Africa Region Human Development Working Paper Series

Girls' Education in Africa

What Do We Know About Strategies That Work?

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Africa Region The World Bank Washington, D.C. Copyright © May 2004 Human Development Sector Africa Region The World Bank

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Foreword

ow levels of educational attainmentespecially among women-represents a very serious constraint on development in most Sub-Saharan African countries. This constraint hampers progress for individuals as well as for nations. At the individual level, education is the ultimate *liberator*, empowering people to make personal and social choices. Education is also the ultimate equalizer, particularly in promoting greater equity for women, and for the poor and disadvantaged groups since education often is the only capital such groups can aspire to acquire. At the *national* level, educated citizens are the foundation for well-functioning democratic institutions, and for achieving social cohesion. Education beyond a certain level is also a necessary (but not sufficient) condition both for creating, applying and spreading the new ideas and technologies critical to achieving the economic growth required to reduce poverty and for creating the human capital among the poor needed for them to benefit from that growth. Educating girls and women is critical to achieving these benefits as well as for improvements in the areas of health, fertility and nutrition.

There is wide international recognition that there is no investment more effective for achieving development goals than educating girls. And yet, reaching gender equity in school enrollment is still a major challenge in most countries. Nothing illustrates this better than the failure of many countries to attain the only Millennium Development Goal (MDG) fixed for 2005, i.e., "Eliminate gender disparity in primary and secondary education".

Why is this so? If the evidence on the benefits of educating girls is so strong, why is progress so elusive? Research has shown correlations between girls' admission and retention at school and a range of societal variables. We also have many successful pilot projects demonstrating the success of particular interventions. But what do we know of the features of such pilots that allow them to be scaled up successfully in a cost-effective manner?

The purpose of this study is to assist countries to develop effective girls' education strategies by providing a comprehensive review of what we know and do not know about successful strategies. One of the study's main conclusions is that getting girls into school and keeping them there, providing them with good learning conditions and relating the school experience to local economic and cultural conditions, requires a two-prong approach that supports both measures targeting girls *and* system-wide interventions. This does not at all suggest neglecting programs targeted specifically at girls; school access and survival clearly has an important gender dimension. But it does mean recognizing that such programs alone seldom can compensate for factors such as weak political priority for education, overall weaknesses in the education system, and neglect of the many factors outside the education system that impinge on whether or not a child can attend school. "Girls' education is so inextricably linked with the other facets of human development that to make it a priority is to also make change on a range of other fronts, from health and status of women to early childhood care, from nutrition, water and sanitation to community empowerment, from reduction of child labor and other forms of exploitation to the peaceful resolution of conflicts" ("The State of the World's Children." UNICEF, 2004).

Another conclusion is that much of the literature and documentation on strategies fails to provide enough information on circumstances, costs and outcomes to draw sound conclusions about what works, where and why. But girls cannot wait upon extensive new studies. This paper does not make the familiar call for "more research"—it suggests instead that we get "information through action" by better documentation of ongoing and future interventions to build better foundations for going forward.

A concerted global effort is required to ensure accelerated progress towards attaining the gender parity goal. To achieve this goal is both a moral imperative and a development necessity. We hope that the findings of this study will provide a useful contribution to this effort.

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Acknowledgements

This study was commissioned by Aminata Maiga and supervised by Aminata Maiga and Birger Fredriksen. The author wishes to thank the many people who provided data or helpful comments, among them Harold Alderman, Mark Blackden, Christopher Colclough, Mourad Ezzine, Birger Fredriksen, Vincent Greaney, Douglas Lehman, Paud Murphy, Robert Prouty, Christina Rawley, Ivar Strand, Mercy Tembon, and Adriaan Verspoor. Aminata Maiga prepared Case Studies 4–6, and provided the data for "student-centered learning" and "gender units." The preparation of the study was funded by the Norwegian Education Trust Fund.

Executive Summary

I know, I know, "investing in girls' education is the single most effective investment a developing country can make...."¹ Fine. The country agrees, the organization agrees, I agree. Now what? I need to know what to do. I want to know what works. I want to know what the problem was, what they tried, what happened, whether it worked, why, and whether it would work for me. (a manager)

n the past decade and a half, world and regional summits and conferences have rung with declarations and resolutions on behalf of girls—get all girls in school by 2000...by 2005...by 2015.... And, in fact, more girls *are* in school. Between 1990 and 2000, most regions of the world made progress toward gender parity.

The World Bank's Annual Review of Development Effectiveness indicates that, of the 60% of low-income countries for which data are available, only 25% are likely to meet the Millennium Development Goal (MDG) of gender parity in primary and secondary school² (World Bank, December 2002). This is especially true for parts of Sub-Saharan Africa (SSA)and, more specifically, Central and West Africa, and for girls in particular.

For these girls, rates for certain indicators are not only poorer than in any other region, but show the least average improvement. In 1990, 43% of girls completed primary school, compared with 46% in the most recent year for which data are available. In contrast, Latin America and the Caribbean made dramatic improvements in this indicator, which jumped from 71% in 1990 to 85% in the most recent year of the study period. According to a recent World Bank data base, in addition to the countries that have achieved primary school completion, only three of the seven Sub-Saharan countries classified as "on track"³ to achieve universal primary education are also ranked as having reached gender parity, namely Gabon, Namibia and Swaziland.⁴

Figures on primary intake show that rates for both girls and boys have declined in nearly half of all countries since 1990. Most of these are in Sub-Saharan Africa, have the lowest GDP per capita, are highly indebted poor countries and have been seriously affected by HIV/AIDS.

Data on survival to grade 6 are limited, but of the twenty-three countries for which figures are available, only four (Botswana, Mauritius, Cameroon and the Republic of the Congo) are reported to have survival rates of over 90% for girls, although twelve of the twenty-three show gender parity or a gap in favor of girls.

By now, it is clear from all available figures and estimates that some of the goals articulated at international forums, most notably, at the Dakar Education for All Forum in 2000 and the 2001 U.N. Millennium General Assembly, are not going to be met by 2005.

Accordingly, managers⁵ and stakeholder partners concerned about basic education want to know the answer to a question. What can be done to get and keep more girls in school and to see that they complete it and complete it well? So, what do we know? What works? Do we really need "yet another study" on this? Don't managers already have enough information on girls' education?

It's true that a great deal of material has been produced in the last decade and a half. The benefits of girls' education have echoed in development gatherings all over the world and, recently, even more evidence has emerged. The challenges, too, have been documented like a litany, over and over-costs, distance, girls' work at home, cultural constraints.... And a number of strategies have been outlined: stipends, community schools, wells, female teachers, boundary walls, gender-sensitive learning materials.... But which of them works? Is there any "scientific" evidence? If not, then what? These questions are the focus of this study, which begins with a review of some basic facts.

Benefits associated with girls' education

...educating girls yields a higher rate of return than any other investment in the developing world (Summers 1992).

...one of the most worthwhile investments available to governments (Abu Ghaida and Klasen 2002).

and, the frequent assurance,

...educate a girl and you educate a nation.

But, perhaps the single most important benefit of education is to the woman herself. Basic education expands options and offers resources for renewal over a lifetime. This, in turn, translates into a range of national, household and family benefits. Research shows benefits such as improvements in farm productivity, more effective functioning as part of the wage labor force and more flexible family economic strategies. Education also affects fertility: educated women have fewer children, later, and more widely spaced. The wife's education has a much stronger effect on fertility than does the husband's (World Bank, 1993a; UNICEF 2003b). Educated women have greater domestic bargaining power and knowledge and their opportunity costs are higher which, in turn, has an effect on fertility rates (Schultz, 1993; Sen, 1999).

What this means is that achieving the Millennium Development Goal of educational equalitywould reduce the number of births per woman by 0.6. Child mortality would also be reduced. Not only does one more year of female education have the impact of reducing child mortality by 18.1 per thousand, but increasing the ratio of female to male educational attainment by ten percentage points would reduce the under-five mortality rate by 14.2 per thousand. Again, if the Millennium Development Goal were met, this would save the lives of 35,000 children a year in Mali alone. These benefits are actually greatest in countries that have declining gender parity rates (Abu Ghaida and Klasen, 2002). The attainment of "mass formal schooling" (the point at which 90% of 15-19 year-olds ever attended school) also affects fertility. A recent study in seventeen Sub-Saharan countries shows that the attainment of mass schooling, especially for girls, led to a 17% decline in the fertility of their mothers, who become concerned with making more resources available to fewer children. Conversely, fertility declines generally proceed more slowly in countries without mass schooling and gender parity in education (Lloyd et al., 1999).

Recently, researchers have produced even more compelling evidence of the benefits of girls' education by looking at its effects from a different angle, namely at what happens if countries don't improve girls' participation in education. The stark statement that "gender inequality in education is bad for economic growth" (Dollar and Gatti, 1999) underscores this issue. Research shows that the national economic and social costs of not educating girls and of not achieving gender parity in education are high and, in fact, are higher for Africa than for any other region. Moreover, gender inequality in education is not simply a feature but a *cause* of poor economic growth. Some of the negative economic consequences of inequality will be seen by 2005 and will continue to increase thereafter (Abu Ghaida and Klasen, 2002). Fortunately, the other side of the coin is that countries that are "seriously off track" in terms of achieving universal primary education or which have declining gender parities have the most to gain, in terms of economic growth, by getting their girls into school and by expanding girls' education faster (Blackden and Bhanu, 1999; Abu Ghaida and Klasen, 2002; Knowles et al., 2002). A final economic "incentive" is that investment at lower educational levels brings higher rates of return and, for girls in Sub-Saharan Africa, this is precisely where the investments are needed.

Finally, while any *one* of the many well-documented benefits of girls' education could be achieved by another intervention, research now shows that no matter *how* the effects are defined, girls' education achieves them all. This finding alone provides a new incentive for the manager (Abu Ghaida and Klasen, 2002).

Obstacles to girls' participation

Experience has taught us that any condition that is bad for a region or nation is generally

worse for girls. Poverty, rapid population growth, political instability, conflict, disease all the factors that make improvements in any sector difficult and that are further aggravated in the case of Sub-Saharan Africa, have had a heightened effect on girls and on girls' education in particular. Africa is the world's biggest producer of poor girls, girls who are now more likely to be infected by or affected by HIV/AIDS than girls anywhere else in the world, who are most likely to bear the ultimate burden of a range of market failures, who are least likely to be educated, and whose contributions to the next generation are most likely to be jeopardized.

While, according to a World Bank study, evidence of the development benefits of female education is "so persuasive" that "new, econometric studies of the impacts...on development are probably worthwhile only in extraordinary circumstances...." (World Bank, 2002b), as yet, research on the challenges and obstacles is not quite as comprehensive. As pointed out by Rugh (2000), "most data on causes of nonparticipation [are] notoriously soft and unreliable." On the other hand, she notes that relying solely on "hard" data leaves us with little more than what is already obvious or wellknown: poor girls and girls from other less privileged groups are at a great disadvantage.

Perhaps this is because the obstacles to girls' participation are so diverse. Macrodevelopment factors, national policy and legislation issues, institutional, social and cultural concerns and local community/household factors all have an impact. Low-income countries with inadequate spending on education, high unit costs, high teacher salaries and poor efficiency have lower primary school coverage rates and usually do worse by girls than by boys (World Bank, 2002c). Legal discrimination is widespread in Sub-Saharan Africa, particularly with regard to employment, property and control of household resources, which means that women, who usually transfer more

resources to their children than do men, have less to invest.

For girls, the combination of gender and poverty can be almost insurmountable. In Benin, for example, 90% of the richest boys complete grade 1, compared with only 11% of the poorest girls, but even girls from the richest quintiles are at a disadvantage compared to boys of similar wealth (Filmer, 1999). Other research shows that, between direct and opportunity costs, education is more expensive for the poor (Mason and Khandker, 1996). If, as a Zambian study shows, girls spend more time on productive work than any group of adult men (Allen, 1988), it is not surprising that lost opportunity costs, plus the fact that even direct costs can sometimes be higher for girls (Mason and Khandker, 1996; Mingat 1999) make educating a girl quite an expensive undertaking. A Kenyan study illustrates the dilemma parents face: 47 % of the rural population and 27% of the urban population are living below the poverty line and, yet, are expected to bear almost 60% of the cost of primary school, forcing them to choose among their children (Ackers, Migoli and Nzomo, 2001).

Poor school quality appears to have a greater impact on the survival of poor children and of girls, whose parents conclude that their time can be used more profitably elsewhere. (See, for example, Khandker, 1996; Filmer and Pritchett, 1998; Lloyd, Mensch and Clark, 1998; Mensch and Lloyd, 1998; King, Orazem and Paterno, 1999.) Institutional factors such as age barriers usually have more of an effect on girls because they often start school later owing to the need to work, or because demand for girls' education is sometimes more sensitive to distance, and they leave early, once again, to work, for reasons of cultural seclusion, for initiation and/or for early marriage. In fact, relatively recent research in Guinea and Ethiopia suggests that culture can play at least as important a role as poverty. (See, for example, Rose et al., 1997; Tembon, et al., 1997; Colclough et al., 1998.)

From all these facts, a real face emerges, that of a poor rural girl with brothers, whose family needs her labor, especially where childcare costs for younger siblings are high, whose culture or religion underestimates her capabilities and emphasizes a limited future role for her, and whose marriageability depends on the rigorous maintenance of cultural safeguards. This girl can be found in most parts of Africa but, currently, is more likely to live in Central or West Africa. It is this girl that strategies need to address.

Evidence for strategies

Thus, it's clear from the research that, while the constraints to girls' education are complex, few other investments will reap as many benefits, and the clock is ticking in relation to the consequences of doing nothing or taking relatively ineffective action.

UNESCO (2002b) estimates that *effective* incentive programs to attract girls/children from poorer households could add at least 5% to the average unit costs of primary education, in addition to the costs of achieving universal primary completion by 2015. For the 47 countries covered in a World Bank study (2002c), this would mean an extra \$1.3 billion in public spending by 2015, adding an additional \$0.4–0.6 billion to the average annual expenditure figure. With so many other calls on public spending and external aid, any educational intervention must be carefully planned, building on good evidence.

But what evidence? Unfortunately, we still don't know enough about what to *do*. How do we reduce remaining disparities and realize all the benefits that have been identified? The interventions generally supported by the World Bank have addressed physical access and quality issues: school construction, awarenessbuilding campaigns, community involvement, gender sensitivity training for educators, teacher training and the availability of female teachers. Far less common are programs designed to address direct or opportunity costs and to provide alternative forms of education.

Sources of information

This study examines four kinds of information about what does or does not work: 1) the literature; 2) lessons drawn from certain World Bank evaluations of girls' education interventions; 3) practitioners' experiences and strategies frequently advocated by donors; and 4) data from countries that have made a certain amount of progress towards improving girls' participation. It is worth commenting briefly on each of these sources of information.

The literature

Although a great deal has been written about girls' education, much of it can be characterized as "advocacy"—a generalized presentation of the importance of girls' education, repeated so often that the arguments have become unmoored from the substantiating facts, targeted at an audience other than the manager, usually one that needs convincing or requires assistance making a case. This is especially true of materials published by international organizations. The practitioner needs something more—facts, when they exist, and help in working out good strategies when they don't.

A close scrutiny of the literature shows that the same faults that the authors of *Achieving Education for All by 2015* (World Bank, 2002c) and of *Education for All: Is the World on Track?* (UNESCO, 2002b) have found with the Education For All process—a lack of technical rigor, transparency, "wish lists" of actions and strategies, are generally also true of plans for improving girls' education, both in the literature and in project documents. The fact is that, as analysts have been remarking since the early 1990s (Herz et al., 1991; Tietjen, 1991; Bellew and King, 1993; Rugh, 2000), throughout the world of international development, strategies are either poorly documented or they are reasonably documented but don't tell us much about how girls have fared.

This doesn't mean that some strategies haven't worked better than others. It is simply that, at this point, we should know more about:

- (a) what exactly was done in a project;
- (b) the impact of the strategy or strategies followed and, in the case of multiple strategies, the role played by each strategy in the outcome;
- (c)what else was happening that may have had an effect;
- (d)the context, so as to form some notion as to whether the strategy is feasible in another situation;
- (e) what the costs were; and
- (f) the sustainability of the outcomes.

An attempt to draw lessons by constructing a Strategies Data Base of girls' education interventions (The Girls' Education Literature Review, Kane and Yoder, 1998) from nearly three thousand items in the girls' education literature (academic and organizational publications, conference proceedings and internal reports and evaluations)⁶ revealed that most project descriptions are missing at least one and, more often, many of these elements. In the end, only fifty-two accounts provided enough information to draw reasonable inferences. Almost all results referred to single projects, either at the primary or secondary level. Few were studies of an intervention per se, such as single-sex schools (Kane and Yoder, 1998). And, while it is unrealistic to expect experimental conditions in development work, some projects with girls' education components have actually had quasi-experimental or naturalistic experimental components but, often, even from this data have not been organized or recorded in the most useful ways. The few statistically significant findings in the Strategies Data Base with respect to individual interventions designed to improve access, persistence or achievement usually refer to results reported in one specific project and often, as is to be expected, interventions that achieve their aim in one project; are shown to have mixed or no results in another.

The unequivocal conclusion is that much of the literature is inadequate or not designed for drawing sound lessons, although it does offer ideas for further exploration.

World Bank documents

World Bank project evaluations, although more rigorous than those of some other agencies, don't tell us as much as we would like them to about interventions designed to help girls, since their purpose is to examine whether specific project objectives as expressed in Project Appraisal Documents have been met. The appraisal document, while often based on a thorough analysis of the issues, usually identifies an intervention or set of interventions for girls' education within the context of a larger project and relates them to an overarching objective or objectives. Thus, the purpose of the evaluation is not to evaluate the effectiveness of the strategies per se, but rather to determine whether the project has met its objectives. Nor is it the function of the evaluation to rule out exogenous factors or to "impact" combinations of strategies, or correlate outcomes.

Practitioners' experiences and donoradvocated strategies

This study examined many donor-supported interventions—addressing costs, cultural concerns, improving quality, involving the community—drawing on organizational evaluations and other literature, as well as on interviews of practitioners. The outcomes of some of these strategies have been reasonably well documented and the results are included in the analysis presented below.

Countries that have made progress in improving girls' participation

Country experiences, particularly those of countries that have made progress with regard to universal primary completion, primary school intake and survival to grade 6, have also been examined for purposes of drawing lessons. These particular indicators have been selected because international agencies are monitoring universal primary completion as a major benchmark on the road to Education for All (EFA) and the Millennium Development Goals (World Bank, 2002c; UNESCO, 2002b), while gender parity in primary school intake and survival to grade 6 are goals which are feasible for many countries working their way to the full EFA and Millennium goals but unlikely to achieve them by 2005. Only recently have countries been monitored to ascertain whether they are "on track" or "off track" in relation to these goals and to gender parity issues. The reasons for their success or decline have been documented in terms of public spending, unit costs, teacher salaries, non-salary inputs and teacher-pupil ratios, and repetition rates below ten percent have been identified as crucial to the achievement of universal primary school completion (World Bank, 2002c). Few such experiences relate to individual strategies, while most point to the fact that macro-level improvements are an important way of helping girls.

Examples of strategies that appear to have a positive impact

Working within these data parameters and the limits of available documentation, this study focuses on strategies for which there is enough information on which to comment although, as the main report shows, given the constraints of such data, singling out items for a summary list here may be misleading. Some strategies do appear to have worked, although we generally know this more from managers' observations and common sense than from "hard" data, and we know little about whether they are cost-effective and, if they are part of packages, about what parts were critical.

Thus, with qualification, from all the sources drawn upon—the literature, tried and tested strategies and countries reporting improvements in girls' participation strategies and approaches that appear to have had a positive impact on access, persistence or achievement include the following:

1. Cross-sectoral interventions: Not all problems affecting girls' education are "girls' problems" per se. Girls and other disadvantaged groups are especially vulnerable to the effects of generic problems associated with poverty, low GDP, HIV/AIDS, poor education resource mobilization and management and poor education quality. These problems cannot be offset by focusing solely on the education sector and on girls. Improvements in employment and labor policies, out-of-home childcare, laborsaving technologies, transportation and HIV/AIDS communication and support programs are all critical factors. USAID's Morocco Education for Girls Program and Girls' Education Advocacy Program are examples of broad-based cross-sectoral interventions.

The most crucial cross-sectoral interventions, now and in the future, are probably programs addressing the HIV/AIDS crisis. In some African countries, infection rates for teenage girls are more than five times higher than for boys. In addition to being infected themselves, girls are also more likely than boys to miss or drop out of school to care for sick parents and siblings, even at the primary school level (Chesterfield and Enge, 2000; UNAIDS, 2000). Some current programs use school and cross-Ministry-based initiatives in conjunction with a wide variety of delivery mechanisms such as mass media, peer-based learning, theater for development and clubs. Such programs in Mozambique, Senegal, South Africa, Tanzania, Uganda, Zambia and Zimbabwe, for example, all have multiple strategies for addressing school participation. The South African program includes the routine testing of teachers, plans for single-sex schools and efforts to reduce the age range in co-educational schools.

2. Multiple interventions: Most successful approaches consist of a flexible package of interventions in response a continuing analytical process of "thinking through" challenges and change. Projects that have used this approach to iterative design have produced dramatic rises in girls' enrollment and persistence. A World Bank evaluation of projects in both The Gambia and Bangladesh attributed their success to multiple interventions, multiple donors and strong government and other stakeholder support. In the Bangladesh project, which saw a 45% rise in girls' enrollment in areas of Bank-supported construction, multiple interventions included new buildings, improvements in water supply and sanitation services in schools, more female teachers and a scholarship program to reduce opportunity costs for girls.

The District Primary Education Program in India (DPEP) is another example in which multiple strategies embedded in necessary institutional supports produced good results. In the state of Uttar Pradesh, in India, the basic education (gross) enrollment rate for girls rose from 50 percent to 98 percent in an eight-year period, while dropout rates fell from 60 percent to 31 percent (Aoki, et al., 2001).

3. Gender-neutral interventions: Some strategies are gender-neutral but have greater benefits for girls than boys. The bilingual programs (education in the mother tongue) referred to below, for example, are gender-neutral but may better serve girls, because females often tend to have less exposure to the world outside their community and to languages other than those used in the home. Early childhood development (ECD) programs may be of greater benefit to girls because they mature at a younger age than boys. Expanding the supply of schools and school places which, historically, has been the most common type of intervention supported by the World Bank, reducing distances to school and many of the interventions listed below are not targeted specifically at girls, but research has shown that they are often of greater benefit to girls. By the same token, interventions giving special consideration to girls often help boys as well. The Community Support Project and Female Secondary School Assistance Program in Balochistan, BRAC in Bangladesh, UNICEF's community schools project in Egypt and the Sindh Primary School Project are only a few examples of interventions of this effect. Even in Pakistan's Rural Community-Based Schools for girls, about a tenth of the pupils are boys.

4. Educational quality improvements, including:

• Alternative programs (programs outside the formal school system). Alternative or non-formal programs serve over fifteen million children in the world's most populous countries. Among the interventions covered in the Strategies Data Base (Kane and Yoder, 1998), alternative programs were the most common type of intervention and the results achieved by different strategies under these alternative programs have been important in improving access, retention and achievement. Some of these programs have been quite successful for girls.⁷ However, except for the more widely publicized programs such as BRAC, Escuela Nueva, the Primary Education Program in Balochistan, the 900 Schools Program in Chile, etc., a UNESCO (2002a) study concludes that little is known about alternative programs because: 1) they fall outside the official regular primary school system that has come to be standard in the pursuit of education for all; and 2) they aren't comparable enough to allow for international or even national comparisons. "Alternative" programs can and do include most of the individual strategies mentioned in this study, usually combined in ways that consider local poverty, scheduling, childcare issues and cultural concerns over girls' honor and safety. While some useful lessons can be drawn from these programs, this cultural specificity, as well as the showpiece intensity of certain programs, may affect their potential for scaling up, their replicability and their sustainability.

- Bilingual programs (first language/local language as the language of instruction in early years of schooling) have been reported to lead to lower repetition and dropout rates, higher attendance and promotion rates and higher exam scores in all subjects, especially for girls (World Bank, 2002c). The Pédagogie convergente method used in Mali has also been reported to lead to better classroom participation by girls. In the Strategies Data Base, the results of bilingual programs have been reported as statistically significant in improving access and persistence in one project in Guatemala and as having mixed results in another.
- Local/female teachers. Africa has the lowest proportion of female teachers in the world, and relatively few World Bank projects target this intervention area. And yet, using female teachers as a strategy was reported to be statistically significant in several studies in the Strategies Data Base. In both Bangladesh and Balochistan, the recruitment of local female teachers has been important in attracting girls to primary school, while villages in Balochistan with female teachers had higher participation rates for girls than villages that didn't (Khanderm 1996; Kim, Alderman and Orazem, 1998; Rugh, 2000). In

Botswana, a consistently positive relationship was found to exist between schools with a higher proportion of female teachers and improvements in girls' achievement levels, which was accomplished without any disadvantage to boys (USAID ABEL, 1994; Rugh 2000).

• Single sex schools/classes. One of the few studies in the Strategies Data Base that provides the data needed to assess an intervention (Jiminez and Lockheed, 1988) showed better school achievement by girls in single-sex schools. Although this issue is important in other regions as well, cultural concerns are often the first barriers to girls' participation in Sub-Saharan African countries, even before any cost issues may arise. Single-sex classes were reported to be effective in a review by Hyde (1993), and have also been shown to have a positive impact on boys' enrollment in a study in Pakistan (Alderman et al., 2002).

5. Addressing costs. Reducing household costs of school attendance may be one of the major policy areas in which visible short-term benefits can be achieved. The PROGRESA program in Mexico and the Minimum Income Program in Brazil are cases in point. Cost measures may include the elimination/reduction of fees, as in Uganda and Benin, as well as the provision of scholarships, stipends (although project experience has shown they can be costly and difficult to administer and, therefore, may not be sustainable) and assistance with transportation costs, materials, etc., as in Bangladesh, Mozambique, Pakistan, Malawi and other countries. The Female Secondary Stipends Program in Bangladesh has led to what has been described in a World Bank project appraisal document as a key factor in a "profound revolution" in Bangladeshi society. Colombia's secondary school voucher program in which qualified students drawn by lottery are able to attend private schools has been shown to have a statistically significant effect on the number of years of schooling completed, which is larger for girls than for boys (King, Orazem and Wohlgemuth, 1999; Augrist et al., 2000). Various experimental variations on a USAID project in Guatemala involving assistance with costs led to improvements in access.

Only a small number of projects have aimed to address opportunity costs systematically, in part because of practical administrative concerns, but also because of a lack of understanding of the dynamics of and fluctuations in local household income, services and resources. Yet, it is clear that opportunity costs are a major consideration for parents. Research in Tanzania shows that opportunity costs may account for a larger share of the full cost of education to households. Average private returns to schooling decline by over 42% when opportunity costs are defined as including both non-market costs, which are the costs girls are more likely to incur, and market costs or foregone earnings (Mason and Khankder, 1996).

6. Reducing distance to school through a variety of approaches, including building schools closer to home, developing satellite schools and boarding facilities and the provision of transportation services. Various studies in China, Ghana, India, Malaysia, Niger, Pakistan, Peru and the Philippines show that household demand for girls' education is more sensitive than that of boys to distance to school (Mingat, 1999; Canagarajah and Coulombe, 1997; Lavy, 1996; Gertler and Glewwe, 1992; among others). However, recent research by Lehman suggests that, while there is dramatic evidence from Chad and other Sahelian countries of the impact of distance on enrollment-for example, when children are expected to travel 2-3 kilometers to school, their enrollment is only one-tenth as high as that of children in villages with schools-there is no marked difference between boys and girls. However, in countries where there are few differences, it is yet another example of an intervention that can have important benefits for both sexes.

7. Real community participation. Assessing the evidence on community involvement is complicated because of the various forms of community participation and the fact that each project usually involves multiple strategies. Some projects have become legendary, some showpieces, some both, which makes their evaluation even more problematic. Types of "participation" range from the most common form, namely assistance with construction and maintenance work, to perhaps the rarest form, participation in school quality, including involvement in management, teacher supervision and curriculum development. Rugh (2000), Watt (2001) and others have remarked that community participation by default is becoming more common, particularly as a way of funding poor rural schools, but is neither an equitable nor a sustainable option. The use of participatory research\learning and action (PRA or PLA) as a strategy for obtaining design and evaluation information, as a way of taking action and, too often, as an end in itself is becoming an increasingly widespread phenomenon in international organizations and NGOs.

Some well-known examples of community education involvement in girls' are Bangladesh's BRAC, the Escuela Nueva program in Colombia, the Community Schools Program in Egypt, BRIDGES in Thailand and several major programs in Pakistan. Participatory research and action programs with successful results for girls' education have been conducted in The Gambia, where community PLA exercises were used to help create a national girls' education plan, as well as local action plans, in Uganda, where Participatory Poverty Assessments have included education issues, as well as in Guinea, Senegal, Mauritania (World Bank), Uganda, Kenya, Morocco, (USAID), Eritrea (UNICEF) and a number of other countries. PLA has helped identify and underscore the issue of girls' workloads and has highlighted parental concerns over costs, curriculum content, the relevance of education to community life and employment, the hardship of traveling long distances to school and girls' security. Program results include adjustments in school calendars and schedules, changes in fee payment schedules, the creation of single-sex schools and more communitysupervised protection for girls. Public-awareness programs have significantly boosted girls' primary enrollment in both Senegal and Niger, partly through public relations campaigns in low-enrollment and rural areas.

* * *

Some broader country lessons have emerged as well. At the country and donor level, the World Bank Operations Evaluation Department's review of two successful projects in The Gambia and Bangladesh involving girls' education summarizes what made them and other projects work, and its findings are borne out repeatedly in other projects reviewed for purposes of this study. They are:

- country ownership;
- an overall guiding country plan within which to work;
- a strong analytical framework underpinning decision-making processes;
- a holistic approach to gender issues, including the organic integration of gender issues into projects;
- capacity building and institutional strengthening rather than "tinkering at the margins;"
- strengthening gender awareness at the community level;
- working with NGOs;
- systematic monitoring of results (World Bank, 2002a).

Policy factors that emerge, particularly from countries that have achieved universal primary

school completion, are on track to achieve it or have made notable progress in this direction, include:

- focusing on poverty as a major barrier to girls' participation;
- a continued emphasis on increasing access, while improving quality and relevance;
- working within a strategic EFA framework as outlined in *Achieving Education* for All by 2015 (2002c);
- a continued focus on the disadvantaged;
- building local involvement and support for learning through community participation (World Bank, 2002 c and 2002 e).

We can add to this the more recent and often unstated policy concern of building on and recognizing the role of culture, a crucial factor that is explored later in the paper.

The lesson drawn from World Bank evaluations with respect to what works for girls' education interventions is that projects that reflect normal good practice, as outlined above, are also more successful in achieving good results for girls' education outcomes.

Finally, some countries that are on target to achieve universal primary school completion and have made dramatic progress in gender parity, such as The Gambia and Uganda, reflect many of the principles and strategies outlined above and discussed in the main study.

Overall, what *doesn't* work are:

• programs that underestimate the full range of economic costs to families and communities;

Some programs fail to explore and address the full spectrum of official and unofficial direct costs and opportunity costs to parents and the full depth of parental poverty. This is particularly important in "community involvement" initiatives that require parents to pay for school construction, major maintenance work, etc.

• programs that fail to consider cultural costs to communities;

Although educators increasingly see "culture" as an important factor, some of the more subtle implications have not been fully explored. For example, we know now that some of the most intractable problems arise from a failure to understand the symbolic roles played by different individuals in a community. A rural Ethiopian girl who has been married since the age of six or eight may represent an important and hard-won alliance between two family groups, factions or communities. Her place as a "marker" may be viewed by both families as more important than any contribution her education might make.

• programs that are not based on countryspecific designs, but simply draw on wellknown generic strategies used elsewhere;

This includes drawing unexamined "lessons" from some of the heavily-funded and well-publicized "boutique" strategies devised by various organizations in the mid-1980s to mid-1990s, which worked in the sense of improving access, and sometimes retention, but were costly oases, completely unsustainable without continued hot housing and/or nonreplicable elsewhere or on a larger scale.

It can also include overlooking conflicting priorities in politically volatile or unstable situations, where the allocation of scarce desirable "goods" such as education and employment is crucial to government stability but likely to have a negative impact on already vulnerable groups. Also, while in theory, political emphases on decentralization and community involvement should lead to the consideration of concerns voiced by vulnerable population groups, in practice, their impact on girls' education has not been clearly documented.

- programs that are based on the increasingly common form of "participation by default" in which school funding is the only community contribution and empty "participatory" research in communities is an end in itself; and
- poorly designed projects.

A review of "lessons learned" in Bank implementation completion reports reveals a number of common reasons for failure, including:

- the lack of a clear relationship between strategies and objectives;
- poor planning in implementing complex programs such as scholarship programs;
- single strategies to solve multiple and complex problems;
- a failure to consider the views of local communities, such as construction design preferences;
- a lack of institutional support and political will.
- Finally, as noted by a Bank Operations Evaluation and demonstrated by all the evidence, "tinkering at the margins" doesn't work. "Successful" country efforts point to the need for a new, structured approach reflecting all the aforesaid points and providing a solid underpinning for all children and for the success of strategies targeted specifically at girls (2002a).

What can be done?

Given the strong evidence on the benefits of girls' education, the relatively strong evidence on the range of obstacles involved and the less conclusive evidence on what works for girls, what can each partner working to improve girls' education do to help get better results?

We need better information, but girls cannot afford to wait for this to happen. What is suggested here is *information through action*. Organizations, researchers and practitioners all have a role to play. Practitioners—managers, project designers, implementers and evaluators can make an especially important contribution by assessing the challenges and carefully choosing their strategies, while building a strong foundation for monitoring and evaluation.

International organizations and governments

1. Offer realistic interim goals. The finding in the 2002 World Bank's Annual Review of Development Effectiveness that only a quarter of low-income countries are likely to meet the MDG goals of gender parity at the primary and secondary school levels and similar findings by other organizations such as UNESCO (2002b) have not been given enough importance, and few alternative goals have been put forward. There are a number of studies that not only document this conclusion, but also provide a basis for identifying common education-related features of countries that are moving forward and those that are not. These include Abu Ghaida and Klasen (2002), Bruns and Mingat (2002), UNESCO (2002) and World Bank (2002c). Such analyses should be expanded to include historical and macro-level political, legal and economic factors, as well as cultural issues, for purposes of drawing relevant lessons. Some of these factors have already been explored separately in recent studies such as Barro (1999) and Dollar and Gatti (1999). With this kind of information, it should be possible, not only to set realistic goals, but also to tailor such goals to different countries sharing common challenges and characteristics, and not solely on the basis of how far they fall short of meeting these goals.

Moreover, there are a number of lessons to be learned from countries that still have relatively large gender parity gaps. A number of Central and West African countries, for example, have made very strong progress in the enrollment of both boys and girls, starting from an extremely low base.

Although this study is not designed to monitor progress toward gender parity goals, an analysis of some of the indicators used in the study suggests that there may be some possible common goals in which progress toward gender parity might realistically be achieved by 2005. These indicators are explored more fully in a special companion computer tool, *Designing for Success: Better Programs for Girls' Education (Kane, forthcoming)*, which helps planners, researchers and managers identify country issues and assess different options for addressing such issues. Some possible indicators are:

- gender parity for primary intake;
- gender parity for survival to grade 6;
- the adoption by all countries of specific gender-targeted strategies for reaching parity by 2015 at all levels of the school system.

2. Ensure macro level supports. Not every issue affecting girls is a "girls'" issue, and not every girls' issue is a cultural issue. While it is true that girls and other at-risk children often suffer most from the precarious conditions prevailing in cases where critical supports to education are lacking, many of the remedies are "gender-neutral." Healthy spending on primary education as a share of GDP, reasonable unit costs, competitive teacher salaries, higher spending on non-salary inputs, pupil-teacher ratios of around 40 and average repetition rates below 10% have been identified as crucial to the achievement of universal primary school completion (World Bank 2002c).

In this regard, it is worth noting that the success of many alternative and non-formal pro-

grams lies, not only in their cultural relevance, but also in the fact that they have, in effect, created a microcosm of a healthy, comprehensive support system. It is perhaps this aspect of alternative programs, rather than their individual strategies, that warrants further study.

3. Rethink data analysis and design. One of the major conclusions emerging from this study is that the World Bank and other international organizations should re-think their approach to girls' education data and its presentation, distinguishing between materials for advocacy and materials for analysis and implementation. Advocacy materials which are useful for the general public and for nonspecialist audiences are generally simplified and reiterate long-standing findings. Both kinds of materials are important but, at the moment, they are being combined, with the balance tilting toward advocacy. Furthermore, "counts" of the numbers of projects mentioning girls' education or the types of strategies used in various countries are a beginning, but are certainly not substitutes for actual assessments of what works. Practitioners generally need more specific, up-to-date analyses of specific topics and interventions. To meet this need, immediate steps should be taken to build stronger data by:

• clarifying project linkages. Only a limited number of projects are suitable for the inclusion of quasi-experimental elements such as natural control groups and, because of the valuable lessons that can be learned, the World Bank and other international organizations should create incentives to encourage project teams to do this, where appropriate. In other projects, establish clear girls' objectives, rationales for interventions, implementing measures and, in end-of-project reports such as the World Bank's Implementation Completion Reports (ICR), the outcomes of interventions.

- drawing lessons on strategies from endof-project reports such as ICRs rather than from design documents such as the World Bank's Project Appraisal Documents (PADs), which is often the case on World Bank and other websites consulted by practitioners. "What is being planned" does not always reflect "what was done."
- providing necessary evaluations. In the course of this study, we found several excellent World Bank Implementation Completion Reports that established the situational context-economic, political, legal, cultural, institutional-for the project in question, provided baseline data, furnished specific details on interventions and on how they related to project objectives, established corresponding outcomes and discussed possible confounds and factors to bear in mind when replicating the intervention elsewhere. Some examples are the ICRs for the Pakistan Middle School Project, the Northwest Frontier Province Primary Education Program, the Balochistan Primary Education Project, the Benin Education Development Project and the Chad Basic Education Project, which carefully reviewed exogenous factors and problems in "disentangling" variables and presented uncompromising conclusions when necessary, such as, in the case of one particular project, the final conclusion that "these outcomes can be explained by the huge amount of resources concentrated on a small number of schools." This rigorous process should be encouraged and the lessons archived in a data base.
- analyzing the impact of changes in organizational and government structure and focus. In attempts to take more holistic cross-sectoral "social protection" and community-driven approaches such as CDD and allocation of Social Funds to

communities, are girls' interests being safeguarded? When governments decentralize, what safeguards can be put into place to ensure that girls' issues do not lose hard-won ground? Within government structures, how and where can the greatest strategic leverage for girls be placed? Are girls' education units in Ministries of Education an answer? If so, how can they be made more effective?

Designers and practitioners

1. Examine evidence on strategies with a critical eye, whether it is found in the literature or in project documents. Designers and practitioners can't be expected to perform experiments and conduct extensive research each time they plan an intervention. However, they can develop a questioning mindset, so as to use

Box 1: Questions to ask when assessing an intervention

- What was the problem that was being addressed?
- What was the situation before the intervention was carried out? What were the circumstances—economic, cultural, political, legal, institutional— surrounding the problem?
- What was the actual intervention?
- What else was done?
- How was the intervention implemented, administered, monitored, evaluated? What happened?
- What were the costs?
- As a result, were there issues that cause you to wonder whether it would work in your country or region?
- If you choose this intervention, what adaptations need to be made?

their limited preparation time more effectively. The questions in Box 1 can help.

2. Use a questioning approach in planning new projects. The companion computer tool, Designing for Success: Better Programs for Girls' Education, outlines a program that designers and practitioners can use to help them design better interventions.

3. Prioritize "gateway" obstacles. Although research shows that the most successful approaches to girls' education have involved multiple interventions tailored to a specific situation, some interventions take precedence because they lay the necessary groundwork for others to be successful. For example, for many families, there may be many obstacles to school access, but a major one is cost. Research shows that direct costs alone put the education of all their children beyond the reach of many parents. In such cases, cost is a "gateway obstacle." Aoki et al. (200:249) present a decision-making flow-chart that can help in this respect, as does the program presented in Designing for Success: Better Programs for Girls' Education.

4. View culture as an opportunity rather than an obstacle. Culture change occurs constantly, but directed culture change can also be achieved through a variety of different mechanisms, including policies and projects based on an understanding of situational contexts and dynamics. The "irreversible" change in Balochistan (see Box 7) and the "profound revolution" in Bangladesh (see Box 12) in relation to girls' education both illustrate this possibility. Now that some of the most pressing economic factors in education are being addressed, the role of culture is becoming even clearer. All the research reviewed for this study shows that development researchers and project designers, from educators to economists, are increasingly aware of this, though more as an explanatory negative factor, which it sometimes is, than as a positive force. However, viewing it as a set of discrete "barriers" fails to recognize culture as the dynamic "macro" medium in which change occurs. A society's culture helps shape its educational philosophy and is the basis for its ideas about desirable cognitive skills, appropriate teaching methods and the role played by the community in learning. Designers should identify and capitalize on these larger strengths to develop more practical, sustainable interventions.

5. Involve communities more creatively. "Community involvement" means more than simply asking the community to host participatory research exercises or being co-opted to fund and maintain schools, which are currently the two most common forms of community participation. Successful work in the area of girls' education in The Gambia, Uganda and Guinea using participatory input, planning, management, monitoring and evaluation shows that communities can participate effectively and equitably. Wolf, Kane and Strickland (1997) and Rugh and Bossert (1998) review a number of strategies for getting communities more actively involved in education, while Watt (2001) provides a useful assessment of the rationale for and relative success of community involvement.

6. Base designs on country-specific issues and options. Because of the poor quality of data available to managers, good practices are more likely the result of locally tailored programs based on a thorough examination of the specific circumstances, rather than of the deployment of a strategy that has worked well in another context. Identifying country or area issues and possible options is a prerequisite for choosing appropriate, well-founded strategies. Again, designers and practitioners will find the compannion computer tool helpful in this respect.

Researchers

1. Encourage and practice improved standards in reporting. Given the nature, ethics and exigency of development work, most accounts of girls' education interventions are non-experimental, and most are narrative. This should not preclude clear, careful reporting, providing data on the pre-intervention situation, objectives, intervention(s), costs, conclusions and possible confounds. This may seem obvious, but one or more of these items of information is missing from most accounts found in the literature.

2. Look for larger lessons in international data bases.

- More analysis of "on track" countries is needed. As statistics for the year 2000 and later years become available and as new data bases are developed for the monitoring of EFA and Millennium goals, practitioners should be looking for larger lessons. In addition to the features mentioned earlier (a healthy share of spending on primary education, reasonable unit costs, competitive teachers' salaries, etc.), it would be useful to know more about what else the "on track" countries for different indicators have in common. It might help us understand, for example, why some previously "on track" countries have fallen behind, and what changes have led to others moving forward.
- Expand and explore variables in crosscountry, cross-sectoral studies drawn from data bases. One of the most interesting lessons learned during the preparation of this study is that economists and researchers looking at cross-country statistical correlations have been making some of the most important contributions in recent years to the study of girls' edu-

cation by looking at the effects of wealth, residence, religion, etc. on participation. More such studies are needed. One area particularly relevant to girls' education is the impact of market failures (World Bank, 2001b) in terms of social security, childcare, need for girls' labor, etc., on girls' participation, and what governments and donors can do to provide needed supports to ensure that the burden does not (as it does now) fall disproportionately on girls.

• Clarify the nature of statistical data. Most education data used by international organizations draw on UNESCO statistics, which are then partially updated, adjusted, recalculated, etc., in ways that are often not fully clarified, which can lead to startling and inexplicable discrepancies in figures. More lessons could be learned from existing studies and more useful cross-study inferences could be drawn if studies using special organizational data bases were more transparent about the nature and provenance of their data and the degree to which they differ from the data used by other recent researchers.

3. Explore economic costs to families. The effects of abolishing fees or providing scholarships or stipends on access and retention, as in Uganda, Malawi, Bangladesh, Pakistan and Guatemala, among other countries, have been better documented than most other interventions, as have the practical problems of planning and financing such measures. In many places, however, although there is little documentary evidence of this, it is possible that incidental and "hidden" direct costs may be increasing. What these costs actually mean to families has not been explored quite as fully or brought home to designers. Nor has the full spectrum of opportunity costs been explored, although there are some intriguing studies such as those of Mason and Khandker (1996) in Tanzania, Canagarajah and Coulombe (1997) in Ghana and Lokshin, Glinskaya, and Garcia (2000) in Kenya. Detailed, high-quality case studies of samples of families showing the varying interdynamics of family resources and expenditures in the context of country data and surveys such as the Living Measurement Standards Survey would be invaluable in this respect.

4. Explore cultural costs to families. Some of the most intractable problems go unsolved simply because the current way of doing something fills an important family or community need. Examples of this include initiation practices and early marriage. Advocacy alone will not meet the need for alternatives. Projects need to address the current functions of these practices realistically and findings in these respects need to be conveyed to practitioners in succinct and meaningful ways.

* * *

The question that launched this study is: "What evidence do we have on strategies for improving girls' participation in education?" The answer is "not nearly enough." But is the quest for "evidence" to the point? Is it realistic? Most educational initiatives, both in industrialized and developing countries, are anchored in morality, values and doctrine. The notion that the practice of education is founded on research, even social science research, is a relatively new one, and is rarely borne out.

However, there are now new challenges and opportunities facing girls' education that will increase the value of and need for evidence on how to proceed. We need to see results if the Millennium Development Goals are to be achieved by 2015 and if low-income countries are to capitalize on the knowledge that, under current circumstances, one of their best investments is the education of their girls. Opportunities for gaining experience with respect to what does and doesn't work will grow as the number of projects including girls' education interventions increases. However, to be useful, this framework experience will need to be more carefully structured at the design stage and the results reported in usable ways. At a minimum, we need to know the circumstances, the outcomes, the costs and the facts which, surprisingly, are often missing from existing accounts.

Research can and has shown correlations between educational participation and a range of societal variables. However, the realities of getting girls into school and keeping them there, providing good learning conditions and relating the school experience to economic and cultural success outside the school require a holistic approach. This does not mean neglecting programs targeted specifically at girls, but it does mean recognizing that individual girls' strategies cannot make up for weak systems and a lack of commitment. We have moved beyond the "magic bullet" approach focusing on single interventions or gender-specific interventions. Now, macro issues need to be addressed as a matter of priority.

Ultimately, even with ironclad evidence of the success of various strategies, one thing is certain: there is no easy road. As pointed out by Lloyd et al. (1999), "contemporary African experience has no historical analog." Good interventions invariably require local analyses of problems and assessments of potential strategies. What we know so far will not be of as much help as we would like it to be. We are still "paddling at the shallow end" in terms of what we need to know. Thus, the importance of this study lies, not in itself, but in follow-up studies.

Résumé analytique

« Je sais, 'investir dans l'éducation des filles pourrait bien être l'investissement le plus fructueux pour le monde en développement ... '⁸. Soit. Tout le monde est d'accord—les pouvoirs publics, les bailleurs de fonds... et moi. Et ensuite ? J'ai besoin de savoir comment procéder. Je veux savoir ce qui marche, pour quel type de problèmes, les différentes stratégies testées, les résultats obtenus, pourquoi et si ces stratégies sont adaptées ou non à mon cas » (un responsable).

Au cours des 15 dernières années, les conférences et sommets régionaux et internationaux ont retenti de déclarations et de résolutions concernant les filles—assurer leur scolarisation d'ici l'an 2000... d'ici 2005... d'ici 2015... De fait, davantage de filles *sont* effectivement scolarisées et, entre 1990 et 2000, la plupart des régions ont fait de réels progrès en termes de parité.

Le rapport annuel de la Banque mondiale sur l'efficacité de l'aide au développement (Annual Review of Development Effectiveness) indique que sur les 60 % de pays à faible revenu pour lesquels nous disposons de données, seul un quart est susceptible de réaliser l'objectif de parité entre les sexes fixé dans la déclaration du millénaire⁹ (Banque mondiale, décembre 2002). C'est particulièrement vrai pour certains pays d'Afrique subsaharienne, notamment en Afrique centrale et de l'Ouest, et plus spécifiquement pour les filles.

Pires que partout ailleurs dans le monde, les indicateurs concernant les filles vivant en Afrique subsaharienne sont également ceux dont l'amélioration moyenne est la plus lente. En 1990, 43 % des filles achevaient leur scolarité primaire, taux qui serait passé à seulement 46 % selon les dernières données disponibles. A l'inverse, la progression la plus spectaculaire est enregistrée dans les pays d'Amérique latine et des Caraïbes, où l'indicateur est passé de 71 % en 1990 à 85 % pour la dernière année de la période considérée. D'après les informations récentes d'une base de données de la Banque mondiale, en plus des pays qui sont parvenus à un achèvement universel en primaire, seuls trois des sept pays d'Afrique subsaharienne « ayant de fortes chances »¹⁰ de réaliser l'enseignement primaire universel (EPU) font également partie de ceux qui ont concrétisé la parité entre les sexes-à savoir le Gabon, la Namibie et le Swaziland¹¹.

Les données sur les nouveaux inscrits en primaire révèlent une baisse des taux depuis 1990—pour les filles comme pour les garçons—dans pratiquement la moitié des pays du monde. La plupart sont des pays d'Afrique subsaharienne qui ont un PIB par habitant au plus bas, sont fortement endettés et lourdement frappés par l'épidémie de VIH/sida.

Bien que les informations sur les taux de survie en sixième année soient rares, l'on constate que parmi les 23 pays pour lesquels nous disposons de données, seuls quatre (le Botswana, le Cameroun, Maurice et la république du Congo) ont des taux supérieurs à 90 % pour les filles, alors que douze d'entre eux ont réalisé la parité ou affichent un écart entre les sexes favorable aux filles.

On sait désormais, grâce aux données et aux estimations disponibles, que certains des objectifs formulés lors de réunions internationales notamment le forum de Dakar sur l'éducation pour tous, en 2000, et l'Assemblée générale des Nations unies en 2001 (le sommet du millénaire)—ne seront pas atteints d'ici 2005.

C'est la raison pour laquelle les responsables¹² et les partenaires impliqués dans l'éducation de base souhaitent résoudre cette question : comment réussir à scolariser et à maintenir à l'école davantage de filles tout en s'assurant qu'elles vont au terme de leur cycle et obtiennent de bons résultats ? Que savonsnous à ce jour ? Quelles sont les stratégies efficaces ? Avons-nous vraiment besoin d'une nouvelle étude sur ce thème ? Les responsables n'ont-ils pas déjà assez d'informations sur l'éducation des filles ?

De fait, quantité de matériaux ont été produits depuis 15 ans. Les *avantages* de l'éducation des filles ont été clamés à toutes les réunions sur le développement organisées de par le monde et, récemment encore, d'autres éléments de preuve ont été réunis. Quant aux *défis*, ils ont été répétés, encore et toujours, comme une litanie—coûts, distance, travail des filles à la maison, barrières culturelles... Un certain nombre de *stratégies* ont par ailleurs été envisagées (allocations pour les études, écoles communautaires, construction de puits et de clôtures autour des écoles, femmes enseignantes, outils d'apprentissage sensibles aux questions de genre...), mais comment savoir lesquelles sont efficaces ? Avons-nous des preuves « scientifiques » ? Dans la négative, que sommes-nous censés faire ? Ces questions sont au cœur de cette analyse, qui commence par un rappel des données de base.

Les avantages de l'éducation des filles

... dans les pays en développement, l'investissement dans l'éducation des filles est plus rentable que tous les autres investissements (Summers, 1992).

... l'un des investissements les plus judicieux que puisse faire un pays (Abu Ghaida et Klasen, 2002).

Mais aussi cette affirmation, que l'on entend souvent :

... éduquez une fille et c'est la nation entière que vous éduquerez.

Cela étant, le premier des avantages de l'éducation réside sans doute dans ce qu'elle apporte aux femmes. Le fait d'avoir suivi une éducation de base élargit leurs choix et leur donne les moyens d'évoluer tout au long de leur vie, ce qui se traduit à son tour par de multiples avantages pour le pays, pour le ménage et pour la famille. Les recherches constatent ainsi une amélioration de la productivité agricole, un fonctionnement plus efficace comme membre de la main-d'œuvre salariée et l'adoption de stratégies d'économie familiale plus souples. L'éducation a également une influence sur la fécondité : plus une femme est éduquée, moins elle aura d'enfants, plus elle retardera sa première grossesse et plus ses enfants seront espacés. L'éducation de la femme a bien plus d'impact sur la fécondité que celle du mari (Banque mondiale, 1993a ; UNICEF, 2003b). Les femmes éduquées ont davantage de poids au sein du foyer, elles savent davantage de choses et leurs coûts d'opportunité sont supérieurs, ce qui joue à son tour sur les taux de fécondité (Schultz, 1993 ; Sen, 1999).

