Such financial costs include not only school fees, but also other direct costs such as the costs of transport, school uniforms, and school books. In addition to financial costs, there are also non-financial costs, such as the opportunity cost of sending children to school. Particularly in rural areas, many children may be involved in agricultural work or domestic duties (for example, fetching wood or water), so sending them to school involves an opportunity cost to the household. There is usually a strong gender dimension to this choice: girls often have more household responsibilities, and there may be fewer well-paying jobs available for educated girls than for boys. In developing countries suffering high levels of HIV and AIDS, there is often a heavy burden on children to care for ill relatives, which may limit their educational opportunities.

Morrisson (2002, pp. 14-15) notes that the demand for education may be quite sensitive to the costs of education, so that high transport costs or school fees may reduce the demand for education substantially. Cost sensitivity (price elasticity) might even be greater among the poor, leading to greater inequality in access, as examples from Indonesia, Madagascar and Tanzania illustrate. The inverse is also true: reducing the costs associated with education, including school fees, is likely to improve school attendance most among the poor. That is one of the reasons why the global Education for All initiative places such a great emphasis on eliminating school fees in poor countries. The World Bank (2004, p. 116) notes that poor people are often the last to enrol in basic education, thus government spending that improves access strongly favours poorer households.

However, the poor also seem to be more responsive to school quality. If educational quality is poor, then poor people are more likely not to attend than rich people (Morrisson, 2002, p. 15). Thus an increase in educational quality is another strong incentive for the poor to attend school, again increasing enrolment.

It is not only the costs or the poor quality of schooling that reduce demand for education among the poor. In many societies, and particularly in rural areas, the benefits of education may be low or not yet well understood. Often the poor, even when they are educated, have difficulty finding jobs that compensate them adequately for their education. This may be because the education they receive is of a lower quality, or may be perceived to be of a lower quality, than is the case in schools in richer areas. It may, however, also be because jobs are scarce in rural areas, where many of the poor live, and the economic benefits of education are therefore not apparent to parents. This is particularly true for girls, adding to the trend towards lower enrolment ratios for girls.

8 Social marginalization constrains learning

Relative poverty (being relatively poor in an affluent context) negatively affects education in developed countries.

Within Sen's view of poverty – the limits imposed on the freedom to participate fully in society – social marginalization can be understood as another form of poverty, even when it does not entail a lack of financial resources. The freedom to function in many developed countries is severely restricted for some marginalized groups (for instance, minorities or immigrant groups) by inadequate education or incomes, etc., but also by their relationships with the rest of society. Increasing their incomes may not, on its own, improve their situation. Where such groups of people are excluded from full participation in society, this may affect their ability to benefit fully from education or to translate the benefits of education into good jobs.

Relative poverty influences education when the poor are marginalized, preventing them from full participation in social and economic processes in rich countries. In developed countries, access to school, or even progress through school, is usually not a major problem. However, educational disadvantage is reflected in poorer quality of learning and, beyond a certain age, higher discontinuation rates. Children from poor neighbourhoods are often poorly motivated to do well at school. This may have much to do with a perception that education will not bring them its full benefits. Poor children suffer from negative peer group effects when they are isolated in poor community schools (for example, inner city schools in the USA), or do not reap

the potential positive peer group effects when they are in schools with more advantaged peers because they often remain socially isolated from these peers.

Moreover, they often have limited parental support, a factor that is strengthened when their parents also feel excluded. Poor parents can sometimes provide little support at home, or support to schools; there are often few books at home; home conditions for doing homework may be bad; children are poorly motivated to do well at school because they do not perceive the benefits of it, and so forth. Parental involvement appears to make a greater difference to performance in some situations than differences between schools, and parental programmes may bring some benefits (Raffo et al., 2007, p. 15). Because poor parents typically have less affluent social networks, this reduces the future benefits of additional education for poor children, as they are less likely to be able to obtain good jobs.

9 Poor schools usually have fewer resources

Lack of resources in developing countries can sometimes prevent good education, while in rich countries it is difficult to attract good teachers to poor schools.

In poor countries, the lack of educational resources in schools sometimes makes learning extremely difficult. In 2001, an average of only 8.7 on a list of 22 desirable resources for teaching were available in the 14 SACMEQ (Southern and Eastern Africa Consortium for Monitoring Educational Quality) countries, and as many as 10% of children (45% in Zanzibar) had no place to sit (UNESCO EFA, 2004, p. 47). Such absence of basic resources and extreme overcrowding in many developing country schools means that other factors that are crucial for quality education (for example, teacher subject knowledge) may initially play a smaller role. But as the budget situation improves, more resources do not always generate a similar educational improvement, perhaps because school and classroom organization does not adjust to use the additional resources well, or because there may be threshold levels beyond which adding further resources do not yield significant additional benefits for learning (Fuller, 1985).

In many of the poorest countries, the right combination of resources may also be quite important (World Bank, 2004). Without good textbooks or other classroom resources, more teachers cannot necessarily improve the quality of learning. Thus studies show great positive effects of more good textbooks, effects that often appear to be larger than

those of additional teachers. How resources are combined and how they are used in the classroom, may be of great importance to gain optimal benefit from them.