Ainsi, la réalisation de l'objectif de développement du millénaire (ODM) permettrait de réduire le nombre de naissances par femme de 0.6 et d'abaisser le taux de mortalité infantile : si une année supplémentaire d'éducation de la femme réduit de 18.1 pour mille la mortalité infantile, l'augmentation de 10 points de pourcentage du niveau de scolarité des filles par rapport à celui des garçons pourrait réduire de 14.2 pour mille le taux de mortalité des enfants de moins de cinq ans. De même rien qu'au Mali, la concrétisation des ODM permettrait de sauver chaque année la vie de 35 000 enfants. Les retombées positives de l'éducation des filles sont en fait plus marquées dans les pays dont l'indice de parité entre les sexes décline (Abu Ghaida et Klasen, 2002). La concrétisation de la « scolarisation formelle de masse » (correspondant à la scolarisation, quelle qu'en soit la durée, de 90 % des enfants âgés de 15 à 19 ans) a elle aussi un impact sur la fécondité. Une étude récente conduite dans 17 pays d'Afrique subsaharienne révèle que cette scolarisation de masse, des filles notamment, a entraîné une chute de 17 % du taux de fécondité de leurs mères, désireuses d'avoir davantage de ressources pour leurs enfants et donc de limiter les naissances. A l'inverse, l'abaissement des taux de fécondité a été plus lent dans les pays n'ayant pas atteint la scolarisation de masse et la parité entre les sexes (Lloyd et al., 1999).

Des recherches récentes mettent encore plus en évidence les avantages de l'éducation des filles—en analysant ses effets sous différents angles et notamment en examinant ce qu'il se passe lorsqu'un pays *n'améliore pas* le niveau de participation des filles à l'éducation. Affirmer simplement que « l'inégalité entre les sexes dans l'éducation nuit à la croissance économique » (Dollar et Gatti, 1999) ne rend pas justice à cette question. Les recherches révèlent l'importance des coûts économiques et sociaux de la non-éducation de filles et de la non-concrétisation de la parité-coûts qui sont d'ailleurs encore plus élevés en Afrique que partout ailleurs dans le monde. En outre, l'inégalité des sexes face à l'éducation n'est pas une particularité, mais bien l'une des raisons de la médiocrité de la croissance économique. Certaines des conséquences délétères de cette inégalité deviendront patentes d'ici 2005 et elles iront en s'aggravant (Abu Ghaida et Klasen, 2002). Heureusement, ce constat a un corollaire positif : les pays qui « risquent sérieusement de ne pas atteindre » l'objectif d'EPU ou dont l'indice de parité entre les sexes diminue sont aussi ceux qui ont le plus à gagner, en termes de croissance économique, de la scolarisation des filles et d'une accélération de ce processus (Blackden et Bhanu, 1999; Abu Ghaida et Klasen, 2002; Knowles et al., 2002). Dernière « incitation » économique, le fait que le retour sur investissement des efforts consentis pour les premières années de scolarité est supérieur à celui réalisé aux autres niveaux-or, c'est justement dans les premières années d'étude que les investissements sont impératifs pour les filles d'Afrique subsaharienne.

Enfin, si *tous* ces avantages bien connus de l'éducation des filles pourraient être obtenus par un autre type d'intervention, les recherches actuelles montrent qu'*au-delà* de la définition donnée aux effets, l'éducation des filles les concrétise tous. Ce constat, à lui seul, devrait inciter encore plus les responsables à agir (Abu Ghaida et Klasen, 2002).

Les obstacles à la participation des filles

L'expérience montre que lorsqu'un facteur, quel qu'il soit, nuit à une région ou une nation, son impact est encore pire pour les filles. Qu'il s'agisse de la pauvreté, de la démographie galopante, de l'instabilité politique, d'un conflit ou d'une épidémie, tous ces facteurs qui empêchent l'amélioration dans un secteur donné-et la situation est encore plus grave dans les pays d'Afrique subsaharienne-ont un effet encore plus prononcé sur les filles et leur éducation en particulier. L'Afrique détient le record du nombre de filles vivant dans la pauvreté, de filles qui aujourd'hui courent bien plus de risques d'être affectées par le VIH/ sida-quand elles ne sont pas déjà infectéesque dans n'importe quelle autre région du monde, de filles sur lesquelles se répercuteront en dernier ressort toutes les imperfections du marché, de filles dont les chances d'être éduquées sont minimes, de filles dont les contributions aux générations futures risquent davantage d'être compromises.

Si, d'après une étude de la Banque mondiale, les preuves des retombées positives de l'éducation des filles pour le développement sont « tellement convaincantes » qu'« il n'est sans doute pas utile de mener de nouvelles études économétriques concernant les impacts ... sur le développement, à moins de circonstances exceptionnelles... » (Banque mondiale, 2002b), les recherches menées à ce jour sur les défis et les obstacles ne sont pas aussi complètes qu'on veut bien le dire. Comme le souligne Rugh (2000), « la plupart des données sur les causes de la non-participation [sont] de l'avis général peu fiables ». Cet auteur note par ailleurs que le fait de ne retenir que des données « solides » revient à travailler sur des questions évidentes ou bien connues : les filles pauvres et les filles issues de groupes défavorisés sont nettement handicapées.

Cela tient sans doute à l'extrême diversité des barrières à la participation des filles à l'éducation. Les facteurs de macro-développement, les questions de politique et de législation nationales, les préoccupations institutionnelles, sociales et culturelles et les caractéristiques des communautés locales/des ménages ont tous une part de responsabilité. Les pays à faible revenu dont les dépenses d'éducation sont insuffisantes et les coûts unitaires élevés, où les salaires des enseignants sont élevés et où le système éducatif est peu efficace affichent de médiocres taux de couverture en primaire et traitent en général les filles moins bien que les garçons (Banque mondiale, 2002c). Les pays d'Afrique subsaharienne pratiquent fréquemment la discrimination légale, notamment pour ce qui est de l'emploi, de la propriété privée et du contrôle sur les ressources du ménage, de sorte que les femmes qui, traditionnellement, transmettent davantage de biens à leurs enfants que les hommes, ont moins de capacités à investir.

Pour les filles, l'influence conjuguée du genre et de la pauvreté peut devenir un handicap pratiquement insurmontable. Ainsi au Bénin, 90 % des garçons appartenant aux quintiles les plus riches achèvent la première année du primaire, contre seulement 11 % des filles les plus pauvres-mais même les filles des quintiles les plus riches sont défavorisées par rapport à leurs camarades masculins de même niveau de richesse (Filmer, 1999). D'autres recherches révèlent que, entre les coûts directs et les coûts d'opportunité, l'éducation revient plus cher aux pauvres (Mason et Khandker, 1996). Si, comme le montre une étude réalisée en Zambie, les filles consacrent plus de temps à un travail productif que n'importe quel groupe d'hommes adultes (Allen, 1988), il n'y a rien d'étonnant à ce que les coûts d'opportunité perdus-et le fait que, parfois, les coûts directs sont plus élevés pour les filles (Mason et Khandker, 1996 ; Mingat, 1999)-fassent de l'éducation des filles une opération assez dispendieuse. Une étude conduite au Kenya met en évidence le dilemme auquel sont confrontés les parents : alors que 47 % de la population rurale et 27 % de la population urbaine vivent en deçà du seuil de pauvreté, ils sont censés supporter pratiquement 60 % des frais de scolarisation en primaire, d'où la nécessité d'opérer un choix entre leurs enfants (Ackers, Migoli et Nzomo, 2001).

La piètre qualité des écoles semble avoir davantage d'impact sur la survie des enfants pauvres et des filles, car les parents en concluent que ce temps pourrait être consacré à des activités plus lucratives (voir par exemple Khandker, 1996 ; Filmer et Pritchett, 1998 ; Lloyd, Mensch et Clark, 1998 ; Mensch et Lloyd, 1998; King, Orazem et Paterno, 1999). Les facteurs institutionnels-comme les barrières de l'âge-pèsent en général davantage sur les filles : celles-ci commencent en effet souvent l'école plus tard, parce qu'elles doivent travailler ou parce que la demande d'éducation pour les filles est parfois plus sensible à la distance ; elles s'arrêtent aussi plus tôt pour pouvoir, là encore, travailler ou pour des raisons d'isolement culturel, de pratiques d'initiation et/ou de mariages précoces. Des recherches relativement récentes en Éthiopie et en Guinée indiquent d'ailleurs que la culture joue un rôle au moins aussi important que la pauvreté (voir par exemple Rose et al., 1997; Tembon et al., 1997; Colclough et al., 1998).

La véritable cible de toutes nos stratégies ressort de tout ce qui précède : il s'agit des filles rurales pauvres, comme on en voit un peu partout en Afrique mais surtout en Afrique centrale et de l'Ouest, ayant des frères, dont le travail est indispensable pour la famille (notamment lorsque les soins aux plus petits coûtent cher), dont la culture ou la religion dénigre les capacités et limite les possibilités de développement et dont les perspectives de mariage sont fortement liées au strict maintien de garde-fous culturels.

Étayer les stratégies sur des faits

On voit donc que si les contraintes à l'éducation des filles sont multiformes, rares sont les autres investissements à pouvoir rapporter autant de bénéfices... Or, le temps presse—nous devons agir et prendre des mesures efficaces.

L'UNESCO (2002b) estime que les programmes d'incitation *efficaces* à l'intention des filles/des enfants de familles pauvres pourraient augmenter d'au moins 5 % les coûts unitaires moyens de scolarisation dans le primaire, en plus des dépenses nécessaires pour parvenir à un achèvement universel du primaire en 2015. Pour les 47 pays concernés par une étude récente de la Banque mondiale (2002c), cela se traduirait par un surcroît de dépenses publiques de 1,3 milliard de dollars d'ici 2015, soit une augmentation de 0,4 à 0,6 milliard de dollars des dépenses annuelles moyennes. Quant on connaît l'ampleur des autres besoins à financer avec les budgets nationaux ou grâce à l'aide internationale, on comprend qu'il faille soigneusement planifier les interventions dans le domaine de l'éducation, en étayant les stratégies sur des données solides.

Mais quelles données retenir ? Les informations dont nous disposons à l'heure actuelle ne nous permettent hélas pas de savoir ce qu'il faudrait faire. Comment réduire les inégalités persistantes et engranger tous les bénéfices identifiés ? Les interventions généralement soutenues par la Banque mondiale se sont efforcées de résoudre des problèmes matériels d'accès et des enjeux qualitatifs : construction d'écoles, campagnes de sensibilisation, implication des communautés, formation des éducateurs aux différences entre les sexes, formation des enseignants et recrutement de femmes enseignantes. Les programmes consacrés aux coûts directs ou d'opportunité et aux solutions éducatives alternatives sont bien moins fréquents.

Les sources d'information

Cette étude examine quatre types d'informations concernant les solutions efficaces et les stratégies inopérantes : 1) les publications ; 2) les leçons tirées de certaines évaluations de la Banque mondiale sur des interventions en faveur de l'éducation des filles ; 3) les expériences des praticiens et les stratégies qui ont la faveur des bailleurs de fonds ; et 4) les données tirées de pays qui ont réalisé des progrès certains pour améliorer la participation des filles. Un rapide commentaire s'impose.

Les publications

Si de nombreux ouvrages traitent de l'éducation des filles, la plupart relèvent d'activités de « plaidoyer », en soulignant de manière globale l'importance de l'éducation des filles. Or, cette affirmation a tellement été répétée que les arguments ne sont plus associés à des faits qui pourraient les corroborer et ne visent pas les responsables mais un public qu'il faut en général convaincre ou qui cherche de l'aide pour faire valoir ses arguments. C'est le cas notamment des publications des organisations internationales. Or, les praticiens ont besoin d'autre chose—de faits (quand ils existent) et d'aide pour concevoir des stratégies efficaces (quand les faits font défaut).

Une étude bibliographique rigoureuse révèle que les dysfonctionnements du processus d'éducation pour tous (EPT) pointés par les auteurs du rapport Réaliser l'éducation pour tous d'ici 2015 (Achieving Education for All by 2015, Banque mondiale, 2002c) et du rapport Éducation pour tous : le monde est-il sur la bonne voie ? (UNESCO, 2002b)-à savoir le manque de rigueur technique et de transparence et un choix d'actions et de stratégies qui s'apparentent davantage à des vœux pieux-sont souvent les mêmes que dans les plans d'amélioration de l'éducation des filles, qu'il s'agisse d'ouvrages publiés ou de descriptifs de projets. De fait et comme les analystes l'ont noté depuis le début des années 1990 (Herz et al., 1991; Tietjen, 1991; Bellew et King, 1993 ; Rugh, 2000), les stratégies mises en œuvre par les acteurs internationaux du développement ont deux failles ; soit elles sont mal documentées ; soit, quand elles sont raisonnablement bien informées, elles ne donnent guère d'informations sur la manière dont les filles s'en sortent.

Cela ne veut pas dire pourautant que toutes ont été inutiles—certaines ont mieux fonctionné que d'autres—mais, en l'état actuel des choses, nous devons impérativement mieux connaître :

- (a) les réalisations concrètes de tel ou tel projet ;
- (b) l'impact de la (ou des) stratégie(s) appliquée(s) et, dans le cas de stratégies multiples, le rôle de chacune d'entre elles face aux résultats obtenus ;
- (c) les autres facteurs susceptibles d'avoir eu un impact ;
- (d) le contexte, afin d'évaluer la faisabilité d'une transposition de la stratégie ;
- (e) les coûts engagés ;
- (f) la pérennité des résultats.

Une initiative visant à tirer les leçons de l'expérience, grâce à la constitution d'une base de données des stratégies et recensant les interventions en faveur de l'éducation des filles (Kane et Yoder, 1998) à partir de quelque 3 000 éléments relevés dans la littérature sur la question (publications d'universités ou d'organisations internationales, comptes rendus de conférence, rapports et évaluations internes)¹³ a révélé que dans une grande majorité de descriptifs de projet, au moins un de ces éléments-et, le plus souvent, la plupart d'entre eux-manquaient à l'appel. En fin de compte, seuls 52 rapports contiennent suffisamment d'informations pour autoriser des déductions raisonnables. La quasi-totalité des résultats renvoyaient à un seul projet, dans le primaire ou dans le secondaire. Rares ont été les études portant sur l'intervention en tant que telle, comme dans le cas des écoles non mixtes (Kane et Yoder, 1998). Par ailleurs, tout en sachant que l'on ne peut pas réunir les conditions nécessaires à l'expérimentation dans les projets d'aide au développement, certaines initiatives portant entre autres sur l'éducation des filles comportaient des éléments quasi expérimentaux ou de type naturaliste sans, le plus souvent, que les informations ainsi recueillies soient organisées ou consignées d'une manière exploitable. Les quelques résultats statistiquement significatifs collectés dans cette base de données à propos d'interventions ponctuelles pour améliorer l'accès, la régularité ou le niveau scolaire renvoient en général aux résultats d'un seul projet et, comme on pouvait s'y attendre, les interventions qui atteignent leur objectif par le biais d'un projet obtiennent souvent soit des résultats mitigés, soit pas de résultats du tout.

On voit ainsi que la plupart des ouvrages publiés ne permettent pas—de par leurs imperfections ou leur conception—de tirer des leçons solides ; cela étant, tous proposent d'utiles pistes de recherche.

Les documents de la Banque mondiale

Les évaluations de projet de la Banque mondiale, si elles sont plus rigoureuses que celles pratiquées par certaines autres agences, ne fournissent pas vraiment les informations attendues sur les interventions conçues pour venir en aide aux filles, dans la mesure où elles ont pour vocation de vérifier que les objectifs du projet, formulés dans les PAD, ont été remplis. Le document d'évaluation, qui part en général d'une analyse approfondie des enjeux, identifie le plus souvent une intervention ou une série d'interventions concernant l'éducation des filles dans le contexte d'un projet plus large, pour les mettre en regard du (ou des) objectif(s) principal(aux). Ainsi, l'objet de l'exercice n'est pas d'évaluer l'efficacité des stratégies en tant que telles, mais de regarder si le projet a atteint ses objectifs. Elle n'a pas non plus pour mission d'écarter les facteurs exogènes ou d'identifier les différentes combinaisons de stratégies et de résultats.

L'expérience des praticiens et les stratégies préconisées par les bailleurs de fonds

Dans le cadre de cette étude, nous avons examiné de nombreuses interventions soutenues par des bailleurs de fonds—portant sur les coûts, les enjeux culturels, l'amélioration de la qualité ou l'implication des communautés—à partir, d'une part, des évaluations faites par les organisations internationales et d'autres comptes rendus publiés et, d'autre part, d'entretiens avec les acteurs sur le terrain. Les résultats de certaines de ces stratégies ont été relativement bien documentés ; nous les présenterons dans l'analyse qui suit.

Les pays qui ont fait des progrès pour la participation des filles

Les expériences nationales-notamment dans les pays qui se sont rapprochés de l'éducation primaire universelle et ont progressé sur le front des premières inscriptions en primaire et du taux de survie en sixième année-ont également été passées en revue, pour en tirer les leçons. Nous avons retenu ces indicateurs pour la simple raison que les organisations internationales utilisent l'achèvement universel en primaire pour évaluer la progression des pays en direction de l'EPT et des ODM (Banque mondiale, 2002c; UNESCO, 2002b); quant à la parité entre les sexes parmi les nouveaux entrants en primaire et le taux de survie en sixième année, ce sont des objectifs que de nombreux pays engagés dans la concrétisation de l'EPT et des ODM pourraient atteindre mais probablement pas d'ici 2005. Les évaluations visant à voir si les pays sont ou non « sur la bonne voie » par rapport à ces objectifs et à la parité entre les sexes sont récentes. Les raisons de la réussite-ou du retard-ont été documentées en termes de dépenses publiques, coûts unitaires, salaires des enseignants, intrants non salariaux et taux d'encadrement, et un taux de redoublement inférieur à 10 % a été identifié comme essentiel pour parvenir à un achèvement universel en primaire (Banque mondiale, 2002c). Rares sont les expériences relatives à des stratégies ponctuelles-mais la plupart indiquent que les améliorations au niveau macro contribuent fortement à aider les filles.

Stratégies a priori efficaces

Avec de tels paramètres et les limites de la documentation disponible, l'étude s'intéresse aux stratégies suffisamment documentées pour permettre des commentaires même si, comme nous le verrons dans la suite de ce rapport, la sélection de certains éléments à des fins de synthèse peut être dangereuse vu les contraintes pesant sur les données. Certaines stratégies semblent avoir réussi, même si ce constat découle plus souvent des observations des responsables et du simple bon sens que de données irréfutables ; en outre, nous ne savons pas grand-chose sur leur coût-efficacité et, quand elles font partie d'une série de stratégies, sur les composantes qui ont fait pencher favorablement la balance.

Ces réserves étant faites et au vu des sources d'information utilisées—littérature officielle, stratégies éprouvées et rapports nationaux sur l'amélioration de la participation des filles—un certain nombre de stratégies et d'approches semblent avoir eu des retombées positives sur l'accès, la régularité ou le niveau d'études :

1. Interventions intersectorielles : les problèmes affectant l'éducation des filles ne sont pas tous « spécifiques aux filles ». Les filles et les autres groupes défavorisés sont particulièrement sensibles aux conséquences génériques de la pauvreté, de la faiblesse du PIB, du VIH/ sida, de la mauvaise mobilisation des ressources éducatives, de l'indigence de la gestion et de la médiocrité de la qualité de l'éducation. Ces problèmes ne seront pas résolus en s'intéressant exclusivement à l'éducation et aux filles. D'autres interventions sont vitales, comme les amendements apportés aux politiques d'emploi et de travail, la prise en charge des enfants en dehors du foyer, les technologies permettant d'économiser la main-d'œuvre, les transports, la communication sur le VIH et les programmes de support. Les programmes que l'USAID a mis en œuvre au Maroc (éducation des filles et sensibilisation à l'éducation des filles) sont deux exemples d'interventions intersectorielles à large portée.

Parmi ces interventions intersectorielles, actuelles et à venir, les plus importantes sont probablement celles qui s'efforcent de résoudre la crise du VIH/sida. Dans certains pays africains, les taux d'infection chez les adolescentes sont plus de cinq fois supérieurs à ceux des garcons. Outre le fait qu'elles sont directement affectées, les filles sont davantage susceptibles que les garçons de manquer l'école ou d'abandonner leurs études pour s'occuper des parents ou des frères et sœurs malades, même au niveau du primaire (Chesterfield et Enge, 2000; ONUSIDA, 2000). Certains programmes en cours associent des initiatives émanant des écoles ou de plusieurs ministères à toute une palette de mécanismes de délivrance-médias, apprentissage par les pairs, théâtre pour le développement et clubs. En Afrique du Sud, au Mozambique, en Ouganda, au Sénégal, en Tanzanie, en Zambie et au Zimbabwe par exemple, ce type de programmes tente de gérer le problème de la participation scolaire en faisant appel à des stratégies multiples. Le programme sud-africain prévoit une évaluation régulière des compétences des enseignants, des plans pour des écoles non mixtes et des initiatives pour réduire les différences d'âge dans les écoles mixtes.

2. Interventions multiples : les approches les plus efficaces font appel à une panoplie très souple d'interventions cohérentes par rapport à un processus analytique permanent d'examen approfondi des défis et du changement. Les projets qui ont procédé ainsi pour la conception itérative ont obtenu des résultats impressionnants en termes d'inscription et de régularité des filles à l'école. Une évaluation de la Banque mondiale sur des projets mis en œuvre au Bangladesh et en Gambie attribue cette réussite à la multiplicité des interventions et des bailleurs ainsi qu'à l'appui indéfectible des pouvoirs publics et des autres parties prenantes. Dans le cas du Bangladesh, où le taux d'inscription des filles a augmenté de 45 % dans les zones de construction bénéficiant de l'appui de la banque, ces interventions multiples concernaient la construction de nouveaux bâtiments, un meilleur accès à l'eau potable et aux installations sanitaires dans les écoles, le recrutement de femmes enseignantes en plus grand nombre et un programme de bourses pour réduire les coûts d'opportunité de l'éducation des filles.

Le programme de district pour l'enseignement primaire (*District Primary Education Program*—DPEP) adopté en Inde est un autre exemple de l'efficacité de stratégies multiples ayant bénéficié du soutien, indispensable, des institutions. Dans l'État de l'Uttar Pradesh, le taux (brut) d'inscription des filles dans l'éducation de base est passé de 50 à 98 % en huit ans alors que les taux d'abandon s'infléchissaient, de 60 à 31 % (Aoki et al., 2001).

3. Interventions sexuellement neutres : certaines stratégies, sexuellement neutres, profitent davantage aux filles qu'aux garçons. Ainsi les programmes bilingues (instruction dans la langue maternelle), évoqués plus bas, sont sexuellement neutres mais susceptibles de mieux réussir aux filles, dans la mesure où les femmes, qui sortent peu de leurs communautés, sont moins exposées au reste du monde et aux langues qui ne sont pas parlées à la maison. Les programmes de développement de la petite enfance peuvent également profiter davantage aux filles, qui mûrissent plus tôt que les garçons. Les interventions soutenues par la Banque mondiale les plus fréquentes, comme le développement des écoles et du nombre de places, la réduction des distances entre la maison et l'école et d'autres, citées ci-après, ne visent pas spécifiquement les filles mais les recherches ont montré que celles-ci avaient tendance à en tirer un plus grand parti. De même, les interventions visant spécifiquement les filles contribuent aussi à l'éducation des garçons. Le projet d'aide aux communautés (Community Support Project) et le programme

d'aide aux lycées de filles (Female Secondary School Assistance Project) au Baloutchistan, le BRAC au Bangladesh, les programmes d'écoles communautaires de l'UNICEF en Égypte et le projet Sindh pour les écoles primaires (Sindh Primary School Project) sont autant d'exemples d'interventions ayant eu ce type d'effets—mais il y en a d'autres. Même dans le programme pakistanais pour les écoles de filles dans les communautés rurales (Rural Community-based Schools), environ 10 % des élèves sont des garçons.

4. Programmes d'amélioration de la qualité, notamment :

• les programmes alternatifs (en dehors du système scolaire formel). Les programmes alternatifs ou non formels concernent plus de 15 millions d'enfants dans les pays les plus peuplés du monde. Parmi les interventions recensées dans la base de données des stratégies (Kane et Yoder, 1998), les programmes alternatifs sont majoritaires et ils obtiennent de réelles avancées, en termes d'accès, de rétention et d'achèvement. Certains ont obtenu des résultats très positifs pour les filles¹⁴. Cela étant, si l'on en croit une étude de l'UNESCO (2002a), à l'exception de programmes fortement médiatisés comme le BRAC, l'Escuela Nueva, le programme d'éducation primaire (Primary Education Program) du Baloutchistan, le programme chilien des 900 écoles (900 Schools Program), etc., nous connaissons mal les programmes alternatifs et ce, pour deux grandes raisons : 1) ils ne rentrent pas dans le cadre officiel de l'enseignement primaire normal, qui sert de référence à la réalisation de l'EPT; 2) ils ne permettent pas des comparaisons avec des programmes internationaux ou nationaux. Les programmes « alternatifs » incluent la plupart des stratégies ponctuelles évoquées ici et les associent souvent à des considérations relatives à la pauvreté locale, aux contraintes temporelles, aux soins à apporter aux enfants et aux enjeux culturels concernant la sécurité et l'honneur des filles. Si l'on peut en dégager un certain nombre de leçons utiles, leur spécificité culturelle tout comme le caractère exceptionnel de certains d'entre eux peuvent nuire à leur éventuelle transposition ou reproduction et à leur viabilité.

- les programmes bilingues (langue maternelle/langue locale comme langue d'instruction pendant les premières années de scolarité) semblent avoir un impact positif, notamment chez les filles, sur les taux de redoublement et d'abandon, en baisse, mais également sur la fréquentation, le passage dans la classe supérieure et la réussite aux examens dans toutes les matières, en hausse (Banque mondiale, 2002c). La stratégie de pédagogie convergente adoptée au Mali aurait elle aussi entraîné une meilleure participation des filles pendant les cours. Deux projets statistiquement significatifs mis en œuvre au Guatemala figurent dans la base de données des stratégies-qui ont eu, pour l'un, des effets positifs au niveau de l'amélioration de l'accès et du maintien des filles à l'école et, pour l'autre, des résultats mitigés.
- enseignants locaux/femmes enseignantes. L'Afrique est le continent ayant la plus faible proportion de femmes enseignantes et la Banque mondiale n'a consacré que de rares projets à cette question. Pourtant, plusieurs études recensées dans la base de données des stratégies montrent que l'embauche de femmes enseignantes est une stratégie statistiquement significative. Au Bangladesh comme au Baloutchistan, le recrutement local de femmes enseignantes a fortement contribué à la scolarisation des filles en primaire ; par ailleurs au

Baloutchistan, les villages ayant des femmes enseignantes affichaient de meilleurs taux de participation des filles que les villages sans femmes enseignantes (Khanderm, 1996 ; Kim, Alderman et Orazem, 1998 ; Rugh, 2000). Au Botswana, une relation régulièrement positive a été identifiée entre les écoles ayant une plus forte proportion d'enseignantes et l'amélioration des niveaux scolaires des filles, sans que cela n'ait d'impact négatif sur les garçons (USAID/ projet ABEL, 1994 ; Rugh 2000).

• classes/écoles non mixtes. L'une des rares études consignées dans la base de données des stratégies et contenant suffisamment d'informations pour permettre l'évaluation de l'intervention (Jiminez et Lockheed, 1988) a montré que les filles obtenaient un meilleur niveau dans les écoles non mixtes. Si cette question revêt une certaine importance dans d'autres régions également, rappelons que les considérations culturelles sont souvent le premier obstacle à l'éducation des filles dans les pays d'Afrique subsaharienne, avant même la question du coût. Hyde (1993) atteste de l'efficacité des classes non mixtes qui auraient aussi, selon une étude sur le Pakistan (Alderman et al., 2002), un impact positif sur les inscriptions des garçons.

5. La question des coûts. La réduction des coûts induits par la scolarisation pour les ménages est probablement l'un des grands domaines d'intervention où des gains visibles peuvent être obtenus à court terme. Le programme mexicain PROGRESA et le programme brésilien du revenu minimum (Minimum Income Program) en témoignent. Les dispositions relatives aux coûts peuvent prévoir la suppression/la réduction des frais de scolarité—comme au Bénin et en Ouganda—et l'octroi de bourses, d'allocations (même si l'expérience montre qu'elles peuvent se révéler coûteuses et délicates à gérer, compromettant ainsi leur viabilité) et d'une aide pour les frais de transport, le matériel, etc.-comme au Bangladesh, au Malawi, au Mozambique et au Pakistan notamment. Le programme d'allocations de scolarité secondaire pour les filles (Female Secondary Stipends Program) du Bangladesh a été à l'origine de ce qu'un document d'évaluation de la Banque mondiale décrit comme une « révolution en profondeur » de la société bangladeshi. Le programme colombien de chèques-études pour le secondaire, qui permet à des élèves qualifiés tirés au sort de fréquenter des écoles privées, a eu un effet statistiquement significatif sur le nombre total d'années de scolarisation, supérieur pour les filles que pour les garçons (King, Orazem et Wohlgemuth, 1999; Augrist et al., 2000). Différentes expériences autour d'un projet de l'USAID mis en œuvre au Guatemala et impliquant une aide pour couvrir les frais de scolarité ont eu des effets positifs sur l'accès.

Seul un petit nombre de projets se sont intéressés de manière systématique aux coûts d'opportunité, en partie pour des considérations administratives pratiques mais aussi par incompréhension des dynamiques et des fluctuations locales des revenus des ménages, des services et des ressources. Pourtant, il est évident que les coûts d'opportunité sont une préoccupation majeure pour les parents. Des recherches conduites en Tanzanie montrent que les coûts d'opportunité représenteraient probablement une part plus importante du coût éducatif total supporté par les ménages. Le retour sur investissement moyen de la scolarisation pour les familles diminue de plus de 42 % lorsque les coûts d'opportunité sont définis comme couvrant à la fois les coûts non marchands (dépenses que les filles sont plus susceptibles de contracter) et les coûts marchands ou les recettes ainsi perdues (Mason et Khankder, 1996).

6. Réduire les distances : plusieurs stratégies sont envisageables-la construction d'écoles plus proches du domicile, l'ouverture d'écoles satellites et de pensionnats ou encore la mise en place d'un réseau de transport. Diverses études en Chine, au Ghana, en Inde, en Malaisie, au Niger, au Pakistan, au Pérou et aux Philippines montrent que la demande des ménages pour l'éducation des filles est plus sensible que celle des garçons à la distance de l'école (voir notamment Mingat, 1999 ; Canagarajah et Coulombe, 1997 ; Lavy, 1996 ; Gertler et Glewwe, 1992), même si des travaux récents de Lehman suggèrent que, en dépit d'éléments flagrants recueillis au Tchad et dans d'autres pays sahéliens quant à l'impact de la distance sur les inscriptions-ainsi par exemple, lorsque les enfants doivent parcourir deux à trois kilomètres pour aller à l'école, les inscriptions ne représentent qu'un dixième de la population scolarisable des villages ayant leur école -, il n'y a pas de différence marquée entre les filles et les garçons. Cela étant, dans les pays où c'est le cas, il s'agit là encore d'un exemple d'interventions pouvant avoir des effets bénéfiques pour les filles comme pour les garçons.

7. Une véritable participation communautaire. Il est difficile d'évaluer les preuves de l'implication des communautés, dans la mesure où leur participation prend des formes diverses et où chaque projet implique en général plusieurs stratégies. Certains sont devenus mythiques, d'autres sont exceptionnels, d'autres encore sont les deux à la fois, ce qui rend leur évaluation encore plus délicate. La « participation » va de la forme la plus répandue-construction et entretien des bâtiments-à la forme probablement la plus rare-participation à la qualité de l'école, ce qui sous-entend une implication dans la gestion, la supervision des enseignants et l'élaboration des programmes scolaires. Rugh (2000) et Watt (2001), parmi d'autres, ont constaté que la participation des communautés par défaut devient de plus en plus fréquente, surtout pour le financement des écoles rurales pauvres—mais cette solution n'est ni équitable, ni viable à long terme. Le recours à la recherche-action participative/ l'apprentissage-action participatif (PRA ou PLA) pour obtenir des informations sur la conception et l'évaluation, comme solution d'intervention et, trop souvent, comme une fin en soi, devient de plus en plus fréquent au sein des organisations internationales et des ONG.

Parmi les exemples classiques de l'implication des communautés dans l'éducation des filles-le projet BRAC du Bangladesh, le programme Escuela Nueva de Colombie, le programme des écoles communautaires (Community Schools Program) en Égypte, le BRIDGES en Thaïlande et plusieurs grands programmes du Pakistan. Des programmes de recherche-action participative mis en œuvre en Gambie ont obtenu de bons résultats pour l'éducation des filles, les exercices PLA avec la communauté ayant servi à concevoir un plan national d'action pour l'éducation des filles et des plans d'action locaux. En Ouganda, les évaluations participatives de la pauvreté ont intégré la problématique de l'éducation, de même qu'en Guinée, en Mauritanie, au Sénégal (Banque mondiale), au Kenya, au Maroc et en Ouganda (USAID), en Érythrée (UNICEF) et dans un certain nombre d'autres pays. Le PLA a permis d'identifier et de souligner la charge de travail des filles et mis en lumière les préoccupations des parents face aux coûts, au contenu des programmes scolaires, à la pertinence de l'éducation pour la vie de la communauté, à l'emploi, à la dureté des longs trajets pour aller à l'école et à la sécurité des filles. Ces programmes ont débouché sur des résultats concrets, dont l'ajustement des calendriers scolaires et des horaires, l'évolution des échéanciers pour acquitter les droits, la création d'écoles non mixtes et une implication plus poussée des communautés dans la sécurité des filles. Les programmes de sensibilisation du grand public lancés au Niger et au Sénégal ont nettement amélioré les inscriptions des filles en primaire, grâce notamment aux campagnes de relations publiques dans les zones rurales et là où les inscriptions restent faibles.

* * *

Un certain nombre de leçons plus générales au niveau des pays peuvent également être tirées. Sur un plan national et à l'échelle des bailleurs de fonds, l'examen par le département de la Banque mondiale chargé de l'évaluation des opérations de deux projets réussis au Bangladesh et en Gambie impliquant l'éducation des filles propose une synthèse des facteurs propices à la réussite, pour ce projet et d'autres ; les conclusions en sont régulièrement corroborées par d'autres projets que nous avons étudiés pour les besoins de cette étude. Ces facteurs sont les suivants :

- appropriation par le pays ;
- existence d'un plan directeur global dans lequel ancrer les actions ;
- mise en place d'un cadre analytique rigoureux, qui vient étayer les processus de prise de décision ;
- adoption d'une approche holistique des questions de genre, en intégrant notamment ces questions dans les projets ;
- renforcement des capacités et consolidation des institutions, au lieu de pratiquer un « bricolage » superficiel ;
- sensibilisation accrue des communautés aux questions de genre ;
- collaboration avec les ONG ;
- pilotage systématique des résultats (Banque mondiale, 2002a).

Les facteurs politiques qui émergent, en particulier dans les pays qui sont parvenus à un achèvement universel du primaire, sont sur la bonne voie ou ont fait de réels progrès dans ce sens comprennent :

• une lutte prioritaire contre la pauvreté, l'un des grands obstacles à la participation des filles ;

- des efforts soutenus pour élargir l'accès, sans sacrifier pour autant la qualité et la pertinence ;
- des interventions qui s'inscrivent dans le cadre stratégique pour l'EPT tel qu'il a été tracé dans le rapport *Réaliser l'éducation pour tous d'ici 2015 (Achieving Education for All by 2015, Banque mondiale,* 2002c);
- des actions durables en direction des populations défavorisées ;
- l'implication, le soutien à l'apprentissage et la participation des communautés locales (Banque mondiale, 2002c et 2002e).

Ajoutons un souci politique, plus récent et souvent inexprimé, d'exploitation et de reconnaissance du rôle de la culture—facteur essentiel que nous aborderons plus en détail dans la suite de ce texte.

S'il est une leçon à tirer des évaluations de la Banque mondiale sur les interventions efficaces pour l'éducation des filles, elle peut se résumer ainsi : les projets qui sont le reflet de bonnes pratiques usuelles, comme nous l'avons souligné, obtiennent davantage de résultats de qualité.

Enfin, certains pays qui sont en passe de parvenir à un achèvement universel en primaire et qui ont fait de réels progrès au niveau de la parité entre les sexes—à l'instar de la Gambie et de l'Ouganda—ont appliqué une grande partie des principes et des stratégies que nous venons d'évoquer et qui seront discutés de manière plus approfondie dans la suite de cet ouvrage.

D'une manière générale, sont voués à l'échec :

• les programmes qui ne tiennent pas compte de l'ensemble des coûts économiques de l'éducation pour les familles et les communautés.

Certains programmes n'arrivent pas à repérer tous ces coûts directs, officiels et officieux, ni les coûts d'opportunité supportés par les parents, à trouver des solutions ou encore à prendre la véritable mesure de la pauvreté des parents. Ce point est crucial pour les initiatives visant à « impliquer les communautés », dans la mesure où les parents vont devoir assumer les frais de construction des écoles, les gros travaux d'entretien, etc. ;

• les programmes qui ne tiennent pas compte des coûts culturels imposés aux communautés.

Si les éducateurs considèrent de plus en plus que la « culture » est un facteur important, certaines des implications plus subtiles de ce constat n'ont pas encore été étudiées en profondeur. Nous savons par exemple que certains des problèmes les plus délicats naissent d'une incompréhension des rôles symboliques des différents membres d'une communauté. Une fillette éthiopienne rurale qui aura été mariée à six ou sept ans peut en fait être le symbole d'une alliance chèrement acquise entre deux groupes familiaux, factions ou communautés. Les deux familles peuvent considérer que sa position de « marqueur » prime sur les avantages éventuels de son éducation, quels qu'ils soient ;

• les programmes qui ne reposent pas sur des plans conçus localement mais se contentent de copier des stratégies génériques bien connues utilisées ailleurs.

C'est le cas lorsque l'on tire des « leçons » non validées de stratégies en vogue, fortement subventionnées et largement médiatisées qui ont été conçues par certaines organisations internationales entre 1985 et 1995 et qui, si elles ont réussi à élargir l'accès et, parfois, la rétention, étaient en fait des exceptions coûteuses, non viables, sous perfusions de l'extérieur et/ou non transposables ailleurs ou à plus grande échelle.

Il peut aussi s'agir de cas où l'on ne tient pas compte de priorités conflictuelles dans un environnement politique changeant ou instable et où l'allocation de « biens » séduisants mais rares—comme l'éducation et l'emploi—, vitale pour la stabilité politique du pays, risque d'avoir des effets pervers pour des groupes déjà fragilisés. De même, alors qu'en théorie l'insistance des pouvoirs publics à décentraliser et à impliquer les communautés devrait amener à tenir compte des préoccupations des groupes vulnérables, dans la pratique, leur impact sur l'éducation des filles n'a jamais été clairement établi ;

- les programmes qui recourent à une forme, de plus en plus fréquente, de « participation par défaut », où la communauté ne contribue qu'à financer l'école et où la recherche « participative », qui tourne à vide, devient une fin en tant que telle ;
- les projets mal conçus.

Un examen des « leçons apprises » recensées dans les rapports de fin d'exécution de la Banque mondiale révèle un certain nombre de causes communes d'échec, notamment :

- le manque de relations clairement établies entre les stratégies et les objectifs ;
- une planification déficiente de la mise en œuvre de projets complexes (les programmes de bourses d'études, par exemple);
- l'adoption de stratégies ponctuelles pour résoudre des problèmes multiples et complexes ;
- l'incapacité à tenir compte du point de vue des communautés (au niveau des préférences architecturales pour les écoles, par exemple) ;
- le manque de soutien institutionnel et de volonté politique.

Enfin, comme le note le département de la Banque mondiale pour l'évaluation des opérations et comme le confirment les éléments de preuve, le « bricolage » superficiel est totalement inefficace. Les initiatives « réussies » mettent en lumière la nécessité d'avoir une approche nouvelle et structurée de tous les points que nous avons évoqués et de poser des bases solides pour tous les enfants et pour le succès des stratégies visant spécifiquement les filles (Banque mondiale, 2002a).

Des pistes pour l'action

Face aux éléments qui prouvent clairement les bienfaits de l'éducation des filles, à ceux qui mettent assez solidement en évidence la série d'obstacles contraignants et à ceux, moins convaincants, qui identifient les stratégies efficaces pour les filles, comment les organisations partenaires œuvrant à l'éducation des filles peuvent-elles agir pour rendre les résultats plus satisfaisants ?

Nous avons évidemment besoin d'informations de meilleure qualité—mais les filles ne peuvent pas attendre. Il faut donc *collecter l'information au fil de l'action*. Les organisations, les chercheurs, les praticiens ont tous un rôle à jouer, ces derniers—les responsables, les concepteurs de projets, les personnes chargées de leur mise en œuvre et celles qui évaluent leurs résultats—ayant une mission particulièrement sensible à assumer, en évaluant les défis et en sélectionnant judicieusement leurs stratégies tout en jetant les bases d'un pilotage et d'une évaluation efficaces.

Organisations internationales et pouvoirs publics

1. Proposer des cibles intermédiaires réalistes. Les conclusions du rapport annuel 2002 de la Banque mondiale sur l'efficacité de l'aide au développement (Annual Review of Development Effectiveness)—selon lesquelles un quart seulement des pays à faible revenu devraient atteindre les objectifs ODM de parité entre les sexes dans le primaire et le secondaire—et les conclusions similaires d'autres organisations comme l'UNESCO (2002b) n'ont pas reçu suffisamment d'écho. Seuls quelques rares objectifs alternatifs ont été envisagés. Un certain nombre d'études apportent des données à l'appui de ce constat et jettent également des bases pour l'identification de caractéristiques éducatives communes aux pays qui avancent et à ceux qui stagnent, à l'instar des travaux d'Abu Ghaida et Klasen (2002), de Bruns et Mingat (2002), de l'UNESCO (2002) et de la Banque mondiale (2002c). Ces analyses devraient être élargies pour intégrer les facteurs historiques, macro-politiques, juridiques et économiques mais aussi les enjeux culturels et ce, afin de pouvoir en tirer des leçons utiles. Certains de ces facteurs ont fait l'objet d'études indépendantes (voir notamment Barro, 1999; Dollar et Gatti, 1999). Ce type d'informations devrait non seulement permettre de fixer des objectifs réalistes mais aussi de les adapter à chacun des pays partageant les mêmes défis et les mêmes caractéristiques, au lieu de simplement considérer leur retard par rapport à ces objectifs.

En outre, les pays qui affichent encore d'importants problèmes de parité ont aussi des leçons à apporter. Un certain nombre de pays d'Afrique centrale et de l'Ouest, qui partaient d'un niveau extrêmement faible, ont ainsi réalisé de nets progrès au niveau des inscriptions, pour les filles comme pour les garçons.

Bien que cette étude n'ait pas vocation à piloter les progrès réalisés en direction des objectifs de parité, une analyse de certains des indicateurs utilisés ici suggère qu'un petit nombre d'objectifs communs et réalistes pourraient être fixés pour améliorer la parité d'ici 2005. Ces indicateurs sont analysés de manière plus approfondie grâce à un outil informatique spécialement conçu à cette fin (voir Kane, à paraître) qui permet aux planificateurs, aux chercheurs et aux responsables d'identifier les problématiques nationales et d'évaluer les différentes options possibles pour les résoudre. Parmi ces indicateurs figurent notamment :

• la parité entre nouveaux entrants en primaire ;

- la parité entre élèves ayant atteint la sixième année ;
- l'adoption par tous les pays de stratégies sexospécifiques pour faire de la parité une réalité à tous les niveaux de l'enseignement d'ici 2015.

2. Garantir des appuis au niveau macro. Les problèmes qui entravent la scolarité des filles ne leur sont pas tous spécifiques. S'il est avéré que les filles et les autres enfants à risque sont en général plus touchés par la précarité de l'environnement lorsque les aides vitales à l'éducation font défaut, les solutions préconisées pour y remédier sont pour la plupart « sexuellement neutres ». De saines dépenses pour l'éducation en proportion du PIB, des coûts unitaires raisonnables, des salaires compétitifs pour les enseignants, des dépenses accrues pour les intrants non salariaux, des taux d'encadrement proches de 40:1 et un taux moyen de redoublement inférieur à 10 % ont été identifiés comme essentiels pour parvenir à un achèvement universel en primaire (Banque mondiale, 2002c).

A cet égard, notons que la réussite de nombreux programmes alternatifs et non formels est le fruit de leur pertinence culturelle mais pas uniquement—ils sont de fait parvenus à mettre en place un microcosme grâce à un système d'assistance extensif et harmonieux. Cet aspect des programmes alternatifs, et non pas les stratégies mises en œuvre, justifierait probablement des recherches approfondies.

3. Repenser la collecte de données, l'analyse et la conception. L'une des grandes conclusions tirées de cette étude est la suivante : la Banque mondiale et les autres organisations internationales devraient revoir leur approche des données sur l'éducation des filles mais aussi leur présentation, en opérant une distinction entre les matériels servant aux actions de sensibilisation et ceux servant à l'analyse et à la mise en œuvre. Les premiers—destinés au grand public et aux non-spécialistes—sont en général simplifiés et se contentent de répéter des conclusions déjà anciennes. Si les deux types de matériels ont leur importance, la confusion qui règne à l'heure actuelle entre eux fait pencher la balance en faveur de la sensibilisation. En outre, si la « comptabilisation » des projets évoquant l'éducation des filles ou des types de stratégies mises en œuvre dans différents pays est bel et bien un début utile, elle ne peut en aucun cas se substituer à des évaluations sérieuses de ce qui est ou non efficace. D'une manière générale, les praticiens ont besoin d'analyses plus spécifiques et à jour de sujets ou d'interventions précis. Pour ce faire, une série de dispositions devraient être prises d'urgence, afin de recueillir des données plus solides :

- clarifier les articulations du projet. Seul un petit nombre de projets peuvent supporter l'intégration de composantes quasi expérimentales, comme les groupes naturels de contrôle et, dans la mesure où ils recèlent d'utiles leçons pour les autres, la Banque mondiale et les autres organisations internationales auraient tout avantage à inciter les équipes de projet à le faire dès lors que la situation le permet. Dans les autres cas, il conviendra d'indiquer clairement les objectifs concernant les filles, les raisons d'être des interventions, les mesures à mettre en œuvre et, dans les rapports de fin de projet (à l'instar des RFE de la Banque mondiale), les résultats obtenus ;
- tirer les leçons stratégiques des rapports de fin de projet (comme les RFE) plutôt que des documents de conception (à l'image des PAD de la Banque mondiale), ce qui est souvent le cas sur le site de la Banque mondiale ou ceux que les praticiens consultent. La « planification » ne correspond pas toujours à la « réalisation » ;
- fournir les évaluations nécessaires. Nous avons consulté au cours de cette recherche

d'excellents RFE de la Banque mondiale qui resituaient le projet dans le contexte (environnement économique, politique, juridique, culturel et institutionnel), fournissaient les données de référence, des détails sur les interventions et leurs rapports avec les objectifs du projet, mettaient en regard les résultats obtenus et discutaient des amalgames possibles et des éléments à garder à l'esprit lors de la transposition du projet dans un autre contexte. Il s'agit notamment des RFE pour le projet pakistanais de collèges (Middle School Project), du programme d'enseignement primaire de la province frontalière du Nord-Ouest (Northwest Frontier Province Primary Education Program), du projet d'enseignement primaire du Baloutchistan (Balochistan Primary Education Project), du projet béninois de développement de l'éducation (Benin Education Development Project) ou encore du projet tchadien d'éducation de base (Chad Basic Education Project)tous analysent soigneusement les facteurs et les problèmes exogènes à l'aide de variables « clarificatrices » et parviennent au besoin à des conclusions sans concession-à l'image de ce projet où l'on lit que « ces résultats peuvent s'expliquer par la quantité impressionnante de ressources concentrées sur un nombre limité d'écoles ». Ce processus rigoureux doit être encouragé et les leçons réunies dans une base de données ;

 les intérêts des filles sont-ils préservés dans les tentatives d'adoption d'approches de « protection sociale » intersectorielles plus holistiques et à l'initiative des communautés—comme le développement mené par les communautés (CDD) ou l'allocation de fonds sociaux aux communautés ? Dans le cas de pays décentralisés, quels sont les garde-fous mis en place pour garantir que la cause des filles, acquise de haute lutte, ne reperdra pas du terrain ? Au sein des structures gouvernementales, où et comment parvenir à un effet de levier stratégique maximal pour les filles ? La création de services chargés de l'éducation des filles dans les ministères de l'Éducation est-elle une solution et, dans l'affirmative, comment faire pour les rendre plus efficaces ?

Concepteurs et praticiens

1. Procéder à un examen critique des éléments de preuve rassemblés sur les stratégies, qu'ils proviennent d'études publiées ou de descriptifs de projet. On ne peut attendre des concepteurs et des praticiens qu'ils procèdent à des tests et se livrent à des recherches approfondies à chaque fois qu'ils planifient une intervention. En revanche, ils doivent avoir un esprit curieux et être capables de rentabiliser au maximum le court délai de préparation dont ils disposent. La liste de questions présentées dans l'encadré 1 peut être utile à cet égard.

2. Opter pour une démarche de questionnement lors de la planification de nouveaux projets. L'outil informatique d'accompagnement—Réussir la phase de conception : améliorer les programmes d'éducation des filles (Designing for Success: Better Programs for Girls' Education)—s'appuie sur un programme que les concepteurs et les praticiens peuvent utiliser pour concevoir de meilleures interventions (voir l'encadré 1 pour les questions essentielles à poser).

3. S'intéresser en priorité aux obstacles « à l'accès ». Alors que les recherches révèlent que la plupart des approches réussies de l'éducation des filles ont impliqué de multiples interventions adaptées à une situation bien spécifique, certaines sont prioritaires puisqu'elles poseront les jalons indispensables au succès des suivantes. Ainsi, parmi les nombreux obstacles à l'accès qui gênent la plupart des familles, le coût de l'éducation arrive en

Encadré 1—Évaluation d'une intervention : les questions à poser

- Quel était le problème à résoudre ?
- Quelle situation prévalait avant la mise en œuvre de l'intervention ? Quel était l'environnement—économique, culturel, politique, juridique et institutionnel ?
- En quoi a consisté l'intervention ?
- Y a-t-il eu d'autres interventions ?
- Quelles ont été les modalités de mise en œuvre, de gestion, de pilotage et d'évaluation de l'intervention ? Que s'est-il passé ?
- Quels ont été les coûts de l'intervention ?
- Avez-vous rencontré des problèmes qui vous ont amené(e) à vous demander si l'intervention pourrait réussir dans votre pays ou votre région ?
- Si vous choisissiez cette intervention, quelles adaptations devriez-vous y apporter ?

tête. Les recherches montrent que les coûts directs rendent souvent, à eux seuls, impossible l'éducation de tous les enfants d'une famille. Le coût est un « obstacle à l'accès ». Aoki et al. (2001, p. 249) proposent un organigramme d'aide à la prise de décision qui peut se révéler utile à cet égard, tout comme le programme qui figure dans *Designing for Success: Better Programs for Girls' Education*.

4. Considérer la culture comme une chance et non pas comme un obstacle. La culture évolue en permanence, mais une évolution dirigée peut aussi avoir lieu par le biais de mécanismes variés—notamment des politiques et des projets qui témoignent d'une bonne appréhension du contexte et des dynamiques en place. Le changement « irréversible » obtenu au Baloutchistan (voir *infra* encadré 7) et la « révolution profonde » du Bangladesh (voir *infra* encadré 12) vis-à-vis de l'éducation des filles illustrent l'un et l'autre cette option. Alors que certains des facteurs économiques les plus prégnants dans l'éducation trouvent aujourd'hui des solutions, la place de la culture s'affirme de plus en plus. Toutes les études examinées pour ce rapport montrent que les chercheurs du développement et les concepteurs de projets-des éducateurs aux économistes-prennent davantage conscience de ce phénomène, même s'ils considèrent plutôt la culture comme un facteur explicatif négatifce qu'elle est parfois-que comme une dynamique positive. Cela étant, envisager la culture comme une série « d'obstacles » discrets empêche de lui reconnaître son rôle de vecteur « macro » par lequel le changement intervient. La culture d'une société façonne la conception qu'elle a de l'éducation et sert de point de départ pour déterminer les compétences cognitives que les enfants doivent acquérir, les méthodes pédagogiques adéquates et le rôle des communautés dans l'apprentissage. Les concepteurs devront identifier et exploiter ces dynamiques immanentes afin de concevoir des interventions plus pratiques et plus viables.

5. Faire preuve de davantage de créativité visà-vis des communautés. « L'implication des communautés » signifie autre chose que de leur demander d'accueillir des exercices de recherche participative ou de les co-opter pour financer et entretenir les écoles-les deux formes les plus fréquentes de participation communautaire à l'heure actuelle. La réussite des projets éducatifs pour les filles mis en œuvre en Gambie, en Guinée et en Ouganda en faisant appel à une recherche d'intrants, une planification, un pilotage et une évaluation participatifs montre bien que l'implication des communautés peut être à la fois efficace et équitable. Wolf, Kane et Strickland (1997) ainsi que Rugh et Bossert (1998) passent en revue une série de stratégies permettant d'impliquer plus activement les communautés dans l'éducation. Pour sa part, Watt (2001) se livre à une évaluation très utile des raisons qui justifient l'implication des communautés et des succès relatifs obtenus par ce biais.

6. Asseoir la phase de conception sur des questions et des options propres aux pays bénéficiaires. Du fait de la médiocrité des données dont disposent les responsables, les bonnes pratiques ont plus de chance de procéder de programmes adaptés aux conditions locales, à l'issue d'un examen attentif des spécificités de l'environnement, que du déploiement d'une stratégie dont l'efficacité a été prouvée ailleurs. L'identification des problèmes propres au pays ou à la zone concernés et des choix possibles est une condition préalable indispensable pour opter en faveur de solutions adaptées et fondées. Là encore, les concepteurs et les praticiens auront tout intérêt à utiliser le programme que nous présentons à la fin de ce document.