Part of the resource constraint in poor schools may result from inequitable distribution of resources. Often, resources are more widely available in urban than in rural areas, or in rich than in poor neighbourhoods within cities.

Even in countries where public resources are equitably distributed between schools; good teachers may avoid poor schools because of the greater difficulty of teaching poor children. Developing countries find it difficult to get good teachers to teach in rural areas; in rich countries, good teachers often avoid poor schools. Financial incentives have not been very successful at attracting better teachers to poor schools. This is partly because of the extreme difficulty of teaching poor children, often in deprived circumstances, and the preference of good teachers to teach in more affluent schools.

10 Escaping poverty requires more than education

For schools to assist children to escape poverty requires a mixture of special interventions and favourable economic circumstances.

For education to offer a route out of poverty on a substantial scale often requires special interventions or favourable economic circumstances. A large number of interventions have been implemented to overcome the negative impact of poor home background in countries throughout the world, with varying degrees of success. These interventions include remedial education measures, nutritional support, social work in the community, attempts by school authorities to involve poor parents in their children's education, adult literacy campaigns, and anti-poverty policies, to name a few. Early childhood development efforts appear very important to allow children to develop (UNESCO EFA, 2006).

Yet it is difficult to draw generalized conclusions from such interventions. Those that have been successful seem to be so because they deal well with the specific context of a particular school, rather than because they offer a model that can be applied across most schools. There appears to be a limit to what schools alone can do to overcome the effects of poverty on education. Levin (2004, p. 47) summarises US evidence and says, "sustained improvement over time in high-poverty schools is rare, despite claims by studies of exceptional schools." This supports the view of the Coleman Report, that it is difficult for schools to overcome the effects of a poor home background. A study for the Joseph Rowntree Foundation on the relationship between poverty and education could identify no single reason

why poor children perform worse in education. Instead it found that multiple factors at different levels play a role and concludes that "there are no 'magic bullets' that will enable such learners to perform as well and derive the same educational benefits as their more advantaged peers." (Raffo et al., 2007, p. 50)

In countries that experience rapid economic growth, the benefits of education become more apparent as school leavers are drawn into good jobs. This opens up possibilities for upward social mobility and provides incentives for parents and children to invest more time and effort in education. This benevolent environment may be a requirement for many other education interventions to have a strong effect.

11 Concluding comments

There is clear evidence that education can reduce poverty. However, poverty is just one of several factors that prevent access to a quality education.

It has been shown that poverty is a wider concept than merely the absence of financial resources. In the conceptual framework provided by Amartya Sen, development deals mainly with the expansion of choice, and financial resources are just one of the factors contributing to this. Accordingly, poverty, in its wider view, should be seen as a range of constraints on the freedom to fully participate in society. Regarding money-metric poverty, (that is, poverty in the financial sphere), both an absolute view (poverty as lacking even minimal resources) and a relative view (poverty as an inability to fully participate in a particular society) were found to be relevant. Absolute poverty is found more in developing countries, whereas relative poverty has particular pertinence in developed countries.

There is substantial evidence that education can reduce poverty. This connection between education and poverty works through three mechanisms: firstly, more educated people earn more; secondly, more (and especially better quality) education improves economic growth and thereby economic opportunities and incomes; and thirdly, education brings wider social benefits that improve economic development and especially the situation of the poor, such as lower fertility, improved health care of children, and greater participation of women in the labour force.

From this, some policy needs follow. It is important for poverty reduction to increase access to education, but also to place emphasis on the quality of such education: the poor suffer most when the quality of education is weak. In addition, there is a particularly large benefit to expanding both the quantity and the quality of female education. Increasing enrolment requires dealing with both demand factors and supply factors. On the demand side, this can be achieved most easily through reductions in the costs of schooling (for example, abolishing school fees) or subsidies to attend school (for example, the Brazilian *Bolsa Escola*, now incorporated into the *Bolsa Familia*). On the supply side, it is important to build enough schools in rural areas, to provide adequate resources, and to prevent a rapid expansion of demand from completely swamping supply, with the resultant extreme overcrowding that countries such as Uganda have experienced after abolishing school fees.

Turning to the impact of poverty on education, it is clear that it negatively affects initial enrolment in schools in developing countries and the survival to higher grades in both poor and rich countries. Social exclusion is often a factor for the poor in rich countries, leading to loss of motivation to study as well as peer group effects working to their detriment.

National assessments are important to identify the extent of the disadvantage in educational quality faced by the poor, even when barriers to school access and attendance have been overcome. The poor often remain neglected, thus the expansion of national and international assessments assists in drawing attention to their plight.

Poor schools also often suffer from having fewer resources, due either to budget limits or to inequitable resource allocation among schools. Additional resources are important, but it is also important to ensure that they are available in the right combinations and that school and classroom organization adjusts to use these resources well.

Poverty is just one of the home background factors limiting learning. Thousands of experiments on overcoming the detrimental impact of home background at school levels have not yet led to a generalised model of intervention with a wide application. Education, and particularly quality education, is crucial for allowing an escape from poverty. How to get that right is still the subject of much debate, and even then it may just be a necessary, but insufficient, means of escaping poverty. Along with good education, what may be required are strong motivation, a benevolent economic environment, and some good fortune!

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