Chercheurs

1. Encourager dans les rapports l'adoption et l'application de normes de meilleure qualité. De par la nature, l'aspect moral et les exigences du travail dans le domaine du développement, la plupart des rapports sur les interventions en faveur de l'éducation des filles ne sont pas étavés sur des faits et sont plutôt narratifs. Cela ne doit pas empêcher de produire des rapports clairs et soigneusement préparés mais aussi d'apporter des données sur l'environnement pré-intervention, les objectifs, les coûts, les conclusions et les éventuels amalgames. Si ce constat s'apparente a priori à une lapalissade, rappelons que la plupart des comptes rendus publiés ne fournissent pas, ou alors partiellement, ce type d'informations.

2. Rechercher dans les bases de données internationales les leçons ayant une plus grande portée

• De nouvelles analyses concernant les pays « sur la bonne voie » sont indispensables. A mesure que les données statistiques pour l'année 2000 et les suivantes vont devenir disponibles et que de nouvelles bases de données seront mises au point pour assurer le pilotage des objectifs EPT et ODM, les praticiens devront s'efforcer de trouver des leçons ayant une plus grande portée. Outre les caractéristiques déjà mentionnées (une part de dépenses publiques pour l'éducation et des coûts unitaires raisonnables, des salaires enseignants compétitifs, etc.), il serait intéressant de mieux connaître ce que les pays « sur la bonne voie » partagent au niveau des autres indicateurs. Cela nous permettrait sans doute de comprendre pourquoi certains pays qui étaient « sur la bonne voie » se sont laissés distancer et quelles évolutions ont conduit les autres à avancer.

- Développer et étudier les variables des études internationales intersectorielles tirées des bases de données. L'une des leçons les plus profitables de cet exercice nous a conduit à réaliser que les économistes et les chercheurs qui ont travaillé sur des corrélations statistiques internationales-impact sur la participation du niveau de richesse, du lieu de résidence, de la religion...-sont à l'origine des contributions les plus importantes de ces dernières années en ce qui concerne l'éducation des filles. D'autres études de ce type sont nécessaires, notamment dans un domaine essentiel pour l'éducation des filles-l'impact sur la participation des filles des défaillances du marché (Banque mondiale, 2001b) en termes de sécurité sociale, de protection infantile, de travail des filles ... - ou encore le fait de réfléchir à la manière dont les pouvoirs publics et les bailleurs de fonds pourraient agir pour apporter les aides nécessaires afin d'éviter que la charge financière ne pénalise les filles de manière disproportionnée (comme c'est le cas actuellement).
- Clarifier la nature des données statistiques. La plupart des données sur l'éducation utilisées par les organisations internationales sont tirées de statistiques de l'UNESCO, qui sont ensuite partiellement mises à jour, ajustées, recalculées, etc., selon des modalités parfois obscures débouchant à l'occasion sur des chiffres étonnants et des divergences inexplicables. Toutes les leçons des études actuelles n'ont pas été totalement exploitées et d'utiles déductions croisées restent à tirer-mais il faudrait qu'il y ait davantage de transparence quant à la nature et l'origine des données utilisées mais aussi sur les différences par rapport à d'autres études récentes-grâce à des bases de données organisationnelles spécifiques.

3. S'intéresser aux coûts économiques pour les ménages. L'impact sur l'accès et la rétention de la suppression des frais de scolarité ou de l'octroi de bourses ou d'allocations d'étudescomme au Bangladesh, au Guatemala, au Malawi, en Ouganda et au Pakistan, notamment-est mieux documenté que la plupart des autres interventions, tout comme les aspects pratiques de la planification et du financement de telles dispositions. Dans de nombreux cas cependant et bien que les preuves attestant de ce phénomène soient encore rares, il semble que les coûts directs accessoires et « cachés » augmentent. Les chercheurs ne se sont pas encore suffisamment intéressés à l'impact de ces coûts sur les familles et ils n'ont pas assez relayé ce problème aux concepteurs. De même, les coûts d'opportunité n'ont pas encore été étudiés de manière exhaustive, même si quelques études sur la question-celles de Mason et Khandker en Tanzanie (1996) ; de Canagarajah et Coulombe (1997) au Ghana ; et de Lokshin, Glinskaya et Garcia (2000) au Kenya-sont tout à fait intéressantes. Des études sérieuses et approfondies auprès d'un échantillon de ménages choisis (dans le contexte de données nationales et d'enquêtes sur le niveau de vie) pour représenter tout le spectre des dynamiques régissant le budget des familles seraient à cet égard très précieuses.

4. S'intéresser aux coûts culturels pour les ménages. Certains des problèmes les plus complexes restent insolubles parce que les pratiques en place répondent à un besoin essentiel des familles ou des communautés. C'est le cas notamment des initiations et des mariages précoces. Les activités de sensibilisation ne suffiront pas à imposer des alternatives. Les projets doivent s'intéresser de manière objective à l'utilité actuelle de ce type de pratiques et les conclusions obtenues doivent être transmises aux praticiens de manière constructive et synthétique.

* * *

A l'origine de cette étude, une question : « De quels éléments de preuve disposons-nous sur les stratégies permettant d'améliorer la participation des filles à l'éducation ? ». De toute évidence, nous manquons cruellement d'éléments. Mais cette recherche de « preuves » estelle pertinente ou réaliste ? La plupart des initiatives éducatives, dans les pays industrialisés comme dans les pays en développement, sont ancrées dans la moralité, les valeurs et la doctrine. L'idée selon laquelle les pratiques éducatives doivent s'appuyer sur des recherchesles sciences humaines-est voire sur relativement récente et rarement corroborée.

Pourtant, les nouveaux défis et opportunités auxquels l'éducation des filles est actuellement confrontée renforceront la valeur et justifieront la nécessité de preuves solides sur la manière de procéder. Si nous voulons réaliser les ODM d'ici 2015, nous devons obtenir des résultats concrets. De même si nous voulons que les pays à faible revenu exploitent le constat selon lequel, en l'état actuel des choses, l'un des investissements les plus judicieux concerne l'éducation des filles. Les possibilités d'acquérir de l'expérience sur les solutions efficaces ou inutiles iront croissant à mesure que le nombre de projets intégrant des interventions ciblant l'éducation des filles augmentera. Cela étant, pour être utiles, ces expériences cadres devront être plus soigneusement structurées au moment de la conception et les comptes rendus d'intervention, plus exploitables. Nous devons, au minimum, avoir des informations sur le contexte de départ, les coûts et les faits—trois éléments qui, étonnamment, sont souvent absents des comptes rendus disponibles à ce jour.

Les recherches peuvent faire apparaître-elles l'ont déjà fait-les corrélations entre la participation à l'éducation et toute une série de variables sociales. Cela dit, les contraintes actuelles qui empêchent les filles d'aller à l'école et d'y rester, d'instaurer des conditions propices à l'apprentissage et de relier l'expérience scolaire à la réussite économique et culturelle en dehors de l'école imposent de recourir à une approche holistique. Cela ne signifie pas qu'il faille abandonner les programmes spécifiquement conçus pour les filles, mais qu'il faut reconnaître que les stratégies destinées aux filles ne peuvent pas compenser l'indigence des systèmes en place et l'absence d'engagement. L'approche selon laquelle les interventions ponctuelles ou sexospécifiques seraient la panacée a vécu. Nous devons désormais-et de toute urgence-nous intéresser aux problèmes macro.

Enfin une chose est sûre, même si nous avions des preuves irréfutables de l'efficacité des différentes stratégies : il n'y a pas de solutions miracle. Comme le rappellent Lloyd et al. (1999), « l'expérience de l'Afrique contemporaine n'a pas d'équivalent historique ». Les interventions réussies passent invariablement par une analyse locale des problèmes et une évaluation des stratégies envisageables. Les connaissances que nous avons acquises jusqu'ici ne nous seront hélas pas d'une grande utilité. Nous « pataugeons » encore lorsqu'il s'agit de savoir de quelles informations nous avons besoin-et c'est pourquoi l'intérêt de ce rapport ne réside pas tant dans sa parution que dans les nouvelles études qu'il va susciter.

Background

Goals

n September of 2001, representatives of 189 countries gathered at the U.N. Millennium General Assembly, where they adopted eight Millennium Development Goals.¹⁵ These goals have since been endorsed by virtually all major international organizations, including the World Bank. Two of the eight goals relate directly to girls' education, namely:

Goal 2, Target 3: Achieve universal primary education: ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

Goal 3, Target 4: Promote gender equality and empower women: eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education by no later than 2015.¹⁶

It's since become clear that at least four other goals—improvements in child mortality and in maternal health, reductions in the incidence of HIV/AIDS and other diseases and the assurance of environmental stability— will not be achieved or that their achievement will be seriously hampered without progress in girls' education. On a more positive note, extensive research on the benefits of girls' education shows that few other factors can hope to have as broad an impact on achieving these goals.

In the education sector itself, countries that have achieved or are on track to achieve Education for All (EFA) in the form of universal primary school completion¹⁷ bear out this point. A recent World Bank study (2002c) maintains that such countries have four characteristics:

- adequate domestic resource mobilization for primary education;
- efficient and effective use of resources;
- a focus on educational quality and learning outcomes;
- and, most relevant to this study,
- specific actions designed to make school more accessible and effective for poor and disadvantaged children in general and for girls in particular.

What progress has been made towards these goals? In 1990, when governments and international development agencies committed themselves to educating all children, with special emphasis on girls and other disadvantaged groups, evidence of the individual and developmental benefits of primary education was strong and persuasive,¹⁸ goodwill was abundant and funding was made available. The dramatic appeals and resolutions created an optimistic mood and tone.

By 1995, participants at the Mid-Decade Meeting of the International Consultative (EFA) Forum on Education for All knew that many countries were unlikely to achieve the universal goals of primary education for all and, by 2000, at the Dakar Education for All Forum, there was no doubt that many had fallen seriously short of their goals. The increasingly large ratio of girls to boys in school was, in fact, misleading. In many locations, boys' rates were simply falling faster than those of girls. In fact, over the past thirty years, girls' access has not improved as rapidly as that of boys in twenty-four countries with traditionally low access, including nineteen countries in Sub-Saharan Africa (Chesterfield and Martinez-Enge, 2001). Thus, two-thirds of all outof-school children were girls. Also, it was becoming clear that quality was being sacrificed as part of the move toward universal access, which problem was compounded by a decline in real spending by more than 50% between 1985 and 1995 (Mlama and Colclough, 1999).

Nonetheless, many countries have come a long way. In Sub-Saharan Africa, for example, which had the longest way to go (particularly in Central and West Africa, which epitomizes many of the challenges faced by Africa in general) progress has been remarkable, if not in terms of gender parity, certainly in terms of boosts in girls' enrollment, which is what we need to examine if we are to draw lessons with respect to strategies. It has been noted that current trends in Sub-Saharan Africa reflect a predictable pattern previously emerging in other regions, under less difficult circumstances: a widening of gender gaps as enrollments increase from a very low base could be a temporary phenomenon.¹⁹ Still, the exigency of helping girls remains clear. Of the close to 50% of African children not enrolled in school, about two-thirds were girls.

In 2000, the First Dakar Framework for Action reiterated its earlier aims of:

- ensuring that, by 2015, all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality;
- eliminating gender disparities in primary and secondary education by 2005 and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality;²⁰

although the 2005 target date was already in sight and would most likely not be met.

In 2001, part of the language of one of the Millennium Development Goals reflected this implausibility:

• Goal 3, Target 4: "Eliminate gender disparity in primary and secondary education, *preferably* (italics mine) by 2005, and at all levels of education by no later than 2015."²¹

Since then, there has been no "countdown" to 2005. There is almost a tacit recognition that the target has shifted to an unspecified future date closer to $2015.^{22}$

But whatever the target date, why the emphasis on primary school completion? Research shows that completing primary school, or at least getting five to six years of primary education, seems to be crucial to maintaining basic literacy and numeracy skills, with attendant consequences for health and other types of behavior, and is critical to higher national returns (World Bank, 2002b; Levine et al., 1994; Levine et al., 2001). The primary school completion rate (the total number of completers [graduates] divided by the total size of the national population of official graduation age, multiplied by 100) has been suggested as a good indicator of household demand for education, progress in student learning and overall education quality.²³ This focus is particularly germane to girls since, in most Sub-Saharan African countries, exposure to a few years of primary education is all that girls are likely to get, especially poor rural girls.

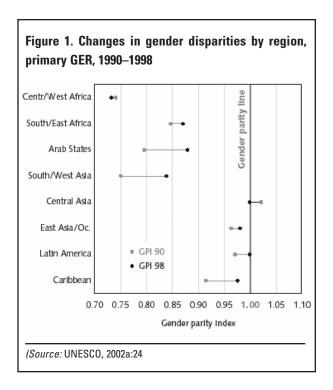
Therefore, in discussing "education for all," this study, drawing on a recent World Bank analysis (2002c), uses **universal primary completion (UPC)** as a relevant standard and the primary completion rate (PCR) as the measure of a country's progress. The analysis also focuses on apparent intake rates (AIR) and survival to grade 6 for reasons explored below. It classifies countries according to their progress in achieving the Millennium goals for gender parity in education as measured by the ratio of girls to boys in school (World Bank, 2002c) and gross enrollment (Abu Ghaida and Klasen, 2002).

Girls' education in Sub-Saharan Africa

This study looks specifically at girls' education in Sub-Saharan Africa. This region contains the largest proportion of poor countries in the world and has the world's largest population growth rates. Its nations and peoples have been ravaged by political conflict, serious economic crises, famine, corruption, displacement and HIV/AIDS. Figure 1 shows just one of the outcomes of this situation, namely the lack of progress in reducing gender discrepancies in Central and West Africa, starting from a very low base.

The consequences for all sectors are unprecedented. As we enter the new Millennium, what is the position of Sub-Saharan Africa with regard to education? Has there been some progress everywhere, or are rates in some countries stalled or actually declining? In the education sector, commentators may argue over the relative utility of different indicators: apparent intake rates, gross enrollment, net enrollment, universal primary completion rates, repetition, dropout, transition, and many others. The fact is that, as shown in the following sections of this study, no matter what regional indicators are used, comparative international data invariably places Sub-Saharan Africa in general and Central and West Africa in particular in the weakest position, with some individual country exceptions and despite some rather impressive progress in certain locations.

Meeting the Millennium education goals will require considerable foreign investment, estimated by the World Bank at \$2.5 billion per year for the fifteen-year period through 2015 and by UNESCO (2002b) at between 4.2 and \$5.6 billion per year, most of which will go to Sub-Saharan Africa. This finance issue is explored on page 60. It will also require inte-



grating these goals into government and agency policy and operations, building effective partnerships and targeting and implementing appropriate strategies, which need to include measures designed to improve and enhance girls' education.

Strategies

What types of strategies can be used to confront the issues outlined in this study? While most countries in the region may share a uniquely difficult situation, they share little else. In fact, there are enormous variations in culture, in governance systems and in institutional capacity. The past decade has produced numerous publications, pilot projects and programs and research papers on girls' education, including girls' education in Sub-Saharan Africa.²⁴ Do we know which strategies have worked in a particular location, and which have been incidental to the progress achieved thus far? Are there lessons from other regions or from broader development analyses we can draw on to help clarify what types of things could give new momentum to efforts on behalf of African girls? Chesterfield and Martinez-Enge (2001), for example, looking at "low [primary] access" countries,²⁵ conclude that girls' primary access has not increased as rapidly as that of boys over the last three decades: "This is true even in countries that have supported the importance of girls' schooling" and, in some countries, "the impact appears minimal." Limitations of scale are one possible explanation, but the limited effectiveness of corresponding strategies must also be explored.

Looking back, there has been a definite pattern in girls' education strategies. The 1990s were devoted to documentation efforts and to intellectual/emotional advocacy. The most compelling literature of the 1990s captured the picture (King and Hill, 1993, for example), made an intellectual appeal (i.e., the growth and development benefits of girls' education in King and Hill; Schultz, 1993; Summers, 1994; Subbarao and Rainey, 1995; etc.) or, alternatively, appealed to the emotions (the film *These Girls are Missing*, vignettes about a girl who wants to go to school but can't, the exhausting work schedule of girls). Specific documents chronicled the problems, benefits and constraints. But in developing strategies to improve the situation, the approach was largely inductive and qualitative—drawing lessons from bits and pieces of inadequate information. There were two things missing:

- a rigorous analysis of effective strategies. The field was, and still is, ill-served by the literature, which has become normative, repetitive and anecdotal, with most accounts missing vital information for an understanding of why the strategy worked in that particular situation, let alone the potential to work in others. This study shows this, and makes recommendations that would allow future readers to draw much sounder conclusions than are possible at this point.
- an examination of some of the common features of "successful" countries-what did they do that got girls into school? Once again, the study looks at a number of strategies, but a macro-examination of economic, historical and political factors is still a must. We may be seeing the early stages of another kind of analysis in studies by the World Bank (2002c), Knowles et al. (2002), Lee and Barro (2000) and Abu Ghaida and Klasen (2002), among others. The variables employed in these studies could not have been used to draw lessons any earlier, since most of the "success" occurred in the 1990s, as a result of commitments undertaken at major international forums.

This study

Accordingly, to put together a picture, this study looked at evidence from:

- 1. the literature. Are there any well-documented "scientific" lessons, or even information, from which to draw conclusions?
- 2. countries that have achieved or are on track to achieve universal primary completion. This study, following the lead of Achieving Education for All by 2001 (World Bank, 2002c), uses universal primary completion as the indicator for "education for all." By definition, this means getting the most vulnerable groups into school, namely girls, ethnic and linguistic minorities and other disadvantaged children. It also looks at countries that have made significant progress in gender parity over the past ten years. What have some of the more "successful" countries done to achieve this and what lessons can be drawn for girls' education?
- 3. the experiences of practitioners, or specific strategies tried by donors, in-country partners, managers and evaluators, such as stipends or the recruitment of female teachers: what happened?
- 4. World Bank²⁶ evaluations of projects addressing girls' education issues (generally as part of a larger project). Do these evaluations tell us anything?

The results of the study are designed to help team leaders and managers and their partners in developing countries hoping to make an impact on girls' education in a particular setting. Many are nervous about simply implementing "lessons learned" and "best practices" in situations widely different from the original context, and rightly so. "Country-specific and country-led" strategies are viewed as sensible strategies for making development work, but how does the manager help make that happen? The final part of the study refers the reader to a companion computer tool, *Designing for Success: Better Programs for Girls' Education*, for help in identifying country-specific issues and assessing appropriate strategies.

The figures

As most readers know, there are serious problems related to the content and dates of figures for education in Africa, affecting their accuracy and comparability, which are further compounded by the use of different data bases by development agencies.²⁷ For international research purposes, the most widely used educational statistics are those from UNESCO. Another source of statistical data is the Demographic Health Survey. The third is national census data. Some data problems are virtually unavoidable. What is being measured by UNESCO indicators, though standardized, may have different meanings in different contexts (which is true of all comparative studies). The data used to establish indicators are usually at least two or three years out of date and not all countries are represented in the same years, and the quality of the data itself is erratic. National census data are often of questionable value owing to over-reporting and patchy data, and international comparisons can be difficult to make because the questions asked may be different. "Level of education," for example, can mean "grade completed" or "years attained." Survey data usually refers to selected countries or to a smaller set of indicators, but can suffer from the same flaws as the census data from which they were drawn. Some studies draw on more than one of these sources.

Many of the figures used in tables in this report were taken from World Bank data bases, particularly figures on progress toward the achievement of universal primary completion. Others, particularly in the case of figures on gender differences, are taken from UNESCO (2000a). The two sources differ on some specific figures but, in general, show similar patterns.

Indicators

Educators dispute the value of various indicators on at least three grounds: poor data content (an example is Lloyd et al.'s (1999) skepticism about to UNESCO's gross enrollment ratios); the explicit use of certain indicators as proxies for other more elusive concepts that are difficult to measure, or for which there are no agreed-on measurements (using spending per student as an indicator of quality, for example); and the automatic use of certain indicators such as the gender gap (the difference in percentage points between percentages for boys and girls, M-F) and the gender parity index (the ratio between the female and male rate, F/M) in situations calling for the use of other or more complex indicators.

Such gender-related indicators are useful in examining the differential representation of boys and girls in the education system. In the context of this study, their purpose is to show, in a very rough sense, how well girls are doing in relation to boys. However, unless "boys are the measure of all things,"28 these indicators tell us very little in absolute terms about how girls are actually doing, not just in relation to boys. (As far as primary completion rates are concerned, Zimbabwe, for example, has a gender gap of 5 in favor of boys, whereas Madagascar has parity. However, Zimbabwe's primary completion rates are 111 and 116 for girls and boys, respectively, while Madagascar's are 26, so the gender gap tells us little about how either sex is doing.) Furthermore, in the case of a reported gain, they don't tell us what it really means. For example, a small or positive gender gap (1.00 or greater) means that girls have met or exceeded boys' rates. In the past, this could usually be taken to mean that girls were gaining on boys. But, in themselves, gender indicators do not tell us how the gain was achieved. Boys' rates may have stabilized while girls' are increasing or, alternatively, girls' rates may not be increasing but boys' rates may have declined. On the other hand, a large or increasing gap could indicate a situation in which girls' rates are improving, but boys' are improving faster. Most importantly, the gender gap can close, as it has in Madagascar, without either sex having achieved a satisfactory completion rate.

Therefore, the practice of reading gender indicators out of context and trying to work backwards to determine which strategies "work" is flawed. Girls' rates may be rising simply because boys have left school to work, in which case the "strategy" that led to the improvement in the girls' indicator tells us nothing.

There is no one set of all-purpose indicators. One way of making gender indicators more meaningful is to construct indicators that show gender trends and whether an overall increase reflects a rise in both or only one of the gender-specific rates. Figures with respect to primary school completion might show:

- the percentages for that indicator, broken down by gender;
- the gender ratio;
- whether the girls'/boys' rate is rising/declining over a specified period such as ten years;
- in this last instance, by what percent, and perhaps grouped (with "1" equaling 0-5%, "2" equaling 6-10%, "3" equaling 11-15%, "4" equaling 16-20%, etc.)

This would produce the following type of reading:

| Primary completion rate | | | | |
|-------------------------|------|------|------|--|
| | М | F | F/M | |
| Country | 46+1 | 43+4 | 93+3 | |

which translates into a female completion rate of 43%, representing a rise of 4 "points" or 16–20 percentage points over the previous period, a male rate of 46, representing a rise of 1 "point" or 0–5%, and a female/male ratio of .93, for a rise of 3 "points" or 11–15 percentage points.²⁹

However, this study continues to rely on the widely available "gender gap" and "gender parity index."

Primary completion indicators

The general picture

While Eastern European and Central Asian countries have either achieved primary completion or are on the right track to do so and certain countries have made remarkable progress, in general, most regions have made very little progress since 1990. In fact, only 36 of 155 developing countries have achieved primary completion. In an analysis of the implications of the current situation, Mingat (2003) suggests that, in low-income countries, three factors in particular affect progress toward the achievement of the Millennium goal of universal primary completion, defined as completion of a six-year cycle of primary education, in both quantitative and qualitative terms, namely:

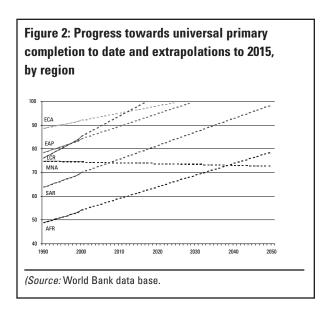
- Completion is predicated on a 100% schooling rate by 2015, whereas current average compounded gross enrollment rates are only 77%.
- Completion rates for 1960–2000 reflect a "progress rhythm" of only 0.6–0.8 percentage points per year, and in the last decade, only 0.5 whereas, even at a future rate of 1%, universal completion would

not be achieved until after the year 2050. Even a rate of 3% would leave some fifteen African countries short of the mark in 2015.

• Children currently unable to complete school are the last and most difficult to reach and measures that have worked in the past may no longer suffice.

Figure 2 shows some comparative regional trends.

The Africa region has the lowest mean completion rate in the world, 54%, compared to the developing world average of 77% (World Bank Data Base). Various World Bank studies examining the cost of achieving universal primary completion by 2015, progress toward this goal and how girls are faring in relation to boys group countries into three categories. A country is ON TRACK if a projection of the observed trend results in a completion rate of 95% or higher by 2015. (If a country does not have two data points, it is on track if the completion rate for the most recent year is 85-94%, inclusive.) Countries are OFF TRACK if a projection of the observed trend results in a completion rate of between 50 and 94% in 2015. (Without two data points, it is



| Progress rating | IDA countries ^a | IBRD countries ^b | All developing countries |
|----------------------------------|----------------------------|-----------------------------|--------------------------|
| Subtotal "On Track" | 22 | 47 | 69 |
| Achieved UPC | 11 (2) | 25 (3) | 36 (5) |
| On track to achieve UPC by 2015 | 11 (4) | 22(3) | 33(7) |
| Subtotal "At Risk" | 51 | 19 | 70 |
| Off track to achieve UPC by 2015 | 28 (10) | 15 (0) | 43 (10) |
| Seriously Off-Track | 23 (21) | 4 (1) | 27 (22) |
| No data available | 9 | 7 | 16 |
| Total | 82 | 73 | 155 |

Table 1: UPC progress ratings (Sub-Saharan Africa in brackets)

a. International Development Association-eligible and blend countries plus non-member low-income countries such as Korea, DPR

b. International Bank for Reconstruction and Development-eligible and non-member middle and high-income countries

off-track if the estimate for the most recent year is between 50 and 84%, inclusive.) Countries are SERIOUSLY OFF TRACK if a projection based on the observed trend results in a completion rate below 50% in 2015. (Without two data points, it is off track if the estimate for the most recent year is below 50%.)

Table 1 shows country groupings for all regions. The numbers of Sub-Saharan countries are in brackets.

According to these classifications, more than half of all African countries are less than halfway to the Millennium Development Goal target. The World Bank estimates that, of the twenty-three IDA countries that are "seriously off track" in relation to the 2015 MDG goal (i.e., with low and declining completion rates), twenty-one are in the Sub-Saharan region. Moreover, of twenty-eight IDA countries "not on track" to achieve universal primary completion by 2015, ten are Sub-Saharan countries, virtually all of which have actually shown negative trends since 1970.30 Of the fifteen countries with actual declines in their completion rates, eleven are Sub-Saharan countries, including Zambia which, until recently, had been "on track." All "declining" countries are expected to have primary completion rates of approximately 40% or less by 2015 (World Bank data base).

However, as illustrated in Table 2, five countries, Botswana, Cape Verde, Mauritius, South Africa and Zimbabwe, have already achieved UPC and seven more, Gabon, The Gambia, Malawi, Namibia, Swaziland, Togo and Uganda, are on track to achieve it by 2015. Malawi's primary school completion rate has increased by an average of over 4% a year, jumping from 30% in 1990 to 50% by the most recent year. The improvement in the Gambian rate was nearly as dramatic, which rose from 40% in 1990 to 70%, or by an average of 3.35% a year. Some of these countries rank among the "best performers" in improving primary completion rates since 1990. Other countries-Benin, Guinea, Eritrea, Tanzania, Mali and Mauritania, while not expected to achieve UPC by 2015, have also made a great deal of progress. Even though Guinea and Mali, for example, still stand at only 35% and 23%, respectively, they have virtually doubled their primary school completion rates since 1990. In fact, of the IDA's twenty "best performers" since 1990, eleven are Sub-Saharan African countries.31

Girls

Overall, girls and boys in developing countries who enroll in primary school have similar success rates as far as primary school completion is concerned (Chesterfield and Martinez-Enge, 2001). Specifically, how are girls in Sub-Saharan Africa doing in relation to this indicator?³² Rates in Sub-Saharan Africa are not only poorer than in any other region but, on the average, show the least improvement. In 1990, 43% of girls in Sub-Saharan African countries completed primary school, compared with 46% in the most recent year for which data are available, whereas rates for Latin America and the Caribbean showed dramatic improvements, jumping from 71% in 1990 to 85% in the most recent year (World Bank data base).

Looking at Table 2, Columns 3-4 show figures for the most recent year for which data are available and the female/male ratio for UPC. Column 5 shows country rankings for achievement of UPC by 2015. This table includes two additional rankings, the World Bank gender equity grouping based on the ratio of girls to boys at the primary and secondary levels (Column 6), and a revised rating (Abu Ghaida and Klasen, 2002) based on the ratio of girls' to boys' gross enrollment rates (Column 7). The "track" numbers in Column 6 are based on the ratio of years it will take to reach the Millennium Development Goal, divided by the years available (between the latest data and 2005). Low and declining ratios of girls to boys at the primary and secondary levels are flagged in the World Bank Data Base. These countries are given a special rank of "4," different from the rankings of "1," "2" and "3" reflecting whether they are on, off or strongly off track.

Two other indicators: intake and survival to grade 6

Since gender parity in universal primary completion will not be achieved by 2005, gender parity in intake could be considered a reasonable interim goal for many countries falling short of the mark. The second suggested interim goal is survival to grade 6, since experts argue that a minimum of five to six years is crucial for maintaining literacy and other basic skills. Also, experience has shown, as in the case of Malawi, for example, that intake may rise dramatically, but students could be dropping out of school shortly after entry.

Apparent intake rates, primary (Table 3)

Intake rates are considered good indicators of enrollment trends and a good basis for tracking gender trends. Therefore, it is unfortunate that so few figures are available for earlier years, but those that are available show that access, or overall apparent intake rates (AIR)³⁵ for both girls and boys have declined in nearly half of all countries since 1990. Most such countries are in Sub-Saharan Africa, have the lowest GDP per capita, are highly indebted poor countries and have been seriously affected by HIV/AIDS.

However, it is clear that many other countries in Sub-Saharan Africa are doing well in relation to this indicator and to gender parity. Nineteen have gender parity ratios of over 90%, including countries classified as "seriously off track." This ratio has been attained by all countries that have achieved UPC and by all "on-track" countries and nearly half of all "off-track countries," but by less than 20% of "seriously off-track" countries. Accordingly, this indicator sets a reasonable interim goal for many countries.

Survival to grade 6 (Table 4)

With three exceptions,³⁶ all countries in Sub-Saharan Africa, regardless of the length of the primary cycle, do include grade 6. Of the twenty-three countries for which data are available, four (Botswana, Mauritius, Cameroon and the Republic of the Congo) have survival rates of over 90% for girls. Twelve of the twenty-three have gender parity or a gap in favor of girls. Some countries that have traditionally had gender disparities in favor of girls, such as Lesotho, offer no surprises. Nor is it surprising that three of the four countries that have achieved UPC and for which data are available have gender disparities in favor of girls. What is surprising are the high gender parity indices for countries seriously off track, indicating, once again, that gender parity for survivaol to Grade 6 may be another target that countries could aim for prior to 2005.

| 1 | 2 | 3 | | | | 4 | 5 | 6 | 7 |
|--------------------------|-------|-----|-----|------|------------------|-------|---------|------------|-----------------------|
| | | | | | | | WB | WB "track" | |
| | | | | Most | recent | F/M | "track" | for gender | D . 124 |
| | | 19 | 90 | уеа | ar ³³ | ratio | for UPC | equity | Revised ³⁴ |
| Countries that have | | | | | | | | | |
| achieved UPC | Grade | F | М | F | М | | | | |
| Botswana | 7 | 126 | 102 | 107 | 96 | 1.15 | A | 1 | 1 |
| Cape Verde | 6 | n/a | n/a | 119 | 115 | 1.03 | A | _ | 1 |
| Mauritius | 6 | 135 | 136 | 108 | 115 | .94 | A | 1 | 1 |
| South Africa | 7 | 81 | 72 | 100 | 95 | 1.05 | A | 1 | 1 |
| Zimbabwe | 7 | 94 | 100 | 111 | 116 | .96 | A | 1 | 1 |
| Countries on track (1) | | | | | | | 1 | | |
| Gabon | 6 | 77 | 66 | 80 | 79 | 1.01 | 1 | 1 | 1 |
| Gambia, The | 6 | 35 | 45 | n/a | n/a | - | 1 | 2 | 2 |
| Malawi | 8 | 22 | 38 | 40 | 61 | .66 | 1 | - | 1 |
| Namibia | 7 | 80 | 59 | 94 | 86 | 1.09 | 1 | 1 | 1 |
| Swaziland | 7 | n/a | n/a | 85 | 78 | 1.09 | 1 | 1 | 1 |
| Togo | 6 | 26 | 55 | 52 | 73 | .71 | 1 | 3 | 3 |
| Uganda | 7 | 30 | 49 | n/a | n/a | - | 1 | - | 2 |
| Countries not | | | | | | | | | |
| on track (2) | | | | | | | | | |
| Benin | 6 | 15 | 31 | 30 | 47 | .64 | 2 | - | 3 |
| Eritrea | 5 | 20 | 23 | 31 | 40 | .78 | 2 | 4 | 4 |
| Ghana | 6 | 54 | 71 | n/a | n/a | - | 2 | - | 2 |
| Guinea | 6 | 9 | 24 | 24 | 44 | .55 | 2 | 4 | 4 |
| Lesotho | 7 | 82 | 45 | 83 | 55 | 1.51 | 2 | 1 | 1 |
| Mali | 6 | 9 | 14 | 18 | 29 | .62 | | | |
| Mauritania | 6 | 26 | 41 | 43 | 48 | .90 | 2 | 1 | 2 |
| Mozambique | 5 | 23 | 36 | 22 | 50 | .44 | 2 | 4 | 3 |
| Nigeria | 6 | 62 | 82 | 61 | 73 | .84 | 2 | - | 2 |
| São Tomé and Principe | 4 | n/a | n/a | n/a | n/a | - | 2 | - | - |
| Tanzania | 7 | 45 | 46 | 60 | 58 | - | 2 | 1 | 1 |
| Countries seriously | | | | | | | | | |
| off track (3) | | | | | | | | | |
| Angola | 4 | 35 | 42 | n/a | n/a | - | 3 | - | 2 |
| Burkina Faso | 6 | 14 | 24 | 20 | 30 | .66 | 3 | 3 | 3 |
| Burundi | 6 | 43 | 49 | n/a | n/a | - | 3 | 2 | 2 |
| Cameroon | 6 | 52 | 61 | 39 | 46 | .85 | 3 | 2 | 2 |
| Central African Republic | 6 | 19 | 37 | n/a | n/a | - | 3 | - | 3 |
| Chad | 6 | 7 | 31 | 9 | 29 | .31 | 3 | 4 | 4 |
| Comoros | 6 | 32 | 38 | 34 | 32 | 1.06 | 3 | - | 2 |
| Congo, Democratic | | | | | | | | | |
| Republic of | 6 | 35 | 60 | 34 | 45 | .76 | 3 | 2 | 2 |
| Congo, Republic of | 6 | 55 | 68 | 60 | 28 | 2.14 | 3 | 2 | 2 |
| Côte d'Ivoire | 6 | 32 | 55 | 33 | 48 | .69 | 3 | - | 3 |
| Ethiopia | 6 | 18 | 25 | 12 | 36 | .33 | 3 | 4 | 4 |
| Equatorial Guinea | 5 | n/a | n/a | 43 | 48 | .90 | 3 | 4 | - |
| Guinea-Bissau | 6 | 12 | 21 | 24 | 40 | 60 | 3 | - | 3 |
| Kenya | 8 | 57 | 69 | 57 | 58 | .98 | 3 | 1 | 1 |
| Madagascar | 5 | 35 | 33 | 26 | 26 | 1.00 | 3 | 1 | 1 |

Table 2: Sub-Saharan African countries, grouped by primary completion rates

(continued on next page)

| 1 | 2 | | 3 | 3 | | 4 | 5 | 6 | 7 |
|--------------------------------------|-------|-----|-----|-----|----------------------------|--------------|--------------------------|------------------------------------|-----------------------|
| | | 19 | 90 | | recent ar ³³ | F/M ratio | WB "track" for UPC | WB "track" for gender equity | Revised ³⁴ |
| Countries seriously off track (3) | Grade | F | м | F | м | | | | |
| Mali | 6 | 9 | 14 | 18 | 29 | .62 | 2 | 3 | 3 |
| Niger | 6 | 13 | 23 | 15 | 23 | .65 | 3 | 3 | 3 |
| Rwanda | 6 | 35* | 33* | 27 | 30 | .90 | 3 | 1 | 1 |
| Senegal | 6 | 35 | 56 | 34 | 48 | .71 | 3 | 3 | 3 |
| Sierra Leone | 7 | n/a | N/a | 30 | 36 | .83 | 3 | - | 2 |
| Sudan | 8 | n/a | N/a | 33 | 38 | .87 | 3 | 2 | 1 |
| Zambia | 7 | 84 | 110 | 75 | 90 | .83 | - | | |
| No data | | | | | | | | | |
| Liberia | 6 | n/a | N/a | n/a | n/a | - | - | - | 3 |
| Seychelles | 6 | n/a | N/a | n/a | n/a | - | - | 1 | |
| Somalia | 8 | n/a | N/a | n/a | n/a | - | - | - | |

Table 2 (continued)

* World Bank staff estimate, World Bank Data Base.

Ranking not available.

Notes on some other primary and secondary indicators

There are a number of other indicators that have been used to monitor girls' progress.

Primary gross enrollment

Though other education indicators such as gross or net enrollment are poorly correlated with primary school completion (World Bank, 2002c), they are examined as part of this study simply because they represent the most currently and widely available data and, as illustrated in Table 2, have been used by various commentators as the basis for identifying countries meeting both UPC goals and THE Millennium Development goal of gender equity (World Bank, 2002c; Abu-Ghaida and Klasen, 2002; Knowles et al., 2002, among others).

Worldwide primary gross enrollment ratEs for girls rose by more than three percentage points in the 1990s, a rise largely attributable to improved trends in developing countries. The gender parity index (GPI) went from 0.86

to 0.92, while the figure for Sub-Saharan Africa rose from 0.79 to 0.89 (UNESCO, 2002b)³⁷. Gross enrollment ratEs show the gender gap has actually narrowed in most cases, though this is partly attributable to the decline in boys' enrollment rates in many African countries (Colclough, 1999). Ghana is the only Central or West African country that does not have a gender gap. Gender disparities are especially high in Chad, the Central African Republic, Ethiopia, Guinea-Bissau, Niger and Benin, where the gap is as much as thirty percentage points. Some countries with the largest disparities are beginning to show an improvement, including Guinea, Benin, Chad, The Gambia and Mali.

Primary repetition

In over half of all African countries, more than one in ten students repeat at least one grade of primary school (UNESCO, 2002a). Even among countries "on track" to achieve UPC by 2115, two have high percentages of repeaters among students enrolled in school, namely one

| Table 3: Apparent Intake Rates by | Gender, Sub-Saharan Africa 200 |) (or nearest date) |
|------------------------------------------|---------------------------------|---------------------|
| Tuble of Apparent Intalle Hatee B | donaol, oub ounaran / intoa 200 | 101 11041000 4400/ |

| Country | Female | Male | GPI (F/M) |
|-----------------------------------|----------|------|-----------|
| Countries that have achieved UPC | | | |
| Botswana | 109 | 110 | .99 |
| Cape Verde | 143 | 145 | .99 |
| Mauritius | 98 | 97 | 1.01 |
| South Africa | 125 | 127 | .98 |
| Zimbabwe | 124 | 127 | .98 |
| Countries on track (1) | | | |
| Gabon | 138 | 140 | .99 |
| The Gambia | 90 | 96 | .94 |
| Malawi | 182 | 178 | 1.02 |
| Namibia | 118 | 114 | .86 |
| Swaziland | 104 | 109 | .95 |
| Togo | 89 | 103 | .86 |
| Uganda | 223 | 227 | .98 |
| Countries not on track (2) | | | |
| Benin | 49 | 103 | .48 |
| Eritrea | 56 | 70 | .80 |
| Ghana | 78 | 83 | .94 |
| Guinea | 69 | 81 | .85 |
| Lesotho | 91 | 89 | 1.02 |
| Malawi | 182 | 178 | 1.02 |
| Mauritania | 89 | 95 | .95 |
| Mozambique | 94 | 109 | .87 |
| Nigeria | - | _ | - |
| São Tomé and Principe | - | - | - |
| Tanzania | 84 | 89 | .94 |
| Countries seriously off track (3) | | | |
| Angola | 57 | 66 | .87 |
| Burkina Faso | 39 | 54 | .72 |
| Burundi | 64 | 78 | .82 |
| Cameroon | 114 | 132 | .86 |
| Central African Republic | 32 | 43 | .74 |
| Chad | 69 | 96 | .72 |
| Comoros | 66 | 78 | .85 |
| Congo, Democratic Republic | 49 | 46 | 1.07 |
| Congo, Republic of | 68 | 76 | .89 |
| Cote d'Ivoire | 65 | 80 | .81 |
| Ethiopia | 81 | 111 | .73 |
| Equatorial Guinea | - | - | — |
| Guinea-Bissau | - | _ | - |
| Kenya | _ | _ | - |
| Madagascar | 101 | 105 | .96 |
| Mali | 42 | 56 | .75 |
| Niger | 37 | 54 | .69 |
| Rwanda | 120 | 186 | .65 |
| Senegal | 79 | 81 | .98 |
| Sierra Leone | <u>.</u> | - | _ |
| Sudan | 60 | 68 | .88 |
| Zambia | 91 | 90 | 1.01 |

Table 4: Survival to grade 6, Sub-Saharan Africa, 2000 (or nearest date)

| Country | Female | Male | GPI (F/M) |
|-----------------------------------|--------|---------|-----------|
| Countries that have achieved UPC | | | |
| Botswana | 90 | 83 | 1.09 |
| Cape Verde | - | - | - |
| Mauritius | 97 | 97 | 1 |
| South Africa | 73 | 71 | 1.03 |
| Zimbabwe | 81 | 78 | 1.04 |
| Countries on track (1) | | | |
| Gabon | - | - | - |
| The Gambia | - | - | - |
| Malawi | - | - | - |
| Namibia | 81 | 76 | 1.07 |
| Swaziland | 82 | 71 | 1.15 |
| Togo | 42 | 55 | .76 |
| Uganda+ | - | - | - |
| Countries not on track (2) | | | |
| Benin | 40 | 56 | .71 |
| Eritrea | - | - | - |
| Ghana | - | - | - |
| Guinea | 67 | 74 | .91 |
| Lesotho | 70 | 53 | 1.32 |
| Mauritania | - | - | - |
| Mozambique | 36 | 42 | .86 |
| Nigeria | - | - | - |
| São Tomé and Principe | - | - | - |
| Tanzania | 75 | 75 | 1 |
| Countries seriously off track (3) | 75 | 75 | · |
| Angola | - | | |
| Burkina Faso | 63 | 60 | 1.05 |
| Burundi | 48 | 49 | .98 |
| Cameroon | 97 | 95 | 1.02 |
| Central African Republic | - | - | - |
| Chad | 42 | 51 | .82 |
| Comoros | 42 | JI - | .02 |
| Congo, Democcratic Republic | - | - | - |
| Congo, Republic of | 96 | 96 | 1 |
| Cote d'Ivoire | 87 | 89 | .98 |
| Ethiopia | 07 | 09 | .30 |
| Equatorial Guiinea | - | - | - |
| | - | - | - |
| Guinea Bissau Kanua | - | - | - |
| Kenya | - | - | - |
| Madagascar | - | - | - |
| Mali | 83 | 85 | .98 |
| Niger | 67 | 70 | .96 |
| Rwanda | 30 | 30 | 1 |
| Senegal | 59 | 67 | .88 |
| Sierra Leone | - | - | - |
| Sudan | - | - | - |
| Zambia | 66 | 77 | .86 |

in four students in the case of Togo and one in three students in the case of Gabon. Overall, boys repeat more than girls. Girl repeaters are almost invariably found in Central and West African countries, with the greatest likelihood of finding girl repeaters in French-speaking countries (UNESCO, 2002a; Mingat and Suchat, 2000). In recent years, however, female repetition rates have declined in a few countries, with rates for Mali and Togo, for example, down by over ten percentage points. Norepetition policies affect girls more than boys, because female student performance is often inferior to that of male students, as discussed in the following section.

Achievement

Any discussion of gender differences in achievement in Africa must first be put in a larger context. The few standard assessments available paint a discouraging picture. A SACMEQ (Southern African Consortium for Monitoring Educational Quality) study of five countries, for example, while showing no significant differences between boys' and girls' reading scores, nonetheless shows generally low levels overall (correct answers in reading achievement fell between 38 and 58 percent). Other studies show poor performance compared with other regions (Verspoor, Mattimore and Watt, 2001; INEADE, 1997; Saito, 1998).

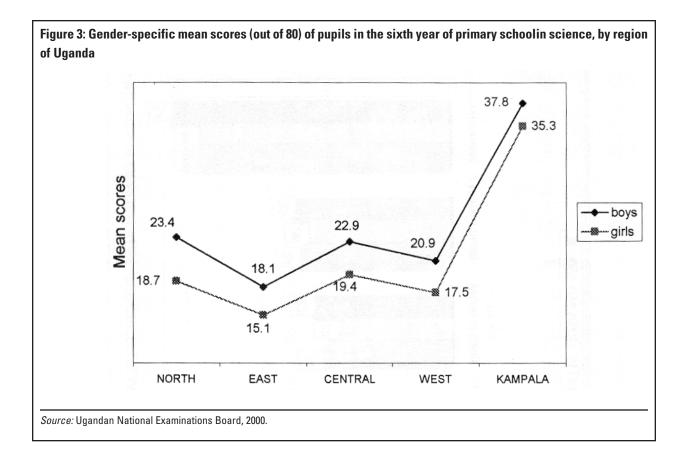
While evidence from a variety of international studies suggests that, with the exception of mathematics and science,³⁸ girls in industrialized countries perform as well as if not better than boys, this is not true in the case of developing countries, despite research showing that there are no cognitive or attitudinal bases that would support this.³⁹ Reading results for 64 countries show a gender advantage for girls in industrialized countries at the primary level which is absent in low-income countries. None of the 10 countries with the best female/male achievement ratios are low-income countries, while 9 of the 10 countries with the worst female/male achievement ratios are, in fact, low-income countries.⁴⁰

Available results from Monitoring Learning and Achievement (MLA) examinations in ten Sub-Saharan African countries favor girls in only one country, namely Botswana. Results from Programme d'analyse des systemes des pays de la CONFEM (PASEC) for literacy and math, available only for Cameroon and Cote d'Ivoire, favor boys, while SACMEQ results from only two of seven countries (Mauritius and Zimbabwe) favor girls, and not by a significant margin.

Results from Uganda (1999) reflect common gender and rural–urban differences in Sub-Saharan Africa, where girls outperform boys at lower levels, but the pattern reverses itself at upper levels. Girls generally do better on literacy-related tasks, while boys do better at mathematics and science, and urban children outperform rural children. Figure 3 shows the pattern for science scores at grade level 6.

Boys got significantly higher scores in mathematics at both testing points, namely grades 3 and 6, although only a third of all students were considered to be performing "adequately." Boys also scored higher in social studies.

These results reflect findings from earlier analyses. A study in Malawi, for example, showed that, except for minor differences in certain years, boys did better in all subjects on primary school leaving examinations. Later, in secondary school, girls fell significantly behind in mathematics and science scores (Kadzamira, 1987 and 1988). Similar results have been documented for Zambia (Kelly, 1991) and, more recently, Kenya (Appleton, 1995), India (Lockheed, 1997), Tanzania (Mensch and Lloyd, 1997), and a host of other countries. Poor performance on these examinations means that fewer girls go on to secondary school. In some countries such as Malawi and Zambia, the problem is so severe that, from time to time, entry requirements for girls at secondary school level have been relaxed or places specifically reserved for them. More recently, Malawi has waived secondary school fees for girls who complete primary school without repetition.



Secondary enrollment and repetition

Based on limited data (see UNESCO, 2002a), secondary gross enrollment seems to have increased in most countries, with the exception of a handful of Sub-Saharan African countries—Cameroon, the Democratic Republic of the Congo, Madagascar, Niger and Zimbabwe.

Table 5 shows gender-specific median gross enrollment rates (GERs) for all regions. Again, values for Sub-Saharan Africa are strikingly low. At the individual country level, absolute gender gaps in enrollment are smaller than at the primary level only because fewer boys and girls are in school. However, gender parity indices have fallen and girls are doing worse. More "seriously off-track" countries are showing worse figures for girls' repetition.

Botswana is a noteworthy (and "reversed") exception, with an 80% GER for girls and 73% for boys. On the other hand, Togo, Benin, Guinea, Chad, Cote d'Ivoire, The Gambia,

Guinea Bissau, The Democratic Republic of Congo, and Liberia all have gender gaps of over 10. Togo is at the high end, at 28. Some countries have managed to reduce their gender gaps at the secondary level. Sub-Saharan African countries in this category include Niger, The Gambia, Comoros, Kenya and Rwanda.

Again, males repeat more than females at the secondary level, except in Sub-Saharan Africa.

| Table 5: Secondary | gross enrollment rates, median |
|---------------------------|--------------------------------|
| values | |

| Region | Females | Males |
|-----------------------------------|---------|-------|
| Sub-Saharan Africa Arab States | 18 | 26 |
| | 67 | 69 |
| Latin America/Caribbean | 73 | 69 |
| Asia/Oceania | 74 | 69 |

Source: UNESCO, 2002a.

* * *

What can we learn from these various sets of indicators? The World Bank's Annual Review of Development Effectiveness concludes that, for the 60% of low-income countries for which data are available, only 25% are likely to attain the MDG of gender parity in primary and secondary education, compared with 60% and 78% of middle and upper-income countries, respectively. In general, gender gaps in enrollment at the primary level have widened in most low-income countries. Chesterfield et al. (2001), for example, examining twenty-four "low [primary] access" countries, concluded that while, on the average, the gender gap has increased in these countries by 1.7%, in twelve countries, ten of which are in Sub-Saharan Africa,⁴¹ gaps between male and female primary gross enrollment were actually larger in the late 1990's than in 1970. Filmer's 1999 analysis of primary school-age children 6-11 and secondary school-age children 12-14, using Demographic and Health Survey data from 41 countries, is still a good summary of the situation. In some countries, namely Benin, the Central African Republic and Cote d'Ivoire, the male-female gap in enrollment is over 10 percentage points, even in the lower, primary age group. In others, such as Burkina Faso, Mali, Niger and Senegal, for example, where the absolute gap is somewhat smaller, the ratio (girls' percentage divided by boys') is poor. Among slightly older children aged 12-14, in general, any earlier gender gaps only got worse. Benin, the Central African Republic, Chad and Togo all have gender gaps of over 20 percentage points (1999).

Can these indicators be used to draw broader conclusions at the country level, such as whether the problem is supply or demand driven, is systemic vs. gender-specific, is an educational or cross-sectoral issue, is generic to education as a phenomenon or a culturally or locally-specific issue, can be traced to policy or practice, etc.? Certainly, they can help paint part of the picture, but other kinds of quantitative and qualitative research are also needed. And, as the author has argued elsewhere, (Salmen and Kane, forthcoming; Kane, 1995), dyadic polarizations are not particularly helpful in understanding and diagnosing real-life complexities,⁴² and often lead to yet another mechanical "checklist," when what is really needed is specific local analysis. Gender gaps, for example, may be aggravated by high costs owing to inadequate national budgets, combined with a parental belief that available resources should go, in the case of girls, to investing in their marriageability rather than in their formal education. Gender abuse can arise from poor teacher selection, preparation and supervision-the problem may be systemic, with consequences across the board, but one of the effects is gender specific.

A system in which many children do not participate at all, perform poorly or are unable to make use of their education (even if, as is usually the case, girls are more affected than boys) clearly has systemic problems that will not be corrected by gender-specific measures. However, indicators can offer some clues, and certain recent national research studies on wealth, gender, and rural-urban variables may help diagnose problem areas and evaluate possible solutions more effectively. (See, for example, Blacken and Bhanu, 1999; Canagarajah and Coulombe, 1997; Filmer, 1999; Filmer and Pritchett, 1998; and Ilahi, 2001.) If poor older rural boys are attending poor quality schools while wealthy younger urban girls are not attending good quality single-sex schools, it is likely that the issues affecting girls are gender specific rather than systemic. Unfortunately, variables are generally not so clear-cut, but the companion computer tool for this study, Designing for Success: Better Programs for Girls' Education, provides methods for designing "thought experiments" to narrow down or eliminate possible causes, and Aoki et al. (2001) provide a flow chart for assessing the larger system to pinpoint problem areas. However, in general, this study takes the approach that many "gender" issues are successfully addressed when systems work effectively and, when they do not (as is currently the case with most systems), takes the boy child and his needs and characteristics as the "generic student" for whom the system is constructed.

Benefits

While there are valuable investment opportunities for public funds, investing in female education to reduce the existing gender gaps is one of the most worthwhile investments available to governments (Abu Ghaida and Klasen, 2002).

Evidence of the development benefits of female education is "so persuasive," according to a World Bank study, that "new, econometric studies of the impacts...on development are probably worthwhile only in extraordinary circumstances" (World Bank, 2002b).

What is this persuasive evidence? Most international development efforts have viewed education as a way of reducing poverty, and most of the arguments in favor of girls' education are based on the fact that it affects the well-being of others, i.e., national productivity, population reduction, and the welfare of households and children. It is also, of course, a basic human right contributing to the wellbeing and empowerment of the woman herself.

Girls' education promotes economic growth, reduces child mortality and malnutrition, brings improved health to women and those they care for, delays the age of first marriage, lowers fertility and heightens women's political participation. An interesting discovery from recent research on girls' enrollment/attainment is that, even when researchers have defined these benefits in different ways, their findings have held true across many studies (Abu-Ghaida and Klasen, 2002). Also, each of these benefits could be achieved by another intervention, but only girls' education achieves them all (Population Council, 2001).

Let's take a look at some of the evidence.

Country benefits

According to Dollar and Gatti (1999), "gender inequality in education is bad for economic growth." More specifically, countries that do not meet the Millennium Development Goal on gender equality in primary and secondary education "will have to face considerable costs in terms of foregone economic growth," as well as compromising other important development goals. Countries will begin seeing these costs by 2005, but they will only continue to increase (Abu-Ghaida and Klasen, 2002). These findings are supported by a number of other studies, including Engendering Development (World Bank, 2001b), a World Bank analysis that looks at models for over 100 countries and controls for other major growth factors. Despite frequent claims in the advocacy literature that girls' education has important impacts on economic growth, these and other studies (Barro and Lee, 1994; Barro and Sala-i-Martin, 1995; Hill and King, 1995; Lorgelly and Owen, 1999; Klasen, 1999; Knowles et al., 2002) are among the few that actually examine the empirical evidence.

Research shows that countries that underinvest in girls' education grow more slowly. Discriminating against girls is not an efficient economic choice, and Klasen (2002) has found that the impact of gender inequality on economic growth is even greater in Africa than in other regions. What does this mean in real terms? Abu Ghaida and Klasen (2002) look at data for various countries that are not on track to achieve the Millennium Goal of educational equality—that is countries slightly off-track, off-track and seriously off-track, or in categories 2–4. They find that countries in categories 3 and 4 get the most benefit from achieving the goal. For example, if countries in categories 3 and 4 had met the goal in 1995, they would have grown 0.1–0.3 percentage points faster between 1995 and 2005. The effects are "significantly" greater between 2005 and 2015, averaging around 0.4 percentage points per year.⁴³ Research by Knowles et al. (2002) suggests an even larger impact.

Thus, translating this into an interregional comparison, one way for Sub-Saharan African countries to have increased their per capita income over the last forty years would have been to reduce their gender gaps. If countries in Sub-Saharan Africa and other high-gap regions had had East Asia's gender gap in 1960 and had then proceeded to reduce it at the same rate as the East Asian region over the period between 1960 and 1992, their per capita income would have grown by an additional one-half to nearly one percentage point each year, nearly doubling their actual growth by 1992 (Klasen, 1999). Within Africa, this is also reflected in a comparison of two countries, Lesotho and Ghana, the first with a longstanding gender disparity in favor of girls, and the second with a 14-point gender disparity in 1990. The research shows that, controlling for other factors, as much as 1.3-1.6 percentage points of annual growth in per capita income can be accounted for by this gender gap in education (Klasen, 1999).

Gender equality in education and growth in income are correlated. But in what direction? Or are both caused by something else? The widely debated research on this is rather complex, involving different variables and techniques. However, studies by Klasen (1999), Dollar and Gatti (1999) and Blackden and Bhanu (1999) show, variously, that gender equality in education has a significant impact on income growth and that increases in girls' participation and higher levels of gender equality in secondary education are associated with higher income in middle and upper-income countries.⁴⁴

Blackden and Bhanu, looking at data for 1960, concluded, "...the male-female ratio of growth in total years of schooling has a positive and significant coefficient. This suggests that educational expansion that increases female education faster than male education (without commensurate declines in male education) is associated with higher growth" (1999). They also concluded that the direction of causality runs from gender gaps in education to economic growth, not the other way around. Perhaps even more intriguing was King and Hill's 1993 finding that gender gaps also have an effect, that countries with larger female-male gender gaps at the primary or secondary school level have levels of gross national product (GNP) that are approximately 25% lower.

Blackden and Bhanu (1999) also suggest that educational expansion that increases female education faster than male education is associated with higher growth. In addition, since higher rates of return to education are associated with lower levels of education, investing in girls' education produces higher marginal returns to girls' education (Alderman et al., 1995; World Bank, 2001b).

To reap the growth benefits described above, and indeed perhaps to surpass them, a country must extend women's access to all levels of education and all sectors of the economy. A 1999 study in India by Ravallion and Datt (cited in World Bank, 2000c) showed that growth has an impact on poverty in countries with a higher level and more equitable distribution of education and higher literacy, but little effect in countries with lower levels and a more inequitable distribution of education.

Country benefits go beyond the economic realm. Bardhan and Klasen (1999) and Abu-Ghaida and Klasen (2002) have pointed out that societies with the same average achievement as other societies but smaller gender gaps in education have higher levels of "aggregate well-being." Also, eventually, the gains associated with higher levels of education for boys will be smaller than the losses engendered by the lower levels of education for girls. The quality of human capital and education suffer as higher levels of boys' education sweep boys of lesser ability into the system, while girls of higher ability are excluded. Therefore, as remarked by Abu-Ghaida and Klasen (2002), "the average innate ability of those who get educated is lower." They estimate that, in areas such as Sub-Saharan Africa where gender inequality is high, this effect alone could depress per capita growth by some 0.3 percentage points. In a related argument, Knowles et al. (2002) showed that, when male and female human capital are taken as imperfect substitutes, diminishing returns on higher levels of male education will also lower the average level of human capital. These selection effects have been well-documented elsewhere. (See Hill and King, 1995; Alderman et al., 1995; and Alderman et al., 1996.)

Progress toward gender parity has other benefits as well. Barro (1999), studying over a hundred countries between 1960 and 1996, found primary schooling and a smaller gender gap in primary attainment associated with a higher propensity for democracy.

In the end, however, some societies *choose* different forms of gender inequality for cultural, religious or political reasons. The government, the public or both will "invest" in it, whether they can "afford" to or not, as in the case of Saudi Arabia or Pakistan. All the research shows that they pay a high cost for this choice, particularly research on girls' education.

Individual/family benefits

In terms of the individual benefits of education, the most important is the contribution made by education to a woman's well-being from an intellectual, social, economic, reproductive and political standpoint. Research by Levine et al. in Nepal and Venezuela (2001) shows that a woman with six years of schooling, even poor quality schooling, retains permanent basic reading skills into adulthood, though not necessarily at the highest grade level completed, and that this, in turn, predicts certain aspects of her adult behavior. She learns an "academic register" which, the authors argue, is the official language of all bureaucracies, including schools. Using this academic language may lead to greater utilization of health services, as well as other beneficial outcomes. Other research described below shows other results of this basic retention of skills.

Economic

Women with at least some education are more likely to be employed in the wage economy and earn higher incomes, with their wages rising by ten to twenty percent with each year of schooling completed (Population Council, 2001). As family contributors, educated women make better farmers. Studies showing a discrepancy between the efficiency of male and female farmers attribute differences to fewer inputs and lower levels of education. A study in Kenya showed that an improvement in female educational levels putting them on par with those of males could improve yields by as much as 22 percent (Quisumbling, 1996). Therefore, saving on girls' education has a short-term effect, because those with less education will be less productive as the use of new technology becomes increasingly widespread. Families with a mix of different sources of income are better able to withstand economic shocks. In farm families, having a wage earner provides a buffer, and in rapidly evolving economies requiring the embracing of new technologies, education is essential to function effectively as part of the wage labor force (World Bank 2001b; Foster and Rosenzweig, 1995, 1996).

Moreover, as the economy becomes more wage-based, more households will rely on or include wage labor as part of their strategy. For example, one member will continue to run the farm, while other adult members work outside the home. "In this case, preferences or market failures that hinder girls' education can mean passing up higher-return investments in human capital, with a significant effect on growth" (World Bank, 2001b). Also, since some degree of wage discrimination is virtually universal, educated females may have a better chance of participating in the formal economy if employers invest in "cheaper" female-intensive labor.

Families also benefit because women pass on more resources to their children than do men. *Engendering Development* notes that "...increases in the relative resources controlled by women generally translate into a larger share of household resources going to family welfare, and especially to expenditures on children—even after controlling for per capita income and demographic characteristics of the household" (World Bank, 2001b:158).

Reproductive

Girls' education has two types of impacts on fertility. Research has repeatedly shown that educated women have a lower desired and actual family size, are more likely to use contraception and have wider-spaced births (see Subbarao and Raney, 1995; Schultz, 1994, 1997; Dollar and Gatti, 1999; Klasen, 1999; Abu-Ghaida and Klasen, 2002, World Bank, 2002i; among others). Studies show that the wife's education has a much stronger effect on fertility than does the husband's (World Bank, 1993a; UNICEF, 2003). Educated women have greater domestic bargaining power and knowledge and their opportunity costs are higher, which impacts on fertility rates (Schultz, 1993; Sen, 1999).

Generally, each year of schooling leads to a reduction in both fertility and maternal deaths and the fertility rate of women without any education is actually 60% higher than that of women who attended secondary school. Abu Ghaida and Klasen (2002) show that achieving the Millennium goal of educational equality would reduce the number of births per woman by 0.1–0.4 children per woman in 2005 and by up to 0.6 children per woman by 2015, with this effect strongest in category 4 or seriously off-track countries. Failure to meet the Millennium goal will result in 0.1–0.6 more children per woman by the year 2015.

Girls' education also has an impact on demographic transition from high to low fertility, as represented by their mothers' fertility. It has been argued that the spread of "mass formal schooling"45 has been an important determinant of fertility change. A recent examination of seventeen countries in Sub-Saharan Africa showed that the availability of mass schooling, particularly for girls, has led to a 17% decline in their mothers' fertility, as measured by fertility declines from the 1960s to the present and the percentage of married currently using contraception. women Research in Pakistan supports this finding. Exceptions to this trend are found, on the one hand, in Cote d'Ivoire and Senegal, which show signs of fertility transition despite limited progress in mass schooling and, on the other hand, in Cameroon, Tanzania and Zambia,⁴⁶ which have fairly high levels of mass schooling, but whose fertility rates have not declined as one would have expected (Lloyd et al., 1999). Subsequent research on twelve communities in Pakistan's Punjab and Northwest Frontier Provinces adds the following finding. Sathar et al. (2000a, b) found that gender equity in education, as measured by the number of public primary schools for girls in the community, or by the ratio of the number of girls' schools to boys' schools, had a statistically significant effect on the probability of a woman expressing a desire to stop bearing children and that the primary reason for her choice was to be able to invest more in her daughters' education. Thus, investing in education for all and attention to survival has consequences for fertility beyond the impact of improvements in educational persistence at the individual level. Conversely, fertility declines proceed more slowly in countries that have yet to achieve mass schooling and gender equity in education.

Child mortality

Numerous claims have been made about the impact of female education on child mortality. A UNICEF report, for example, claims that "a 10% increase in the girls' primary enrollment rate can be expected to lower infant mortality by 4.1 deaths per 1000 live births," and the same rise in girls' secondary enrollment would reduce mortality by 5.6 per 1000 (UNICEF 1999, 2003). Abu-Ghaida and Klasen (2002) found that an additional year of female education lowered the child mortality rate by 18.1 per 1000 in 1990 and that increasing the ratio of female to male educational attainment by ten percentage points would reduce under-five mortality by 14.2 per 1000. They provide a dramatic example of this. If Mali were to meet the goal for educational equality for 2005, this would reduce child mortality by up to 14 children per 1000. The figure for India would be 3 per 1000. This would save 35,000 children a year in Mali and 435,000 in India. On the other hand, failing to meet the goal for 2005 would mean an increase in child mortality of up to 32 deaths per 1000.

The relationship between mother's education, child mortality and national growth is complex, and recent research suggests that the real relationship is between a mother's education and her participation in health programs and choice of health interventions, such as immunization. This is particularly true of Sub-Saharan Africa (Desai, 1998). Mother's education is also the most important factor in protecting children against malnutrition (Smith and Haddad, 2000). Reaching the Millennium goal for gender parity would reduce malnutrition rates in many countries by several percentage points by 2005 and by even more in subsequent years, especially in category 4 or seriously off-track countries (Abu Ghaida and Klasen, 2002).

Education

At the international level, in countries with large gender disparities in education, educated women have a greater impact on girls' enrollment than on that of boys. However, this relationship is not consistent. Mother's education had a greater effect on boys than girls in Benin, Burkina Faso, Cote d'Ivoire, Kenya, Mali, Morocco, and Zambia. In certain places, the fact that mothers have relatively low levels of education could also play a role. Fathers' education rarely affects their children's education. There are certain exceptions, as in Benin, Cote d'Ivoire and Madagascar, which show a positive correlation between fathers' education and enrollment rates for boys (Filmer, 1999). Literate mothers also have another educational effect. One study showed that, on average, children of literate mothers study two hours more a day (Berhman et al., 1999).

Status and empowerment

Any intervention that helps a woman develop and expand her personal and intellectual resources and improve her potential for participation in society, in the economy and in the family is a source of empowerment. Educating girls does all these things.

Still, this is a rewarding area for further research, because until we know more about what is needed for "empowerment," it will be difficult to attain. There is no readily available "hard" data on indicators of empowerment for countries where girls' education still has the farthest to go, most of which are concentrated in Sub-Saharan Africa. For example, of the thirty-six countries categorized by The Human Development Report 2002 as having indicators of "low human development," twenty-eight are in Sub-Saharan Africa.47 In relation to girls' education, on the whole, these countries have the lowest female net primary enrollment rates. Owing to a lack of data on the various indicators making up the Gender Empowerment Measure or GEM (mainly, the percentage of total official political and management positions, the percentage of technical and professional workers and the income ratio), none of the thirty-six countries are ranked on this indicator. However, these same countries are at the very bottom of the rankings for the Gender-Related Development Index (life expectancy, literacy, estimated earned income), although this reflects a generally low human development index. The Gambia, for example, is the only country that ranks higher for the Human Development Index than for the Gender-Related Development Index.

Even without such data, it is important not to lose sight of the fact that, though the benefits of educating girls are enormous, education alone is not the only way to address women's poverty or empowerment issues. A World Bank study pointed out the error of this assumption. Increasing human capital has a positive effect on income only if there are increased economic opportunities for the poor, and if distortions that affect women's market access and potential for selfemployment are also addressed (Thomas et al., 2000; World Bank, 2002a). Unfortunately, even though the ratio of female to male wages is improving, it is still below parity, even in industrialized countries, and even though women account for one-third of the world's labor force, they earn less than one-fifth of the world's wages.

This finding reinforces some much earlier cross-cultural research. For example, in a study of the status of women relative to that of men in 93 cultures, White (1980) showed that there is no unitary concept of the status of women. In fact, looking at 52 variables drawn from a wide range of hypotheses on women's status found in the literature, there appears to be no key variable or combination of variables that predict women's status in relation to the others—they vary independently. Although his research deals with pre-industrial societies, he concluded that there is little about modern nation-states that would lead us to expect any different results from a contemporary crosscountry survey. A number of studies of contemporary societies show that gains in one variable do not lead to or are not necessarily caused by gains in another. "There is no crucial aspect of the status or role of women such that an improvement there will have a favorable impact on many other aspects as well" (1980).

Challenges

What are the barriers to achieving these benefits?

There are many studies on the barriers and constraints to girls' education. These are reviewed in an early study by King and Hill (1993) and a more recent one by Rugh (2000). The current study includes a long list of such obstacles, but concentrates on those for which there are recent studies that add to the picture because, as Rugh rightly points out, "most data on causes of non-participation are notoriously soft and unreliable." On the other hand, she also notes that relying solely on "hard" data leaves us with little more than what is already obvious or well-known, namely that poor girls and girls from other less privileged groups are at a great disadvantage.

Macrodevelopment issues, national policy and legislation, institutional factors, sociocultural factors and local community/household issues all have implications for girls' education. They can be categorized as driven by inadequate supply/demand, as systemic versus girlspecific, or in any number of other ways. Tools for narrowing down causes and focusing in on issues that specifically affect girls can be found in *Designing for Success: Better Programs for Girls' Education*, the companion computer tool for this study.

Some of the macrodevelopment, country and institutional issues affecting primary school completion can be extrapolated from recent studies looking at factors common to countries that are not on track or seriously off track for this indicator. Low-income countries in the Sub-Saharan Africa region with inadequate spending on education, high unit costs, unduly high teacher salaries and poor efficiency have lower primary school coverage and usually do worse by their girls than their boys. In such cases, girls are not staying away simply because their textbooks are not gender-sensitive, or because teachers pay more attention to boys, although these may be the ultimate barriers for some girls. The analysis here assumes that macro factors affecting nations, institutional systems and boys have already been taken into account and that factors specific to girls are now being examined (World Bank, 2003c; Bruns and Mingat, 2002).

One of the major considerations is the cost of funding UPC and girls' education interventions. For the 47 countries included in its 2002 simulation study, the World Bank estimated that the achievement of 100% completion rates for the final grade of primary school by 2015 would require \$6.3 billion in domestic resource mobilization and \$2.5 billion in external funding per year.⁴⁸ The projected gap between domestic funding and total expenditures by 2015 is \$4.5 billion. However, the UNESCO EFA Global Monitoring Report (2002b) cautions that, while the Bank's study data and methodology

are strongest, "all recent studies on the costs of achieving primary school for all by 2015 appear to have understated the real situation." Although the Bank's cost estimates are the highest of the studies surveyed,49 the UNESCO report puts the resource gap in 2015 at \$9.9 billion, compared with the Bank's \$4.5 billion, and development aid costs at \$4.2 billion, rather than \$2.5 billion, with the possibility of such costs reaching as much as \$5.6 million to meet the educational needs of the poorest countries in emergency situations. The fact that, whatever the cost may prove to be, the Bank expects 85% of external funding to go to Sub-Saharan Africa and 40% to go to a mere five countries, four of which are in the Sub-Saharan African region, is particularly relevant to this study⁵⁰ (UNESCO: 2002b).

Even more relevant to this study are the "additional" costs engendered by girls' education. UNESCO (2002b) estimates that effective incentive programs to attract girls/children from poorer households could add at least 5% to the average unit costs of primary education. For the 47 countries in the World Bank's simulation study (2002c), this would mean an extra \$1.3 billion in public spending by 2015, adding \$0.4–0.6 billion to average annual expenditures. Table 6 illustrates what this

| Country | Column 1 Intended recipients of subsidy | Column 2 School children receiving incentive (as % total enrollment) | Column 3 Proposed size of subsidy per beneficiary (in \$PPP) | Column 4 Increase in primary unit cost (as %) |
|-------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------|
| Ethiopia Ghana | Rural girls in disadvantaged areas Rural girls from disadvantaged | 20% | \$100 | 10% |
| | backgrounds | 15% | \$ 61 | 5% |
| Guinea | Rural girls | 13% | \$ 31 | 2% |
| Mali | Rural girls | 2% | \$ 35 | 1% |
| Senegal | Rural children, particularly girls | 2% | \$ 44 | 0.6% |
| Zambia | Rural girls (sanitary protection) | 8% | \$ 32 | 4% |

Table 6: Effect of incentive programs on unit costs for six African countries

Column 1 describes the intended recipients of the subsidy; column 2 gives the percentage of total enrollment represented by this group in the base year (in each case, in the mid to late 1990s). Column 3 shows the proposed size of the subsidy (in purchasing power parity dollars) for each recipient, and column 4 shows the percentage increase in the base-year average weighted unit cost of the proposed incentive programme assuming the reported level of coverage [column 2] and base-year enrollment levels. *Source:* UNESCO, 2002b.

would mean for some proposed incentive programs in six African countries.

Obviously, social disparities within the population also have an impact. Recent research in twenty African countries (Mingat, 2003) shows that the impact of disparities in income and residence (rural versus urban) on GER, access to first year of schooling, retention rates between the first and last years of the education cycle and completion rates is actually greater than the impact of gender differences. Being poor, being from a rural area and being a girl is a disadvantage for participation in education. However, as the study notes, the interplay of these factors is complex, and not simply incremental. Gender has less impact in well-off urban groups, but can have a considerable impact in poor rural areas, where the fragility of the situation, both economically and culturally, is such that almost any obstacle is going to have a greater impact on girls' participation.

When indicators of social disparity based on income, location and gender are applied to Sub-Saharan Africa, they reveal large disparities at both the regional and the country level. Francophone countries, for example, have higher levels of disparity, with Burkina Faso showing the highest level of disparity (Mingat, 2003). There are also disparities within countries, as in the case of rural-urban differences. Research in Mali and Niger shows that, while their capital cities have net enrollment rates of 80-90%, certain rural regions have rates below 20%. Rural poverty is often more deeply entrenched and more pervasive, with two variables intersecting to produce conditions such as those prevailing in Zambia, where nearly half of all rural children suffer from malnutrition and half live more than 10 kilometers away from school (Watson, 2000).

Countries with poor educational coverage (that is, poorer performance on the educational indicators mentioned above) and high levels of disparity face an especially daunting task in endeavoring to attain the Millennium goals for universal primary completion and gender parity.

In addition to region, wealth, rural/urban residence and gender, culture also has a special effect on participation in education, as a component of the construction of gender. The least fortunate potential scholar is likely to be a poor rural Central or West African girl with brothers, whose family needs her labor and whose culture or religion places limitations on her future role and regards intellectual and physical protection as a way of ensuring her continued dependence and submission. This is a heavy burden for a child to bear, and a burden that prevents many girls from going to school. Rarely are their parents unfeeling or neglectful. In most cases, they have assessed the situation and concluded, as did this man:

I've worked all my life for my family in the best way that I could. I want my children to have a better life. If my sons get a little more education, they can do better than I do. They will know more, make better choices, and be able to represent themselves better. My daughters I would die for-who would not? Look at them. I want a better life for them, too, to have a good husband, a healthy family. A job? Of course. Who wouldn't want their child to have a good job? To be the first woman President-if she wanted it, I would be proud, prouder even than of my sons. But there are no jobs here for boys or girls. I want my daughters to be happy. Good skills so she can earn something, good training so she can care for her children, and a good husband. Maybe the order is backward but you know what I am saying. (A father of three girls and two boys in rural Eritrea) (Kane, 1996)

The following section takes a closer look at some of these challenges.

Culture

The single largest household factor in preventing girls from fully participating in education is poverty which, when combined with cultural and even legal factors, as it usually is, creates a particularly intractable situation that requires wide-ranging cross-sectoral interventions. The role of culture is often misunderstood, and is the first factor explored in this section.

Culture affects girls' education in two ways, first, as a source of ideas about the educational process and, secondly, as a set of ideas and practices about the rights and responsibilities of women. All of this can have either positive or negative impacts on improving girls' participation in education.

First, culture is the medium in which the educational process is embedded-drawing on traditional philosophical approaches to knowledge, taking heed of what constitutes a good education in a particular country or region, shaping teaching practice through an understanding of how knowledge is gleaned and of who has a responsibility to participate in teaching and learning, shaping the curriculum by determining what knowledge is relevant and what cognitive and behavioral skills should be inculcated in students. However, most professional educational practice is based on western cultural input. Many developing countries have, at best, a locally adapted version of a western system rather than an education system founded on local cultural insights. Indeed, in many educators' minds, even the words "local," "traditional," "indigenous," etc. have come to represent barriers to be overcome, rather than sources of educational strength.

Second, culture creates an ideational system that defines the roles of the sexes. "Culture" per se is rarely an obstacle to girls' education. Most parents want children of both sexes to lead successful, productive lives. However, the combination of poverty and of the failure of institutional supports is always interpreted within a cultural framework, both in the North and in the South, and, in all parts of the world, tends to work more against girls than against boys.

This mix is particularly potent in Sub-Saharan Africa (except in a narrow band cutting through central Africa and inhabited by population groups who have had or still have a matrilineal society, as in parts of Ghana), which is affected by a combination of factors, often upheld by law. Market failures (such as the need to draw on children as a source of future social security), combined with exogamy, in which women must marry into a different village, patrilocal residence, in which women reside with their husbands' families, patrilineal descent, in which the family "line" passes only through males and, last but not least, patrilineal inheritance, all have an impact. There is a common saying in Eritrean villages to the effect that "it is better to bring up the son of a dog than the son of a daughter," reflecting the fact that a girl's "line" is lost to the family. And

When girls are married, they tend to forget their parents—at that time, she would want the husband to become king rather than even the closest relative. So if you have to make a choice, send boys to school. (Men in a Gambian village) (DeBrun,1995)

There is considerable legal discrimination against women in most African countries. Kenyan and Tanzanian women, for example, do not inherit property in cases where there are male heirs. Since land ownership is often the basis for business activity and collateral for loans, the ability of women to help themselves and their children can be severely limited. Even where women have *de jure* rights, customary law and breakdowns in the administrative and/or judicial system can discourage them from invoking such rights. In Ethiopia, for example, although women are assured an equal share of common household property, the husband has the legal right to make all decisions concerning such property, and this is upheld by traditional beliefs (World Bank, 2000; 2003b).

The combination of all these factors makes it more likely for males to be regarded as the mainstay of a family's economic well-being, even when, as in the case of Africa, women are responsible for most subsistence production. Families conclude that a boy's future economic security, as well as that of the parents in their old age, lies in maximizing his chances of securing a paying job, which is a scarce commodity, while that of a girl lies in protecting her marriageability through cultural safeguards. The combination of a shortage of employment opportunities for girls finishing school, discriminatory labor laws that guarantee poor outcomes for women who do work and a lack of female role models ensures that this assessment is, in fact, correct.

The marriageability of females is a concern that is not restricted solely to developing countries, but when combined with concerns over the economic, religious and cultural well-being of the family and of the female herself, can be vet another powerful force in education. In many societies, schooling for girls beyond, perhaps, the most basic level, is considered both expensive and risky. The thinking is that girls will "lose their culture" and their amenability. They may question parental decisions and, later on, the decisions of their spouses. Their behavior may damage the family honor and jeopardize, not only their own marriageability, but also that of other women in the family. "What do we want for our daughters?" Village women in Eritrea reflected on this when guestioned by female researchers, who were also former soldiers. "Well, we don't want them to be like you" (Kane 1996). These issues are extensively covered in the literature, in studies of parental concerns over negative influences on girls' behavior (Anderson-Leavitt et al., 1994) and Sanou's 1995 study of the "women's" place in rural Burkina Faso.

Initiation ceremonies and female genital cutting (FGC) prepare girls for their roles as adult women and wives. Two million girls a year are subjected to FGC, mainly in Africa. New research suggests that, while the frequently cited negative physical, sexual and reproductive effects of FGC may not be well-founded, the higher presence of herpes simplex virus 2 in females who have undergone the procedure could pose a greater risk of HIV infection (Morison et al., 2001). Whatever the outcome of this evolving research on the health implications of FGC, it is clear that girls often see themselves as adults after undergoing initiation ceremonies, whatever their form, and choose to leave school. Participatory research in The Gambia and Kenya, for example, showed that girls were dissuaded from returning to school after initiation ceremonies because they had lost considerable school time helping with domestic preparations (for their own, and also for boys' ceremonies), that monies that might have been available for schooling were used to cover the considerable costs involved in what was considered a major social event, and that girls felt they were now too "grown up" to go back to being schoolgirls (Kane and DeBrun, 1993; Thomas, 2002).

However, marriageability is not the only issue. As recent history shows, there is a "hidden" concern about girls' education related to the fact that, in times of rapid, unsettling change, women in many cultures are seen as the symbolic core of the "true" culture, and some people fear that education could threaten their ability or desire to fulfill this role. This point cannot be overemphasized and takes on increasing importance in newly emerging nations and nations reasserting their political or religious identity. For example, women have worked side by side with men in many revolutionary movements, but when the goals of the movement are met, they often find themselves in more culturally conservative and restricted roles than before, legally, socially, and even expressively, in terms of dress, while their male colleagues go on to represent the new nation, drawing at will on both western and "traditional" culture. Iran, Afghanistan, Eritrea and many other countries are all examples of this phenomenon to some degree.

Finally, in countries with scarce resources and serious political instability, males are more likely to have greater access to desired goods, services or facilities than females, in order to maintain law and order. A shift in this pattern can be politically costly, even in stable societies. For example, a substantial increase in women's wages is something which is possible with a relatively small loss in male wages, resulting in expanded output, but since this means a restructuring of the labor force, male to female and vice versa, is highly unlikely (Tzannatos [1999], guoted in World Bank, 2001b). A study of attitudes in 40 countries over the period 1990–1993 showed that while, in virtually all countries, more men than women agreed with the statement "when jobs are scarce, men have more right to a job than women," the main difference was in the size of the gap in men's and women's views, which was small in the case of Iceland, Finland, Spain, Chile and Ireland and large in the case of China and Bulgaria (World Bank [2001b], based on data in Inglehart, Basanez and Moreno, 1998).

Culture, gender disparities and education

Successful approaches to girls' education are likely to be culture-specific, not only to ensure the practical success of a given project, but also because western notions of status are not necessarily the "gold standard" to which other regions need aspire. Although it is true that gender disparities tend to be higher in lowincome countries and, within countries, among the poor rather than the more affluent (Dollar 1999; World Bank 2001b), White's research on the status of women in 93 cultures showed that "more developed" countries do not necessarily have the higher ground. Women and girls in less complex societies tend to have higher status than men in the same group on a range of variables.⁵¹ Less complex societies have simpler political, economic, technological and social systems. More complex societies have used that complexity to control resources and maximize production, in the process, engendering major inequalities affecting all kinds of groups, including females (White 1980).

Since, in one form or another, gender inequities are universal, people may wonder whether their pervasiveness makes them a "natural" phenomenon and whether attempting to redress them is simply "swimming upstream." What is universal, however, is the existence of disparities in status, rather than specific inequalities, making it clear that they are not "intrinsic." The rights, privileges and responsibilities associated with status and privilege differ in content from one society to another, and any one "good" can mean different things in different contexts.⁵² Gender inequality is still always a choice, rather than an outcome of nature.

Recent studies in Ethiopia and Guinea by the Institute of Development Studies at the University of Sussex and the Forum for African Women Educationalists offer a microcosmic summary of the cultural barriers found in most countries. They show that, although poverty is associated with under-enrollment of children at both the nationwide and the household levels, "the gendered outcomes of such under-enrollment are more a product of adverse cultural practice than of poverty itself." Early marriage, initiation ceremonies, fears for girls' safety, gendered divisions of household labor and the belief that investing in women's education has lower economic returns owing to limited employment opportunities for women, the loss of a woman's contribution to the natal household upon her marriage and a belief that females are less intelligent all contribute to these "gendered outcomes," where poverty creates rationed enrollment opportunities. Hence the conclusion that culturally gendered practices are so pervasive as to require policy intervention, and that economic development alone will not lead to gender equity in schooling (Colclough et al., 1998; Rose, Yoseph et al., 1997; Tembon, Diallo et al., 1997; Mlama and Colclough, 1999).

When considering the impact of culture on gender and education, it is important not to reinvent anthropology which, in turn, does not close its eyes to other factors such as economics. Learning that most of the coed Rural Girls' "Fellowship" schools in Balochistan have become single-sex Community Support Schools, it would be easy to conclude that cultural factors were behind this change. However, while culture has played a pivotal role in the history of Balochistan education, Alderman, Kim and Orazem (2002) show that, in this case, cost had at least as much to do with the outcome. Cultural factors are often invoked as a murky residual category when all other explanations seem to fail but, like other variables such as political or economic factors, they can be studied and factored into the program development process.

Does culture change? If culture is defined as an ideational system that shapes a group's responses to its environment, it is clear that survival depends on change, as new challenges are encountered However, engineered or directed change can be quite complex, often because programs put together too hastily are based on a limited understanding of the context and dynamics of a particular situation. Since the 1960s, the anthropological literature has documented the outcomes of countless poorly-conceived interventions, some tragic, some hilarious and some merely costly but harmless. Many specific girls' education programs have been sensitive to context and dynamics, and it is clear from a variety of large-scale interventions in the areas of education, health and HIV/AIDS that policy can have an impact on culture. In Uganda, for example, the abolition of fees has brought large numbers of girls into school, and schooling is now regarded as a normal part of a girl's life experience. In Bangladesh, the commitment of two female prime ministers to girls' education has had a major impact on the acceptability of girls' education. Projects can contribute to policy change, as in the case of Senegal, where a TOSTAN program led a number of Bambara villages close to the Senegalese border to abandon the practice of FGC, which were soon followed by other villages in Senegal's southern region. In fact, the government of Senegal has recently banned the practice of FGC nationwide (International Literacy Explorer Report, 1999).

On the other hand, crafting a "policy" without necessary supports, such as sensitization campaigns and administrative support, may not produce the desired effect, as was the case in the abolition of the pregnancy barrier in schools in Malawi, for example (Malawi, 1998), or in the mandating of culturally-unacceptable coeducation in lowland Eritrea (Kane, 1996).

Finally, sometimes "policy" has yet to catch up with "culture." For example, a Balochistan policy based on the belief that parents would not allow girls to attend school with boys was re-shaped once it became clear that, in the absence of girls' schools, parents were indeed sending their girls to boys' schools, creating an expansion in educational opportunities for girls (see Box 7, page 107).

Poverty

Direct, indirect and opportunity costs

In most developing countries, there are three investment partners in public education: governments and donors on the one hand; and on the other, and often overlooked, families. Families' share of total expenditures on primary education is generally somewhere between one third, as in the case of Kenya, and one half, as in the case of Zambia and Tanzania (Bray, 1996), but which are often overlooked. Families invest directly in education through school fees, levies, unofficial "fees" such as those that appear to have accompanied Malawi's abolition of school fees (Al-Samarrai and Zaman, 2002) and community contributions, textbooks, supplies and uniforms and, indirectly, through a variety of costs such as transportation, food, clothing, special tutoring, etc. Some also forego the opportunity costs of children's non-market and market labor. Ignoring these indirect and opportunity costs seriously overestimates private returns to schooling, something that parents have realized for a long time, and underestimates the contributions that they must make.

Mingat (2003) has pointed out that the characteristics and needs of the last remaining children who never attend or fail to complete school in the Twenty-First Century may differ from those of children whose needs have been successfully met by existing strategies. Particularly important is the finding that the disparity between richer and poorer children in terms of educational participation is greater than disparities between urban and rural children, or between boy and girls, although these, too, are considerable. One of the characteristics of these hardest to reach children, especially girls, is the greater burden they bear in terms of opportunity costs. In the case of girls, such costs include the cost of the loss of their domestic services and production, as well as their market labor, including helping their mothers with beveragemaking, sales and other business activities. In a study in Sindh, cited by Watkins (2000), approximately 40% of parents of out-of-school girls aged 10-18 cited the need for their work at home. Only 8% cited costs as the main factor. The figures were reversed in the case of boys. It may well be that, for the last remaining out-of-school girls and poorer children, we will need to better identify and address the different types of costs incurred in connection with their schooling. (More information is also needed on how many children are working at home as a result of being out of school, for whatever reason, rather than the reverse.)

However, recent experience suggests that direct costs alone are a formidable obstacle for

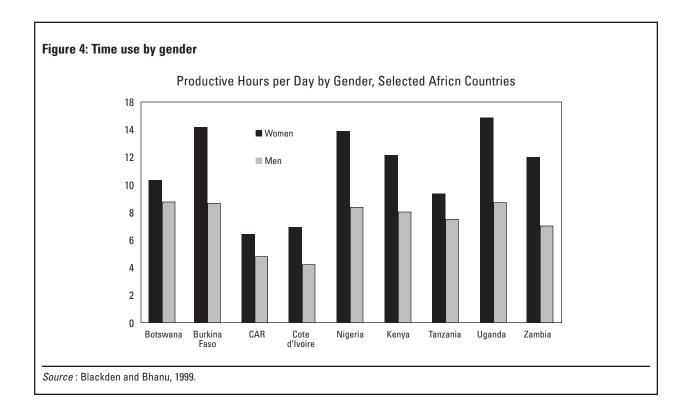
many poor parents. The dramatic jump in enrollments in Uganda and Malawi in the wake of the abolition of school fees suggests that this is the case for many parents, as does the success of scholarship and other fee-reduction programs. Other examples, such as the fact that poor parents in Lahore transferred their children to private schools that were less expensive than public schools (Watkins, 2000), reinforce this point. Thus, addressing direct costs could bring a whole new wave of children into school.

Clearly, wherever the costs lie, education is more expensive for the poor than for the rich. It consumes a larger share of their per capita income, and the opportunity costs of education are higher for this group.53 For example, research in Tanzania, which bears out research in Vietnam and Indonesia, shows that, though poor families spend less than wealthy families on their children's education, it costs them more in proportion to their income. In 1993, Tanzania's wealthiest urban households spent ten times as much on primary schooling as the poorest rural households, but poor households spent a much larger percentage of their per capita income on education. Considering both direct and indirect costs, poor Tanzanian households spend one fifth of their income to send one child to school. The difference is even more dramatic at the secondary school level, where education costs account for 21% of total per capita expenditures by families in the wealthiest quintile, compared with 81% for children from the poorest quintile (Mason and Khandker, 1996; Watkins 2000).

It often costs families more to send a girl to school than a boy, because of the contributions made by girls to productive household activities. Kenyan research clearly illustrates the dilemma faced by parents of school-age children: 47 % of the rural population and 27% of the urban population are living below the poverty line and, yet, are expected to bear close to 60% of the cost of primary education, forcing them to choose among their children (Ackers, Migoli and Nzomo, 2001). It also shows us what they do. In a survey dating back to the mid-1990s, 58% of respondents said they would choose to take their daughters out of school, while only 27% said they would choose to withdraw their sons from school (World Bank, 1995a). This same finding is borne out by research by Chesterfield and Martinez-Enge (2001) on the impact of economic crises on girls' education. (The pattern does not invariably hold true, however. Other studies in Sub-Saharan Africa show that, while boys may be the first to be enrolled in school, in times of economic crisis, when waged employment is available, they may also be the first to be withdrawn. (Colclough et al., 1998).

Girls' and boys' labor

Girls in Africa and, in fact, in almost every region of the world work more than boys, regardless of whether they are in school and of whether adult women are present and working in the household. This has implications, not only for costs, but also for dropout and repetition rates, performance and achievement. In one province in Zambia, for example, Blackden and Bhanu (1999), citing a study by Allen (1988), show that the average girl spends four times more time than boys on directly productive work and, what is even more striking, "more time on productive work than any group of adult men." They conclude, "the time girls spend on this activity boys spend in school." Outside of school, as concluded by Whiting and Edwards (1988), "to state the situation in the baldest terms, girls work while boys play." Earlier studies by Acharya and Bennett in Nepal (1981), Davison and Kanyuka (1990), Davison et al. in Ethiopia (1994), Kane and DeBrun in The Gambia (1993) and Kane in Eritrea (1996) found similarly disproportionate and long work hours among girls. Moreover, poorer girls work more than wealthier girls. A study in rural Java in the early 1990s showed that poor girls work, on average, 94 hours a month, while girls from the wealthiest households work 26 hours a month (Palmer 1991).



To understand the role of girls in household production, it is important to understand women's work. Though there are many accounts of women's and girls' daily chores in the literature, officially, their non-wage work has been poorly documented. In Kenya, for example, an estimated 60% of women's work is not represented in the National Accounts (SNA). What we do know is that, almost everywhere in the developing world, women work longer hours than men, and girls work longer hours than boys. Women in Kenya and Uganda, for example, work between 50% and 75% more hours than men. Women in Cameroon work about twice as many hours as men. Figure 4 breaks down the time spent working in selected Sub-Saharan African countries by gender.

Though there are some regional variations, particularly in the Sahel, women are indisputably the farmers of Africa. This is clearly illustrated by the data presented in Table 7 for Uganda, with its clear-cut division of labor by gender. In addition, virtually all home-based workers (in non-domestic enterprises) in Africa, as well as around the world, are women.

This has special relevance for girls because of the disproportionate participation of girls in adult women's work, as opposed to boys' participation in men's work. This can be explained by the general "substitutability" of women's work, the clear gender divide and the expectation that girls' future work will require the skills they are learning in helping with household chores and production. Work in the formal sector, clearly associated with men, is less "substitutable," as is heavy labor, with boys less likely than men to do either. What does this mean in practical terms?

While traditional women's work can be highly skilled work, most women can and must be able to substitute their work for that of other women at various points in the family cycle and in times of household crises, such as pregnancy, birth, sickness, death, economic change, etc.⁵⁴ Girls are taught to do most types of women's work at a relatively early age, both in the household and in domestic production.⁵⁵ Cross-cultural research by Whiting and Edwards (1988) showed that girls also actually start work at an earlier age than boys and that girls under the age of eleven, rather than older girls, are the preferred caretakers of young children.

This clear divide in terms of work hours and control over agricultural productive resources and inputs has serious economic impacts at the household and country level, but girls are doubly affected. Low household income affects girls' education more than that of boys, and it is girls who are primarily engaged in doing farm work, thereby limiting their opportunities for schooling and perpetuating the vicious cycle of poor economic performance and low levels of education.

| | | | Gender intensity | of production* |
|----------------|--------------|------------------|------------------|----------------|
| | Share of GDP | Share of exports | Female | Male |
| Sector | % | % | % | % |
| Agriculture | 49.0 | 9 | 75 | 25 |
| Industry | 14.3 | 1 | 15 | 85 |
| Services | 36.6 | _ | 32 | 68 |
| Totals/Average | 100.0 | 100.0 | 50.6 | 49.4 |

Table 7: Gender shares of production and intensity of work, by sector, Uganda

*female and male shares of employment

Source: Blackden and Bhanu, 1999

Girls are more likely than boys to get only a primary education. Although, paradoxically, this is one of the reasons for the higher marginal returns to girls' education, since educational returns are higher at lower levels of education (Alderman et al., 1995), it has other consequences for parents. Opportunity costs of education at the primary school level are high, between two and a half and three times the value of average direct expenditures on primary education, and are higher for girls, owing to their longer work hours, since the time lost to schooling is greater, thereby reducing returns for parents to girls' education. Research shows that opportunity costs represent a smaller share of education costs at the secondary level, but are still higher for girls-80% for girls versus 50% for boys. Looking at the combined costs of education, for the poorest families, direct, indirect and opportunity costs of primary education would be equal to one-third of their per capita expenditure and one and a half times their per capita expenditure at the secondary level. In contrast, for the wealthiest families, they are equivalent to a mere 30%. Not only opportunity costs, but direct and indirect costs as well, may also vary as a function of gender. It can cost more to send girls to school in absolute terms as well. In Tanzania, for example, it costs 14% more to send a girl to primary school with transportation costs and the cost of appropriate school clothes (Mason and Khandker, 1996; Mingat, 1999).

But while girls can be more "expensive" to educate, small boosts in household income have more important implications for girls' enrollment than for that of boys. Research in India shows that a one percent increase in per capita household income raises the probability of boys' enrollment in middle school by a negligible amount (1 percentage point), compared with 4 percentage points in the case of girls. In Malaysia, the same boost in household income increases the probability of school attendance by girls by 18–20 percentage points, compared with 5–6 percentage points in the case of boys (World Bank, 2001b).

What makes this so difficult to address is the absence of a consistent relationship between household wealth and child labor, as demonstrated by the 1997 Canagarajah and Coulombe study in Ghana, which found only a weak association between these variables and that economically insecure non-poor households continued to draw on child labor. Here again, girls' household labor is not counted, nor is labor in family enterprises or farming, all of which are more likely to involve girls' work.

The allocation of girls' time is more affected by changes in the household than that of boys. Ilahi found that, in Peru, the use of girls' time is more sensitive that that of boys to changes in household poverty, to the presence and employment of adult females and to sickness in the household (Ilahi 2001: 4).

This kind of finding is worth examining on a larger scale because of its implications for girls as the HIV/AIDS crisis continues to escalate. As of the beginning of 2002, 40 million people world-wide were infected with HIV/AIDS. Eighty-two percent of infected women live in Africa. In some parts of Sub-Saharan Africa, the rate is as high as one in four among women. In some African countries, infection rates for teenage girls are as much as five times higher than for boys. And, though infection rates are even higher in the 15+ age group, rates for pre- and primary school-age children can also be astonishingly high. In Uganda, for example, an estimated 18% of children aged 0-15 are infected with HIV/AIDS (UNAIDS, 2003).

In some of the most seriously affected countries such as Malawi and Zambia, an estimated one third of all children have lost one or both parents (Watkins 2000). In addition to the greater likelihood of being infected, girls are also more likely than boys to feel the indirect impacts of such tragedies, missing or leaving school in order to care for sick parents and siblings, even at the primary level (Chesterfield and Enge, 2000; UNAIDS 2000). Girls can also be affected by boys' opportunities. Even with declines in family size, girls may be given additional responsibilities to make up for the absence of boys while they continue their education.

Wealth and location

An urban or well-off child in Africa has a much greater chance of being in school than a poorer or rural child, but a combination of rural residence, low family income and female gender will almost guarantee that the child is not in school. Being a poor girl in Africa usually has radically different consequences than being a rich boy, or even a rich girl, and gender disparities are relatively large throughout Central and West Africa, even for girls who are well-off. A good rule of thumb in relation to gender, wealth and school participation in Africa is that, while being a boy sometimes mitigates the effects of poverty; being a girl doesn't. Indeed, even rich girls can be at a disadvantage, as in the case of Cote d'Ivoire, where 91% of rich boys complete primary school, compared with only 66% of rich girls. Rural residence only serves to compound the problem. Thus, the completion rate for rural boys in Cote d'Ivoire is 48%, compared with a rate of 17% for rural girls (Filmer, 1999).

In Benin in the mid 1990s, for example, there was a gap of over 24 percentage points between the primary school enrollment rate for the richest girls aged 6-14 and the richest boys (Filmer, 1999). Moreover, 60% of wealthy boys aged 15-19 completed grade 5, compared with a mere 2.5% of poor girls. The figures for completion of grade 1 were nearly as striking, namely 90% of rich boys versus 11% of poor girls. These same disparities were also found at the secondary level, in both absolute and relative terms, with a male-female gap of over 20 percentage points in Benin, the Central African Republic, Chad and Togo (Filmer, 1999). As Klasen (1999) points out, given similar patterns of innate ability, inequality leads to the education of boys of lesser ability and the noneducation of girls of greater ability. In terms of human capital, this lowers the average ability of those who receive an education. When this is compounded by social class, wealth and rural–urban inequalities, the implications are even greater.

Research described earlier on page 61 (Mingat, 2003) shows that, in a twenty-country study, wealth gaps are greater than gender gaps in terms of school participation. Countries such as Madagascar, Rwanda, Tanzania and Zambia have larger wealth gaps than gender gaps. Furthermore, being a boy does not always mitigate the effects of poverty—four of the six largest rich–poor gaps are in Sub-Saharan Africa, in Morocco, Benin, Mali and Burkina Faso—but it does have an effect in Mozambique where, if a child is poor, it helps to be a boy (Filmer, 1999).

Institutional factors

Official barriers

Institutional barriers often have a greater effect on girls than on boys. Age barriers at entry are more likely to affect girls in places where distance to school prevents them from enrolling until they are older and can safely travel. Starting school later can have an even bigger effect on a girl, who then leaves school early because she has reached puberty or initiation age, or is considered marriageable. Research in lowland Eritrea showed that boys and girls often started school at eight or nine years of age because of dangers on the long trip to school. However, girls were taken out of school at ten or eleven because they were considered to be of marriageable age and had to be secluded from men and boys and taught the domestic skills they would soon need to contribute to their new households (Kane 1996). When governments bar over-age children from registering for school, it can affect a certain number of boys, such as the older shepherd boys in Lesotho whose presence caused tension among younger classmates, but it is usually girls who are more likely to be affected.

Some barriers affect only girls. Pregnant girls and mothers are often prohibited from attending school. Malawi is one of the few countries in Africa where girls are readmitted to school after giving birth and where the father of the child, if attending school, is required to withdraw for the same period of time. However, even when a pregnancy barrier is abolished, this information may not be clearly conveyed throughout the system, as happened in Malawi, or communities may continue to adhere to their own cultural norms preventing these girls from attending school, as in the case of The Gambia (Malawi, 1998; Doolan, Kane and DeBrun, 1994).

School quality

In contrast to the current situation in most other regions, investment in education in Sub-Saharan Africa continues to focus on expanding enrollments rather than on higher per student spending, and the pupil-teacher ratio, which had been declining, is now up to 40 pupils per teacher (UNESCO, 2002b). Input indicators and system process indicators such as grade repetition and dropout are useful proxies for a vital element of educational quality, namely learning outcomes. With the participation of more Sub-Saharan African countries, the increasingly available information provided by measurements such as standardized international surveys of learning is probably even more useful.

Even when boys and girls attend school for the same number of years, their experiences may be very different. Girls are thought to be more sensitive to school quality than boys, and teacher quality affects demand for girls' schooling more than that of boys (Khandker, 1996; Lloyd, Mensch and Clark, 1998). Research in India suggests that poor quality causes the poor to leave school more quickly than wealthier children, perhaps because the poor see primary education as an end in itself and they can use their children's time more productively, whereas wealthier households see primary education as an interim goal and, if necessary, can afford better quality alternatives. If these findings are true for poor children generally, they are even more pertinent in the case of girls (Filmer and Pritchett, 1998). Research in Kenya showed that girls are more likely than boys to drop out of school in the case of negative attitudes and discrimination (Mensch and Lloyd, 1998; Lloyd, Mensch and Clark, 1998). Unlike boys, their achievement is also poorer when teachers think they are naturally less capable, which is also the case when parents themselves hold their daughters' abilities in lower estimation. In such cases, girls perform worse on exams than do girls whose parents do not share the same view (Appleton, 1995).

It also appears that parents are more sensitive to how well girls do in school. Studies in Pakistan's Northwest Frontier Province found that girls' advancement through school may be more sensitive to parental perceptions of performance. Parents respond more positively to merit-based promotion in the case of girls. When girls are promoted on the basis of their academic achievement, they are 70 to 90% more likely to stay in school, while boys in the same situation are only 50% more likely to continue their education (King, Orazem and Paterno, 1999).

An analysis of 26 World Bank-funded projects affecting the quality of primary education showed that, while project inputs included an array of elements known to affect educational outcomes, they were rarely integrated into schools, and process factors in schools, such as the teaching–learning process, school environment, etc. were rarely addressed (World Bank, 2003). Since quality is shown by certain research findings to have more of an effect on girls and since other research suggests that certain improvements in quality can be made at a relatively low cost (Aoki et al., 2001), a review of quality-targeted interventions is certainly warranted.

Instructional materials can also have negative impacts, perpetuating gender stereotypes about behavior, roles and occupations. Educational research has shown that girls' learning can be affected, not only by restrictive portrayals of girls and women in school textbooks, but also by the use of examples, problems, etc. relevant to the lives of boys but much less so to those of girls. The Commonwealth Secretariat, concerned over the lack of interest by girls in careers in science and technology in many Commonwealth countries, concluded that the problem lies in the way in which mathematics is taught to girls. An analysis of primary school mathematics textbooks in India found them to portray active males engaged in profitable, interesting activities, in many cases, supported by less valued, mundane, female activities (Wolf and Kainja, 1999).

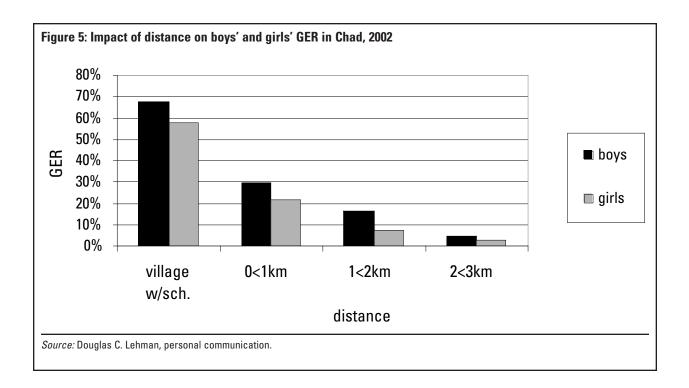
Other studies in developing countries found similar patterns in different subject areas. Males are rarely portrayed doing household chores, while happy women are rarely shown doing anything else (Birckhill, 1999). Males are portrayed as liberators, leaders, heroes, problem solvers and inventors, as rescuing other persons engaged in some form of mischief and as adventuresome and proactive. Girls, on the other hand, are frightened, inept in the use of technology, easily duped or surprised, need to be rescued and shown crying or in distressing situations. Even when they come up with an idea, boys are more likely to put it into practice. Women and girls play a supporting role in men's/boys' activities. In textbooks, they tend to be interrupted more often, both in speaking and in their actions. A 1994 analysis of textbooks in The Gambia exposed all of these stereotypes (DeBrun and Kane, 1994). Educational radio scripts reflect the same stereotypes. Hartenberger and Bosch (1996) found that such scripts not only reflected the stereotypes mentioned above, but that boys also solved problems in an "analytical" way, divided up the work, made final decisions and spoke for the group, while girls were intuitive, acted mainly as helpers and were almost always on the receiving end of actions.

Even when textbooks are rewritten, they may still contain serious biases. A recent analysis of the illustrations in a rewritten second grade textbook in a Central Asian country showed that only two of 35 illustrations portrayed girls, both weeping. Wolf and Kainja (1999) found a similar problem with revised textbooks in Balochistan, which had made few improvements in their portrayal of girls and women. One of the objectives of the Education Sector Project in The Gambia was to eliminate sexual biases from textbooks which, though already rewritten, were still considered to be in need of "further revision."

Repetition is often a reflection of the poor quality of education and, in general, the evidence shows that repetition does not improve learning. In fact, for girls, it often results in their leaving school when parents see that they are not really learning. In some systems, repetition is forbidden, although McGinn and Borden (1995) found that this also led to poor learning. Though not very common in Africa, automatic promotion at the primary school level has been tried in Mali, for example, with some success, where it was combined with other measures such as instruction in the mother tongue, leading to improved performance on exams. Togo's Students' Tutoring for Achievement and Retention (STAR) has also reduced repetition rates.

Distance

Interesting recent research by Lehman suggests that, while there is dramatic evidence from Chad and other Sahelian countries of the impact of distance on school enrollment when children are expected to travel 2–3 kilometers to school, for example, their enrollment is only one-tenth as high as that of children in villages with local schools—there is no visible difference between boys and girls (see Figure 5). In countries where this is the case, it affords an opportunity for an intervention that can



have important benefits for both sexes. However, other research in Cote d'Ivoire, Egypt and Ghana suggests that distance has a negative effect on school enrollment for girls, particularly at the secondary level (Tansel, 1997). In some cases, the combination of distance, fears for girls' safety and girls' workloads gave girls little if any opportunity to attend school. A survey of rural areas of Zambia showed that grueling distances to school caused parents to defer schooling for both sexes, but that girls were then often taken out of school at puberty. According to another study in Eritrea, girls were not only sent later to distant schools, but were taken out of school soon afterwards to marry at age ten or eleven (World Bank, 1995b; Kane, 1996).

In many countries, however, distance to school has a bigger impact on girls than on boys for a variety of reasons. In some places, young girls are not considered to be ready for travel as early as young boys. Older girls may be subject to harassment and, even when the trip is safe, the direct costs may be high and the time lost traveling more costly to girls' work than to that of boys. Accordingly, various studies in China, Ghana, India, Malaysia, Niger, Pakistan, Peru and the Philippines show household demand for girls' education more sensitive to distance to school than in the case of boys (Mingat 1999; Canagarajah and Coulombe, 1997; Lavy, 1996; Gertler and Glewwe, 1992, in World Bank, 2001b, among others).

Gender abuse

Gender abuse of school-aged girls not only causes them to drop out of school owing to pregnancy and early marriage, but can also lead to demoralization and poor performance. "Abuse" covers a wide range of different types of mistreatment, such as harsh punishment, including beatings and verbal abuse, bullying by older male pupils, extra large workloads at home and an unfair allocation of "domestic" tasks at school, teacher favoritism toward boys and gender violence.

Gender violence in schools is a worldwide phenomenon, but some of the most dramatic

current research comes from Sub-Saharan Africa, where it is becoming a serious concern. Recent studies in Ghana, Malawi, Uganda, Namibia, South Africa, Uganda and Zimbabwe, among others, indicate widespread sexual abuse. For example, in a study of 246 reported cases of abuse in Zimbabwe between 1990 and 1997, over 85% involved sexual abuse, almost exclusively by males, 82% of whom were trained teachers. Two-thirds of the cases involved sexual intercourse and rape (Shumba, 2001). In urban Zimbabwe, half of all reported rape cases involved girls under the age of fifteen (World Bank, 2002). Among the causes cited by Zimbabwean girls were older men allowed access to school grounds, school boys forcing girls to have sex, being followed to school by men and teachers touching girls' breasts (Leach and Machakanja, 2001). Other studies show teachers and headmasters forcing girls to have sex. Parents in one particular community in Gambia suggested that "the government should make rape by teachers a crime," when questioned as to how to get more girls to go to school (Kane and DeBrun, 1993). In northwestern Kenya, a headmaster who had been actively involved in a participatory research and action (PLA) program focusing on girls' education withdrew his support as it gradually became clear that multiple rapes on his part were one of the main reasons for girls not completing their education (Kane, 1996). Parental concerns over schoolgirl pregnancies and the humiliation they cause the family contribute to another abuse, namely forced early marriages.

Gender violence is still more common at the upper primary, lower secondary and secondary levels. Research in Zimbabwe on 112 girls at these three levels of the education system shows a peer group culture in which older men and boys prey on young girls, luring them into engaging in sexual activity with money, status symbols and promises of marriage. However, sexual abuse of younger girls is becoming increasingly common. One of the factors associated with and contributing to the spread of HIV/AIDS is the belief that sex with a virgin is a cure.

There are many reasons for gender violence. It may have become an accepted part of the school culture, the authorities may not be enforcing the law and girls themselves may need or want cash and gifts from older males or "sugar daddies." This latter reason may have to do with a desire to gain status among their peers but, more often, girls need money for basic school costs such as fees, books and transportation.

Religion

None of the major world religions has bans against educating girls, though local restrictions on school attendance by girls are often justified by the belief that they do. In a study of 127 countries over four five-year periods through the year 1990, Dollar and Gatti (1999) found that high female attainment at the secondary level is associated with Protestant religions and found a weak association between low attainment and the Muslim and Hindu religions. These findings on religion reflect certain findings by Canagarajah and Coulombe (1997) in their study of child labor and schooling in Ghana, who showed a correlation between religion and both these variables. Compared with animists (who practice traditional local religions), Protestants were 18 times more likely to send their children to school, Catholics were 13% more likely and Muslims were 5% more likely. These findings not only reflect attitudes toward education, but also the related fact that certain religions operate more school facilities than others and, in some cases, are officially or effectively part of the state system, as in the case of Paraguay. On the other hand, the pattern of child labor in Ghana in relation to these groups is reversed, with Protestants least likely to have children working and animists most likely. Research in Eritrea showed rural girls' enrollment statistically associated with religion (communities that were Christian or had a mix of religions) (Kane, 1996).

The difficulty of distinguishing between the theological foundations, historical and political experiences and social accretions (class, income, local interpretation, etc.) of different religions brings a number of confounds into the picture, further complicating the interpretation of these findings. For example, background research for a study by Kane and DeBrun (1993) in The Gambia showed that, in certain communities, Christians were likely to get more education because the low social status of that ethnic group meant they had few other opportunities. Certainly, the subject warrants further research, but issues such as these, combined with its political and cultural sensitivity, will most likely limit the availability of new information.

Crises

Lastly, what is the impact of major crises such as conflicts, economic recessions, epidemics

and HIV/AIDS on girls' education? As noted on page 69, HIV/AIDS has serious consequences for girls' workloads. What effect does this and other crises have on girls' participation in school? Chesterfield et al. (2001), in a detailed analysis, looked at the impact of crises such as economic recessions, internal conflicts and HIV/AIDS on both boys' and girls' education based on education statistics from 89 countries on GER (access), primary school completion to grade 5 (completion), apparent gross intake at first grade level (demand), transition to secondary education (achievement), overall attainment (average primary school completion) and pupil-teacher ratios (quality). They found the severity of economic downturns to have a higher correlation with a decline in girls' enrollment ratios than with that of boys. Data suggest that boys' enrollment may be affected more by internal conflicts than that of girls. HIV/AIDS in Sub-Saharan Africa has had a significant impact on girls' participation in primary education, particularly in terms of access and demand.

What we know and don't know about what works

Common interventions⁵⁸

able 8 shows some common interventions, grouped according to the types of problems they are designed to address. These strategies have been combined in a variety of different ways. It is important to realize that they are not proven "checklists" and that, in some cases, there is very little information on their outcomes and costs.

Looking at these strategies, what do we know about those that have worked? This study drew on four sources of information:

- the *literature* on education, project evaluations and other documents, to learn whether claims of success are well-substantiated.
- *countries* showing visible progress in improving girls' participation in education: What exactly did they do?
- the *experience of practitioners:* strategies which donors, in-country partners, managers and evaluators believe have worked well and whose success can be substantiated, though not clearly documented in the literature (for example, baselines were

not clearly established, or other factors existed that may have had an effect as well). The study also looked at strategies which, according to the same kinds of commentators, have not worked.

• recent *World Bank evaluations* of projects involving a girls' education intervention.

Evidence from the literature

State of the literature

Anyone seriously interested in designing projects addressing problems relating to girls' participation in education might reasonably expect to be able to go to the literature, draw on the lessons and experiences of others, select the most promising and situationally-relevant interventions and build more effective projects. They would have practical questions. Which strategies work for which problems? In what situations have they been shown to work? Were the objectives and outcomes expressed in measurable terms? What was the scope of the project? What were the costs? The World Bank (2002d) has called for "complementary actions by international partners,

| Problem | sible intervention | | | |
|-------------------------------------------------|--------------------------------------------------------------------------------------------|--|--|--|
| Poor access | support positive policies and public expenditure programs | | | |
| | improve data collection and relate to policy | | | |
| | increase number of school places | | | |
| | provide new places | | | |
| | eliminate forms of discrimination restricting girls' attendance | | | |
| | provide access to boys' schools | | | |
| | expand and upgrade religious schools | | | |
| | introduce multiple shifts | | | |
| | introduce feeder and satellite schools | | | |
| | increase the number and improve location planning for rural schools | | | |
| | place schools in culturally-acceptable locations | | | |
| | reduce distance to school | | | |
| | make transportation available | | | |
| | make enrollment more flexible; lower enrollment age | | | |
| | review repetition policies | | | |
| | provide informal or alternative forms of education | | | |
| | make school schedules more flexible | | | |
| | train additional leaders | | | |
| Poor demand | nunvide scholaushing stingade unsite fass | | | |
| high fees uniforms | provide scholarships, stipends; waive fees subsidize uniforms; drop uniform requirement | | | |
| hidden costs | alleviate poverty | | | |
| | factor hidden costs into educational planning | | | |
| | provide school feeding programs | | | |
| | provide school transportation service | | | |
| | subsidize school materials | | | |
| high opportunity costs | improve home technologies | | | |
| | make school schedules more flexible | | | |
| | help improve the division of labor by sex | | | |
| | provide day care | | | |
| | boost adult income | | | |
| | impose enforceable restrictions on child labor | | | |
| | provide alternative forms of education, such as non-formal or alternative programs | | | |
| High social/cultural costs | | | | |
| fears for female safety | reduce distance to school | | | |
| | recruit female teachers | | | |
| | provide dormitories, boundary walls, separate latrines | | | |
| | provide family planning/life education services | | | |
| | reduce hidden costs (and girls' dependence on men and boys for money) | | | |
| | involve parents in school | | | |
| | make use of religious schools | | | |
| concerns about cultural | get parents involved in the school and in curriculum development | | | |
| relevance and utility | make use of religious schools | | | |
| of education | identify culturally-acceptable educated role models | | | |
| | relate schooling to employment needs | | | |

Table 8: Strategies associated with various girls' education problems

to include knowledge generation and dissemination of good practices on EFA: in particular, focus on areas where the knowledge base is weak," including: (i) internationally standardized assessments to track learning outcomes; and (ii) low-cost, high-return policy interventions such as community involvement in school construction, community participation, decentralization, etc.

Currently, however, those interested in implementing programs designed to help girls are often forced to draw whatever lessons they can from incomplete reports or evaluations of poorly described projects, second-hand reviews of the literature or glossy, semi-promotional materials circulated by donor agencies or commercial sub-contractors. (In addition, many such organizations distribute advocacy materials, both printed and online, which are based on studies and reviews which, though groundbreaking at the time, are now at least ten years old.)

What is generally missing from such materials is:

- the social, economic and political context for the project;
- the situation prior to the intervention;
- a precise description of the intervention;
- the extent of its scope, whether local or national;
- its costs;
- its impact, and in the case of multiple strategies, the role played by each strategy in the outcome;
- any confounds affecting its results;
- a sustainability analysis.

These elements are crucial to an understanding of whether a given project might be something to consider for a particular country. There may be very little information on why a project worked or didn't, and on what else must be in place for an intervention to be successful. As a result, projects designed to address specific cultural constraints and opportunities in one country are oftentimes looked at for wholesale adoption in other cultural contexts. However, as observed by Samoff and Sebatane (2001) in another context, "lessons shorn of their context are not lessons at all." In some cases, costs can only be guessed at, sometimes for good reason. Many girls' education programs have been small-scale, carefully tailored operations easily adapted to changing circumstances, and their costs were often diffused and absorbed by other programs. As a result, what some policymakers, managers and educators may want is "science," but what exists, for the most part, is "narrative"—stories circulated and recirculated in the literature, promising projects visited and revisited by touring dignitaries, with not enough real data.

This section takes a look at the primary literature on strategies, i.e., accounts of individual projects, rather than general overviews or reviews. It draws on the Strategies Data Base (Kane and Yoder, 1998),⁵⁷ a tool for designers and practitioners engaged in designing and implementing effective strategies. The data base is an attempt to assemble the main facts on a variety of interventions that have been tried, and, working from the available primary literature (as opposed to literature reviews), to try to understand what worked or didn't work, under what circumstances, and why. What does the available literature tell us, what might we reliably take from it, and where might improvements in reporting be made in the future? Unfortunately, much of the organization-based literature included in the Strategies Data Base is available in theory but not always in practice, which poses serious problems for planners and practitioners wishing to learn from it, but unable to spend weeks searching for information.

Publications and evaluations from sources outside the World Bank

Nearly three thousand references on factors associated with girls' education in both industrialized and developing countries were included in the initial review, of which only 250 focused on strategies (rather than on determinants, for example). Of these, only 52 contained sufficient information to be able to conclude whether or not the strategy had

Box 2: The state of the literature on girls' education

"The major findings of the Strategies Data Base reflect and provide extensive documentation for the statements made by expert commentators in the field of girls' education that there is little empirical evidence on which to judge strategies. We were not looking for scientifically-acceptable experiments, although one document does contain an account of a statistical approximation of a true experiment, (Jimenez and Lockheed, 1989) but we had hoped for enough detailed information to draw reasonable inferences. This is often missing, with the result that there can be little or no incremental development of the field-people who wish to learn from the experience of others have to make educated guesses, a la carte choices from project packages, and conjectures about whether their own environmental circumstances are approximately similar to those in which an intervention was tried."

Source: Kane and Yoder, 1998.

worked. That figure in itself invites some thought.

The data base has not been updated since its completion in 1997. For most of its developmental period, World Bank Staff Appraisal Reports (now known as Project Appraisal Documents or PADs) were not available to the public and, therefore, are not included. However, for purposes of this study, 242 World Bank PADs and ICRs for the period 1997–2002 with a girls' education component were also examined to see what lessons could be drawn and whether they, too, suffered from the same types of limitations as the documents in the data base. These reports were not incorporated into the original data base and are discussed separately here. Clearly, much of the literature is inadequate for purposes of drawing sound lessons. Analysts such as Herz (1991), Tietjen (1991) and Bellew and King (1993) had previously made this same comment. The data base broadened the discussion by illustrating exactly where the deficiencies lie and what information tends to be missing.

In summary, the types of information most likely to be missing from the literature used in the Strategies Data Base were pre-intervention data, cost data, data on sampling methods (in cases where sampling was used), discussions of possible confounds, evidence to support the conclusions drawn and information on the context. Without these types of information, particularly the latter, it is impossible to pass judgment on any strategies, since most interventions figure on both the "successful" and "unsuccessful" lists. Also missing are descriptions of discrete interventions within a package, rather than of the entire package. Admissions of failure are a rarity, and when an intervention fails to work, the literature rarely provides any explanation. Was the strategy inappropriate, or were other factors involved, such as poor design or administration, early cancellation, etc.? Finally, the completion of project reviews can be haphazard-the midterm review may be the last document prepared. Note that "statistical significance" refers to the results of an intervention with regard to access, persistence or achievement in a specific project. Thus, the same intervention can have mixed or no results with regard to the same aim in another project.

However, even with these qualifications, the following facts emerge:

• In general, looking at interventions described as successful, the most common such interventions are alternative programs (i.e., outside the formal school system) that prepare girls to enter the formal system. However, these are large "seamless" packages precluding an evaluation

of individual interventions within the package.

- Access. Of seventy-eight interventions designed to improve access, twenty-three had no reported results. Fifty, in ten projects, were reported as having some type of impact. Interventions with statistically significant results focused on bilingual education and interactive learning, while other interventions reported to be successful focused on the school itself (provision of buildings and programs) and on the community (economic incentives, awareness-building campaigns, local management of schools and the recruitment of female teachers).
- *Retention/attainment/persistence*. Of seventy interventions designed to address retention issues, seventeen provided no results, seven had mixed outcomes and four produced no visible improvements in retention. The most successful were community-based initiatives (incentives, awareness-building, community management), alternative education programs and interventions establishing flexible school schedules.

• Achievement. Sixty-four interventions discussed in the literature were designed to address achievement, of which thirty-one reported successful results. Alternative learning programs, single-sex schools and the supply of textbooks were the most common interventions. Achievement-based scholarships seem to have had a positive impact.

Table 9 is a summary of the results of strategies designed to improve access, persistence or achievement drawn from the Strategies Database.

Most projects (as opposed to studies) are not designed in ways that permit claims of statistically significant outcomes for a variety of reasons. They lack adequate pre-intervention data, clearly specified and measurable objectives and post-intervention data. Table 10 shows some specific projects (only data on USAID projects were available) reporting statistically significant outcomes with respect to access, persistence or achievement.

However, most project reports are missing one or more vital pieces of information. Many (the majority in the Strategies Data Base) do not even provide clear descriptive data on outcomes. To get some idea of the difficulties of

| | Positive results | Mixed results |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Strategies improving access | bilingual educationinteractive learning | |
| Strategies improving persistence | bilingual education scholarships interactive learning local teachers restricted, focused curriculum female teachers | • formal teacher training |
| Strategies improving achievement | scholarships programmed learning single-sex schools* | group work and peer teaching female teachers single-sex classes in co-ed schools* |

 Table 9: Strategies with statistically significant reported findings

| Source | Intervention | Objective | Results |
|------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------|
| Guatemala 85-90 | bilingual education | access/persistence | improved access improved persistence |
| AGES (Guatemala) improved achievement | scholarships | persistence/achievement | • improved persistence |
| NEU (Guatemala) | group work and peer teaching | achievement | • mixed |
| BEST (Guatemala) | interactive learning | access/persistence | improved access improved persistence |
| IEL (Liberia) | programmed learning programmed materials (some outcomes) | achievement achievement | improved achievement some outcomes significant |
| ABEL II (Malawi) | local teachers | access, persistence, achievement | improved persistence |
| | restricted, focused curriculum | • access, persistence, | improved persistence |
| | • female teachers | access, persistence, achievement | improved persistence |
| Pakistan 88-89 | female teachers | achievement | mixed |
| Thailand 89 | single-sex schools | achievement | improved achievement |
| US93 | group work and peer teaching | • achievement | • improved achievement |
| US96 | single-sex classes | achievement | • mixed |

Table 10: Specific USAID projects reporting statistically significant outcomes

drawing conclusions from existing reporting, Appendix II contains detailed summary data on eleven interventions carried out as part of eleven projects. And though eight of the fourteen had objectives expressed in measurable terms, the lack of data on outcomes is discouraging.

Finally, another interesting aspect concerns the standards by which interventions are sometimes evaluated. One international agency, for example, in its final review of a large girls' education program, noted that the program's greatest impact was on increasing girls' primary enrollment, asserting that, for the countries in question, the average annual increase in enrollments during the years of the program was greater than in the years immediately preceding the program. "While the projects may not be entirely responsible for increased female gross enrollment ratios, the consistency of the trends toward greater female enrollment and a reduction of the gender gap in access during the life of the projects, suggests that they make a contribution" (USAID, 2002). No other evidence is offered, and there is no consideration of the fact that governments and other agencies had other contemporaneous programs employing other strategies.

World Bank documents

Two hundred forty-two Project Appraisal Documents (PAD), Implementation Completion Reports (ICR), Country Assistance Strategies (CAS) and other World Bank project and planning documents for the period 1995–2000 were singled out for examination as part of this study. This figure is mentioned because, although the documents were identified by Bank computer searches for "girls' education," the search also produced many documents that had no girls' education component or, in fact, any reference to girls or girls' education at all. It also omitted at least ten (out of 36) projects in Africa alone that did have girls' education components, that fell within the specified time frame, and that were eventually identified using other approaches. A search for "girls' education" on the Bank's website produced sixteen documents, half of which were from either Nigeria or Afghanistan, including two newsletters but no ICRs.

Sub-Saharan African projects with a girls' education component appear to have two major priorities: (i) addressing physical access; and (ii) improving quality. The most common interventions are school construction, awareness-building campaigns, community involvement, gender sensitivity training for educators, teacher training and the provision of female teachers. Far less common are programs addressing direct or opportunity costs and providing alternative forms of education.

The general conclusion drawn from an examination of these documents is that, while they are thorough in meeting the objectives for which they were designed (country/sector analysis, examination of objectives, indicators and assumptions, assessment and rating of a variety of outcomes), they are not useful to managers and other parties trying to assess the relevance and efficacy of strategies because:

- PADs do not contain the kinds of baseline data and details on strategies that permit effective evaluations of individual strategies or packages of strategies;
- Individual strategies to improve girls' participation are almost always part of more complex packages of girls' education interventions, and also of gender-neutral educational strategies. However, this does not invariably preclude an examination of individual strategies. For example, the Yemen Basic Education Expansion Project (2000) includes provisions for locating schools closer to girls' homes, getting community commitment to girls' education as a prerequisite for school construc-

tion, latrines and boundary walls, separate classrooms for girls in grades 7–9 and the building of girls' secondary schools. In most cases, the target groups for these interventions are distinct enough that they could be evaluated in a more specific way than is generally the case and, for certain projects such as this one, control groups could be established for better evaluation lessons.

- The inclusion of a particular intervention in a PAD does not necessarily mean that it was carried out, or that it was carried out as indicated in the PAD. PADs occasionally refer to "tracer studies" and "longitudinal studies" that would be useful in assessing outcomes, but these are often not mentioned in ICRs, and it is difficult to find out whether they have been carried out. One indication that they may not have been carried out is the fact that, when discussing materials used in the preparation of new PADs, lessons from these longitudinal and tracer studies are almost never mentioned, although the results of other studies may be drawn on. In other cases, they are carried out too late to be usefully tested. The Education Development Project in Benin (ICR, 2002), for example, which had intended to pilot promising approaches to girls' education based on a study to establish such factors, did not actually carry out the study until the final year of the project. Four studies for the Bangladesh Non-Formal Education Project (ICR, 2002) were carried out so late in the project that their findings could not be used.
- ICRs rate projects on satisfactory performance, sustainability and degree of impact. Many different factors influence evaluation outcomes, including project design, implementation, factors outside the government and implementing

agency, sustainability, Bank and borrower performance, etc. The efficacy of specific strategies or groups of strategies is usually evaluated in these contexts, and the relationships between objective and impact are not clear-cut. The ICR for the Basic Education II Project in Guatemala, for example, states that one of the lessons learned during the project was that "project design should include a baseline and implementation of a needed sustainable system for monitoring activities to evaluate the impact of the intervention " and, while most ICRs do not specifically state this, it is clear that these elements are often missing from the PAD.

Some ICRs are quite rigorous (or simply skeptical, in some cases) even by "scientific" standards. Pakistan provides some examples of well-thought-out conclusions. The ICR for the Pakistan Middle School Project (2001) is clear about the fact that, despite impressive gains in girls' enrollment, "disentangling the effects of other developments from those of the project would require an assessment of the counterfactual and this has not been possible." On the other hand, an ICR for the Northwest Frontier Province Primary Education Program was able to rule out exogenous factors during a project associated with a 36% increase in girls' enrollment using scholarships as a strategy. The Middle School report concludes that "the effect of the scholarship program on girls' participation cannot be assessed until the winners have completed their studies, become qualified to teach and actually take up positions," a process requiring at least seven years. The Balochistan Primary Education Project ICR, which deemed the project "satisfactory" with respect to all its girls' education components, ruled out factors outside the control of the government and implementing agency when examining project outcomes.

Similar comments can be found in ICRs for Africa. In the Benin Education Development Project (ICR, 2000), for example, although girls' enrollments increased from 36% to 70% during the project period, "this appears to be the result of changing attitudes about the value of girls' education and to grassroots efforts by APEs" (Association des Parents Elèves or Parent Student Associations). Large increases in enrollment rates are also noted in the Chad Basic Education Project ICR (2002), but "these outcomes can be explained by the huge amount of resources concentrated on a small number of schools."

Bank websites on girls' education emphasize advocacy over the kinds of analysis needed by managers for selecting strategies. For example, the Staff Appraisal Report (SAR) for the 1995 Guinean Equity and School Improvement Project states: "Thirty-two per cent is the most stubborn statistic in Guinean education. It represents the percentage of primary school students who are girls and hasn't changed in the last ten years." However, both girls' and boys' enrollment rates shot up between 1999 and 2000. According to the SAR, "girls' rates have increased by an average of 12 percentage points per year over the past decade and are now at about 42%." However, there is little in the website material to help the reader ascertain how this might have been achieved. There are references to a restructuring of the Ministry of Education, improvements in teacher training and personnel programs, increased school construction/rehabilitation and the provision of textbooks. It also mentions: "An Equity Committee was created in the Ministry of Education in 1992 to promote female education and train teachers in gender issues." Since girls' rates rose faster than those of boys, the improvement could be attributable to the largely gender-neutral interventions.

Of course, website materials are dependent on the availability of good project data. If the field of girls' education is to build incrementally on lessons learned, it is clear that agencies and others reporting on outcomes in this field must address the serious documentation problems examined in this section. A number of ways to improve the lessons in the literature are outlined under "Key lessons and recommendations" on page 174.

Evidence from countries

Since the literature offers no clear and easy guidelines, another and perhaps more direct way of drawing lessons is to take a look at what has been working in those countries which have improved their positions in relation to various aspects of girls' participation in education.

In these cases, we know there has been an improvement. What we are trying to ascertain is what interventions may have been associated with the improvement. It is particularly important to look at countries in Africa since, as the statistics show, the region faces some unique challenges. Attempts to replicate programs from another time and place have not always met with success, not only because of cultural differences, but also because the underlying factors in the success of the original program are sometimes lost in the transition. The initial success of Colombia's Escuela Nueva program, for example, was tied to a teacher training program estimated to have cost three times that of training teachers in regular schools (Cortina, 2000.) This same high level of investment was not made in some of the other countries in which different versions of the program were subsequently replicated.

This section looks at two categories of country performance:

• countries that have attained UPC or are predicted to be on track to achieve it.

These countries, from varying baseline situations, have managed to include girls as well as boys in their progress; and

• countries that may not be on track to achieve UPC but that, nevertheless, have made considerable progress in reducing gender disparities in education

Countries on track for EFA (as UPC)

All relevant considerations for improving education systems are generally applicable to girls' education and need to be considered in reviewing different strategies. In discussing the achievement of education for all or universal primary completion by 2015, the World Bank categorizes countries as falling into one of four groups: those who have achieved universal primary completion; those who are "on track" (Group 1); countries "not on track" (Group 2) and "seriously off-track" (Group 3) countries (see Table 1, page 45).

Botswana, Cape Verde, Mauritius, South Africa and Zimbabwe have already achieved universal primary completion. Seven more, namely Gabon, The Gambia, Malawi, Namibia, Swaziland, Togo and Uganda, are on track to achieve it by 2015. Zambia, categorized as "ontrack" in 2002 analyses of World Bank data bases, is now considered "seriously off-track."

How do the "successes" differ from African countries which are "not on track' or "serious-ly off-track"?

The World Bank analysis of countries that have achieved or are on track for UPC shows they all have healthy spending on primary education as a share of GDP, reasonable unit costs, competitive teacher salaries, higher spending on non-salary inputs, pupil-teacher ratios of somewhere around 40 and average repetition rates below ten percent.

"Off-track" countries have a large gap between enrollment and completion rates and are characterized by inadequate spending and excessive repetition.

Box 3: An example of a Group 3 country: Niger

Niger has one of the lowest primary completion rates in the world. Only one child in three is enrolled in school. One child in five completes primary school while, for girls, the rate is one in ten. According to a World Bank analysis, the main cause is the limited supply of education which, in turn, is constrained by comparatively high teacher salaries. Another factor is the low mobilization of tax revenues, despite the large percentage of the total budget allocated to education.

Source: World Bank, 2002c.

In "seriously off-track" countries, fewer than half of all children have access to schooling, and only one in four completes primary school. This group is characterized by low spending, high unit costs driven by extremely high teacher salaries and relatively poor efficiency (World Bank, 2002c, e). Similar results on unit costs in Sub-Saharan Africa were reported by Colclough and al-Samarrai (2000). Countries with a relatively large share of GNP allocated to primary education but with high unit costs are likely to have lower enrollment rates than other countries. On the other hand, SSA countries that have achieved UPC tend to have higher GNP per capita than the SSA average, but also lower unit costs (2000).

The causes of poor performance in countries in Groups 2 and 3 lie in different combinations of factors, such as too few days of schooling delivered, too few resources reaching the system, region-wide teacher surpluses and shortages, low supplies and poor delivery of textbooks and materials, outdated curricula and teaching methods, inadequate statistics, no systematic measurements of student learning outcomes and high repetition (World Bank, 2002c, e).

Gender and universal primary completion

What makes Group 1 countries "successful"? Obviously, to achieve universal primary completion, girls as well as boys have to finish school. In addition to having adequate financial resources, countries that have achieved or that are "on track" to achieve universal primary completion also have two other characteristics with direct relevance for girls' education, namely a focus on equitable access, including access for the disadvantaged, and balanced attention to both access and quality, which is especially important for girls, since research has shown that girls' participation is more sensitive to quality. They also tend to have a strong, gender-disaggregated data base for monitoring and assessing outcomes and impacts (World Bank, 2002c, e).

Did any of these countries achieve their success by making particularly dramatic progress toward girls' educational parity?

Table 11 shows the gender disparity index (F/M) for each country. (UNESCO figures [2002a] were used to ensure consistency across gender-disaggregated indicators. UNESCO's survival rates are to grade 5 rather than grade 6, as used elsewhere in this report.)

Progress in gender parity

Most of the countries that have made the biggest improvements in gender parity in recent years are Groups 2 and 3; "off-track" or "seriously off-track" countries. Table 12 shows the "best" and "poorest" countries in Africa in 1998 in terms of gender parity and those that have shown the biggest improvement, along with each country's group assignment with respect to UPC performance. For example, Lesotho, which has achieved primary completion, has the highest gender parity index for net primary enrolment. Chad, a Group 3 country, has the lowest. Malawi, a Group 1 country, made the most progress in

| Achievement of UPC by 2015 | GER | NER | School life expectancy | Repetition, primary | Survival to grade 5 | Transition to secondary | GER, secondary | NER, secondary |
|-------------------------------|------|------|---------------------------|------------------------|------------------------|-------------------------|-------------------|-------------------|
| Achieved | | | | | | | | |
| Botswana | 0.99 | 1.04 | 0.66 | 0.68 | 1.06 | 1.00 | 1.10 | 1.19 |
| Cape Verde | _ | _ | _ | 0.80 | 1.03 | _ | 1.03 | 1.02 |
| Mauritius | 1.00 | 1.00 | 1.00 | 0.75 | _ | 1.10 | 1.01 | 1.00 |
| South Africa | _ | _ | _ | 1.09 | 0.97 | 1.01 | _ | 0.84 |
| Zimbabwe | 0.96 | 1.01 | 0.94 | _ | _ | _ | 0.88 | 0.90 |
| "On track" | | | | | | | | |
| Gabon | _ | _ | _ | 0.96 | _ | _ | _ | _ |
| The Gambia | 0.85 | 0.88 | 0.78 | 0.98 | _ | _ | 0.66 | 0.72 |
| Malawi | _ | _ | _ | 1.00 | _ | _ | _ | _ |
| Namibia | 1.14 | 1.08 | 1.04 | 0.79 | 1.06 | 1.13 | 1.17 | 1.48 |
| Swaziland | 0.94 | 1.03 | 0.91 | 0.72 | 1.08 | 1.01 | 0.98 | 0.84 |
| Togo | 0.76 | 0.79 | 0.68 | 1.02 | _ | 0.85 | 0.40 | 0.44 |
| Uganda+ | 1.30 | 0.89 | _ | 0.86 | - | _ | _ | _ |

 Table 11: Gender parity indices* for selected indicators: "on-track" countries

* ratio between female and male rates (F/M).

+Figures for Uganda, not available in the UNESCO study, are from national statistics.

reducing its gender parity index and gender gap with respect to school life expectancy and survival to grade 5 between 1990 and 1999.

Case studies from selected "track" countries

What exactly have some of the "on-track" countries and countries with the "biggest improvements" done to make this happen? Are there initiatives at other levels within these countries whose examination we might find useful?

Case Study 1, Uganda, looks at a Group 1 ("on-track") country in which a rising, participatory tide has lifted all children, including girls.

The Gambia, another of the "on-track" successes, like Uganda, is an example of a "rising tide" that is not only strengthening the education sector as a whole, but is also improving the participation of girls relative to boys. Gender parity in education has improved across every indicator in the last ten years—intake, GER and NER at both the primary and secondary levels, repetition at the primary level and survival to grade 6. A Bank Operations Evaluation Department evaluation, looking at the Second Education Sector project, attributed its success to a holistic approach to gender issues, a strong national action plan, a strong analytical framework, strengthened institutional supports, community-level awareness and active partnerships with NGOs and the systematic monitoring of project results. Other commentators point to strong and systematic institutional analysis and to the strength of the partnership. The evaluation, which looked at thirteen gender-related education projects, noted that these characteristics were found to work in The Gambia and in Bangladesh, but that "in none of the other countries is Bank assistance characterized by all the above factors" (World Bank, 2002a and 2002g; Peters and Chao, 1998).

The Second and, now, the Third Education Sector projects are excellent example of how an integrated process, rather than a strategy or even a project-based approach, can have benefits across an entire sector. Both projects, as

| Table 12: Gender | Table 12: Gender parity indices for selected indicators: high, low and improving countries, 1998 (UNESCO, 2002a) | selected indicator | s: high, low and i | improving countrie | s, 1998 (UNESCO, 2 | 2002a) | | |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| | GER, primary | NER | School life expectancy | Repetition, primary | Survival to grade 5 | Transition to secondary | GER, secondary | NER, secondary |
| Best GPIs in Africa Worst GPIs in Africa | Lesotho 1.09 (2) Chad 0.58 (3) Also Ethiopia (3), Guinea (2), Niger (3), Benin (2) | Lesotho 1.14 (2) Chad 0.62 (3) | Lesotho 1.14 (2) Chad 0.51 (3) | Eq. Guinea 1.60 (3) Botswana 0.68 (A) | Niger Also Burkina Faso (3), Guinea (2) | Mauritius 1.10 (A) Cote d'Ivoire 0.81 (3) | Namibia 1.17 (1) Guinea 0.38 (2) | Lesotho 1.90 (2) Chad 0.29 (3) |
| Biggest improvement in GPI and gender gap, 1990-1999 | Democratic Republic of the Congo (3), Mauritania (2), The Gambia (1), Comoros (3), Benin (2), Chad (3), Mali (3), Guinea (2) | Democratic Republic of the Congo (3), The Gambia (1) | Malawi (1) | Little improvement; in general, The Gambia (1) | Malawi (1), Mauritania (A), Botswana (A); S. Africa (A), The Gambia (1) | Poor data (Standards revised between 1990-1998) | Niger (3), The Gambia (1), T Comoros (3), H Kenya (3), H Rwanda (3) t | The Gambia (1), Rwanda (3), Democratic Republic of the Congo (3) |

Case Study 1: Uganda

Uganda's "big bang" approach to increasing enrollment in primary education has had dramatic results for all children, but the biggest impacts have been on the poor and on girls. Wealth and gender gaps have been virtually eliminated.

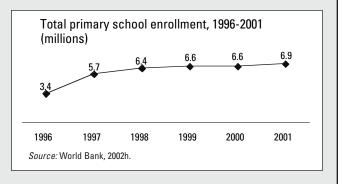
The context: In the early 1990s, primary education in Uganda was expensive for parents, under-financed and inefficient in terms of resource use. The gross enrollment rate was 87%, and only about half the poorest quintile of boys and less than half of girls were enrolled. Uganda's system is highly decentralized. While the Ministry of Finance and Education are still in charge of setting standards and monitoring, most other functions are managed at the district level, including the recruitment of teachers/head teachers, inspection and classroom construction.

The strategies: What did Uganda do? First, budget appropriations increased. The share of education in total public recurrent expenditure was increased from 11% in the 1980s to 32% in 2001, and the share of primary education from 5% to 22%. However, the most striking feature of the Ugandan approach, the 1996 abolition of fees for up to four children in a family--two of whom were supposed to be girls, which has now been extended to all children in a family—is only one element in an evolving set of supportive strategies whose lessons need to be considered as a whole.

What happened? The abolition of fees "worked." It led to a doubling of enrollments in a five-year period, to nearly 90% NER for both sexes. It reached the target groups. It had little effect on the rich, who were already enrolled, but it brought the enrollment of the poorest quintile up to nearly the same percentage level. It also increased enrollments by girls to nearly the same level as that of boys. According to a World Bank study (2002), Uganda is one of the few countries in Africa that is now "on track" to achieve universal primary completion by 2015.

Broader supports: However, this increase in enrollments created new problems, including a decline in achievement levels, increased demand for post-primary education and reliance on unsustainable levels of external financing. Though serious, these problems can be addressed in time based on the principles and processes that are now in place and which are critical to an understanding of Uganda's successes. They are:

• A firm, sustained cross-Ministry commitment, as reflected in the fact that:



under the Poverty Eradication Action Plan (PEAP), the Ministry of Finance focused on universal primary
education as its highest priority. Other Ministries, such as the Ministries of Local Government and Public
Service, helped resolve emerging teacher-related issues as enrollments soared;

well as the 2002 Poverty Reduction Strategy Paper, also show evidence that poverty, especially in rural areas, is the "overriding" factor in low girls' enrollment: over 90% of all outof-school children are from families in the two lowest income quintiles, and the majority are partners have used participatory and transparent planning, decision-making and reporting processes involving Ministries, parliamentary representatives, district and central education officials, NGOs and donors within an agreed-on, sector-wide policy framework, all of whom participate in six-monthly education reviews and finance plans.

Significant, collaborative budget support on the part of six participating external agencies as part of a long-term sector policy and financial plan consistent with Poverty Reduction Strategy targets and incorporated into a medium-term budget framework that is reviewed as part of the six-monthly sector review. This, along with sound macroeconomic policies, has led to a dramatic increase in education funding, which now accounts for one-third of the discretionary recurrent budget, of which 70% goes to primary education.

An improved demand-driven education information management system and training for officials, who are now producing needed reports for monitoring purposes.

Community involvement: community-based construction has helped meet increased needs for classrooms more effectively than previous centralized school building programs.

Communities also benefit from and participate in the monitoring of public funds. Process: The Ministries of Finance and Education publish amounts released to districts. Districts publish the amounts they, in turn, release to schools, and schools post information on the amount of funding received and on how it is being spent on school notie-boards. Today, 90% of education-related transfers are reaching the schools, compared with only 26% in 1990.

Most of the problems associated with Uganda's move to UPC are connected with the huge increase in enrollments. Quality, which is critical to universal primary completion, has declined. The pupil-teacher ratio shot up from 40 to 100 (but is now at 54). The pupil-classroom ratio soared from 85 to 145 (but is back down to 85). Achievement, measured by national tests, has declined considerably. Despite this, completion rates have improved for both sexes, and repetition rates have declined.

Countries looking to profit from Uganda's lessons may adopt only part of the strategy—for example, the abolition of fees—without considering the entire package and what messages it conveys under different political, economic and cultural circumstances. Observers who see the Uganda process at work are impressed, even when the challenges are taken into account, just as observers of the Escuela Nueva schools in Colombia were sufficiently impressed to adopt that model, in some cases, taking the most dramatic elements, without examining the underlying factors that led to its success.

Source: Murphy, Liang and Bertoncino, World Bank, 2002

girls. Special measures are needed to include these children in the system.

Finally, past experience provides an interesting example of how to combine the best of "high and low-tech" approaches. On one hand, a computer-based projection model was used in a "best practice" application to assess the cost implications of alternative investment subprojects, while community level participatory learning and action exercises helped clarify community views.

Case Study 2: The Gambia

The context: At the end of the 1980s, the government of The Gambia developed a fifteen year (1988-2003) Sector Policy Framework to address a range of problems identified in the education system, including weak sector-wide structures, planning, management and monitoring/evaluation, poor integration of corresponding activities and limited stakeholder involvement. The existence of a number of separate, individually-funded donor projects compounded the problem of a lack of a coherent approach, causing public financing to be redirected to other less well-supported sectors and subsectors.

The "strategy": To address these issues, the government developed a sector-wide approach which has been maintained in the Third Education Sector project. It increased public expenditure on education by 10% annually in real terms, from 15 to 21% of total government expenditure and from 2.6 to 4.3% of GDP. The share of the education budget earmarked for basic education rose from 38% to 45%.

The Third Education Sector project takes a comprehensive approach to education at all levels, from early childhood education to university studies and adult literacy. Its goals include an improvement in GER to 90% for the nine-year basic education cycle, improvements in learning achievement, more equitable and efficient public education financing and, most relevant to this paper, the implementation of measures designed to overcome barriers to girls' education in grades 1-12. A recent review of the 1988-2003 Education Policy underscored improvements in the accessibility and quality of mainstream and vocational training, improvements in non-formal, early childhood and special education, accelerated decentralization and the building of management capacity.

As noted in the 2002 PRSP Strategy Paper, "the concept of participation in The Gambia is well developed beyond just information gathering, and is seen as an instrument for accountability, empowerment and joint decision-making." The Gambia was the site of the first application of PLA (Participatory Learning and Action) to the field of girls' education in 1993, and the Girls' Education National Action Plan, developed in 1996-97, was based on extensive community input. The Third Education Sector Project incorporates some of the ideas emerging from

The case of Zambia is equally interesting, yet quite different. Classified as "on-track" in 2002 World Bank analyses (2002c), in recent years its universal primary completion rates have noticeably declined and, by the time of this study, it was reclassified as "seriously offtrack." What happened, and what impact will this have on girls?

The case of Guinea is also an interesting one. It is currently "not on track" to achieve UPC, though it is classified by the World Bank as one of the "best performers" in improving primary completion rates. In the 1990s, it was among the countries making the most progress in reducing the gender gap for gross primary enrollment. Stable policies in this country have been making a difference for girls.

Mauritania is one of the countries with the biggest improvement in its gender parity index with regard to the primary gross enrollment rate (GER) in the last decade, which rose from 0.79 to 0.95. Its rates for survival to grade 6 have also improved. It is also one of the countries classified by the World Bank as a "best performer" in improving primary completion rates. A wide array of macro-level strategies has been used to accomplish this, including efforts to address the issue of distance from school, the recruitthis experience, such as flexible fee payment schedules, separate latrines and the enforcement of policies against sexual harassment in schools. Other elements of the project include scholarships, financial aid for the cost of books, tuition and examination fees for children and girls in the poorest communities, a gender-sensitive curriculum, guidance and career counseling for girls and an increase in the number of female teachers through academic bridging programs allowing young women to enroll in teacher training programs. It also includes community and teacher mobilization through PLA to identify issues and strategies in the poorest communities, information campaigns and women's theatre groups for building community awareness. The 2002 Poverty Reduction Strategy Paper, building on this, analyzes the progress made by girls and identifies issues requiring further action, most of which are poverty-related. One strategy is to provide scholarships for 10% of girls in the country's poorest regions.

What happened: These strategies are only a small part of a comprehensive sector-wide approach which, despite being "gender neutral" in most respects, benefited girls more than boys. Between 1980 and 2000, girls' GER more than doubled, from 36% to 75%, with the biggest improvement occurring just as the sector-wide approach was implemented, in the first half of the 1990s, shortly before The Gambia went through a period of major economic and political shocks. Boys' GER reached a high of 82% in 1998, falling back down to 77% in the year 2000.

In the same twenty-year period, net enrollment ratios for girls jumped from 34% to 57% and, despite rises in boys' enrollment figures during this period, by 2000 they were roughly the same as in 1980, at around 65%.

There are still challenges to be met. Deadlines for the payment of school fees still fall in the "hungry season," grade 6 dropout rates for girls are as high as 16-20% in some regions, largely owing to early marriage and pregnancy, although girls' enrollments have increased proportionately to those of boys at the secondary level, they are still considerably below those of boys, and girls' performance on examinations at all levels is poorer than that of boys.

Source: World Bank, 1998, 2001c and 2002g.

ment of female teachers, the establishment of scholarships for girls and the mounting of school canteen programs. However, "religion" has been cited in recent analyses (see, for example, Dollar and Gatti, 1999 and Canagarajah and Coulombe, 1997) as a possible factor in whether children attend school, while many other studies have cited religious and cultural beliefs as "barriers" to girls' education. Case Study 5 shows how religion and religious leaders can create a climate of cooperation helping to improve girls' education in situations where parents might otherwise be reluctant to get involved.

Experiences of donors and practitioners: strategies that have been tried

The following sections draw lessons from experiences with various strategies that have been tried in different parts of the world.

Though, nowadays, very few projects involve *single* interventions, such projects were common in the past. Historically, the most common World Bank interventions involved school construction or other efforts to expand schooling. Among the projects included in the Strategies Data Base (Kane and Yoder, 1998), we also find single interventions involving

Case Study 3: Zambia

The context: Zambia was one of Africa's star performers in education until the late 1980s or early 1990s. By 1985, it was already close to achieving UPC, with a GER of 95% and a NER of 77%. The government's commitment to education was reflected in its relatively high budget allocation for education as a share of GDP. On average, between 1985 and 1990, 5.3% of GDP went to education and 2.4% went to primary education. The 1990's saw a reduction in these figures. By 1998, the allocation for education had dropped to 2.3% of GDP and the allocation for primary education had fallen to around 1.2%. The result was stagnation in enrollments and an ensuing decline in enrollment ratios. Currently, the GER is 85% and the NER is 69%. In addition, student learning achievement has been unsatisfactory. In the 1995 SACMEQ survey of learning in English by grade 6 pupils, only 25% attained the proficiency level set by Zambian teachers as the minimum requirement for that grade. One of the main reasons for this decline was the limited resources being furnished by the government. Partly as a result of limited funding, the government decided to assign teachers two classes each for each of the first four years of the seven-year primary cycle, with children receiving less than 500 hours of instruction annually in each of these years. This may have affected learning achievement.

The strategies: A sub-sector investment program – BESSIP: The Basic Education Sub-sector Investment Program— was implemented with World Bank funding and assistance from the main bilateral aid agencies active in Zambia. BESSIP's objectives are to increase enrollment and improve learning outcomes. The government's target is to increase GER to 100% by 2005 and to improve learning achievement as measured by ongoing national assessments. Approximately \$340 million was spent during the three-year period ending in 2002, of which about half came from government sources. An additional \$500 million will be expended over the period between 2002 and 2005. BESSIP was designed to increase enrollment and improve learning outcomes by strengthening teaching/learning/readiness at the primary school level, building primary school infrastructure, through preservice and in-service primary school teacher training, through curriculum development and by strengthening the administration of the education system. Considerable emphasis was to be placed on equity, both in each of the other components and through specific support for the Program of Action for Girls' Education and the development of a nation-wide financial aid scheme.

What happened: Progress on the two main program objectives has been relatively disappointing. Enrollments have not increased at the envisaged rate. In 2000, the GER was 89% for boys and 84% for girls, while the NER was 74% for boys and 72% for girls, showing no significant improvement over pre-BESSIP figures. National assessments of learning achievement carried out in 1999 and 2001 showed little improvement in learning achievement.

Achievements: There have, however, been significant improvements in underlying administrative structures, including the delegation of responsibilities for the administration of education systems to larger numbers of districts. In addition, structures for monitoring progress have been greatly enhanced. The government has established an annual review process in which it reports on progress in different aspects of education involving all donors and many interested stakeholders. More directly, modalities for classroom construction are community based and the numbers are improving each year. In addition, girls' education has been strengthened by the Program of Action on Girls' Education, a UNICEF-initiated program that has been extended to the entire country.

Source: World Bank, 1999b; Bruce Jones, personal communication.

Case Study 4: Guinea

Context: Guinea is a low-income country with a population of 7.1 million (49.7% female, 1998) and a per capita GNP of US\$ 530. In 1997, 1.9% of Guinea's GNP was spent on education (35.1% on primary, 29.6% on secondary and 26.1% on tertiary). The education system in Guinea consists of six years of primary school, followed by seven years of secondary school (four years in lower secondary and three years in upper secondary) and four to six years of higher education, depending on the type of degree. Students sit for examinations in order to advance from tier to tier. Children are usually admitted to pre-school at the age of four and to primary school at the age of six or seven. French has been the language of instruction since 1984, after more than two decades of instruction in local languages.

In the early 1990s, Guinea was not only lagging behind most countries with respect to primary and girls' education (50% total GER and 24% female GER in 1990). Its education system was unable to accommodate any more students. There were visible inequities, not only between the sexes, but also between geographic areas. Rural areas lacked classrooms and interest in school, while urban areas were overcrowded, with an average of 70 students per class. Repetition and dropout rates were high, with 25% of students enrolled in primary school likely to repeat. Worse yet, teacher qualifications were inadequate and textbooks were scarce.

What happened? Guinea's gross enrollment rate for 2000-2001 was 61% (up from 57% the previous year), with 50% for girls. Over the past ten years, this type of performance has gradually become the norm in Guinea. As illustrated in the following table, relative increases in enrollment rates were even higher for girls than for boys towards the end of the decade. This is a clear manifestation of a political commitment to closing the gender gap while pursuing EFA and gives Guinea the distinction of representing one of the rare Sub-Saharan African countries in which girls' education has steadily expanded over a full ten-year period.

| Year | Total school pop. | No. of girls | Girls (%) | GER, girls |
|---------|-------------------|--------------|-----------|------------|
| 1990/91 | 346807 | 109351 | 31.53 | 19.66 |
| 1991/92 | 359406 | 113250 | 31.51 | 19.71 |
| 1992/93 | 421869 | 133777 | 31.71 | 22.81 |
| 1993/94 | 471792 | 154138 | 32.67 | 25.71 |
| 1994/95 | 544729 | 182493 | 33.5 | 29.28 |
| 1995/96 | 584161 | 200807 | 34.38 | 31.54 |
| 1996/97 | 649835 | 233415 | 35.92 | 35.53 |
| 1997/98 | 674732 | 249088 | 36.91 | 36.94 |
| 1998/99 | 726561 | 276708 | 38.08 | 39.98 |
| 1999/00 | 790497 | 314778 | 39.82 | 44.33 |
| 2000/01 | 853623 | 350446 | 41.05 | 50.00 |
| 2001/02 | 997645 | 417556 | 41.85 | 63.00 |

Source: SSP/MEPU-EC/CONAKRY, Guinea. 2003.

Some underlying factors: To address the flaws in Guinea's educational system, the government prioritized primary and girls' education, with strong, coordinated donor support (including that of the World Bank). Through a committed education minister, the government has been playing a leading role in the coordination of projects fostering education for all children and special measures designed to boost female school participation in particular. In 1989, Guinea embarked on an ambitious two-stage education for all program known as the Programme d'Ajustement Sectoriel de l'Education. PASE I (1989-1994) and PASE II (1995-2000) sought to increase the quality and efficiency of education, while promoting equity. This was accomplished through political and supply-side interventions such as restructuring and capacity-building efforts at the Ministry of Education, teacher and manpower training activities, school construction and rehabilitation and the supply of textbooks. *(continued on next page)* **Strategies designed to reduce the gender gap in education:** The implementation of PASE I & II policies promoting primary education and equity in education (i.e., creation of an Equity Committee attached to the Ministry of Education in 1992 to expand female educational opportunities, implementation of gender-conscious teacher selection strategies, decentralized teacher recruitment policies and innovative pre-service and in-service teacher training practices) has resulted in numerous encouraging achievements, including:

- a steady increase in the share of the education budget allocated to primary education (from 25% in 1989 to 38% in 1996 and to 42% as of 2000);
- an impressive increase in primary enrollment rates, from 29% in 1989 to 61.4% in 2000-2001. The latest statistics show steady progress in all regions of the country and, without exception, a higher relative increase for girls. The remarkable jump in female enrollment from 17% in 1990 to 51% in 2001 (see table above) is a reflection of the unwavering commitment on the part of interested stakeholders to continue the quest for EFA.
- a nearly two-fold increase in the number of teachers between 1989 and 1999, to 15,512, plus an increase in the percentage of female teachers from 22% to 25%;
- the construction of 8,895 classrooms between 1989 and 1999;
- an increase in the number of primary schools (from 2,476 in 1991 to 3,906 in 1999);
- the creation of equity sub-committees at the secondary and higher education levels, as well as in primary education.

All of this shows a firm political commitment to achieve EFA goals and a determination to support that commitment.

Efforts deployed by Guinea to overcome gender disparities are paying off. Girls now represent more than 40% of the student population. In its new EFA project started up in 2003, the Guinean government is setting out to try new measures in an effort to make further cuts in the high repetition and dropout rates that inevitably accompany large boosts in enrollment. Weak internal efficiency is a phenomenon that can be caused by several factors, including the opportunities afforded children from disadvantaged backgrounds. All major interventions within the EFA project plan to address gender inequity, including Early Childhood Development (ECD) activities, the initiative to address repetition and dropout rates, gender sensitization for teachers, measures to increase female students' participation in science courses at the secondary education level, scholarships at the higher education level, etc. At the same time, a wide range of quality-enhancing measures have also been instituted.

Analysis: It is a fact that, in the past decade, low turnover in government and Bank education teams, a firm, unwavering political commitment, including budget increases, and real policy reforms in education have led to remarkable improvements in primary GERs for both girls and boys. Effective donor commitment and coordination also helped. Moreover, Guinea's sensitization campaigns designed to change parental attitudes targeted the most important community and religious leaders. After more than ten years, there are still campaigns being mounted to sensitize the public to the importance of female education after Friday prayers. The fact that the government is considering more targeted interventions in addition to broader measures encompassing all children is an encouraging sign. Another encouraging sign is the willingness on the part of the government to address internal efficiency, a measure which will, no doubt, further enhance Guinea's already respectable progress.

Sources: Project Appraisal Documents and MEPU-EC statistics, Guinea)

Case Study 5: Mauritania: The community of Maata Moulana

The context: Mauritania is an Islamic republic in which conservatism may appear to be a prominent feature, but which could potentially confound easy assumptions. Thus, the discovery, in 1999, of religious leaders who fought to get and keep schools in their village was regarded as an incongruity. This case study is about one such leader in Mata Moulana.

The community of Mata Moulana (451 households) has seen a large part of its male population drift to the city, with women making up nearly 60% of the population. The average family size is somewhere around ten household members, including two or three actively employed workers. The village also has a spiritual leader, who plays a key role in all decision-making affecting the community's future. Contrary to expectations, however, the community has an inspiring school history.

In Mata Moulana, as in many parts of the world, men are the official household representative, even when they are absent. Women do all the housework and are responsible for raising and educating the children. They also engage in income-generating activities, operating small shops and working in cottage industries, gardening and dyeing.

There are four major socio-professional associations in the community: two for women (one in the craft industry and an agricultural cooperative), one for men (a field and forest cooperative) and a fourth, the parents' association. The women's cooperatives coordinate their efforts with the men's cooperative and the parent association.

The strategy: creating schooling opportunities based on community involvement and religious leadership

Children begin preschool at the age of three. At four, they can begin informal schooling in the Koranic school and, at age six, they begin formal schooling in both primary school and the *mahadra*, the traditional Islamic school. The village nursery school was built in 1991, thirty years after the primary school, at the initiative of the community's spiritual leader. One of its purposes is to reduce the burden of childcare for women with other socioeconomic obligations in the village. In 1999, there were 200 children at the Mata Moulana nursery school, 146 girls and 54 boys, taught by two women. The school is funded by fees paid by local families and a subsidy from the community's spiritual leader. According to the nursery school director, the school prepares girls psychologically, so that they can do well in the formal and religious school.

Mata Moulana's primary school was built in 1961 at the initiative of the late spiritual leader, El Mechri, the father of the village's current chief. When the school first opened, it had 40 students, including four girls, one of whom was the spiritual leader's own daughter. Now, there are two primary schools with a total of 401 students, including 198 girls and 203 boys. There are 16 teachers, including seven women and nine men.

The secondary school has 65 students, including 43 girls, with a staff of six temporary teachers, most of whom are volunteers from the community. The school was opened at the initiative of the spiritual leader in response to the main concerns voiced by poor households. Distance was a serious handicap for girls, preventing them from acquiring the knowledge they needed to pass professional school entrance examinations.

Religious instruction is offered in three *mahadra* schools attended by both boys and girls, nearly all of whom are also enrolled in the village's primary and secondary schools. The *mahadra* schools have a total of 460 students, including 250 girls. To synchronize the operation of these two educational systems, the school administration set up two different operating schedules in conjunction with the Ministry of National Education. Thus, primary and secondary schools operate from 8 a.m. to 1 p.m., six days a week, while the *mahadra* schools run from 3 p.m. to 7 p.m.

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Some underlying factors: The parents' association was formed immediately after the opening of the Mata Moulana school in 1962. It has a nine-man office staff and a clearly defined allocation of responsibilities. In addition to its main mission, namely the development of the two village schools, it engages in activities relating to the construction, upkeep and maintenance of school infrastructure, as well as in dialogue and cooperative efforts with parents and teachers. It deals with other community organizations, two women's cooperatives and the *Direction Régionale de l'Enseignement Fondamental* (the Regional Basic Education Office).

In Mata Moulana, the factors promoting education for girls are as follows:

- parental assistance at home (acceptance, support and encouragement from all family members);
- · the relationship built by the school with female students and their parents;
- the importance attached by the community to helping girls develop good self-esteem

Interviews and analyses conducted as part of the study revealed that girls are aware of the importance of acquiring new knowledge. Girls spend many hours at the *mahadra* school and the mosque, and spend time studying in evening courses.

- In Mata Moulana, women were also key to the success of girls' education. They generally provide guidance and advice on the advantages of education and of delaying marriage until after finishing primary school.
- The fact that the religious leader is highly trusted attracts children of families who would otherwise be reluctant to send girls to school.

There are also other factors influencing education outcomes. The parents' association, for example, is continuously supporting the school by:

- participating in classroom construction;
- maintaining and refurbishing school infrastructure and equipment (running water in both schools, latrine construction);
- helping to finance the school cafeteria;
- · coordinating efforts and resolving any problems arising between the school and parents;
- · organizing and staffing evening courses, particularly for girls;
- seeking external financing for expanding the school;
- raising parental awareness of the advantages of educating girls;
- following up on the transparency of school examinations.

Summary: While some religious leaders fight modern schooling in their area, the leader in Maata Moulana, continuing a tradition begun by his father, helps create and support schools while preserving parental and community values. The success of this community is also indicative of a simple fact: when the government gets the message across and local leaders, in this case religious leaders, support it, the community's religious and cultural traditions can be used as building blocks in an open, participatory process.

In a very close-knit community, the support of community leaders operates as a moral seal of approval that cannot help but encourage reluctant parents to send their children, particularly their daughters, to school. In this respect, Guinea and Mauritania are both examples of countries where religious leaders, as influential members of the community, were called on to help build public awareness of the importance of educating girls. The success of this strategy showed that gaining the trust and support of prominent community members ought to be the starting point for any crusade to change negative attitudes towards girls' schooling.

Source: World Bank, 1999a

Box 4: Lessons from other parts of the world: Multiple strategies in the District Primary Education Program in India, 1995-1999

The World Bank has been bolstering India's efforts to attain universal primary education through a series of District Education Programs in the country's neediest states. The program in Uttar Pradesh illustrates the range of strategies being used to reach that state's large, diverse population. The majority of the state's 160 million residents live in rural areas, and 42 percent of its rural population is below the poverty line. (World Bank, 1999) The DPEP program reaches more than half of India's 110 million primary school students. Building on the Bank's experience in a series of primary education projects in India, the Uttar Pradesh project includes, among others, the following components:

- To make up for shortages of qualified teachers, the government hires para-teachers for the early grades. Following the lead of the *Shiksha Karmi* project in Rajasthan, para-teachers are selected and appointed by the *panchayat* government Village Education Committee, and their contract is renewed yearly based on their performance. They are given 30 days of initial training and attend a 2-week-long refresher course every year thereafter. The project provides continuous professional support and is considering a career ladder to hold onto personnel. About 17,000 para-teachers are being employed, trained and supported under this program.
- In densely populated rural areas, the government has established a double-shift system, trying out five different schedules and teacher rotation schemes.
- The project provides alternative school facilities in villages and hamlets not covered by state school construction standards and in situations where children are unable to avail themselves of existing school facilities. One such alternative is particularly well suited to small, isolated communities where the total number of children is 40 at most. Another strengthens Muslim schools *(maktabs and madarasa)*, particularly for girls, by adding a literacy component in consultation with minority groups and religious leaders. There are also special arrangements for flood-prone areas where schooling is disrupted during the monsoon season. Another alternative is the Education Guarantee Scheme for sparsely populated areas in which the local community selects the teacher, provides accommodations and decides on the months and hours of operation and venue for the education center and the scheme finances the instructor's salary.
- Specific interventions are designed to address the educational needs of a particular group, including children from scheduled castes and scheduled tribes.
- Special provisions are made for girls, including the provision of free textbooks, escorts and female teachers. New Early Childhood Care and Education centers are established in some locations to improve school readiness and boost enrollment and retention figures for girls by providing alternative sources of sibling care during school hours. Basic infrastructure components include separate latrines for girls.

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- The project supports linkages with local health authorities to ensure regular quarterly health check-ups for school children to help promote the integral development of children and encourage regular school attendance. Because community support is considered vital to sustaining good schools, a community mobilization program is conducted to build community awareness of the importance of educating children and foster a sense of ownership on the part of the community with respect to education issues. The project helps Village Education Committees play an active role in school management and draws on other rural programs, such as water users' groups and women's self-help groups.
- Another important project component is designed to improve school quality. The project supports efforts by government and non-governmental organizations to implement a holistic approach to teaching. This includes revising curricula, developing training modules and instructional materials and using continuous assessment methods in the classroom to monitor student progress.
- The project also strengthens state and division education offices, helping them build needed capacity to sustain their operations once project support is terminated.

Through such strategies, the Uttar Pradesh and other World Bank primary education projects in India draw on a broad range of approaches to reach a wide spectrum of disadvantaged groups in a predominantly rural area. The state of Uttar Pradesh raised its basic education (gross) enrollment rate for girls from 50 percent to 98 percent in an eight-year period and lowered its dropout rate from 60 percent to 31 percent. Other Bank projects targeted at rural areas are equally comprehensive, though few have such a range of specific strategies for different groups. The success of this approach is largely dependent on community-based needs assessments and on tailoring schools to meet the needs of the children they are designed to serve.

Source: interviews, World Bank Task Managers, 2002; Aoki et al., 2001; World Bank evaluations.

bilingual education, interactive learning, female teachers, single-sex schools/classes, group work and peer teaching.

Most strategies now involve a package of interventions, often intended to deal with multiple constraints. Usually, this is a strength. In the the Gambian and Bangladesh projects referred to earlier, a World Bank evaluation ranked one of the projects as "satisfactory" and the other as "highly satisfactory" and attributed this to multiple interventions, multiple donors and strong government and other stakeholder support. The Gambian project was described in Case Study 2. In the Bangladesh project, which saw a 45% jump in girls' enrollments in areas with Bank-supported construction activities, multiple interventions included new buildings, improvements in in-school water and sanitation services, more female teachers and a scholarship program to reduce opportunity costs of education for girls.

A battery of strategies was also used in Malawi in the early 1990s, where the number of girls enrolled in primary school doubled between 1990 and 1997. Such strategies included waivers of fees, school construction, especially in rural areas, scholarships for girls attending secondary school, social mobilization and girls' clubs, readmission of girls after pregnancy, reforms in girls' initiation ceremonies, textbook revisions and changes in classroom practices (Stromquist and Murphy, 1996).

In fact, the best progress has been made in countries using social assessments, surveys or other studies to identify major constraints and issues and to tailor a strategy package to their unique situation. Examples include India, Bangladesh, Malawi, Uganda and Bolivia. "Country experience confirms strongly that addressing multiple concerns related to girls' education simultaneously in a coherent strategy can produce significant gains in relatively few years" (Aoki, et al., 2001).

Among the projects surveyed in the Strategies Data Base (Kane and Yoder, 1998), most combined multiple interventions. Certain combinations were more common than others. Some of the most common tried and tested combinations or "packages" of interventions are listed in Table 13. The italicized heading in each section is the main *project focus*, and the bullet point items represent the interventions most commonly used in association with that focus.

On the negative side, multiple interventions can be costly and wasteful if they are not properly targeted and based on a proper analysis of the issues, or if some other major factor is missing. Nepal, for example, developed a wide range of gender-targeted initiatives for girls, but "there is ample evidence that ambivalence by frontline Ministry of Education staff in promoting, implementing and monitoring has sharply reduced their collective potential. While many of these incentives have been successful in other countries, their impact has been minimal in Nepal" (UNESCO, 2002a:11).

Another more analytical problem has to do with the difficulty, in many cases, of ascertaining which strategy or combination of strategies will make an impact. Only rarely are projects constructed as "experiments." The initial phase of PROGRESA in Mexico (page 124) is a case in point. Another is USAID's BEST Eduque de la Niña project in Guatemala. The BEST project consisted of three "packages" spread over thirty-six intervention schools and twelve control schools. Package 1 was the

| With alternative or preparatory programs: Flexible schedule/calendar Increased number of schools Provision of alternative school facilities Community management Child-care programs | With flexible schedule/calendar: • Local teachers • Textbooks • Curriculum revision (particularly cultural) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| With community management: Female teachers Single-sex schools Provision of alternative facilities Alternative or preparatory programs | With textbooks: • Flexible schedule/calendar • Curriculum revision (particularly cultural) • Single-sex schools |
| With formal teacher training: lies: | With direct economic incentives to girls and their fami- |
| Female teachers | Media campaigns/community sensitization programs |
| With female teachers: • Formal teacher training • Community management • Single-sex schools • Provision of alternative school facilities | With curriculum revision: • Textbooks • Flexible schedule/calendar |
| <i>Source:</i> Kane and Yoder, 1998. | |

Table 13: Common packages of interventions, Strategies Data Base

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basic model providing for the community management of schools and community mentoring of girls. Package 2 added scholarships, while Package 3 provided gender-sensitive materials. All three increased access.⁵⁸ USAID's BEEP project in Mali (1989) also included multiple strategies, many of them targeted specifically at girls, and provided measurable objectives and outcomes for each strategy. Although pre-intervention data for this project were unavailable, of ten of the thirteen strategies⁵⁹ achieved their goals with respect to access and retention, though with no information on achievement, which was also one of its goals. In any event, the program has been described as "very expensive" and too isolated and insulated to be scaled up (Stromquist, Klees and Miske, 2000).

Cross-sectoral and sector-wide strategies

Many of the strategies recommended by the World Bank and other organizations for improving gender equity for women also benefit girls. Most of them are *cross-sectoral*, or involve an intervention in another sector, as well as in education. Examples include:

- Improving employment and labor policy, including the establishment of affirmative action programs in recruitment and job screening for government employees and private firms holding government contracts and job retraining.
- Out-of-home child care, time-saving infrastructure (water, power and transportation service, particularly in rural areas) and measures designed to remedy market failures, such as old age security.
- Labor-saving technologies such as solar energy pumps, wells, running water and grinding mills are known to reduce women's labor and usually that of girls as

well, although one study of Liberian girls showed that women used the time freed up by these technologies to engage in other activities that did not necessarily free girls as much as expected (Boothroyd and Chapman, 1987).

• Improving roads and transportation facilities can increase access for both sexes, but research in several African countries has shown that if transportation is expensive, parents are more likely to pay for boys to use such services.

USAID's Morocco Education for Girls (MEG) and Girls' Education Advocacy Program described in Box 5, designed to get more girls enrolled in primary school, strengthened women's microenterprises, village wells, trachoma control, school latrines and environmental action and improved local governance. It did this through public and private partnerships and local and national exchanges of information and used a variety of mechanisms, including theatre for development.

Probably the single most important crosssectoral interventions, now and in the future, are programs designed to address the HIV/AIDS crisis using schools and inter-ministry-based initiatives in conjunction with a wide array of delivery mechanisms, such as the mass media, peer-based learning, theatre for development and clubs. Such programs in Mozambique, Senegal, South Africa, Tanzania, Uganda, Zambia and Zimbabwe, for example, all have multiple strategies involving school participation. The South African program includes the routine testing of teachers, plans for single-sex schools and plans to reduce the age range in co-educational schools.

Other strategies are *sector-wide* in scope. This relatively new approach, a logical outgrowth of a general development movement towards holistic approaches and the devolvement of authority, is aimed at developing a

Box 5: Lessons from other parts of the world: Morocco Education for Girls (MEG)

In 1997, USAID/Morocco instituted a long-term strategy in thirty-two pilot schools designed to address the gap (sixteen percentage points) between girls' and boys' enrollment. Foremost among its goals were the improvement of educational quality and relevance and the development of a more flexible education model. Efforts to heighten demand for education included initiatives designed to mobilize community interest in girls' education. Other initiatives have attempted to make schooling more attractive to girls by providing more gender-sensitive school environments and more relevant course content.

The strategy includes:

- creating a school environment that encourages all children to want to learn, with special emphasis on girls;
- mobilizing community support;
- promoting public-private sector partnerships;
- helping provincial teams be more efficient and improve their decision-making.

As the MEG model has evolved, it has endeavored to synchronize its interventions with baseline conditions in the rural, pilot school communities and to provide necessary support and assistance. The MEG approach includes:

- the introduction of child-centered, gender-sensitive educational processes. School inspectors, directors, teachers, and the staff of teacher training colleges are all being trained in these processes. Student-centered teaching methodologies with applications to Arabic and mathematics have been developed and used in training activities.
- the promotion of better communications between community members and MNE (Ministry of National Education) inspectors, school directors and teachers.
- strengthening community participation through more involved parent-teacher associations.
- building MNE capacity at the provincial level to assess needs, evaluate results and formulate strategies for effective, inclusive, equitable education.
- the establishment of multi-media centers in teacher training colleges for the introduction of self-learning approaches and computer-assisted education. These centers are making educational resources available at the provincial level and connecting educators via the Internet. The plan is for these centers to become the educational resource centers for their province.

Source: Kane, Moulton and Rawley, 2002.

broad policy framework in which external, fungible funds are channeled through government, allowing a country to develop sustainable approaches to the achievement of key objectives. Most sector-wide approaches are still first-generation, and the lessons learned are limited (Johanson, 2000), but for countries

that have the institutions necessary for proper design and implementation, this could be an invaluable tool for ensuring that girls' education issues are addressed from the outset, across the system (Verspoor, Mattimore and Watt, 2001), including issues such as gender bias in the curriculum and in textbooks, teacher education and training and girls' non-school work (Siddons et al, 2000).

Building on gender-neutral interventions

Some interventions can be considered "gender neutral" in some situations and gender-targeted in others. Girls' enrollment and achievement rates have increased disproportionately in a number of countries implementing acrossthe-board measures such as reducing or abolishing fees, building more schools or providing alternative forms of education. In fact, the most common strategy for increasing girls' participation in school is to expand the supply of schooling for both sexes, through school/classroom construction. satellite schools, boarding schools or the provision of dormitory places. The presence of a primary school in the community was shown to have a significant effect on enrollments for both boys and girls in parts of Central and West Africa, (in Burkina Faso, Chad, Cote d'Ivoire and Niger, for example), as well as in Malawi, Madagascar and Zimbabwe. In Benin, however, the effect has been much greater for girls (25 percentage points more likely to be enrolled) than for boys (eight percentage points). Reducing distance to school, lowering costs and improving quality all have greater impacts on girls' participation, even when not intended specifically to help girls. Colombia's secondary school voucher program in which qualified students drawn by lottery are given a chance to attend private schools has been shown to have a larger statistically significant effect on the number of years of school completed by girls compared with boys (King, Orazem and Wohlgemuth, 1999; Augrist et al., 2000).

Other across-the-board improvements focus on quality, including an emphasis on basic skills, student-centered teaching, improved teacher training and resources, teaching materials and instruction in local

languages, all of which have positive impacts on girls. The District Primary Education Program (DPEP) in India (Box 4) is an example of a program combining a wide range of quality-targeted improvements, some aimed specifically at girls, such as female teachers, escorts and latrines, but most of which were gender-neutral and attracted both boys and girls. Yet others, while neutral, appear to have special benefits for girls. Examples include open admissions, automatic promotion, flexible school schedules and quota systems, as illustrated by Mauritania's General Education project and Guinea's Pre-Service Teacher Education Project Learning and Innovation Loan.

A World Bank evaluation of gender assistance concluded:

"In countries with less gender disparity in enrollments, Bank assistance for education was gender-blind for the most part. Field assessments suggest no significant adverse impact on girls as opposed to boys in Ecuador, Sri Lanka, and Vietnam. In Vietnam, field assessments indicate that the largely gender-blind education project generated more benefits for girls than for boys" (OED 2002: 10)

On the other hand, many programs are intended to benefit both boys and girls, even though their emphasis may be on girls. Morocco's World Bank-funded school construction program, for example, designed to address distance problems at the primary and middle school levels, was aimed specifically at increasing girls' enrollment by 75% between 1996 and 2001, but was also expected to improve boys' participation. Enrollments did increase for both sexes (more so for girls than for boys), though not to the degree expected, and could not be shown to be related to any project inputs. Bank evaluations of both the Rural Primary and Rural Basic Education loans rated them "unsatisfactory" on most counts. Boys have also benefited from alternative programs emphasizing girls' participation, as in the case of the Community Support Project in Balochistan, BRAC in Bangladesh (Box 10), UNICEF's community schools project in Egypt and the Sindh Primary School Project, which included the establishment of 100 community-supported schools. Even in Pakistan's Rural Community-Based Schools for girls, about a tenth of the pupils are boys.

Many other gender-neutral efforts have been shown to have had some impact, but the effects are not disaggregated by gender. New instructional materials for the early primary school years led to higher achievement in Pakistan's Northwest Frontier Province, for example (Pakistan, 1994). Teachers using simpler traditional teaching styles in Botswana also improved student achievement (USAID ABEL, 1994).

Using community involvement and participation

Community involvement is not simply a strategy, but also a means of implementing strategies, and sometimes an end in itself. Current World Bank emphasis on decentralization, community-driven development with social funds as a mechanism for disbursing funds to communities, the use of beneficiary assessment as a way of relating community insights to managers' information requirements and the increasing importance of participatory poverty assessments all point to a new focus on collective action.

Community involvement and alternative forms of education provided by communities, government, NGOs and private entrepreneurs have taken on increasing importance in the education systems of a number of countries.

Box 6: Malawi and community construction, 1995

When the government of Malawi abolished primary school fees in 1994, enrollments shot up from 1.9 million to 3.2 million, creating shortages of classrooms, teachers and teaching materials. New financial demands, coupled with the loss of fees, led to one project component, namely community involvement in the construction of "shell" classrooms. NGOs were commissioned to mobilize the communities, which prepared the sites, made bricks and filled in the frame. Workshops and mobilization campaigns were mounted. At the project's end, little more than half of the 1600 planned classrooms had been built, and many remained mere unfurnished shells.

The ICR points to a number of problems which led to all project components being rated "unsatisfactory." For the construction component, the project design underestimated the complexity of the operations needed to mobilize the communities in a timely manner and teach them new skills. Watt (2001) points out that some communities "lacked the cohesion, skills and confidence" to respond to the various government incentives provided by the project and, in some cases, there was poor communication about what communities were expected to do. In theory, "shell" construction was technically simple and had worked in Ghana. In practice, in Malawi, it was not, and the ICR notes the project's failure to take local circumstances into account. Even so, the mobilization failures would probably have still led to a poor outcome.

Source: Malawi Primary Education Project (PAD 1995, evaluated 2001).

Nearly a quarter of all primary schools in Mali, for example, are based on community/ alternative education forms of schooling, and Senegal is expected to have a similar percentage of such schools within the next few years (World Bank, July 2000).

Research shows that community involvement in education can have important impacts. Rugh and Bossert (1998), for example, argue that, in general, education projects with a community participation component appear to be associated with increased enrollments.

Three factors in particular have increased the importance of community involvement in African education in the last two decades: 1) stalled progress, particularly between 1980 and 1990, with respect to primary school access, retention and improvements in quality; 2) low levels of public financing in a number of countries, compounded by rapid population growth, economic decline and the consequences and rising costs of addressing HIV/AIDS, climate risks, unsound policies, conflicts and public sector mismanagement; and 3) a general shift in philosophical approaches to development, emphasizing the value of stakeholder insights and participation in all sectors.

In some countries, this combination of need, of a lack of other clear-cut alternatives and of increasing appeals for "participation" has led to community involvement by default, in some cases, inappropriately and ineffectively (World Bank 2001a). In other cases, community "involvement" simply means being the focus of social marketing, "sensitization" and social mobilization programs. And in still other cases, communities have become active stakeholders in the educational process. World Bank appraisal documents often reflect a rather limited view of community involvement in education, which can involve simply co-opting communities for financial inputs.

The most common type of community participation involves some form of contribution to school resources (construction, school maintenance, fees, etc.) In fact, Watkins (2000) points out that, without some kind of household or community contribution to schooling, the education systems of many countries would collapse. Other forms of involvement include participation in school management and contributions to the learning process. Wolf, Kane and Strickland (1997) found the latter to be the least likely form of participation offered to communities, while a World Bank analysis of factors affecting the quality of education showed that, of 26 projects examined, 20 involved community support elements, almost all of which focused on contributions to improving physical facilities (World Bank 2003).

All stakeholders, from international donor agencies to local NGOs to independent community groups, have supported community involvement. The World Bank funded nine major education programs in Africa between 1995 and 2000 with community involvement at a cost of over \$680 million, in Cote d'Ivoire, Mali, Malawi, Madagascar, Mauritania, Nigeria, Rwanda, Tanzania and Zambia. All focused either on physical expansion (7) or school management (2), and six had a component that addressed girls' education (Watt, 2001).

Recent research for a World Bank study on participatory approaches in Bank projects⁶⁰ showed that, today, most managers in development draw on some form of participatory input in girls' education projects, reflecting a new trend emerging in most development agencies over the past ten years. Some longstanding projects and programs using participatory approaches include BRAC in Bangladesh (Box 10), Escuela Nueva in Latin America (Box 11), the Community Support Program (CSP) in Balochistan (Box 7), Egypt's Community Schools Program, the Moroccan Education for Girls Project (MEG), the Female Secondary School Assistance Project in Bangladesh (Box 12) and Pakistan's Education Development Program (PEDP) in Balochistan and its Northwest Frontier Province, which was terminated in mid-1994 for political reasons. Some of these and other similar programs have become "legendary" showpieces, in which their costs, management and other features are somewhat obscured by the momentum of their perceived successes at various points.

Community funding

Many agencies have developed community funding programs, including the USAID-sponsored Community Schools Projects in Mali, Malawi, Ghana and Tanzania. In an examination of the World Bank's Community Education Fund in Tanzania, in which communities created a plan that they funded by collecting fees, which were then doubled by matching funds, Sumra (in Ridker, 1997) reported that outcomes with respect to the substance of the program (acceptable plans, parents' involvement) were positive, but that its sustainability was questionable. Watkins (2000) argues that matching fund programs such as those of the World Bank in East Africa tend to heighten disparities between poorer and wealthier communities, since poorer communities attract fewer funds for matching. USAID's Community Schools Project in Mali, which was based on the BRAC model, comes to the same conclusion. In this project, INGOs, local NGOs and communities worked together to build 1500 three-year community schools. Several models were used, but only one, which is basically that of a government school, but with NGO support, has proven cost-effective.

Other programs that draw on community funds or contributions in kind include the BRIDGES Project in Thailand, where research shows that households in impoverished rural communities contributed more to their schools than the average Thai household. This system is combined with school *clustering*, in which groups of schools work together, through a committee, pooling equipment and teacher development resources, but not funding. PROPEL in India, in which the Indian Institute of Education arranges for communities to provide and maintain a shelter for a program, is only part-time and targets out-of-school children, especially in remote areas. In Zimbabwe's government schools program, parents and local authorities build schools and the government maintains them, covers their operating costs and pays for furniture, salaries and instructional materials. Parents levy taxes on themselves to pay for capital expenditures of their own choosing, such as more classrooms. Obviously, schools in betteroff communities have an advantage under this system, and the government has made some attempts to assist schools in poorer communities.

Community construction

There is a question about the sustainability of certain community-constructed schools. Harambee secondary schools in Kenya, for example, increased rural children's participation, although not equally for both sexes or across all income groups, but, in the end, the schools were not sustainable, were unaffordable for poorer communities and turned out students who had a harder time competing for places at higher levels (Rugh 2000; Rugh and Bossert, 1998). More recently, tensions rose in Niger when poor rural communities had trouble raising funds for classroom construction. In Senegal, despite revisions to a Structural Adjustment Credit reducing the financial contribution of local communities to school construction from 20% to 10%, parents were still too poor to contribute anything but labor.

Community management

The most well-known community-based school management programs are probably those associated with the Community Support Program (CSP) in Balochistan involving school management committees (SMCs) and men's and women's village education committees (VECs) (Box 7), the Escuela Nueva program in Colombia, where children are elected to a school government (Box 11) (Williams, 1995), EDUCO in El Salvador, where the Ministry of Education trains elected local community members, who administer ministry funds, hire and fire teachers, determine the timetable to meet local needs and build and maintain classrooms, and Save the Children in Mali, where community members, both literate and non-literate, decide on teacher recruitment, school schedules and calendars and special assistance for girls (De Stefano, 1996). Other examples include PROPEL in India, ChildScope in Ghana, the Community Schools Project in Egypt and BRIDGES in Thailand. School management programs have also been supported by the World Bank in Cote d'Ivoire (1998) and Mali (2000), but have not yet been evaluated.

Participatory school councils and village education committees that make a specific effort to involve mothers have been shown to have a positive impact on girls' enrollments. The "mother education committees" established under India's DPEP (Box 4) and Pakistan's Balochistan Primary Education Program have brought more girls into school and cut down on the numbers of girls dropping out of school (Aoki et al., 2001).

Sensitizing the community

Addressing parental concerns about government, schooling and, in particular, girls' physical and cultural security in schooling may be an area in which community involvement is one of the few feasible strategies. The World Bank recommends "retro-fitting" school facilities and teaching staff to address cultural concerns about sending girls to school. Parent involvement in teacher recruitment and other concerns about girls' wellbeing has been decisive in the Balochistan Community Support Program (Kim, Alderman and Orazam, 1998), as has adapting the school schedule to meet child labor needs, as in the case of Mali's community schools.

The USAID GABLE Social Mobilization Project in Malawi for girls' education uses community theatre, in which university student-actors join forces with local community members to create and analyze common scenarios. Theatre for development is also used in Nigeria (in the Nigerian Popular Theatre Alliance and the Theatre for Development Network). USAID's GABLE project in Malawi draws on both the social marketing and active involvement components of community participation. As part of this project, a team of researchers and university student-actors engage the community in acting out various issues relating to girls' education and work with the community to develop action plans.

In Niger, girls' primary enrollment rose from 36% in 1996 to 40% in 2000 owing, in part, to massive sensitization or public awareness campaigns, particularly in rural areas. Likewise, in Senegal, girls' enrollment rose from 41% to 47% between 1992 and 1998. Besides latrines and water points, the main contributing factor to this boost in girls' enrollment was believed to be the mounting of a public relations campaign in low-enrollment areas.

Community involvement can promote the use of more culturally-relevant approaches in materials, content and teaching methods. The Child-to-Child initiative in Zambia (Box 8) is a case in point. Another is the Meena Communication Initiative in Bangladesh, part of the Intensive District Approach to Education for All (IDEAL). IDEAL is an example of a community mobilization program designed to raise gender awareness among teachers, improve girls' completion rates and enhance their self-esteem and academic achievement. This initiative included revision of textbooks and the development of a training module designed to be used in teacher training institutes. However, the materials have not actually been integrated into the teaching program, and their use has had no effect on the behavior and attitudes of most of the teachers using them.61

Box 7: Lessons from other parts of the world: "Irreversible Change" — The Balochistan Primary Education Project (BPEP)

In 1990, only ten percent of schools in the Balochistan province of Pakistan were girls' schools. Only twenty percent of girls were enrolled in school, and many of these were in schools in urban areas. Low rural population density and large distances between villages made it extremely difficult to put a school within walking distance of many children. Many poor girls, both rural and urban, were unable to afford school costs. Female teachers, crucial to girls' education in the local culture, were in short supply.

Cooperating with the provincial government and other donors and building on earlier work by USAID, the World Bank launched BPEP, the Balochistan Primary Education Project, in 1993 to meet a number of objectives, some of which were targeted specifically at girls, including the provision of co-educational girls' primary schools and the establishment of a pilot scheme for providing scholarships for girls from low-income families to attend private school. A new credit in 1997 added other components increasing the supply of female teachers and mounting activities designed to encourage girls to attend middle and secondary school. The project also included support for NGOs commissioned to mobilize community-based education and the creation of village education committees (VECs). Plans for community/NGO schools piloted over the period from 1993 to 1996 were extended to approximately 300 schools per year.

The Community Support Program (CSP) was a comprehensive program designed to get communities actively involved in the provision, management and monitoring of schools, leading to the creation of 1300 schools, with 60,000 girls enrolled. A fourteen-step program for opening and maintaining a community school was developed through trial and error. At its center was the establishment of a Village Education Committee which, with help from an NGO, took over responsibility for opening the school. The committee was required to find a site for the school, provide land for the building, monitor the performance and progress of the school, periodically evaluate its success and furnish information to parents and the Education Department. The government built the school, paid the teacher and provided instructional materials. By taking on these responsibilities, the committee offered security and support to the teacher, who was selected from among qualified women living in or near the village to increase the likelihood that she would remain on the job. The entire process is recorded in a video, *Letters to Yasmin*, available from the World Bank Institute.

Private school scholarships in urban and rural areas supported low-tuition private schools to increase access to primary and middle school for disadvantaged girls by covering the cost of school fees, books and materials. The rural component was designed to help girls in rural communities who could not be served by CSP schools. Eventually, most of the scholarship schools were converted to CSP schools and, because of the success of the CSP schools, the government decided that all new schools would follow the CSP model.

Though local culture allows girls to be taught only by women, few rural women were qualified and few urban women willing to teach in rural schools. There were only two teacher training colleges for women. Both were located just outside the provincial capital of Quetta, and rural teacher training recruits were reluctant to spend long periods away from home. The

(continued on next page)

Mobile Female Teacher Training Unit (MFTTU) provided three months of training at nearby sites for women who had been teaching for several months in the newly established community schools. The women continued to receive additional support after returning to their village. The Mobile Female Teacher Training Unit was specifically designed to provide pre-service training for community schools. Some 1500 untrained female teachers were trained and certified in this manner.

The ICR (2000) reported that girls who would otherwise not have had access to primary education were attending school. Parents' aspirations were being met. There were across-theboard improvements in all indicators. Among others, enrollment targets for girls, up from 15% of the eligible age group to 40%, were close to being met. Promotion rates at different levels improved dramatically and completion rates jumped from 32% to 80%. The ICR concluded that "the landscape has been altered drastically at the school and community levels, and much of the change would appear to be irreversible." However, a deterioration in the political climate after 1996 prompted the Bank to cancel the 1997 credit and to conclude that programmatic thrusts had been lost and important BPEP gains put at risk.

One of the important lessons underscored by the ICR was the importance of community involvement in school-related issues during project implementation. However, previous USAID work and the involvement of knowledgeable teams suggest that community knowledge was drawn on even earlier in the project

Source: Stromquist and Murphy, 1996; Kane, Moulton and Rawley, 2002.

Sometimes "cultural attitudes" are blamed when, in fact, there are other factors at play. In Balochistan, parents believed to be reluctant to send their girls to school for cultural reasons did so when issues of cost, distance and appropriate design were adequately addressed (World Bank, 2001b:168). And in Yemen, a Bank-supported program aimed at improving girls' enrollment by increasing the number of classrooms (ICR, 2001) did not anticipate community problems with the new schools, which had no boundary walls or latrines, both of which were added to selected schools only after the mid-term review. Greater community involvement can pinpoint issues such as these at earlier stages of the design process.

Community contributions to learning

Other programs help the community contribute to the learning process, although these are rare. Even rarer are programs drawing on the community to meet girls' learning needs, except for the recruitment of local women as teachers in Balochistan. In general, programs may organize part of the curriculum around local community life, drawing on local experience. Examples include Escuela Nueva (Box 11), in which community members help children study the community and provide local resources and experiences relating to their lessons, and Save the Children in Mali, which focuses on local village life and draws on local folklore. One such program in which local community members actually teach is the 900 Schools Program in Chile, which funds local young tutors to help children identified by their schools as having problems. Other examples include the Institut d'Education Populaire in Mali, which helps promote the development of leadership abilities among children in community schools, and Tostan in Senegal, which ties education in with local development issues. The most com-

Box 8: Lessons from Sub-Saharan Africa: Child-to-Child Approaches in Zambia

The Child-to-Child approach in Zambia, which is modeled in part on approaches described by Hawes (Hawes, 1988; Otaala, 1978), endeavors to bring standard curriculum aims in line with cognitive skills and behaviors valued by the community and, in this particular application, to mobilize the potential of children as agents of preventive health in their schools, their homes and their communities. In the classroom, children are divided into co-ed cooperative learning teams of mixed ability, and each child is "twinned" as a mentor to a younger child in the community, often a sibling. Building on the work of Gibbs and Mutunga (1991), it draws on a set of instructional modules in mathematics centered around health issues affecting the twinned children, their peers and the larger community. Children are engaged in highly structured activities such as weighing, recording, making, analyzing and interpreting charts, for example. Their findings are then related to scientific and social issues, drawing on real life experiences and leading to the framing of practical action strategies for the local community, as well as for larger communities. As Serpell (1998) points out, the growth charts provide an "exquisite example" of the Western scientific tradition of measurement and stimulation of physical processes in order to control them, while the context in which they are embedded draws on the indigenous Zambian tradition of cultivating nurturance as a form of priming for parental responsibility. This approach helps to free teachers in large classes, is conducive to democratization, has helped improve girls' performance by capitalizing on their ability to relate to others and share ideas and has led to a dramatic improvement in the qualification of participating students for admission to secondary school (boosting the admission rate to 74%, with girls accounting for two-thirds of this figure,⁶² in contrast to averages of 33% and 29% for two non-Child-to-Child classrooms).

Other benefits described by Serpell include developmental benefits for the older child and the special potential for cognitive growth created by peer-mediated learning and individualcentered learning, as discovered in the KEEP program in Hawaii. From the standpoint of the community, parents are encouraged by the fact that the school is inculcating an important Zambian value, that of nurturance, and that they are able to help monitor the child's progress, as well as by improvements in community knowledge about health-related matters.

The Child-to-Child approach has led, not only to "lateral" links between children, both between peers and younger children, but also to links between the child and the family, between the school and the community and even between schools, in a program in which practitioners of Child-to-Child approaches share the concept with other teachers in other areas, who then assess the appropriateness of such an approach and adapt its underlying principles to their own situations.

Source: Mwape and Serpell, 1996; Serpell and Mwape, 1998/9; Serpell, 1998; Serpell, 1999).

mon form of community involvement specifically targeted at girls tends to draw on local needs and ideas—for planning around girls' work schedules (Wolf, Kane and Strickland, 1997).

Evaluation of community participation and decentralization

Evaluation evidence for community participation programs other than those involving a single strategy (requiring parents to pay a fee, for example) is complex and patchy, first, because of their differences in all the aspects referred to above; second, because of the existence of multiple strategies which, if tailored to local circumstances, may differ from one community to another; and third, because participation may be an end in itself, as well as a strategy. Maclure (1997), looking at programs in Africa, concluded that attempts to involve parents in maintenance and management have not been particularly successful, largely because they felt they were given little authority in systems that proved ineffective and which were rightfully the responsibility of the State. The case of Ghana is a good example. Although parents are expected to play an active role in its new (1995) School Management Committees, teachers often resist parental involvement, and many parents see their role simply as contributors of additional funds. Many children have been educated under these kinds of programs, but Rugh (2000) questions the likelihood of parents being able to sustain the schools on their own, as well as the likelihood of the project's replication in the many communities still lacking schools, particularly in poorer communities that will have a hard time raising funds. Watkins (2000) describes cost-sharing with communities, as opposed to tax-based free primary education, as a "highly regressive" indirect tax, in that it draws disproportionately on the resources of the poor.

A recent analysis of evaluations of World Bank Social Funds for Education in six countries (of which Zambia was the only Sub-Saharan African country) showed that most were used for physical facilities and, in the rare cases where they included education measures, there were improvements in dropout and attainment, but not in repetition or achievement. Only one such evaluation, in Nicaragua, presents gender-disaggregated data. The impact on girls' enrollment is greater in communities benefiting from social fund investments than in control communities. Moreover, improvements in the gender gap in education are greater for poor students than for wealthier students (Rawlings, Sherburne-Benz and Van Domelen, 2002).

Decentralization in education is also difficult to evaluate in terms of effort, performance and output (Jimenez, 2002). Common forms of community-based decentralization are autonomous decentralized schools, as in the case of Nicaragua, and the involvement of school improvement committees, as in the case of Brazil and Colombia. In the decentralized EDUCO program in El Salvador where the community is especially active in the hiring, firing, supervision and payment of its teachers, active community participation in management has been shown to lower dropout rates and to have a significant positive effect on language outcomes (Jimenez, 2002). Effective decision-making in autonomous schools in Nicaragua, again, particularly in communities involved in the recruitment, monitoring and evaluation of teachers, has been shown to be positively associated with student test scores (King and Özler, 1998). However, while evaluations of decentralization processes have focused on other aspects of education (see, for example, Gaynor, 1998), few evaluations have singled out their effects on girls. Decentralized financing can lead to greater accountability and responsiveness, but it can also have a negative impact on equity, as demonstrated by studies in Brazil, where there are large disparities in funding between rural and urban areas and between higher and lower-income States, with an inadequate redistribution of funds to these areas. Similar inequities have been reported in Tanzania (Watkins, 2000). For girls, especially rural girls, any disadvantage in funding is likely to have disproportionate implications.

A recent study (Mingat, 2003) of how to best serve the most hard-to-reach population groups, those for whom meeting the Millennium goals poses the greatest challenge, namely poor children, rural children and girls, adds important information to the decentralization debate. One conclusion emerging from this study is that weaknesses in educational management reflected, for example, in a poor allocation of budgetary resources in terms of teacher deployment and of the transformation of these resources into student learning, present a major challenge in educating these children. Schools with similar amounts of resources perform differently, and the relationship between a school's resources and outcomes is weak.⁶³ The research suggests that administrative decentralization of the educational system, though certainly not a panacea, and not even a necessary or sufficient condition for successful management, nevertheless, probably offers a better chance for its effective operation (Mingat, 2003).

Participatory research approaches

Getting insights from interested stakeholders and encouraging them to consider options and help create action is a process that is not limited strictly to communities and local groups. But, during the 1990s, it became part of the information and planning process for a number of projects, sometimes successfully, and sometimes as a more mechanically-applied rhetoric. The Gambia is a good example of a success story. The World Bank's work in this country involved the first application of Participatory Learning and Action (PLA) to girls' education (Kane and DeBrun, 1993; DeBrun, 1994; Doolan, Kane and DeBrun, 1995; World Bank, 1996). The Gambian National Girls' Education Plan was informed by extensive participatory research on the part of many communities, and various subsequent education projects have also drawn on participatory research (Kane, Lawrence and DeBrun, 1998). Since then, it has been used in Guinea, Senegal, Mauritania (World Bank), Uganda, Kenya, Morocco, (USAID), Eritrea (UNICEF) and a number of other countries. The main value of such approaches has been in identifying and illustrating the issue of girls' workloads and in highlighting parental concerns over costs, curriculum content, the relevance of education to community life and employment, the hardship of traveling long distances to school and girls' safety. Among other results, school schedules have been adjusted, fee payment schedules changed, single-sex schools created and more community-supervised protections for girls arranged. When used properly, as part of a coherent research program drawing on communities and groups whose views need to be understood, PLA works. However, most development agencies, including the World Bank, omit the "action" element of PLA⁶⁴ and, as a result, lose valuable models for local-level implementation, as the basis for what parents can actually do and what roles can be played by local groups in projects calling for their involvement.

Issues in participation

By now, most development practitioners are familiar with the ethical and practical reasons for involving communities in development. However, in the last several years, there have been vigorous critical reexaminations of "participation" and community involvement by expert practitioners of such approaches. (See, for example, Cooke and Kothari, 2001.) Some focus on theoretical and methodological weaknesses and, increasingly, on ethical and political issues. Some of these have implications for girls' and women's concerns. In addition to those mentioned above, other concerns have to do with the possibility that communityinvolvement approaches may support local inequities and subvert the interests of the disenfranchised, the erroneous assumption of community homogeneity, the frivolous and purely processual involvement of communities in issues in which their input can make no difference (issues requiring financial reform, for example), attempts to shift responsibility to poorer communities for activities they cannot possibly sustain (Watt, 2001; Hailey 2001) and the fact that the "choices" made by communities are often actually supply-driven by the agenda of the sponsoring agency. Participation has been known to be a "well-honed tool for engineering consent to projects and programs whose framework has already been determined in advance—a means for top-down planning to be imposed from the bottom up" (Hildyard et al., 2001).

Both ends of the spectrum—appropriation by local elites, and predetermination of supposedly local issues, pose threats for girls' issues. As research has shown in studies of school participation as it relates to gender and wealth, poor girls and their families are among the most underprivileged and disenfranchised groups. On the other hand, as shown by this study, assumptions by international organizations about the deployment of strategies are not always well-founded and, in many cases, could be made more effective by the corrective of local insight.

Improving school quality

Many quality-enhancing measures are genderneutral, such as lowering the pupil-teacher ratio or building schools closer to home. Some quality measures are aimed specifically at girls, such as revisions of textbooks to reduce gender bias and sensitization training for teachers (the World Bank-funded Education and Training Support Project in Cote d'Ivoire and the District Primary Education Project in India (Box 4)) and increases in the numbers of female teachers and administrators, as in the Bankfunded Guinea Equity and School Improvement Project.

Student-centered learning

Do learner-centered approaches help girls learn more?

Studies have found that students' perceptions of the classroom environment can have a direct impact, not only on their achievement, but also on their personal/social behavior, while depressed rates of student classroom participation could indicate lower achievement as early as the first three grades (Caruthers, 2003).

As current education reforms in Sub-Saharan Africa focus more on completion for all which, in turn, calls for a higher level of learning and achievement for all, it will soon become necessary to start looking at teacher training inputs to prepare teachers to deliver learner-centered education. Carey (1993) states that "for the most part, most of the instruction that educators receive while at university or college is of a decidedly teacher-centered variety. In the absence of such types of instruction [learner-centered instruction], is it any wonder that new teachers, upon being hired, are unable or reluctant to run a student-centered classroom?" Research involving over a hundred primary school lessons in Kenya is illustrative of the problem, revealing "an overwhelming predominance of teacher-directed question-and-answer exchanges and dependence on closed questions that call for a single response" (Ackers and Hardman, 2001).

Research on learner-centered approaches in Sub-Saharan Africa and their effects on girls is very limited, but the Four Country study of Burkina Faso, Guinea, Mali and Mauritania (World Bank, 1999a) identified a number of educational approaches conducive to learning by girls. One of the main factors in their success appears to be their inclusiveness, drawing all children into the learning process. Some of these approaches are summarized below.

Cooperative learning

In cooperative learning, the class is organized into small groups with elected group leaders, with the teacher moving among the groups. Such groups tended to improve results for girls, in part, because girls are less intimidated by the smaller group size, because they cut down on bullying and teasing, and because girls participated more than in conventional settings. In the Four Country Study, the only school using cooperative learning performed the best in mathematics and French.

Convergent methodology or convergent pedagogy (CM or CP)

"Pédagogie convergente" is a teaching method that uses the mother tongue as the medium of instruction in the early years of schooling and gradually moves on to the second language. The approach also emphasizes child-to-child interaction and role playing and bans corporal punishment (Box 9).

Experienced teachers

In The Four Country study, teachers who used effective class management techniques such as

Box 9: « Pédagogie convergente » (PC) in Mali

Many schools in Mali are now using PC. Some teachers have been trained in the use of this method that is gradually finding its place in Mali's educational system.

PC is a bilingually-oriented educational method first used in 1987. In 1997/98, PC was used in 241 schools with 38,577 students, 43% of whom were girls. Six languages were involved: Bamanankan, Fulfulde, Songhai, Dogon, Soninke and Tamashek. The mother tongue is used as a medium of instruction in the first year and is gradually replaced by French, becoming a subject by grade 4. In other settings in Mali, all teaching is done in the mother tongue. This works for both boys and girls, encouraging them to participate more actively in class, attend school more regularly and succeed in larger numbers.

In Mauritania, an Islamic republic, the use of Arabic as a language of instruction has apparently encouraged integration between religious and formal education, which has met with the approval of parents and may partially explain girls' high enrollment rates in this country (higher than in any of the three other countries in the Four Country Study of Burkina Faso, Guinea, Mali and Mauritania (World Bank 1999a). The use of a language which the children are also exposed to in Koranic school reassured them, prevented them from feeling culturally marginalized and helped them better understand what they were being taught.

A World Bank evaluation showed that "pédagogie convergente:" (i) improves student learning; (ii) prepares students for understanding concepts; (iii) promotes group work and active participation by children in classroom discussions because they are able to grasp concepts more easily; (iv) lowers student dropout rates; (v) improves relations between communities, schools and families; and (vi) validates the importance of the mother tongue to children. Evaluation results showed that, on the same test of cognitive skills (reading and writing) administered to students in schools using PC and those in non-PC schools, the success rate was 95% for children in PC schools with instruction in national languages and French, versus 50% in non-PC or traditional schools using French as the medium of instruction. Other research on performance in mathematics and French shows that girls in PC schools get statistically significant better results in mathematics than girls in conventional schools, while boys do better in both subjects. Observations show that girls in PC classrooms volunteer more and read more comfortably than their peers in conventional schools. Girls also appreciate the absence of corporal punishment, which is a pivotal element of PC.

Source: World Bank 1999a; Mercy Tembon, personal communication.

group work, student reinforcement, involvement of all students, etc.) had more active student classroom participation. Even weak students volunteered answers and asked questions.

Classroom environment

Unfortunately, segregation by gender and ability is still the rule in most classrooms in the countries examined in the Four Country Study. In Mali and Guinea, for example, the best male students sat in the first rows, followed by average male students, then the best female students, and finally the weakest students, both girls and boys, clustered at the back of the classroom, where they tended to be forgotten. In Mauritania, since most conservative parents forbid any mingling between boys and girls, there are "girls' rows" and "boys' rows" in each classroom. As in the case of Mali and Guinea, the best Mauritanian students sat in the front rows, while weaker students usually sat in the back of the classroom.

Expanding physical facilities

Historically, school and classroom construction has been the main type of World Bank intervention in education, with benefits for girls as well as boys. Providing schools closer to home, providing secure latrine facilities for girls, constructing boundary walls, building separate girls' schools and creating or reserving a specific number of dormitory places for girls are all examples of measures used in projects designed to increase girls' participation in education. The presence of a primary school in a local community has been shown to affect enrollment, though this finding is only statistically valid for Central and West Africa, where it increases enrollment for both sexes and, in the case of Benin, for girls more than for boys (Filmer, 1999; D.C. Lehman, personal communication).

In Malawi, facilities have been expanded to meet the requirement that all new grade 9 sec-

ondary day school places be reserved for girls in conjunction with a USAID program providing scholarships for all girls enrolled in secondary education. Pakistan's Punjab Middle Schooling Project (2001) provided over 14,000 additional classrooms, improved facilities in 1400 other schools and awarded 12,000 scholarships a year to girls. The aim was for 70% of project beneficiaries to be girls. The end result was a 27% increase in the number of girls enrolled in school and a 3% increase in boys' enrollment but, as concluded by the evaluation, this improvement could not be attributed to the project alone.

Other than the provision of separate latrines and the construction of boundary walls in societies that practice female seclusion, there is little evidence to suggest that the *quality* of school facilities has any effect on girls' participation. It is more important for the facility to be close to the girl's home.

Making teaching and materials more relevant

While a number of countries have endeavored to reduce the gender bias of their learning materials, in many cases, in practice, this has been a purely mechanical process. Boys' names may be replaced with those of girls, or girls may be portrayed more often but, in many cases, certain underlying themes such as those referred to on page 72 do not change. In other cases, in the rush to achieve education for all, quality is sometimes sacrificed for access, and the issue of gender-sensitivity may be overlooked, both in textbooks and in the classroom. For example, Malawi's sudden boost in enrollments by 1.3 million students in the wake of the abolition of school fees and the immediate need for 38,000 additional classrooms and tens of thousands of new teachers sidelined the work of the Gender Appropriate Curriculum Unit. In Balochistan, the need to provide and upgrade basic subject knowledge took precedence over gender issues in both classrooms and textbooks (Wolf and Kainja, 1999). In Niger, a massive effort to improve access affected quality and parents' views of the value of education.

Gender education units

The objective of current gender education units in Sub-Saharan Africa is to correct gender imbalances in educational systems by increasing female access to and retention in school, mainly through sensitization/social mobilization and grassroots activities. Such units are primarily responsible for monitoring the implementation of government policy on gender equity through targeted programs and activities. In 2001, the World Bank Africa Region conducted an informal survey of Sub-Saharan African countries. Of the twenty-eight countries that responded, seventeen reported the existence of a girls' education structure responsible for the promotion of gender equity in education. Almost all were created in the wake of the Jomtien conference of 1990. Such structures ranged from a unit with an independent staff (10 countries) to a focal point (2), a directorate (2) and a committee/group (3). They can exist either as separate entities under donorfinanced education projects, responsible for the implementation/monitoring of activities related to girls' schooling, or as structures created by Ministerial decree or composed of a group of Education Ministry officials recognized as the "gender group." In the former case, such units are eventually integrated into the Ministry of Education.

Eleven countries reported having no gender units, having chosen to address gender issues through various activities/programs/ projects financed and/or implemented by local NGOs and international donors. In three of the 28 countries (Gabon, Namibia and Rwanda), girls' issues were handled directly by the Forum for African Women Educationalists (FAWE)⁶⁵ attached to the Ministry of Education. While there has been little evaluation of the effectiveness of these units, it appears that they have helped draw attention to the issue of girls' education and may have helped keep it on the political agenda. One concern, however, is that they have little power, and may inadvertently lead to the marginalization of girls' education issues (Swainson et al., 1998). It would be useful to have more precise information on their specific aims, on their technical capacity to achieve these aims, on how they are integrated into country political, instructional and administrative networks and, most importantly, on their impact.

Expanding the number of female teachers and role models

Since, in many countries, cultural constraints play an important role in determining whether girls go to school, and, once there, how well they perform, female teachers have had an important impact on their access, retention and achievement (UNESCO, 2000; Mingat, 1999; UNESCO, 1999, Aoki et al., 2001, among others), at least at the primary level. Few World Bank projects target this strategy (two exceptions are the Guinea Teacher Training project and The Gambia Third Education Sector Project.). However, in both Bangladesh and Balochistan, the recruitment of local female teachers has been important in attracting girls to primary school, and villages in Balochistan with female teachers had higher participation rates for girls than villages that didn't (Khander, 1996; Kim, Alderman and Orazem, 1998; Rugh 2000). The Community Support Process (CSP) program in rural Balochistan, for example, aimed at increasing the numbers of schools and female teachers and promoting parental involvement, boosted girls' enrollment by an average of 22 percentage points (Kim, Alderman and Orazem, 1998). In Botswana, a consistently positive relationship was found to exist between schools with a higher proportion of female teachers and improvements in girls' achievement levels, without putting boys at a disadvantage (USAID ABEL, 1994; Rugh, 2000). Similar results were observed in Pakistan, where girls taught by female teachers reportedly scored twenty-five percent higher than girls taught by male teachers (Ul Haq and Haq, 1998).

Some of the countries with the lowest ratios of female teachers in 1990 have reported 40% increases, but the ratio of female primary school teachers in Sub-Saharan Africa is still the lowest in the world. This region has the highest number of countries in which women account for less than half the teaching staff and, with the exception of Mozambique, all countries in which less than 25% of teachers are women are in West and Central Africa (UNESCO, 2002a:40). There is a clear relationship between the low incidence of female teachers in a given region and higher gender disparities in access to education (UNESCO, 2002a; PROBE 1999), but recruiting female teachers, particularly in areas where traditional cultural concerns are most likely to be a deterrent, in itself, requires innovative strategies. The Mobile Teacher Training Program (MTTP) in Balochistan is one such strategy. Getting women to teach in locations outside their own area was virtually impossible and, yet, in areas where girls were most disadvantaged, there were few women qualified to teach. The MTTP provided a three-month training program for local young women. However, Rugh (2000) describes the extensive monitoring arrangements that had to be set up for these teachers as "burdensome." Similarly, the Yemen Basic Education Project was able to recruit only 56% of the projected 800 female teachers.

There is no clear alternative to recruiting more female teachers. In Morocco, evaluations of the Morocco Rural Primary Education Project and Rural Basic Education Development Project (Performance Audit Report, 2001), showed female teachers placed in rural schools as dissatisfied, with a negative attitude toward local children and anxious to be transferred back to their urban areas. And yet, there was a local male with a baccalaureate degree in science but no teacher training working as a school janitor. Alderman, Kim and Orazem (2002), looking at Community Support Schools, found that some parents were prepared to send their daughters to segregated schools taught by male teachers, providing they were local and, therefore, accountable to the community.

Finally, various efforts are being made to provide girls with role models, particularly in the areas of leadership, business, math and science. There is little concrete evidence about the impact of such efforts, perhaps because many are relatively recent. (On the other hand, there is no evidence to suggest that girls are any less responsive to role models than boys, for whom their value has long been established, and no evidence that male role models resonate as effectively with girls as with boys.) Organizations such as the Forum for African Women Educationalists (FAWE), the Commonwealth Secretariat and FEMSA, Female Education in Mathematics and Science in Africa, have been active in Africa, producing calendars, organizing girls' clubs and science clinics and conducting research on how to improve girls' performance in math and science (Rugh 2000; Wolf and Kainja, 1999). Sometimes, however, the results are modest. One of the objectives of the Education Sector Project in The Gambia (ICR, 1999) was to encourage girls to enroll in science, mathematics and technical courses. In the end, only five girls a year were sponsored to attend a mathematics camp in Ghana.

Providing single-sex schools

Although, recently, there has been considerable international debate on the merits of single-sex schools, there are several reasons for considering them in developing countries. One of the more compelling reasons is that, in some areas, parents will simply not send their daughters to co-educational schools, regardless of other incentives. Research in lowland Eritrea, for example, showed that the obstacles to girls' participation were overwhelmingly cultural rather than financial, and that single-sex schools were, at least, a first step towards getting girls into school. According to some older men in a lowland Eritrean village, "sending boys and girls to the same school is like leaving a goat and a hyena together" (Kane, 1996). Jimenez and Lockheed's study (1988) of singlesex schools in Thailand (one of the few in the Strategies Data Base that provides most of the data needed to assess an intervention) suggests that girls fare better in single-sex schools in terms of confidence and performance. Hyde's 1993 review of research on single-sex schools in Sub-Saharan Africa shows that the majority of studies reported positive results (these studies focused on secondary schools), and the evidence is even more compelling in certain Middle Eastern and North African countries.

However, research by Alderman, Kim and Orazem (2002), cited earlier, shows that, in Balochistan, where one might expect girls and boys to be forbidden to attend the same school (although some girls had been discovered in boys' schools in the past, officially registered as boys), the private-school-based Urban and Rural Girls' Fellowship Programs led to a clear boost in girls' enrollment. In urban areas, boys' enrollments rose as well: they were permitted to attend such schools, but were unsubsidized and usually charged higher tuition fees. The reasons for the lower enrollment figures for rural boys appear less related to cultural concerns over co-educational schools than to inadequate supplies of places in rural boys' schools and higher costs to parents. Some of the rural schools later converted to segregated public Community Support Schools, but this appears to have been related to economic sustainability issues rather than cultural issues. The authors point out, however, that the combination of male teachers and co-educational schools is likely to have an impact on enrollment by older girls.

Using bilingual education

"Bilingual education," or teaching in the local language at some point in the school cycle, is being tested in Burkina Faso, Guatemala, Guinea, Mali, Malawi, Peru, Pakistan and Zambia, among other countries. It has been linked to lower repetition and dropout rates, higher attendance and promotion rates and higher test scores in all subjects, especially for girls. Programs can be delivered in a variety of ways ranging from immersion in the second language to varying degrees of emphasis on the mother tongue (World Bank, 2000b). Few programs teach only the mother tongue, with no teaching in a regional or national language.

The literature includes a number of heated debates over the value and practicality of educating children in a local language focusing on learning benefits (do children fail to learn either language properly, or does leaning a second language make children more skillful in learning a third language?), cultural rights (2000 languages are likely to be lost in the next quarter century and at least another 2000 can be considered "endangered"), practical issues (parents may be sending their children to school so that they can write in the national language and communicate with officials and employers) and on whether such children are at a disadvantage on international assessments of achievement.

In addition to the issue of cultural rights, the main arguments for education through indigenous languages have to do with cognitive development and relevance. Research indicates that children need at least 12 years to learn their first language, that progress in the mother tongue is crucial to cognitive development and that children do not learn second languages any more easily than adults or older children. Materials that reflect the child's home life and experiences are more meaningful and effective. This same argument is cited in making the case for using gender-sensitive materials. Moroccan Berber children are a good example of the complexity of the language issue. They are taught in classical Arabic, a language not in daily use, and are not taught "derija," the language they will actually need. They are also taught French beginning in grade 3. Many children drop out of school, and it is not clear exactly how much the language problems they encounter are a factor. It has been argued that one of the reasons Zambian children perform so poorly on standardized tests is that primary school instruction is in English, though English is rarely the language used in rural households.

In countries with multiple local languages, schools may have little choice but to teach a common non-vernacular language, though the "Pédagogie convergente" method in Mali, for example, uses six languages (Box 9) in addition to French. Finding teachers proficient enough in the local language and in French to teach in both and to ensure a successful transition to French poses a major practical problem. Providing appropriate instructional materials is another problem. Research shows that recurrent costs are about the same in bilingual and traditional programs, but there is little information available for making generalizations on development costs (World Bank, 2000b).

Kane and Yoder (1998) found that two different USAID projects in the same country, Guatemala, both designed to improve access, persistence and achievement, namely the *Programa Nacional de Educación Bilingüe* (PRONEBI, 1985–1900) and BEST (1991– 1995) had different outcomes. Bilingual education under the first program showed statistically significant results in improving access and persistence but only mixed results under the second program. In 1995, PRONEBI became the DIGEBI (*Dirección General de Educación Bilingüe*). Today, only 5% of Guatemalan schools serving a majority Mayan population are bilingual, and 60% of these schools offer bilingual education only in grades one and two. Gendersensitive materials have been the subject of some debate, and have reached only small numbers of teachers (Stromquist, Klees and Miske, 2000).

Finally, international and national assessments of achievement are usually administered in the official language of the state, and some results have shown that the performance of children whose early education is in another language may suffer, as illustrated by examples from Nigeria and Morocco under the MLA Project (UNESCO/UNICEF, Monitoring Learning Achievement Project).

Improving teacher development

One of the characteristics shared by countries "not on track" or "seriously off-track" for achieving UPC is high pupil-teacher ratios (World Bank, 2002c). UNESCO (2002b) estimates that at least three million more teachers are needed in developing countries. Other teacher-related problems include a poor mastery of education content, the lack of a student-centered orientation and a lack of awareness of gender issues. Recent programs based on mutual teacher support, resource teachers and resource centers have reported good results, even with large classroom numbers, at relatively low costs. The *microcentros* in Chile and Colombia, for example, use a mutual support system in which groups of rural teachers meet once a month to share lesson plans, assess student work and help each other improve their teaching practices. Regular visits from district resource teachers are helping teachers in Lesotho, Kenya, and Nepal improve their practices. Teacher resource centers are used in India's DPEP to provide teachers with new learning materials, on-the-spot advice and mentors, who visit classrooms and reinforce new skills. "These approaches are having more impact than many more costly institute-based in-service training programs and traditional school inspectors" (Aoki et al., 2001).

Box 10: Lessons from other parts of the world: BRAC (Bangladesh Rural Advancement Committee)

BRAC is probably one of the most frequently described and invoked non-formal education program in developing countries and is the model for non-formal education in a number of other countries, including Mali and Nepal. It provides a three-year basic education in local, one-room learning centers, taught by staff receiving two weeks of initial training and one or two days of refresher training a month. Though parents do not pay for schooling, they are expected to attend regular meetings. Employing teachers on a part-time basis and eliminating capital costs keeps expenses low. The school uses simple materials and students receive writing materials and books. The annual school calendar and daily schedule are flexible, and parents choose the time of day at which classes are held. Ninety-three percent of the teachers are female, as are 70% of the students.

Although attendance rates are higher, dropout rates lower and students test marginally higher than students in state schools, BRAC has been described in a recent study as a stand-alone program that does not do enough to provide the support students need to participate in more rigidly structured government schools, whose hours, fee requirements, etc. are not as accommodating for the low-income families served by BRAC. Also, because, at least to some extent, BRAC works with the government curriculum, the skills and job-related training provided by the program do not really meet the future employment needs of the poorer families whose children are most likely to participate in the BRAC program. Although BRAC provides scholarships for students wishing to transfer to the formal system, few reliable records are available to monitor and evaluate their progress. Earlier studies commented on the fact that, though NGO providers such as BRAC helped deliver alternative forms of education to girls who would otherwise not receive it, they did not necessarily give girls adequate preparation in life skills or for entry into government schools. As of early 2002, BRAC itself did not have gender parity in management or any women running its various programs (Sedere 1995; Murphy 1996; Sedere, 1999; Rawley, Moulton and Sedere, 2002).

On the other hand, other non-formal programs in Bangladesh (Friends in Village Development, Underprivileged Children's Education Program, Center for Mass Education and Science and the Adolescent Girls Program) have been characterized as providing a "strong learning environment" and skills and knowledge transferable to the formal system and/or the workplace. Together, however, these programs represent less than 10% of the number of students in BRAC programs, while BRAC itself, teaching over 1.2 million children, serves only 8% of all primary school students. There have been no tracer studies of any such programs, including BRAC, to track female graduates.

Source: Rawley, Moulton and Sedere, 2002).

Providing non-formal alternatives

Many community programs provide non-formal alternatives to the official system. In the nine most populous countries in the world, nearly 15 million children are enrolled in nonformal schools. A UNESCO study (2002a) concludes that such programs are difficult to evaluate due to the lack of consistent, comparable program data.

Kane and Yoder (1998), however, found that alternative programs, often non-formal, were

the most common intervention in the literature included in the Strategies Data Base (see page 78) to improve access, persistence and achievement (as opposed to teacher, curriculum or community-based interventions) and that they were successful in meeting each of these goals. In Bangladesh, while NER gender parity in government schools is declining, non-formal primary education (NFPE) schools run by NGOs account for the largest gains in girls' access and achievement. On national examinations, NFPE school results, while low in absolute terms, are six times higher than those of government schools, despite the fact that NFPE teachers have lower educational attainment and are paid less than teachers in government schools. In relation to girls, however, the Education Watch School Survey 2000 shows that, while girls have higher performance and participation rates in non-formal schools than in government schools, girls' achievement is still lower than that of boys in both types of schools (Rawley, Moulton and Sedere, 2002).

Non-formal and alternative programs that prepare girls to enter the formal system are one of the few interventions found by Kane and Yoder (1998) to be sufficiently well-documented to be able to claim they have some impact. However, many of these programs such as BRAC, UNICEF's Community Schools Project in Egypt and USAID's Mosque Schools Program and Pakistan Primary Education Development Program, both in Pakistan, are "seamless" packages precluding any differentiation of their interventions and outcomes.

Providing early childhood development programs

Early childhood development programs are an example of "gender-neutral" interventions that may actually have greater advantages for girls than for boys, although both benefit from such programs.

International data on participation in ECD programs is limited and there are no standard-

ized indicators (UNESCO, 2002b). What data is available, mainly from government-administered ECD programs, shows that, of the twenty developing countries around the world where gross enrollment in ECD programs is less than 5%, three quarters are in Sub-Saharan Africa, though certain Sub-Saharan African countries such as Mauritius and Namibia have high rates of participation.⁶⁶ With the exception of eight countries in Central and West Africa, more girls than boys participate in early childhood care and education in that region.

"Early childhood development programs" cover an extremely wide spectrum of formal and non-formal offerings combining care, play and education in varying degrees. Do children who participate in such programs, particularly those that emphasize school readiness, continue onto primary school and do they perform better? Some programs have been outstanding in monitoring these and other outcomes. Most of these are western, such as the Abecedarian Project and the Perry Preschool, and show that children participating in high-quality, non-home-based programs scored higher on school achievement tests, at least through second grade, had lower repetition rates and higher rates of secondary school completion and that these positive results actually continued into young adulthood in the form of later pregnancy and higher employment rates (Frank Porter Graham Development Center, 1999; Currie, 2000; NICHD, 1998; Reynolds et al., 1997; Schweingart et al., 1993; Barnett 1996). Research also shows that disadvantaged children benefit most from good early childhood programs (NICHD, 1998) and reveals a correlation between stable ECD care and girls' academic performance, while both quality and stability are a factor in the case of boys (Howes, 1986 and 1988). Costs analyses for the Perry Pre-school Program showed a sevenfold savings in public expenditures on welfare, education and other social services. Mass programs such as Head Start in the United States have also reported benefits in terms of achievement and retention (Barnett, in press).

Unfortunately, we do not know as much about outcomes of ECD programs in developing countries. A 1997 review concluded that the need to expand data on impact and cost effectiveness and on the long-term benefits of ECD was a crucial area for future action (Colletta and Reinhold, 1997), which need has since become even more pressing. There are various reasons for our relative lack of knowledge in this area. Some childhood development research on "effectiveness" is far from clear and falls short of current notions of what constitutes research.⁶⁷ Second, ECD programs have many functions, ranging from community empowerment to integrated rural development, to the mainstreaming of immigrants, to the improvement of nutrition, causing less attention to be paid to learning outcomes in monitoring and evaluation activities. Lastly, measurements of quality at the primary level are usually proxy measures relating to the system (such as spending per student, for example), while participation in reliable surveys of learning outcomes is less common.

However, what evidence does exist supports the western findings outlined earlier, namely that good quality programs have cognitive and school survival benefits (Myers, 1992 and 1996; Wilson 1995). Examples of the monitoring of individual project results include the Brazilian PROAPE project, which showed that the total cost of schooling for pupils up to grade 2 was 11% lower for ECD children than for those who had not participated in ECD (including the cost of the ECD program itself) (Colclough et al., 2002). Another example is The Ugandan Mother-Child Day Care Center Services (MCDCCS) program, an integrated program for poor, working and, often, homeless mothers in Ugandan slums and trading areas, which was shown to improve school readiness and school attendance, especially for girls (Kirpal, 2002).

But some of the strongest "evidence" for girls' participation in ECD programs is based, not on official educational "outcomes," as described above, but on conclusions drawn from recent neurological research on cognitive outcomes and from social research.

Research shows that rapid brain development in early childhood has consequences for learning. Optimal times for learning certain skills are brief, fleeting, and occur earlier in life than the ages at which most children enter primary school or, in the case of certain skills, even kindergarten (Bruer, 1999; Gunnar 1998; Shore 1997). Some research argues that early childhood programs are based on globalized "western" conceptions of the child and maintains, correctly so, that programs need to be culturally-embedded (Penn and Ogadhoh, 1998). But, if the neurological evidence is correct, early interventions are universally important. And, since girls mature faster than boys, they are more likely to be ready to, and need to, learn these skills at an earlier age.

Moreover, some of ECD's indirect benefits are also important for girls. Among other evidence, higher age-specific mortality rates and lower ratios of female-to-male population in a number of countries indicate that girls are more likely to suffer from malnutrition and lack of health care at critical developmental ages. Programs that monitor and supplement food intake and health care can prevent irreversible physical and cognitive damage. Because opportunity costs are lower for girls of pre-school age than at the primary school level, parents may be more willing to send girls to ECD programs. And, since research shows that girls generally begin working earlier than boys (Whiting and Edwards, 1988), their early enrollment in ECD may increase their chances of continuing on to primary school. ECD programs may also free mothers to engage in paid work and free older siblings, who might otherwise be prevented from attending school because of childcare responsibilities. Deolalikar (1998) presents a dramatic example of the latter situation from Brazil. Taking other enrollment determinants into account, the probability of a girl aged 14-17 being enrolled in secondary school is reduced by 41% when there is a child under 3 in the household. For boys, it is 5%. However, research by Lokshin, Glinskaya and Garcia (2000) shows that older girls can be the chief indirect beneficiaries or casualties of ECD programs, since such programs also give mothers the freedom to participate in paid employment. Boosts in mothers' wages depress girls' enrollments, who substitute their domestic labor for that of their mother. Conversely, higher mothers' wages increase boys' enrollments. Moreover, high childcare costs depress girls' enrollments, but not figures for boys. The research suggests that low-cost ECD programs would free mothers for work and may also increase older girls' participation in school.

Addressing costs

Abolishing fees

Together, poverty and costs, both direct and opportunity, are probably the single largest barrier to girls' participation in education. Addressing poverty first, within a culturallysensitive context, makes good sense. A number of strategies have been employed to reduce schooling costs for parents, including:

- abolishing school fees, as in the case of Kenya, Malawi and Uganda, and fees for rural girls in Benin;
- providing stipends, scholarships, fellowships, vouchers and grants for tuition and other costs, as in the case of Bangladesh, Mozambique, Pakistan, Malawi and many other countries;
- awarding capitation grants that subsidize girls' schools or girls' places in schools, as in Pakistan and Tanzania.

The abolition of school fees can have a dramatic effect on enrollments for both sexes. In Uganda, primary school enrollments jumped from 3.4 million to 5.7 million in the year after primary school fees were abolished in 1996. In Malawi, enrollments rose from 1.9 to 3.2 million in the 1994–1995 school year, the year in which the country abolished its school fees, although, in this case, this was soon followed by a record drop of nearly twenty percentage points in the school survival rate. Analyzing the impact of the abolition of school fees in Malawi is complicated by the fact that the two fee waiver programs, one a USAID-funded initiative, were mounted simultaneously but, during the effective period of the USAID waivers, girls' enrollments increased more rapidly than those of boys (Wolf and Kainja, 1999). In Benin, the gender parity index rose from 0.56 to 0.72 and the gender gap narrowed by ten percentage points with the abolition of school fees for rural girls as part of a package that also included sensitization activities for parents (UNESCO, 2002a).

In both Uganda and Malawi, this had a dramatic effect on the school systems themselves, and in the specific case of Malawi, triggered a major regression when the system proved unable to keep pace with demand. Today, in Malawi, the percentages of children surviving to grade 5 are down from 1990 levels, though not as noticeably for girls as for boys (from 71 to 36% for boys, and from 57 to 32% to girls) (UNESCO: 2002a:113). Again, in the case of Malawi, it also had a negative impact on quality owing to the combined effects of soaring demand, overcrowded classrooms and shortages of teachers. While Uganda may have better insulated itself from the worst effects of this measure by increasing resources and adopting a sector-wide approach, the evidence is clear that education quality suffered in that country as well.

Providing financial assistance

Direct costs

Another way of defraying costs is through the use of stipends and scholarships, as in new

World Bank-funded projects in India, Pakistan, Senegal, Tanzania and Yemen. The Female Secondary School Assistance Program (FSSAP) in Bangladesh involves large numbers of donors and considerable investments, amounting to about three-quarters of the FSSAP project cost (Box 12). It offers small cash payments to girls in poorer rural areas who stay single, maintain a 75% attendance rate and achieve a minimum 45% score on their final examination. Once girls' tuition was abolished at the nationwide level in 1992 and the stipends program extended to all rural areas, enrollment in project areas more than doubled between 1994 and 2001 to just over a million students. By the year 2000, girls' enrollment accounted for 55% of total enrollment, reversing the girl/boy ratio, and more girls than boys sat for examinations and went on to junior colleges. The proportion of married females aged 13-15 fell from 29% to 14%, while the rate for girls aged 16-19 dropped from 72% to 64%. The survival rate for girls in the stipends program was a surprising 97%.

On the other hand, recipients of the stipend have not participated as extensively or performed as well as expected on examinations for senior secondary school certificates. Roughly 60% took the exam and only a little more than half passed. (However, this is still marginally higher than nationwide rates in project areas) (PAD, 1997; ICR, 2002). It has also been suggested that boys' enrollments declined to some extent as girls' enrollments increased, perhaps as a result of the program (Feder, 2003). Overall, however, the World Bank PAD for the second phase of the project, FSSAP-II, concludes that "all indicators are that a profound revolution has occurred in Bangladeshi society and that incentives to keep girls in school were a critical feature of that revolution."68

World Bank program evaluations show that the combination of the girls' urban fellowship program in Balochistan and a school building program led to boosts in enrollment figures for both sexes, as did, interestingly enough, a program of single-sex schools and stipends in rural areas, although girls benefited more than boys. This was also the case in Colombia, where both sexes participated in a voucher scheme allowing them to attend private secondary schools. The program resulted in a statistically significant increase in the number of years of school completed by girls (World Bank, 2001b).

The USAID-sponsored Guatemalan Association for Family Life Education (AGES), which provides scholarships to disadvantaged girls and income-generating loans to mothers, has been expanded by various experimental pilot packages (community mentoring and non-textbook learning materials, for example). All combinations of interventions have improved girls' access, but the results are mixed as far as persistence is concerned (Kane and Yoder, 1998).

Despite these proven effects for girls, stipends and scholarships can also have certain disadvantages. In preparing the project appraisal documents for FSSAP II, the team noted that the stipends were expensive, accounting for over 13% of the secondary education budget for 1990-2000, and that the question of whether the effects were deep-rooted enough to subsist as cultural norms, were the stipends to be withdrawn, was "an unanswered riddle." Various evaluations showed that the program was affected by misallocations of resources (NORAD, cited in Rawley et al., 2002; World Bank, 2002e), and a USAID assessment of gender issues in education concluded that such programs are "costly, subject to misallocation and... not sustainable" (Rawlev, Moulton and Sedere, 2002). The World Bank's 2002 ICR noted that the IDA had investigated these irregularities and found that, while the project was not significantly compromised, certain safeguards had to be established before extending the program any further. Other scholarship programs have had similar administrative problems. Arrangements for the allocation of resources under the Pakistan middle school scholarship program were described in the program evaluation report as "cumbersome," and the resulting uptake as "disappointing," while those for the Mozambique Capacity Building Human Resources Project (2002) were characterized by "bureaucratic bottlenecks."

And, as Rugh (2000) points out, such programs only benefit individual students and fail to address larger problems, cost too much to administer, sometimes as much as 50–65% of the total program cost and, since they involve such large amounts of money, are open to abuse. There is also the problem of complaints from excluded boys and girls. The Mozambique project had to reduce the benefits of the comprehensive scholarship program targeted at smaller numbers of girls to furnish assistance to all girls and needy boys. Likewise, free textbooks were not distributed to rural girls in co-educational schools for fear that this would operate as a disincentive for boys.

On the other hand, it could be argued that many of the strategies intended to help underprivileged groups, including girls, such as alternative non-formal programs and an emphasis on community financial support, also fail to address larger problems, and that programs that have targeted girls as a group have sometimes failed to help at all, such as efforts to involve the private sector in Guatemala, as discussed below. Scholarships can be effective as part of a larger package. The Sindh Primary Education Development Project specifically targeting girls in urban slum and rural areas included free textbooks for rural girls, as well as a large-scale classroom construction/rehabilitation program and other institutional support measures, which were associated with a doubling in girls' enrollments and a three-fold increase in enrollments for rural girls.

Opportunity and indirect costs

Although scholarships and stipends help parents cover certain direct costs for girls, few programs actually address indirect and opportunity costs. In fact, until recently, indirect costs were not clearly delineated, and opportunity costs of children's labor, particularly of non-wage labor of the sort provided by girls, were rarely taken into account in any projects, except to note that poor attendance, retention and even achievement, particularly for girls, were the result of children being required to work. However, Canagarajah and Coulombe (1997) found that, in Ghana, the presence in the family of children under six years of age increased the likelihood of girls working and not attending school. In Kenya, price reductions for out-of-home care had a "substantial impact on enrollment rates of 8-to-16-year-old girls." "A ten percent decrease in the cost of out-of-home care is expected to result in a 5.1 increase in the enrollment rate of 8-16 year old girls," but had no effect on boys (Lokshin, Glinskaya and Garcia, 2000).

Mexico's PROGRESA program, which channels monetary and in-kind benefits directly to population groups in rural areas living in extreme poverty, is an example of an attempt to offset costs. Program benefits vary as a function of grade level and gender and are contingent upon the children's regular attendance at school. The initial phase of the program was constructed as a randomized experiment, and results show the program to have significantly increased enrollments, particularly for girls and, mostly, at the secondary school level, though it had no significant effect on achievement (Skoufias, 2000; Behrman, Sengupta, and Todd, 2001; Schultz, 2001). Another example is Brazil's Minimum Income Program, which guarantees a minimum wage (equal to \$128 per month per family regardless of family size or the number of children in the family) and other incentives to every low-income family that keeps its children aged 7 to 14 years in school, as long as the children attend school regularly. Evaluations show a boost in enrollments, while the dropout rate was cut from 10 to 0.4% (Caccia Bava, n.d., Schiefelbein, 1997).

Sibling day-care programs in satellite schools in Bangladesh, pre-school programs in Nepal, BRAC in Bangladesh, the Escuela Nueva program in Colombia (Box 11) and UNICEF-supported schools in Egypt have all school. attempted to reduce the burden of childcare on girls, but Rugh concludes that, often,

because of the fact that such programs generally do not accommodate children under the age of two, girls with the heaviest responsibilities may not be included (Rugh 2000: 73). But childcare accounts for only part of girls' work loads, and the fact that, in countries such as Bangladesh, which has a gross enrollment rate of close to 100%, the majority of girls from the poorest rural households still do not complete primary school suggests a need to meet all education-related costs for the very poor, as in the case of FSSAP-II (Box 12), and to study and address the issue of opportunity costs to poor parents. The fact that, among poor families, not all non-participation in education can be attributed to the demands of children's work is also illustrated by a study in India showing that school attendance was not hindered by work as long as class schedules did not interfere with children's chores. Actually, 90% of children not attending school were prevented from doing so by costs, and were simply working because they were out of school (PROBE, 1999).

Examples of other interventions addressing the issue of girls' work include flexible school hours established through community consultation in Bangladesh, which have boosted girls' enrollment and reduced dropout rates (World Bank, 2003b), flexible school schedules in Pakistan and Senegal, and the Escuela Nueva program's flexible daily schedules and school terms and its multi-grade flexible promotion system, with individual semi-programmed learning units enabling students to progress at their own pace. Another example is a BRAC pilot offering the first three years of primary education in a program which runs for two and a half hours a day, either in the morning or in the evening, at the community's choice, six days a week, over an extended school year of about 270 days. After completing the program, most students enroll in a formal primary

Involving the private sector

Private sector financing of education has become increasingly important in recent years. It involves a variety of mechanisms, from commercial enterprises to community-run schools, to an often-overlooked sector, that of households making contributions to supposedly "free" education systems. While private sector involvement is often invoked as a means of improving quality and giving parents more choices, Watkins (2000) argues that, dollar for dollar, there is little hard evidence to show that private schools outperform other schools, and they are often unaffordable for poor parents. He cites research showing a three-fold increase in the number of private schools in Zambia between 1990 and 1996, with no effect on the decline in enrollment rates. In Bolivia, while 60% of non-poor households send their children to private schools, 94% of the extremely poor send their children to public schools.

The use of public-private partnerships as a way of addressing costs to governments and communities and of promoting involvement by civil society has been the subject of a certain amount of debate on girls' education, particularly in USAID projects. In Latin America, USAID's Girls' Education Program (GEP), a component of BEST, got sugar growers, beer and food manufacturers, coffee growers, an oil company, etc. involved in various programs, in some cases as contractors. Other major stakeholders were not involved. Although certain BEST and GEP activities made girls' education a public issue, the private sector component had very few lasting effects. In fact, contrary to original plans, subsequent World Bank and Inter-American Development Bank (IDB) program loans included very few elements of BEST and, while some bilingual elements are found in the IDB program, neither places very much emphasis on girls' education (Stromquist, Klees and Miske, 2000). Currently, USAID's GEA project in Morocco is forging partnerships between the private sector and individual schools.

Pakistan's government-supported private sector initiative, the statutory Frontier Education Foundation, was created specifically to increase access and quality, particularly in rural areas and for girls. Initially, it was regarded by some as a possible model for innovative modes of delivery, but has been so compromised by the lack of a clear policy on public-private partnerships, as well as by neglect and political interference, that, instead, it offers some good lessons on the types of safeguards that need to be in place for such an approach to succeed. However, other programs designed to deal with shortages of public funding have been successful, such as those described earlier on pages 119–120.

Box 11: Lessons from other parts of the world: Escuela Nueva

Colombia's Escuela Nueva program was designed to overcome curriculum-related, training and administrative problems in rural schools and reduce opportunity costs. In the early 1980s, about 55 percent of five-to nine-year-olds and 45 percent of ten-to-fourteen-year-olds in rural areas had never attended school, and one-third of first-graders dropped out. Escuela Nueva facilities are multi-grade schools, with one or two teachers per school. Escuela Nueva is the best-known model for multi-grade schools and has been observed by educators from around the world. Students work at their own pace, and individual assignments are supplemented with work in small groups. Self-instruction books guide them in singling out examples, cultural elements from their own experiences and local materials to be built on in the learning centers. The more advanced students help slower students. Children also participate in health, sanitation and nutrition activities. In this way, the school gradually becomes a resource center for teachers, for agencies operating in other sectors and, eventually, for the community itself.

Teachers are trained on-the-job in three one-week courses during the first school year. They are supplied with detailed manuals similar to the students' own instruction books. Thus, teachers learn by doing, rather than through lengthy pre-service lectures. Teachers also attend workshops held at "micro-centers," where they are encouraged to share their ideas and questions with other teachers.

Students take part in school government, form discipline committees and set up other committees to deal with school cleaning and maintenance, athletics and the school garden, newspaper and library. Teachers are encouraged to organize meetings with parents to discuss the materials prepared by the students. In this way, communities are involved in designing and supporting the school curriculum.

Girls, in particular, have benefited from the Escuela Nueva programs. Daycare centers for younger children, labor-saving technologies and flexible school schedules have reduced or accommodated the work loads of both mothers and daughters.

Evaluations of the program, which has rapidly expanded to some 20,000 schools, suggest that educational achievement and civic behavior compare favorably with the output of traditional schools, at similar per pupil costs.

Source: Kane, Moulton and Rawley, 2002.

Scaling up

This study focuses on strategies, and one of the best "strategies" is scaling up good projects and processes in areas where they work. Chesterfield and Martinez-Enge (2001), concluding that the impact of girls' education programs "appears minimal" in countries that traditionally have had low access (see page 41), suspect this may be the result of the limited scale of such programs and call for greater investment.

Several facts emerge from the work of Wright (2001) and others with a bearing on girls' education projects. Unfortunately, the "scaling up" literature has been described by Uvin and Miller (2001) as reminiscent of the Loch Ness monster—"sighted" often enough

Box 12: Lessons from other parts of the world: Scaling up in Bangladesh

Bangladesh's FSSAP and FSSAPII programs funded by the World Bank are examples of scaling up from an earlier successful program, the Female Secondary Scholarship Project, operated by USAID and administered by the Asia Foundation from 1982 to 1994. This program, aimed at reducing fertility, encouraged girls to enroll in and pursue their secondary education (grades 6-10), boosting both enrollment and attendance figures (Khuda and Barkat, 1992). Both this program and FFSAP also drew on lessons learned from the unsuccessful Free Tuition Program (grades 6-8) that had good educational outcomes, but serious implementation problems (Valad, 1995).

FSSAP, which began in 1994, continued to address direct costs through the provision of stipends, much as the USAID project had, but also added a number of other measures addressing in-school and out-of-school factors. The decision to continue somewhat reduced stipends covering 30-54% of direct costs was based on the earlier program's success, and research shows that, except for the top 15 percent of households (for which direct costs of secondary education represented 16% of their disposable income), such costs placed an enormous burden on other households, estimated at 54% of the income of the middle 23% of households and at 63% for those on the bottom of the ladder, families who either cannot afford such costs on their small disposable income, or have no disposable income at all (Chowdhury, 1994). Households with available funds allocated nearly three-quarters of such funds to educating boys (Valad, 1995). Thus, four of the five main constraints to girls' education in Bangladesh were cost-related. The fifth, however, was "boys," reflecting one of the many other issues at play—cultural, religious, class-related, etc.

The program set up a comprehensive administrative system, drawing on the lessons learned from the implementation problems encountered in the Free Tuition Program. Both schools and parents are integrated into the system as agents of social change by a system of agreements that must be honored in order to maintain eligibility.

Girls' enrollments in project areas have more than doubled since the start-up of FSSAP in 1994, shooting up from 462,000 in 1994 to just over a million students by 2001. Marriages declined from 29 to 24 percent for girls aged 13-15 and from 72 to 64 percent for girls aged 16-19. FSSAP II is expected to serve nearly a million and a half girls.

Source: Chowdhury, 1994; Valad, 1995; Khuda and Barkat, 1992.

to give it some credibility, with its description as varied as the people who have written about it. Samoff and Sebatane (2001) note that "broad and energetic" surveys of the literature on scaling up education reform in Africa identified few empirical studies.

While small, bottom-up, NGO-run projects have figured in development since the 1960s, the idea of grassroots development and participatory approaches first gained widespread attention in the 1980s. Since the early 1990s, a new model has emerged, that of state-civil society partnerships, with an emphasis on strengthening NGOs to scale up their size, scope and activities. This is the same period in which many of the most prominent girls' education programs were first mounted, many of them NGO programs. Scaling up was not always a priority. A program's success was often dependent on carefully nurtured local participation and painstaking responses to cultural factors. Often, poor documentation, and occasionally, a rhetoric that went far beyond actual performance affected the possibility and practical value of evaluation and monitoring. Thus, the history of scaling up in girls' education programs has been short, and specific lessons limited. However, some of the most successful examples of the scaling up of programs serving girls, such as the District Primary Education Program (DPEP) and The Female Secondary School Assistance Project in Bangladesh (FSSAP), were the result of paying close attention to lessons learned from earlier programs.

Scaling up can refer to extending grassroots movements, such as Escuela Nueva, replication, as has been done repeatedly with many USAID community school programs, and to influencing policy reform. A newly-emerging form of this last activity is the "scaling up" of local insights and perspectives to help shape national plans. Examples include the use of Participatory Poverty Assessments, the PRS process and participatory learning and action (PLA) to help shape national policy with regard to gender and education issues, as in the case of Uganda and The Gambia (see Case Studies 1 and 2).

Key lessons and recommendations

iven the strong evidence on the benefits of girls' education, the relatively strong evidence on the range of obstacles involved and the less conclusive evidence on what works for girls, what can each of the partners—international organizations, designers, practitioners and researchers—working to improve girls' education do to help get better results?

It would be ideal to be able to provide managers with a checklist of strategies for helping girls' achieve selected goals, neatly grouped by objectives such as "access," "retention," "achievement," "improving quality" and "addressing sociocultural issues" or by cause, such as "systemic" vs. gender-specific or supply vs. demand-driven, and to do so with more well-founded assurance than is warranted based on current findings in the literature and in organizational reports. However, the fact is that, in most cases, there is not enough information to do anything more than simply review the full repertoire of strategies and make general suggestions as to sound practices.

The situation may not be quite as bleak as it might seem. It could encourage those concerned with girls' education to take a fresh look at the issues and give more thought to possible solutions. Even in the face of incontrovertible evidence for a strategy that succeeded in one country, the new circumstances under which it might be deployed are likely to be different enough, in terms of the government commitment, institutional capacity, degree of centralization, the density and mix of the population, social and institutional structures, cultural variations, the role of teachers' unions, etc., to require major adaptations.

For example, Sub-Saharan African countries have very little in common other than the severity of their problems. Strategies for addressing "cultural issues" need to consider, both the girl in lowland Eritrea who is dead to her family if she "goes with boys," and the girl in western Kenya who is expected to prove her fertility before marriage. Introducing community participation into a centralized system such as that of Nigeria or a decentralized but fairly "non-participatory" system such as that of Zimbabwe is likely to have very different outcomes from the situation in Uganda. The sustainability of using local, primary-schooleducated women to teach, as was done in Balochistan, is not quite as simple in Malawi, where there are concerns over undermining the professionalization of the teaching force. Context matters.

So does identifying the problem correctly. The notorious example of parents in Balochistan supposedly refusing to send their daughters to school, when many were already in school, enrolled as boys, is a case in point. Part IV of this study introduces the reader to a companion computer tool Designing for Success: Better Programs for Girls' Education that can help in thinking through the process of the contextual identification of problems and assessment of strategies. But, while it is true that we need better information, girls cannot afford to wait for this to happen. What this study suggests below is getting information through action. Organizations, researchers and practitioners all have a role to play. Practitioners-managers, project designers, implementers and evaluators-can make a especially important contribution to this process by assessing the challenges and carefully choosing their strategies, while building a strong foundation for monitoring and evaluation.

Here, however, the study summarizes some general suggestions emerging from a look at different strategies.

Strategies for helping girls

International organizations and governments

1. Offer realistic interim goals. Many developing countries are clearly not going to achieve the EFA and Millennium goal in relation to gender parity by 2005. Although this study is by no means the first to state this directly, this realization has not been attributed the importance it deserves, and few alternative goals have been put forward. There are a number of studies that not only document this conclusion but also provide a basis for identifying common education-related features of countries that are moving forward and those that are. These include Abu Ghaida and Klasen (2002),

UNESCO (2002), and World Bank (2002c).

These analyses should be expanded to include historical and macro-level political, legal and economic factors, as well as cultural issues, for purposes of drawing broader lessons. Some of these factors have already been explored separately in recent studies, such as Barro (1999) and Dollar and Gatti (1999). With this kind of information, it should be possible, not only to set realistic goals, but also to tailor such goals to different countries sharing common challenges and characteristics, and not solely on the basis of how far they fall short of meeting these goals.

Furthermore, there are a number of lessons to be learned from countries that still have relatively large gender parity gaps. A number of Central and West African countries such as Mauritania and Guinea, for example, have made good progress in boosting enrollments for both boys and girls, starting from an extremely low base.

Although this study is not designed to monitor progress toward gender parity goals, an analysis of some of the indicators used in the study suggests that there may be some possible common goals in which a certain amount of progress toward gender parity might realistically be achieved by 2005. These indicators are explored more fully in the computer tool. They include:

- gender parity for primary intake;
- gender parity for survival to grade 6;
- the adoption by all countries of specific gender-targeted strategies for reaching parity by 2015 at all levels of the education system.
- 2. Ensure macro level supports. According to *Achieving Education for All by 2015* (World Bank, 2000c), the conditions associated with countries "on track" for achieving universal primary education by

2015 are at the macro level. Conditions in much of Africa are such that individual strategies or even packages of strategies for addressing girls' education issues are unlikely to be effective or sustainable without first ensuring sound national supports and planning for education in general. They are usually "gender-neutral," but girls often benefit more than boys because they tend to suffer most from the conditions prevailing in their absence. Examples are healthy spending on primary education as a share of GDP, reasonable unit costs, competitive teacher salaries, higher spending on non-salary inputs, pupil-teacher ratios of around 40 and average repetition rates below 10%. For low-spending Sub-Saharan African non-UPC countries, Colclough and Al-Samarrai (2000) estimate the necessary share of GNP at over 4%.

Non-formal and alternative programs provide a good lesson in this connection. The success of many such programs lies, not only in their culturally tailored relevance, but also in the fact that they have, in effect, created a microcosm of a healthy, comprehensive support system. It is true that many of these programs cannot be "scaled-up," but this has more to do with the program's inability to extend such supports into a larger arena than with the replicability of the intervention itself. It is perhaps this systemic aspect of alternative programs, rather than their individual strategies, that warrants further study.

3. Rethink data analysis and design. Obviously, without systematic data, websites or other documents cannot hope to provide useful databases, or even useful narrative examples of lessons learned. This study has commented on the state of the literature and the general absence of the kind of information required to draw

conclusions. Evaluation procedures within international organizations are not designed to provide the kinds of information on strategies that would be useful to managers attempting to draw lessons, and most "lessons learned" are pithy vignettes intended to pique interest rather than serve as guides. Once intrigued, a manager has no systematic, easily accessible source of help.

Also, some review reports provide counts of the number of project designs, such as PADS, and the number of country plans, such as Bank Country Assistance Strategies (CASs) referring to girls' education, or they may contain charts and tables showing different types of strategies and presenting counts of the numbers of countries in which they have been used. Such accounts are interesting, but are not substitutes for actually assessing what works.

Practitioners generally need more comprehensive analyses of specific topics and interventions. There is probably no better potential repository of the kind of information needed to draw lessons about what strategies work than the World Bank which, as much or more than any other organization, has experience with a wide range of interventions, as well as the capacity to analyze them. Such analyses need to include more information on the costs and sustainability of these interventions.

Immediate steps should be taken to build stronger databases by:

• clarifying project designs. Projects offering promising conditions for drawing powerful lessons (innovative approaches, potential for naturalistic or quasi-experimental elements, good baseline data) should be identified from the outset, assisting the teams developing the project and research design work. Resulting PADS can be more clearly organized to spell out perceived relationships between issues, strategies, expected outcomes, costs and other influential factors and their possible roles and define what constitutes acceptable evidence for relating strategies and outcomes. This approach will provide a good foundation for making better evaluations and drawing firmer conclusions.

using Implementation Completion Reports and other end-of-project analyses to construct "lessons databases." Draw on the World Bank's expertise and wide experience in the area of girls' education to create a more robust database that includes the situational context-economic, political, legal, cultural, institutional-for a given project, baseline data, specific details on interventions and how they relate to project objectives, outcomes, possible confounds and factors to bear in mind when replicating the intervention elsewhere. A number of excellent Bank Implementation Completion Reports were discovered in the course of this study, which provided this very type of information. Examples include the ICRs for the Pakistan Middle School Project, the Northwest Frontier Province Primary Education Program, the Balochistan Primary Education Project, the Benin Education Development Project and the Chad Basic Education Project, whose authors carefully reviewed exogenous factors and the problems of "disentangling" variables in various situations and, where necessary, drew hardnosed conclusions such as, in the case of one such project, the final conclusion that "these outcomes can be explained by the huge amount

of resources concentrated on a small number of schools." This rigorous process should be encouraged and the lessons archived in a data base.

Lastly, it is essential that lessons be drawn from "what was actually done," or from ICRs, rather than from "what was being planned," or from PADs, which is often the case, for example, on World Bank and other websites consulted by practitioners.

4. Analyze the impact of changes in organizational and government structures and focuses. Do attempts to take more holistic cross-sectoral "social protection" and community-driven approaches such as CDD and the allocation of social funds to communities protect girls' interests? Again, "counts" in project documents are simply not enough. A number of in-depth case studies showing the dynamics involved would be much more useful.

Likewise, as governments move toward decentralization, what safeguards can be put in place to ensure that girls' issues do not lose hard-won ground, as local authorities and communities identify issues for funding,?

Governments can also look at how and where the greatest strategic leverage for girls' education can be achieved. Are girls' education units working? What kinds of improvements could be made in their structure, placement and financial and technical capabilities?

Designers and practitioners

1. Examine evidence on strategies with a critical eye, whether it is found in the literature or in project documents. Designers and practitioners can't be expected to perform experiments and conduct extensive research each time they plan an intervention. However, they can develop a

Box 13: Questions to ask when assessing an intervention

- What was the problem that was being addressed?
- What was the situation before the intervention was carried out? What were the circumstances—economic, cultural, political, legal, institutional, surrounding problem?
- What was the actual intervention?
- What else was done?
- How was the intervention implemented, administered, monitored, evaluated? What happened?
- What were the costs?
- As a result, were there issues that cause you to wonder whether it would work in your country or region?

questioning mindset, so as to use their limited preparation time more effectively. The questions in Box 13 can help.

- 2. Use a questioning approach in planning new projects. The companion computer tool outlines a program that can be used by designers and practitioners to help them design better interventions.
- 3. Prioritize "gateway" obstacles. Although research shows that the most successful approaches to girls' education have involved multiple interventions tailored to a specific situation, some obstacles are higher level than others and some interventions take precedence because they lay the necessary groundwork for others to be successful. Such an analysis is beyond the scope of this paper for two reasons: 1) larger-scale research on the impact of variables such as wealth, location, gender, distance, financing, administration, etc. is fairly recent, though we are beginning to

get a clearer idea of how much each contributes to the education of disadvantaged groups; and 2) as underscored by this study, we don't have enough information on strategies to know how well some of them address these obstacles.

However, one example of a macro-level gateway obstacle is a lack of appropriate taxation, leading to inadequate public investment at the primary education level, or sufficient public investment, but an inequitable redistribution of funding. At the household level, there may be many obstacles to school access, but a major one is cost. Research shows that direct costs alone put the education of all of their children beyond the reach of many parents. In such cases, cost may be a gateway obstacle, though the need for children's work or fears for girls' safety may also need to be addressed. Aoki et al. (2001) present a decision-making flowchart that can help identify such obstacles, as does the program presented in the companion computer tool. A recent development in the field of educational participation may also help, namely the emergence of studies, though still limited in number, of country and cross-country correlates, some of which are cited in this study. This kind of research can help us re-interpret and prioritize obstacles and strategies.

4. View culture as an opportunity rather than an obstacle. Now that some of the most pressing economic factors in education are being addressed, the role of culture is becoming even clearer. All the research reviewed for this study shows that development researchers and project designers, from educators to economists, are increasingly aware of this, though more as an explanatory negative factor than as a positive force. However, viewing it as a set of discrete "barriers" fails to recognize culture is the dynamic "macro" medium in which change occurs. A society's culture helps shape its educational philosophy and is the basis for its ideas about desirable cognitive skills, appropriate teaching methods and the role played by the community in learning. Designers should identify and capitalize on these larger strengths to develop practical, sustainable interventions. There is no other option. Ignoring cultural practices, whether "good" or "bad," simply does not work. The field of development is littered with such instances, which have been extensively documented for the past forty years.

- 5. Involve communities more creatively. "Community involvement" means more than simply asking the community to host participatory research exercises or being co-opted to fund and maintain schools, which are currently the two most common forms of community participation. Successful work in the area of girls' education in The Gambia, Uganda and Guinea using participatory input, planning, management, monitoring and evaluation shows that communities can participate effectively and equitably. Wolf, Kane and Strickland (1997) and Rugh and Bossert (1998) review a number of strategies for getting communities more actively involved in education, while Watt (2001) provides a useful assessment of the rationale for and relative success of community involvement.
- 6. Base designs on country-specific issues and options. Because of the poor quality of data available to managers, good practices are more likely the result of locally tailored programs based on a thorough examination of the specific circumstances, rather than of the deployment of a strategy that has worked well in another con-

text. Identifying country or area issues and possible options is a prerequisite for choosing appropriate, well-founded options. The companion computer can help.

Researchers

- 1. Encourage and practice improved standards in reporting. Given the nature, ethics and exigency of development work, most accounts of girls' education interventions are non-experimental, and most are narrative. This should not preclude clear, careful reporting, providing data on the pre-intervention situation, objectives, intervention(s), costs, conclusions, and possible confounds. This may seem obvious, but one or more of these items of information is missing from most accounts found in the literature.
- 2. Look for larger lessons in international databases.

More analysis of "on-track" countries is needed. As statistics for the year 2000 and later years become available and as new databases are developed for the monitoring of EFA and Millennium goals, practitioners should be looking for larger lessons. In addition to the features mentioned earlier (a healthy share of spending on primary education, reasonable unit costs, competitive teachers' salaries, etc.), it would be useful to know more about what else the "on-track" countries for different indicators have in common. It might help us understand, for example, why some previously "on-track" countries have fallen behind, and what changes have led to others moving forward.

Expand and explore variables in crosscountry, cross-sectoral studies drawn from databases. One of the most interesting lessons learned during the preparation of this study is that economists and researchers looking at cross-country statistical correlations have been making some of the most important contributions in recent years to the study of girls' education by looking at the effects of wealth, residence, religion, etc. on participation. More such studies are needed. One area particularly relevant to girls education is the impact of market failures (World Bank, 2001b) in terms of social security, child care, the need for girls' labor, etc., on girls' participation. What can governments and donors do to provide needed supports to ensure that the burden does not, (as it does now) fall disproportionately on girls?

Clarify the nature of statistical data. Most education data used by international organizations draw on UNESCO statistics, which are then partially updated, adjusted, recalculated, etc. in ways that are often not fully clarified, which can lead to startling and inexplicable discrepancies in figures. More lessons could be learned from existing studies and more useful cross-study inferences could be drawn if studies using special organizational databases were more transparent about the nature and provenance of their data and the degree to which they differs from the data used by other recent researchers. Currently, it is extremely difficult for follow-up researchers to build an incremental picture by drawing crossstudy inferences from these works.

3. Explore economic costs to families. The effects of abolishing fees or providing scholarships or stipends on access and retention, as in Uganda, Malawi, Bangladesh, Pakistan and Guatemala, among other countries, have been better documented than most other interventions, as

have the practical problems of planning and financing such measures. In many places, however, although there is little documentary evidence of this, it is possible that incidental and "hidden" direct costs may be increasing-costs such as community contributions in the form of "participation" (Watt, 2001; Rugh, 2000), supplemental evening studies, gifts to teachers, etc. What all these direct costs actually mean to families has not been explored quite as fully or brought home to designers. Nor has the full spectrum of indirect and opportunity costs been explored, although there are some intriguing studies such as those of Mason and Khandker in Tanzania (1996), Canagarajah and Coulombe (1997) in Ghana and Lokshin, Glinskaya and Garcia (2000) in Kenya showing that opportunity costs account for a substantial share of the private costs of schooling. In Tanzania, for example, it is estimated that the share of such costs could be as high as 75% at the primary level (Mason and Khandker, 1996). Good case studies of samples of families showing the varying interdynamics of family resources and expenditures in the context of country data and surveys such as the Living Measurement Standards Survey would be invaluable in this respect.

4. Explore cultural and political "costs." Some of the most intractable problems go unsolved simply because the current way of doing something fills an important family or community need. While the various functions of initiation ceremonies, for example, have been studied at length and some acceptable alternatives are now being embraced in certain areas, this is not true of the family and community functions of other practices such as early marriage. Advocacy alone will not meet the need for alternatives. Projects need to address the current functions of such practices realistically and findings need to be conveyed to practitioners in succinct and meaningful ways, many of whom are wary of being drawn into what they consider to be tangential sub-anthropological morasses.

5. Look at the reality of political "costs." Conflicting political priorities can be particularly relevant when addressing the problems of at-risk groups such as girls and women. For example, in politically unstable situations, when faced with a scarcity of desirable societal "goods" (i.e., higher education, training, jobs, etc.), governments are likely to protect their own institutional survival and maintain law and order by giving preference to potentially volatile segments of the population such as young males. This is the reality. Researchers need to look at what this means in practical terms, and managers need to draw on this research in designing safeguards for girls and other at-risk groups.

Conclusion

The question that launched this study is "What evidence do we have on strategies for improving girls' participation in education?" The answer is "not nearly enough." But, "is the quest for 'evidence' to the point? "Is it realistic to expect such 'evidence?'?"

And if the answer to each of these questions is "yes," what kinds of evidence do we need? Are we framing the questions effectively?

The cynical view is that, historically, the role of "evidence" in educational design and planning has been rather limited. This is not simply owing to the limitations of social science research. Most educational initiatives, both in industrialized and developing countries, are anchored in morality, values and doctrine. The history of a nation's education system affords a microcosmic view of its cultural, philosophical and political assumptions about what learning is, what is worth learning, to what end, who is educable, how children learn, how learning should be delivered, how it should be measured and who should pay. The notion that the practice of education is founded on research is a relatively new one, and is rarely borne out. The fact is that even the results of the few real controlled experiments conducted in education have often been ignored. (For example, researchers familiar with the debate on phonics versus whole language instruction are well aware of the fact that results-based evidence often competes with notions of "progressiveness." Likewise, debates on "open school" models versus "direct learning" models and the effectiveness of reductions in class size are based less on evidence than on philosophical and political positions.) "Science" alone does not drive education-in fact, it almost never drives education.

Having said that, there are now new challenges and opportunities facing girls' education that will increase the value of and need for clearer evidence on how to proceed. The pressing need to achieve the Millennium Development Goals and the realization that, under current circumstances, one of the best investments a low-income country can make in its future is to educate its girls will require results rather than mere rhetoric, even if such results are cast mainly in terms of access, with only a secondary emphasis on quality. Moreover, opportunities for gaining experience with respect to what does and doesn't work will grow as the number of projects including girls' education interventions increases. However, the findings from this study suggest the need for changes in design and reporting procedures if this experience is to be of any use. Project designs generally fail to meet the requirements of even the simplest of social science experiments, when doing so would not be especially burdensome or costly. Even when such designs are impractical, much of the literature and most documents fail to meet even the most minimal reporting standards. Most accounts are still missing answers to questions such as "what were the circumstances?" "what happened?" and "what did it cost?"

More attention to design work and reporting and to the construction of useful, accessible databases is definitely warranted, because research can and has shown correlations between school attendance, performance on examinations and other variables such as gender, residence, wealth, religion, etc., which can, in turn, pinpoint areas of concern. Also, research shows that addressing the main barrier, namely poverty, and ensuring that girls can get to a school can improve girls' access to education. Cultural "barriers" can be minimized by addressing physical and cultural security issues-providing boundary walls, female teachers, classroom monitoring by the community, separate latrines and curricula incorporating community concerns. There is enough evidence to show that tackling these issues gets girls into school-Uganda and Balochistan, for example, are cases in point.

However, the applicability of "controlled" research focusing on individual variables has certain limitations when dealing with the complexities shaping the obstacles and incentives to educating girls. "Educating"—keep-

ing girls in school, providing necessary conditions for learning and relating the school experience to economic and cultural success outside the school—requires holistic approaches and general support for education systems as a whole, as in the case of The Gambia and Uganda. We have moved beyond the "magic bullet" approach. In the end, individual girls' strategies cannot make up for weak systems and a lack of commitment. This does not mean that projects should not include programs targeted specifically at girls. It merely assumes that macro issues are being addressed as a matter of priority. Even in effective, well-supported systems, girls can be at a disadvantage

Ultimately, even with ironclad evidence of the success of various strategies, one thing is certain: there is no easy road. Good interventions require local analyses of problems and assessments of potential strategies. As pointed out by Lloyd et al. (1999), "development has been experienced traditionally as a steady and irreversible process; contemporary African experience has no historical analog." What we know so far will not be of as much help as we would like it to be. We are still "paddling at the shallow end" in terms of what we need to know. Thus, the importance of this study lies, not in itself, but in follow-up studies.

"Country-led and country-specific": identifying appropriate strategies

bviously, many of the factors mentioned earlier in the study as associated with universal primary school completion for boys and girlshealthy spending on primary education as a share of GDP, reasonable unit costs, competitive teachers' salaries, higher spending on nonsalary inputs, pupil-teacher ratios of around 40 and average repetition rates below ten percent (World Bank, 2002c)-need to be addressed at the macro level. However, the problems arising when such elements are not present differ from one country to another. In one country, relatively small numbers of girls may enter school. In another, they may enter school but may not persist because of cost or cultural concerns. In a third, they may persist, but do poorly. Moreover, in most countries, even those countries doing relatively well, such problems will differ in nature and scope from one area to another and, perhaps, from rural to urban areas. Even in the face of similar problems in different countries, the strategies used to deal with them must be tailored to local conditions and resources if they are to work.

How do you learn what the problems are and find out what to do about them? This section of the study presents a summary of some of the main points in *Designing for Success: Better* *Programs for Girls' Education*, the companion CD-ROM for those concerned with identifying and planning better girls' education interventions. Taking the World Bank emphasis on "country-specific" and country-driven development as its point of departure, the tool asks "What can partners do to design and implement programs that will meet a country's specific needs?" and introduces a process designed to help managers and other partners:

- identify top priority problems of girls' education in a particular country;
- pinpoint the causes;
- consider appropriate strategies;
- design a program or part of a program.

While focusing on primary intake, survival to grade 6 and universal primary completion, it also covers a wider range of relevant indicators than those discussed in this study at both the primary and the secondary level, along with other indicators considered important by educators in achieving gender parity, such as literacy rates, the percentage of female teachers and labor market participation.

The process follows a logical, sequential model adapted from the work of Hartnett and Heneveld, *Statistical Indicators of Female Par-*

ticipation in Education in Sub-Saharan Africa (1993), and Odaga and Heneveld, Girls and Schools in Sub-Saharan Africa (1994). The tool consists of five steps, which can be used either as a complete process or as individual steps, depending on one's needs.

Step 1: Identifying *problems and issues* in a country or region

Step 2: Identifying causes

Step 3: Identifying and assessing interventions

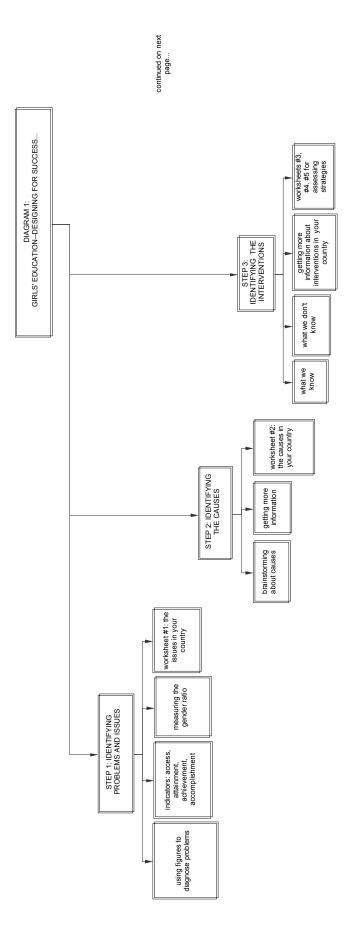
Step 4: Using some design tools

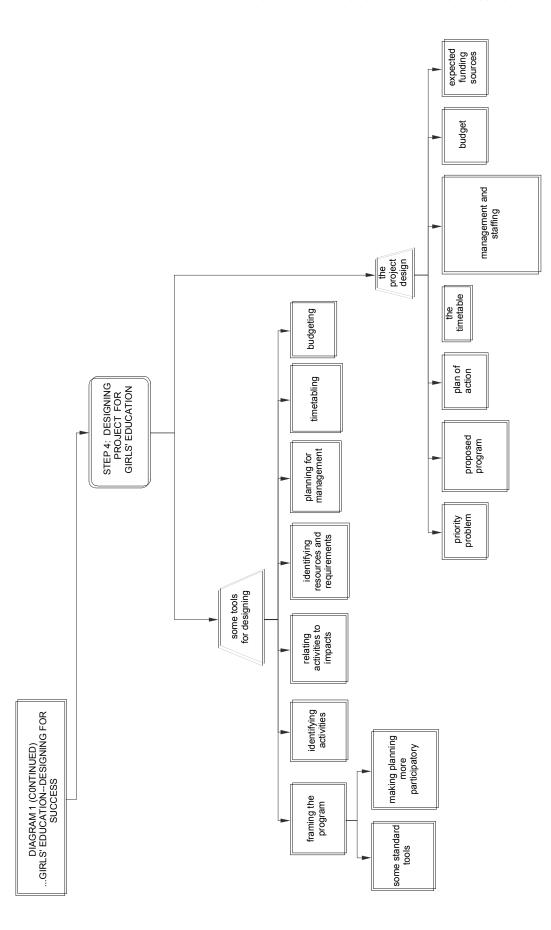
Step 5: Bringing it all together: the project

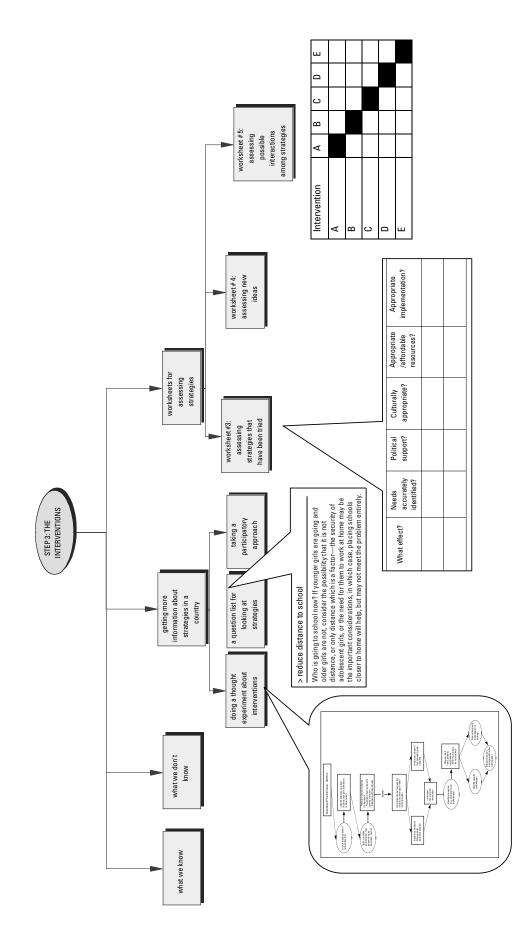
Figure 1 outlines some of the activities in each step of the tool. Clicking on any part of the tool provides the user with detailed help with each step.

For example, Figure 2 shows some of the help you can get by clicking on different areas in Step 3. You may want to figure out whether "distance from school" is a potential cause of poor school participation on the part of girls. One way of doing this is through a thought experiment. The call-out under that box shows part of the inquiry process you would follow to work out the answer. If you discover that distance is, in fact, a problem, you might then want to look at the specifics of the problem in more detail. The call-out under another box, a question list for looking at strategies, provides a set of questions for most issues likely to be encountered in girls' education, including the issue of distance.

These call-outs are only a sample. Each box in the tool contains additional sub-levels of information, guidance and help.







UNESCO: Countries at risk in relation to Millenium Education Goals

Primary education net enrollment ratios, countries in Sub-Saharan Africa

| | Away from the goal | Towards the goal |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Far NER <80% | <i>Serious risk of not achieving the goal</i> Burundi, Central African Republic, Comoros, Djibouti, Equatorial Guinea, Lesotho, Madagascar, Namibia, Niger, Nigeria, Tanzania, Zambia | <i>Low chance of achieving the goal</i> Benin, Burkina Faso, Chad, Cote d'Ivoire, Democratic Republic of the Congo, Eritrea, Ethiopia, The Gambia, Malawi, Mali, Mauritania, Mozambique |
| Close NER 80-95% | At risk of not achieving the goal Botswana, Gabon, Mauritius | High chance of achieving the goal Swaziland, Togo, Uganda |

Source: UNESCO, 2002b.

Primary gross enrollment rate gender parity index: countries in Sub-Saharan Africa

| | Away from the goal | Towards the goal |
|----------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Far NER <80% | <i>Serious risk of not achieving the goal</i> Burundi, Cameroon, Equatorial Guinea, Ethiopia, | <i>Low chance of achieving the goal</i> Benin, Burkina Faso, Central African Republic, Chad, Comoros, Cote d'Ivoire, Djibouti, Ghana, Guinea, Guinea-Bissau, Mali, Niger, Senegal, Sudan, Togo. |
| Close NER 80-95% | At risk of not achieving the goal Madagascar | <i>High chance of achieving the goal</i> Cape Verde, Congo, The Gambia, Lesotho, Mauritania, Sierra Leone, Uganda |

Source: UNESCO, 2002b.

Examples of missing data

he following chart shows interventions under selected USAID projects examined in the 1998 Strategies Data Base that failed to meet their goals of promoting improvements in access, persistence or achievement, or for which information was not available. USAID projects are not unusual in

this regard. A subsequent, albeit cursory, examination of recent World Bank documents for this study suggests that a comparable chart of World Bank projects would also reflect missing data that may have been helpful in drawing conclusions about useful strategies.

| Pre- interventio data supplied? | Pre- intervention data supplied? Intervention | Objective: Improve access? | Objective: Improve persistence? | Objecti Objective: expres Improve measu achievement?terms? | ve sed in able | Improved access? | lmproved persistence? | Improved achieve- ment? | Outcomes expressed in measurable terms? | Cost reported? | Environment addressed? |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------|---------------------------------------|---------------------------------------------------------------------|----------------------|--------------------------|--------------------------|-------------------------------|--------------------------------------------------|-------------------|---------------------------|
| Group work Not and peer reported teaching | Not reported | | Not reported | Yes | Yes | | | Mixed | No | No | Not at all |
| Bilingual Yes education | Yes | | Yes | Yes Y | Yes | Mixed | Mixed | Don't know | Yes | No | Not at all |
| Formal Yes teacher training | Yes | | Yes | Yes | Some | Don't know | Don't know | Don't know | No | No | Very little |
| Program Not reporte materials | Not reporte | σ | Not reported Not reported | Yes | No | | | Mixed | Yes | Yes | Very little |
| Formal Yes teacher training | Yes | | Yes | Yes Y | Yes | Don't know | Don't know | Don't know | Yes | Yes | Very little |
| Textbooks Yes Classroom Yes construction | Yes Yes | | Yes Yes | Yes Yes Y | Yes Yes | Don't know Don't know | Don't know Don't know | Don't know Don't know | No Yes | | |
| Labor-saving Yes technologies | Yes | | Not reported | Not reported Not reported No | ٥N | No | | | No | No | Very little |
| Scholarships Yes | Yes | | Yes | Not reported Yes | res | Don't know | Don't know | | No | No | In most areas |
| Gender Yes appropriate curriculum revisions | Yes | | Yes | Not reported Y | Yes | Don't know | Don't know | Don't know | No | Yes | In some areas |
| Alternative Yes Not reported ⁿ or prepara- tory programs: •Textbooks •Culturally appropriate curriculum revisions •Formal teacher training •Local female teachers • Flexible schedule/calendar | Yes s: ppropriate curr her training s teachers edule/calenda | | Not reported ulum revisions | Not reported Not reported No ulum revisions | 0 | Don't know | Mixed | Yes | Yes | ° Z | In most areas |

(ccontinued on next page)

| Subject of source | F ii Scope of d intervention s | Pre- intervention data supplied? | Objective Improve Intervention access? | Objective: Improve access? | Objective: Improve persistence? | Objective: Objective: expressed in Improve Improve measurable persistence? achievement?terms? | Objective expressed in measurable Improved ?terms? access? | n Improved access? | Improve Improved achieve persistence? ment? | Improved achieve- ment? | Outcomes expressed in measurable Cost terms? repor | Cost reported? | Environment addressed? |
|---------------------------------|-----------------------------------------|-------------------------------------------|----------------------------------------------|----------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------|---------------------------------------------------|-------------------------------|-------------------------------------------------------------|-------------------|---------------------------|
| PEP (PAK79-85) (Pakistan) | Multiple non-national | Yes | Formal teacher training | Yes | Yes | | Ω | on't know | Don't know Don't know No | No | Yes | No | Not at all |
| AGES (Guatemala) | Multiple non-national | Yes | Sex education | Not reported Yes | Yes | Not reported Yes | | 'on't know | Don't know | Don't know Don't know Ves | Yes | No | In some areas |

Executive Summary

1. Summers, Lawrence (1994).

2. Goal 3, Target 4: Promote gender equality and empower women: eliminate gender disparity in primary and secondary education , preferably by 2005, and in all levels of education no later than 2015. (United Nations General Assembly, Resolution A/56/326, September 6, 2001).

3. A country is "on track" if a projection of the observed trend results in a completion rate of 95% or higher by 2015. Countries are "off track" if a projection of the observed trend results in a completion rate of between 50% and 94% in 2015. Countries are "seriously off track" if a projection based on the observed trend results in a completion rate below 50% in 2015. (For more details, see page 44.)

4. (Abu Ghaida and Klasen [2002] include Malawi as well.)

5. In this context, "managers" refer to practitioners responsible for designing girls' education programs, such as managers in development agencies, including World Bank sector managers and task team leaders, and officials in developing countries.

6. World Bank internal design and evaluation documents were not available for public examination when the data base was originally designed and were not included, although other Bank publications were included. However, two hundred and forty-two 1995–2000 Project Appraisal Documents (PAD), Implementation Completion Reports (ICR), Country Assistance Strategies (CAS) and other World Bank project and planning documents were reviewed for the current study.

7. For selected characteristics of "formal" or "mainstream" education as compared with non-formal education, see Wright's comments (2001).

Résumé analytique

8. Summers, Lawrence (1994).

9. Objectif 3, cible 4 : « Promouvoir l'égalité des sexes et l'autonomisation des femmes : éliminer les disparités entre les sexes dans les enseignements primaire et secondaire d'ici à 2005 si possible et à tous les niveaux de l'enseignement en 2015 au plus tard. » (Assemblée générale des Nations unies, résolution A/56/326, 6 septembre 2001).

10. Un pays est considéré comme étant « sur la bonne voie » si les prévisions sur la base des tendances observées parviennent à un taux d'achèvement d'au moins 95 % d'ici 2015. Lorsque elles tablent sur un taux compris entre 50 % et 94 % d'ici 2015, le pays est considéré comme « n'étant pas sur la bonne voie ». Quant aux pays où les prévisions aboutissent à un taux inférieur à 50 % en 2015, ils sont considérés comme « risquant sérieusement de ne pas atteindre les objectifs » (pour plus d'informations, voir page 44).

11. Abu Ghaida et Klasen (2002) rajoutent le Malawi.

12. Le terme de « responsables » recouvre ici les praticiens chargés de concevoir des programmes éducatifs pour les filles—qu'ils soient chefs de projet dans des organismes de coopération au développement—y compris les responsables sectoriels et les leaders de groupes de réflexion de la Banque mondiale—ou qu'ils occupent des fonctions officielles dans les pays en développement.

13. A l'époque où la base de données a été lancée, les documents internes de conception et d'évaluation de la Banque mondiale ne pouvaient pas être diffusés en dehors de l'organisation ; ils ne sont donc pas inclus, à l'inverse des autres ouvrages qu'elle publie. Cela étant, 242 documents de la Banque mondiale ont été examinés dans le cadre de la présente étudeévaluation de projets (PAD) couvrant la période 1995-2000, rapports internes de fin d'exécution (RFE), stratégies d'assistance aux pays (CAS) et autres descriptifs de projets et documents de planification.

14. Pour une sélection de caractéristiques de l'éducation « formelle » ou « ordinaire » par rapport à l'éducation non formelle, voir les commentaires de Wright (2001).

Part I

15. The Millennium goals reaffirm previous commitments to girls' education made at the World Conference on Education for All in Jomtien, Thailand, and the World Summit for Children in 1990, at a number of mid-decade events such as the 1993 Summit of the Nine High-Population Countries and the World Summit for Social Development, as well as in broader declarations such as that of the 1995 Fourth Conference on Women's Beijing Platform for Action, the 1998 Second Tokyo International Conference on African Development (TICAD II), the Dakar Education for All Forum in 2000 and at a number of more specific discussions in Africa, the focus of this study.

16. (United Nations General Assembly, Resolution A/56/326, September 6, 2001)

17. through grade 6 or another official complete cycle of primary education

18. For example, an average 27% private return on investments in education (Psacharopoulos, G. and H. Patrinos, 2001. "Returns to Investment in Education Up to the New Millennium. Mimeo)

19. (Robert Prouty, personal communication).

20. The Dakar Framework for Action, Education for All: Meeting Our Collective Commitments, adopted by the World Education Forum. Dakar, Senegal, April 26–28, 2000, Paris, UNESCO, 2000, paragraph 7.

21. United Nations General Assembly, Resolution A/56/326, September 6, 2001.

22. The 2003 Global Monitoring Report, forthcoming in November 2003, will acknowledge the challenge presented by this target date and propose some short-term measures (Colclough et al., 2002, p. 17)

23. World Bank (2002d)

24. For example, a detailed series of Strategic Resource Planning (SRP) studies funded by the Rockefeller Foundation and others, including Norway and the World Bank, looked at constraints, options and policy implications for girls' education in nine Sub-Saharan African countries between 1996 and 1999.

25. Including nineteen Sub-Saharan African countries: Benin, Burkina Faso, Burundi, Chad, Ethiopia, The Gambia, Guinea, Guinea-Bissau, Liberia, Malawi, Mali, Mauritania, Niger, Senegal, Sierra Leone, Somali, Sudan, Tanzania and Yemen.

26. We are focusing on World Bank evaluations since they were not available to the public at the time of the development of the *Strategies Data Base* (Kane and Yoder, 1998), which is the basis for our comments about "the literature" in this study.

27. For a brief account of the problems associated with educational statistics, see Watkins (2000), p. 76.

28. As indeed they often are, even among the most sympathetic of commentators, who talk about "adapting" the school system to "girls' special needs," which implies that boys have no special needs and is based on the assumption that a "boys" school system is the generic standard, while girls require something "extra."

29. The figures, "1," "2," etc. should not be confused with the rankings used by Bruns and Mingat (2002) above, which refer to gender equity groupings based on the ratio of girls to boys at the primary and secondary level, or the revised ratings (Abu Ghaida and Klasen, 2002) presented on page 41 based on the ratio of girls' to boys' gross enrollment rates. A related composite index known as the Education Performance Index has been developed by Oxfam to measure shortfalls from a perfect score for net enrollment and completion (100%) and the gender gap (0). The higher the score, the larger the shortfall. (According to this index, the level of basic education deprivation in Sub-Saharan Africa is 40% higher than the average for all developing countries [Watkins 2000]).

30. World Bank 2002c and 2002d focused on 63 low-income countries with populations of over one million. The expanded data base includes 139 countries for which data are available. However, the simulation estimating UPC costs covered only forty-seven countries, two thirds of which are in Sub-Saharan Africa. Another 49 countries at risk of failing to achieve UPC were not included. UNESCO (2002b, Chapter 4) reviews this and two other cost studies. UNESCO 2002b also uses a different non-cost-related classification system in which countries are categorized as moving toward or away from various Millennium goals, the most relevant of which are primary net enrollment and the gross enrollment rate gender parity index (GPI) for purposes of this study. Countries are also grouped according to their chances of reaching the Millennium goals. Of 21 countries at serious risk of not reaching the goal of universal primary education enrollment and moving away from the target, 12 are in Sub-Saharan Africa. Of the 16 countries moving towards but with a "low chance" of reaching this goal, 12 are in Sub-Saharan Africa. Only three countries, Swaziland, Togo and Uganda, are moving toward the goal with a high chance of actually achieving it. Botswana, Gabon and Mauritius are considered close to the goal, but moving away from it. The results form a quadrant for each variable. These quadrants are presented in Appendix I for comparison purposes.

31. IDA countries, in order of their trend rate, are Malawi, The Gambia, Togo, Uganda, Zimbabwe, Benin, Guinea, Eritrea, Tanzania, Mali and Mauritania. Among the 20 "best performing" IBRD countries, three are Sub-Saharan African nations, namely Namibia, Gabon and Swaziland. 32. The total number of completers (graduates) divided by the total size of the national population of official graduation age, multiplied by 100.

33. From 1995 to 2000

34. Abu Ghaida and Klasen note that, while the achievement of the MDG gender goal with respect to educational equality would be better measured in terms of educational outcomes such as test scores or outputs such as completion rates, the most consistent, recent, widely available data refer to school attendance and resulting calculations of gross enrollment rates.

35. The apparent intake rate (AIR) or gross admission rate is the number of new entrants as a percentage of the population of official entrance age. The inclusion of over-age children produces figures of over 100% for most countries. On the other hand, the net intake rate—new entrants of official entrance age as a percentage of the population of that age tends to be low, since many children enter school late.

36. Angola, Eritrea and São Tomé and Principe

37. This study refers to both the gender parity index and the gender gap. The gender parity index is the *ratio* between female and male rates (F/M). A figure of 1.00 or higher indicates a disparity in favor of girls. The gender gap is the absolute *difference* between male and female rates (UNESCO, 2002a:45). A gender gap of 15, for example, indicates a difference of fifteen percentage points between boys' and girls' rates in favor of boys. Neither can be used to assess overall "well-being" in relation to this indicator. For example, a country with boys' and girls' rates of 40 and 25, respectively, has a gender gap of 15, as does a country with figures of 99 and 84, respectively.

38. Though results varied from one country to another, internationally speaking, the Third International Mathematics and Science Study (TIMMS) showed a modest but statistically significant difference in mathematics scores in favor of boys and a larger difference in science scores, despite a significant improvement in girls' scores between 1995 and 1999. (Other international surveys include MLA (Monitoring Learning and Achievement) for math, literacy, science and life skills, PASEC (Programme d'Analyse des Systèmes des pays de la CON-FEM) for literacy and math, PIRLS (Progress in Reading Literacy Study), PISA (Programme for International Student Achievement) for literacy, math and science and SACMEQ (Southern African Consortium for Monitoring Educational Quality) for literacy.

39. For a review of this literature see Kane, 1996, *Gender Culture and Learning*, Washington D.C.: USAID ABEL 2, Educational Development Center.

40. Prouty, Robert, World Bank Development Committee, forthcoming.

41. Benin, Burkina Faso, Chad, Ethiopia, The Gambia, Guinea-Bissau, Mali, Niger, Senegal and Uganda

42. See Arensberg and Niehoff (1971) for an early yet still relevant discussion of the tendency in the Western intellectual tradition to become over-reliant on dyadic analysis.

43. Abu Ghaida and Klasen point out that, at first glance, such growth may appear to be minor, but is considerable when compounded. They cite the example of a country with a PPP–GDP per capita income of \$1500 in 1995 and a projected per capita growth rate of one per cent per year for the period 1995–2015. Such a country would have a 10 percent higher income in 2015 if the effect of failing to meet the goal was 0.4 percentage points for both ten-year periods.

44. *Engendering Development* (World Bank. 2001b: 89–90) provides a summary of recent research to date.

45. The attainment of "mass schooling" was defined by Caldwell in his 1980 study as the point at which 90% of 15–19 year-olds ever attend school. Countries such as Botswana, Ghana, Kenya, Namibia, South Africa, Tanzania, Zambia and Zimbabwe achieved mass

schooling as long as two decades ago. Lloyd et al.'s study of education and fertility (1999) also used 75% of 15–19 year-olds completing four years of schooling and 60% of the same age group completing primary school as indicators of mass schooling (attained by Botswana, Kenya, Namibia, South Africa, Zambia and Zimbabwe). Interestingly enough, prior to the attainment of mass schooling, a ten percent increase in grade four attainment had virtually no impact on fertility (Lloyd et al., 1999; 2000).

46. The researchers speculated that poor school quality and linguistic diversity may have played a role in this phenomenon.

47. The exceptions are Botswana, Cameroon, Cape Verde, Comoros, the Congo, Equatorial Guinea, Gabon, Ghana, Kenya, Lesotho, Mauritius, Namibia, São Tomé and Principe, South Africa, Swaziland and Zimbabwe.

48. The study (World Bank, 2002c) costs three different "scenarios" with regard to revenues and public spending. These figures refer to the second such scenario.

49. The studies are World Bank (2002c), Brossard and Gacougnole (2000) and Delamonica et al. (2001). The strengths and weaknesses of each study are explored in UNESCO, 2002b.

50. Democratic Republic of the Congo, Ethiopia, Nigeria and Sudan

51. White's finding appears counter-intuitive, at least to the western reader, and the underlying research is too complex to be recapped in this study. The reader is referred to *The Status of Women in Industrial Societies* (1980) for a full explanation of the variables, cultures and analytical process.

52. No one would argue, for example, in the seven African countries with a gender gap in favor of women in secondary net enrollment, that this is an indicator of the higher status of women in these countries than in many other African countries. In three such countries, namely Botswana, Lesotho and Namibia, women are under their husband's guardianship and have no independent right to control property (World Bank, 2001b: 37). Similarly, Togo's gender gap of 27 points in favor of women for trained teachers at the primary level, the highest in any developing country, doesn't mean that the status of women in that country is superior to that of, say, South African women, where the gap is 4, in favor of men.

53. A 1993 study of girls' education in The Gambia showed that sending three children to primary school, one to middle school and one to secondary school would cost a family about 11,000 dalassis, or US\$ 1257, at a time when average per capita household income was estimated at US\$ 220 (Kane and DeBrun, 1994; World Bank, June 1993).

54. There is a considerable amount of literature on why economic activities are divided between the sexes. Is it a matter of social custom, of differences in economic incentives and constraints, or of a comparative advantage by one sex over the other? One of the earliest and most extensive studies based on cross-cultural data from 185 cultures concluded that the best explanation for the division of labor by sex for 50 types of tasks is men's physical advantage and women's relative disadvantage with regard to activities incompatible with childcare (Murdock and Provost, 1980: 301–302).

55. These observations are supported by recent research, which showed, for example, that the presence of female adults in Ghanaian households increased the likelihood of girls attending school and not working (Canagarajah and Coulombe, 1997). Where adult women are absent or holding jobs in the formal sector, these girls are likely to replace them as workers. Also, even improvements in mothers' wages have been found to have an effect on girls' education. Lokshin et al. (2000) found, in Kenva, that a 10% boost in mother's wages increased boys' participation in school and decreased girls' participation by nearly the same amount. Finally, higher prices for childcare reduce the numbers of girls attending school but have no significant effect on school attendance by boys. In effect, as direct or opportunity costs of childcare become more expensive for the family, the daughter replaces at least part of the mother's labor at the expense of her schooling.

Part II

56. See Rugh (2000) for an informative review of the *history* of interventions designed to promote girls' education.

57. The Strategies Data Base included all primary literature from projects, academic research and policy studies that could be located in a four-month-long search period, using the resources of USAID's CDIE, the World Bank, Creative Associates, The Academy for Educational Development, Global Vision, the Center for Development and Population Activities, the Education Development Center, the Center for International Education and others. The accounts cover seventeen countries, seven of them in Africa: Ethiopia, Liberia, Burkina Faso, Ghana, Zimbabwe, Malawi and Mali.

58. They had mixed results in addressing retention/attainment/persistence goals, and there are no reports on their goal of improving achievement.

59. Successful strategies included female teacher-trainers, incentives for female teachers, flexible schedules/calendars, scholarships, gender-appropriate curriculum revisions, improved working conditions for female teachers, child-care programs, media campaigns, community sensitization programs and alternative/preparatory programs. Strategies whose outcomes were not reported or are unknown involved the development of new textbooks, formal teacher training and classroom construction.

60. Salmen, L. and E. Kane, World Bank, forthcoming

61. Gender Audit Preparation on the Intensive District Approach to Education for All (IIDEAL) Project, February 1999.

62. On average, girls' absolute scores were equal to those of boys, and not as a result of

the affirmative action policy currently in place in Zambia.

63. Something similar can be said for the relationship between country income and Oxfam's Education Performance Index score for performance on net enrollment, completion and gender parity. In a comparative table of countries grouped by income rank and EPI rank, a number of countries, including Kenya, Zimbabwe, Zambia, Tanzania, Namibia and Malawi in Sub-Saharan Africa, have EPI ranks more than 10–20 slots above their income ranks (Watson, 2000).

64. A recent study of the failure by the Uganda Participatory Poverty Assessment which, in other respects, is a model PPA, to carry through with the "action" phase of Participatory Learning and Action in local communities is enlightening, both from a practical and from an ethical standpoint, and its lessons are equally applicable to education. Certain communities in Uganda will no longer participate in the process because it simply extracted information to be used for national

policy and planning purposes (Okello and Yeats, 2002).

65. An African-based international NGO that grew out of a working group on girls' education established by the Association for the Development of Education in Africa (ADEA), dedicated to improving girls' participation and achievement at all levels of education

66. Figures for ECD are available for only 27 of 45 countries in Sub-Saharan Africa and data on new entrants to primary education with ECD experience are available for only eight countries (UNESCO, 2002a).

67. For example, in a conference organized by the World Bank in April 2000, one paper presented 24 indicators of effectiveness, not one of which referred to enhanced likelihood of entrance to primary school or better performance. For the conference proceedings, go to http://w.w.w. worldbank.org/children/confdocs.

68. A World Bank Institute video, *Educating Asmata*, shows the efforts made by Bangladesh to educate girls.

References

- Abu-Ghaida, Dina and Stephen Klasen. 2002. "The Costs of Missing the Millennium Development Goal on Gender Equity." Draft. World Bank.
- Ackers, J. and F. Hardman. 2001. "Classroom Interaction in Kenyan Primary Schools." *Compare* Vol. 31, No. 2: 245-261.
- Ackers, J., J. Mignoli and J. Nzomo. 2001. "Identifying and Addressing the Causes of Declining Participation Rates in Kenyan Primary Schools." *International Journal of Educational Development* 21: 361–372.
- Alderman, H.J., J. Behrman, S. Khan, D. Ross and R. Sabot. 1995. "Public Schooling in Rural Pakistan: Efficiently Targeting Girls in a Lagging Region." In D. Van de Walle and K. Nead, eds., *Public Speaking and the Poor.* Baltimore: Johns Hopkins Press.
- Alderman, H.J., Jooseop Kim and Peter Orazem. 2002. "Design, Evaluation and Sustainability of Private Schools for the Poor: the Pakistan Urban and Rural Fellowship School Experiments." *Economics* of Education Review.
- Alderman, H.J., Behrman, D. Ross and R. Sabot. 1996. "Decomposing the Gender Gap in Cognitive Skills in a Poor Rural Economy. *Journal of Human Resources* 31: 229–254.
- Allen, J.M.S. 1988. Dependent Males: The Unequal Division of Labor in Mabumba Households. ARPT Luapala, Labor Study Report No. 2.
- S. Al-Samarrai, S. and Hassan Zaman. 2002. *The Changing Distribution of Public Education Expenditure in Malawi*, Africa Region Working Paper Series No. 29. Washington D.C.: The World Bank.
- Anderson-Leavitt, K., M. Bloch and A. Maiga Soumare. 1994. Inside Classrooms in

Guinea: Girls' Experiences. Final Report to the Ministry of Pre-University Education, Republic of Guinea, and to The World Bank.

- Aoki, A, B. Bruns, M. Drabble, M. Marope, A. Mingat, P.Moock, P. Murphy, P. Paci, H. Patrinos, J. Tan, C. Thomas, C.Winter, and H.Yang. 2001. "Education" in *Poverty Reduction Strategy Sourcebook*. PREM Poverty Unit. Washington D.C.: The World Bank.
- Appleton, Simon, 1995. Exam Performance In Kenyan Primary Schools: Determinants And Gender Differences. Washington D.C.: The World Bank.
- Archaya, M. and L. Bennett. 1981 "The Rural Women of Nepal: An Aggregate Analysis and Summary of Eight Village Studies." *The Status of Women in Nepal*, Vol. 2, Part 9. Katmandu: Centre for Economic Development and Administration, Tribhuvan University.
- Arensberg, Conrad, and Arthur Niehoff, 1971. Introducing Social Change: A Manual for Community Development. Chicago: Aldine Atherton.
- Augrist, Joshua D., et al. 2000. "Vouchers for Private Schooling in Colombia: Evidence from a Randomized Natural Experiment." Cambridge Mass.: Massachusetts Institute of Technology.
- Avotri, Ruby, Lucy Owusu-Darko, Hilda Eghan and Sylvia Ocansey. 1999. Gender and Primary Schooling in Ghana. Partnership for Strategic Resource Planning for Girls' Education in Africa. Forum for African Women Educationalists (FAWE) and the Institute of Development Studies. Sussex: Institute of Development Studies.
- Bardhan, K. and S.Klasen, 1999. "UNDP's Gender Related Indices: A Critical

Review." World Development 27: 985–1010.

- —. 2000. "On UNDP's Revisions to the Gender-Related Development Index." Journal of Human Development 1: 191–195.
- Barnett, S.W. 1996. Lives in the Balance Age-27 Benefit-Cost Analysis of the High/Scope Perry Preschool Program. Ypsilanti: High/Scope Press.
- Barnett, S.W. (in press). "Does Head Start Have Lasting Cognitive Effects?" In E. Zigler and S. Styfco, eds., *The Head Start Debates*. New Haven CT: Yale University Press.
- Barro, Robert J. 1999. "Determinants of Democracy." *Journal of Political Economy* 1–7: (6): 158–83.
- Barro, Robert J. and Xavier Sala-i-Martin (1995). *Economic Growth*. New York: McGraw-Hill.
- Barro, Robert J. and Jong-Wha Lee. 2001. "International data on educational attainment: updates and implications." *Oxford Economic Papers*, July, 53(3), 541–63.
- Bellew, Rosemary and E. King. 1993. "Educating Women: Lessons From Experience."
 In Elizabeth M. King and M. Anne Hill, eds., Women's Education in Developing Countries: Barriers, Benefits and Policies. Baltimore, MD: The Johns Hopkins University Press.
- Behrman, J. et al. 1999a. "Intergenerational Schooling Mobility and Macro Conditions and Aggregate Schooling Policies in Latin America." In Nancy Birdsall and Carol Grahams, New Markets, New Opportunities? Economic and Social Mobility in a Changing World. Washington D.C. Brookings Institution and Carnegie Endowment for International Peace.
- Behrman, J., J.P. Sengupta and P. Todd. 2001.Progressing through PROGRESA: An Impact Assessment of a School Subsidy Experiment. Washington D.C.: The

International Food Policy Research Institute and the University of Pennsylvania.

- ——. 1999b. "Women's Schooling, Home Teaching and Economic Growth." *Journal of Political Economy* 107 (4) 632–714.
- Behrman, J.R., Y. Cheng, and P. Todd. 2000. The Impact of the Bolivian Integrated 'PIDI' Preschool Program. World Bank Research Foundation Project on Evaluation of the Impact of Investments in Early Childhood Development on Nutrition and Cognitive Development. Washington, D.C.: The World Bank.
- Birckhill, P. 1996. Textbooks as an Agent of Change: Gender Aspects of Primary School Textbooks in Mozambique, Zambia and Zimbabwe. Swedish International Development Agency, Education Division.
- Blackden, Mark and Chitra Bhanu. 1999. Gender, Growth and Poverty Reduction. Special Program of Assistance for Africa, 1998 Status Report on Poverty in Sub-Saharan Africa. Washington D.C.: The World Bank. Technical Paper No. 429.
- Boothroyd, R. and D. Chapman. 1987. "Gender Differences and Achievement in Liberian Primary School Children" in International Journal of Educational Development 7(2): 99–105.
- Bray, Mark. 1996. Counting the Full Cost: Parental and Community Financing of Education in East Asia. World Bank, Directions in Development Series. Washington, D.C.: The World Bank.
- Bruer, J.T. 1999. The Myth of the First Three Years: A New Understanding of Early Brain Development and Lifelong Learning. New York: Free Press.
- Bruns, B. and A. Mingat. 2002. The Chance for Every Child: Achieving Universal Primary Education by 2015. Washington D.C.: The World Bank.

- Caccia Bava, Silvio. "Bolsa-Escola: a Public Policy on Minimum Income and Education. Canada: IDRC CIID Policy Brief."
- Caldwell, John C. 1980. "Mass Education as a Determinant of Fertility Decline." *Population and Development Review* 6 (6): 225–255.
- Canagarajah, S. and H. Coulombe. 1997. 6 Policy Research Working Paper, Human Development Technical Family. Washington D.C.: The World Bank.
- Carey, Doris. 1993. "Teachers' Roles and Technology Integration: Moving From Teachers as Directors to Teachers as Facilitator." *Computers in the Schools 9*, No. 2–3: 105–118.
- Caruthers, L. 2003. "Classroom Interactions and Achievement." Kansas City, MO: Mid-continent Regional Educational Laboratory. www.mcrel.org/PDFconversion/ Noteworthy/Learners_Learning)
- Chesterfield, R. and K. Enge. 2000. The Effects of HIV/Aids on Girls and Girls' Education. Washington D.C.: USAID.
- Chesterfield, R. and P. Martinez-Enge. 2001.*Girls' Education and Crises*. Washington D.C.: USAID.
- Chowdhury, Md. Fazlul Karim. 1994. "Participation of Girls in Education Bangladesh Experience." Paper presented at Seminar on Girls' Education in Asia, Guilin, China.
- Colclough, C. 1994. "Underenrollment and Low Quality in African Primary Schooling: Toward a Gender Sensitive Solution." Nairobi: Forum for African Women Educationalists. (FAWE)
 - —. 1999. Achieving Schooling for All in Sub-Saharan Africa: Is Gender a Constraint or an Opportunity? Sussex: Institute for Development Studies.
- Colclough, C., P. Rose and M. Tembon. 1998. "Gender Inequalities in Primary Schooling: the Roles of Poverty and Adverse Cultural Practice." IDS Working Paper 78.(December)

- Colclough, C. and S. Al-Samarrai. 2000. "Achieving Schooling for All: Budgetary Expenditures on Education in Sub-Saharan Africa and South Asia." World Development 28 No. 11: 1927–1944.
- Colletta, Nat J. and Amy Jo Reinhold. 1997. Review of Early Childhood Policy and Programs in Sub-Saharan Africa. Technical Paper 367. Washington D.C.: The World Bank.
- Cortina, Regina. 2000. Global Priorities and Local Predicaments in Education." In Regina Cortina and Nelly P. Stromquist. 2000. Distant Alliances: Promoting Education for Girls and Women in Latin America. New York: RoutledgeFalmer.
- Cooke, Bill and Uma Kothari, eds. 2001. Participation: the New Tyranny. London: Zed Books.
- Currie, J. 2000. "Early Childhood Development Intervention Programs: What Do We Know?" Los Angeles: UCLA and NEBER.
- Davison, J. et al. 1994. Educational Demand in Ryural Ethiopia. Addis Ababa: USAID.
- Davison, J. and M. Kanyuka. 1990. "Girls' Participation in Education in Southern Malawi (Focus on Gender)." *Comparative Education Review* (Feb.) 61–84.
- Dollar, David and Roberta Gatti. 1999. Gender Inequality, Income and Growth: Are Good Times Good for Women? Policy Research Report on Gender and Development. Working Paper Series No. 1. Washington D.C.: The World Bank.
- DeBrun, Mary O'Reilly, 1994. Tender Shoots. Report prepared for AFTHR, World Bank. Later incorporated into How Gambian Households Underinvest in Girls' Education, World Bank, 1996.
- Deolalikar, A. 1998. "Primary and Secondary Education In Kenya." Sector Review. Washington D.C.: The World Bank.
- DeStefano, Joseph. 1996. "Community-based Primary Education: Lessons Learned from the Basic Education Expansion Project

(BEEP) in Mali." SD Publications Series, USAID.

- Desai, Sonalde. 1998. "Maternal Education and Child Health: Is There a Strong Causal Relationship?" *Demography* 35 (1): 71–81.
- Diamond, I., M. Newby, and M. Varle. 1999. "Female Education and Fertility: Examining the Link." In Bledsoe, C. et al., eds. *Critical Perspectives on Schooling and Fertility in the Developing World*. Washington D.C.: National Academic Press.
- Diokhané, Maréma Dioum, Oumel Khairy Diallo, Alhousseynou Sy and Mafakha Touré. 2000. Genre et fréquentation scolaire au premier cycle de l'enseignment fondamental au Sénégal. Partnership for Strategic Resource Planning for Girls' Education in Africa. Forum for African Women Educationalists (FAWE) and the Institute of Development Studies. Sussex: Institute of Development Studies.
- Doolan, Lelia, Eileen Kane and Mary O'ReillyDeBrun. *Groundwork* (video.) 1995.Washington D.C.: The World Bank, Education Development Institute.
- Feder, Gershon, 2003. Rural Development Research: Agricultural Extension. http:// www/worldbank.org/programs/rural_dev /topic23807
- Filmer, Deon. 1999. The Structure of Social Disparities in Education: Gender and Wealth. Policy Research Report on Gender and Development, Working Paper Series No. 5. Washington D.C.: The World Bank Development Research Group/Poverty Reduction and Economic Management Network.
- Filmer, Deon and Lant Pritchett. 1998. "Educational Enrollment and Attainment in India: Household Wealth, Gender, Village and State Effects." Washington D.C.: The World Bank South Asia Region Internal Discussion Paper No. 173.

- Forum for African Women Educationalists. 2000. *Girls' Education in Africa: The FAWE Response*. Nairobi: FAWE.
- Foster, Andrew D. and Mark R. Rosenzweig. 1995. "Information, Learning and Wage Rates in Low-Income Rural Areas." In T. Paul Shultz, ed., *Investment in Women's Human Capital*. Chicago: University of Chicago Press.
- ———. 1996. "Technical Change and Human-Capital Returns and Investments: Evidence From the Green Revolution. *American Economic Review* 86 (4): 931–953.
- Frank Porter Graham Child Development Center. 1999. *Early Learning, Later Success: The Abecedarian Study.* Chapel Hill: University of North Carolina at Chapel Hill.
- Gaag, J. and J. Tan. 1999. "The Benefits of Early Childhood Development Programs: An Economic Analysis." Education Human Development Network. Washington D.C.: The World Bank.
- Gaynor, Cathy. 1998. Decentralization of Education: Teacher Management. Washington D.C.: The World Bank.
- Gertler, Paul and Paul Glewwe. 1992. "The Willingness to Pay for Education for Daughters in Contrast to Sons: Evidence from Rural Peru." *The World Bank Economic Review* 6 (1): 171–188.
- Gibbs, W. and P. Mutunga. 1991. *Health Intro Mathematics*. Harlow: Longmans/The British Council.
- Gunnar, Megan. 1998. "Quality of Early Care and Buffering of Neuroendocrine Stress Reactions: Potential Effects on the Developing Human Brain." *Preventive Medicine* 27 No. 2, March/April.
- Hailey, John. 2001. "Beyond the Formulaic: Process and Practice in South Asian NGOs." In *Participation: the New Tyranny*. Bill Cooke and Uma Kothari, eds. London: Zed Books.
- Hartenberger, Lisa and Andrea Bosch. 1996. Making Interactive Radio Instruction Even Better for Girls: The Data, the

Potential and the Scripts. USAID ABEL 2 and The Education Development Center.

- Hartnett, Teresa and Ward Heneveld, 1993. Statistical Indicators of Female Participation in Education in Sub-Saharan Africa. Washington, DC, World Bank AFTHR Technical Note No. 7.
- Hawes, H. 1988. "Child to Child: Another Path to Learning." Hamburg, Germany: UNESCO Institute for Education.
- Herz, B. K. Subbarao, M. Habbib and L. Raney. 1991. Letting Girls Learn: Promising Approaches in Primary and Secondary Education. Discussion Paper No. 133. Washington D.C.: The World Bank.
- Hildyard, N., P. Hedge, P. Wolvekamp and S. Reddy. 2001. "Pluralism, Participation and Power" in Cooke, Bill and Uma Kothari, eds., *Participation: the New Tyranny*. London: Zed Books.
- Hill, M. Anne and Elizabeth M. King. 1995."Women's Education and Economic Wellbeing." *Feminist Economics* 1 (2): 1–26.
- Howes, C. 1988. "Relations Between Early Child Care and Schooling." *Developmental Psychology* 24(1):53–57.
- Howes, C., and M. Olenick. 1986. "Family and Child Care Influences on Toddler's Compliance." *Child Development* 57:202–16.
- Ilahi, Nadeem. 2001. Children's Work and Schooling: Does Gender Matter? Evidence from the Peru LSMS Panel Data. Washington D.C.: The World Bank Latin America and Caribbean Region Gender Sector Unit, Policy Research Working Paper. No. 2745.
- INEADE. 1997. "Projet SNERS: L'évaluation du rendement pédagogique du français écrit dans L'enseignement primaire." Fontainebleu.
- International Literacy Explorer. 1999. Report on Participatory Nonformal Education: The TOSTAN Basic Eduaction Program,

Senegal. http://www.literacyonline.org/explorer/index.html

- Jejeebhoy, Shireen J. 1995. Women's Education, Autonomy and Reproductive Behavior: Experience from Developing Countries. Oxford: Clarendon Press.
- Jimenez, Emmanuel. 2002. "Empowering Countries and Individuals to Improve Education." PowerPoint demonstration, Empowerment Week, May 7, 2002. Washington D.C. The World Bank.
- Jimenez, Emmanuel and Marlaine E. Lockheed. 1988. "The Relative Effectiveness of Single-Sex and Co-educational Schools in Thailand." Washington, D.C.: World Bank. Policy Research Working Paper 29. Population and Human Resources Department, Education and Employment Division.
- Johanson, Richard. 2000. "Sector-Wide Approaches for Education and Health in Sub-Saharan Africa." Washington D.C.: The World Bank, Africa Region.
- Kadzamira, Esme and Mile P. Chibwana.
 1999. Gender and Primary Schooling in Malawi. Partnership for Strategic Resource Planning for Girls' Education in Africa. Forum for African Women Educationalists (FAWE) and the Institute of Development Studies. Sussex: Institute of Development Studies.
- Kane, Eileen. 1996. But Can She Eat Pencil and Paper? Girls' Education in Lowland Eritrea. Asmara: UNICEF.
- ——.1996 (September). Guide for Task Managers: Identifying Problems and Interventions in Girls' Education. Washington D.C.: World Bank Asia Technical Department.
- ------. 1996. *Gender*, *Culture and Learning*. Washington D.C.: USAID ABEL 2 and The Education Development Center.
 - forthcoming. Designing for Success: Better Programs for Girls' Education.
 World Bank Africa Region. Washington D.C.: The World Bank.

- Kane, Eileen and Mary O'Reilly DeBrun. 1993. Bitter Seeds. Report prepared for AFTH5, World Bank. (Later incorporated into The Gambia: Why Gambian Households Underinvest in Girls' Education. 1995. World Bank Technical Report, AFTHR.
- Kane, Eileen and Karla Yoder. 1998. *The Girls' Education Literature Review*. USAID Girls' and Women's Education Activity. American Institutes for Research.
- Kane, Eileen, Lawrence Bruce and Mary O'Reilly DeBrun. 1998. "Designing the Future Together: PRA and Education Policy in The Gambia" In Whose Voice? Participatory Research and Policy Change. Eds: Holland, J & J. Blackburn. London: Intermediate Technology Publications.
- Kane, Eileen and Elizabeth Thomas. 1998. Healthy Futures: Reducing Barriers to Primary School Completion Among Kenyan Girls. Maendeleo Ya Wanawake Organization; The Academy for Educational Development; and Johns Hopkins University.
- Kane, Eileen, Jeanne Moulton and Christina Rawley. 2002. "Changing Trends in Theory and Practice in Basic Education in the Wake of Education for All: Future Programming in the USAID Basic Education and Policy Support" (BEPS: USAID) Activity. Draft.
- Kasonde-Ng'andu, Sophie, Winnie Namiloli Chilala and Njekwa Imutowana-Katukula. 1999. *Gender and Primary Schooling in Zambia*. Partnership for Strategic Resource Planning for Girls' Education in Africa. Forum for African Women Educationalists (FAWE) and the Institute of Development Studies. Sussex: Institute of Development Studies.
- Keating, D.P., and C. Hertzman. 1999. Developmental Health and the Wealth of Nations: Social, Biological, and Educational Dynamics. New York: Guilford Press.

- Kelly, Michael J. 1986. An Overview of Education in Zambia. Lusaka: University of Lusaka.
- Khandker. S. 1996. Education Achievement and School Efficiency in Rural Bangladesh. World Bank Discussion Paper 319. Washington D.C.: The World Bank.
- Khuda, B, and A. Barkat. 1992. "An Impact Study of the Female Education Scholarship Program in Bangladesh." A study prepared for the World Bank for its Female Secondary School Assistance Project. Bangladesh: University Research Corporation.
- Kim, Jooseop, Harold Alderman and Peter Ozazem. 1998. Can Cultural Barriers Be Overcome in Girls' Schooling? The Community Support Program In Balochistan.
 Working Paper Series on Impact Evaluation of Education Reforms 10. Washington, D.C.: World Bank: Development Research Group.
- King Elizabeth M., and M. Anne Hill, eds. 1993. Women's Education in Developing Countries: Barriers, Benefits and Policies. Baltimore, MD: The Johns Hopkins University Press.
- King, Elizabeth M. and Berk Özler. 1998. "What's Decentralization Got to Do With It? The Case of Nicaragua's School Autonomy Reform." Draft. Washington D.C.: The World Bank Development Research Group.
- King, Elizabeth M., Peter F. Orazem and Darin Wohlgemuth. 1998. "Central Mandates and Local Incentives: The Colombia Education Voucher Program." World Bank Working Paper Series on Impact Evaluation of Education Reforms No. 6.
- King, Elizabeth M., Peter F. Orazem and Darin Wohlgemuth. 1999. "Central Mandates and Local Incentives: Colombia's Targeted Voucher Program. World Economic Review 13 (3): 467–91.
- Kirpal, Simone, 2002. "Communities Can Make a Difference: Five Cases Across

Continents." In Mary Eming Young, ed., Investing in Our Children's Future. Washington D.C.: The World Bank.

- Klasen, Stephan. 1999. "Does Gender Inequality Reduce Growth and Development? Evidence From Cross-Country Regressions." World Bank Policy Research Working Paper No. 7. Washington D.C.: The World Bank.
- Knowles, S. P., K. Lorgelly and P.D. Owen.
 2002. "Are Educational Gender Gaps a Brake on Economic Development?" Some Cross-Country Empirical Evidence." Oxford Economic Papers 554:118–149.
- Lavy, Victor. 1996. "School Supply Constraints and Children's Educational Outcomes in Rural Ghana." *Journal of Economic Development* 51 (2): 291–314.
- Leach, Fiona and Pamela Machakanja. 2002. "The Sugar Daddy Trap: Peer Pressure Pushes Girls Into Sex." id21 insights, August 2001 Insights Gender Violence Special Issue. http://www.ids.ac.uk.
- Lee, Jong-Wha and Barro, Robert J. 2001. "Schooling quality in a cross-section of countries." *Economica*, 68(272), 465–88.
- Lehman, Douglas C., personal communication.
- LeVine, Robert A., E. Dexter, P. Velasco, S. LeVine, A.R. Joshi, K.W. Stuebing, and F.M. Tapia Uribe. 1994. "Maternal literacy and health care in three countries: A preliminary report." *Health Transition Review* 4(2):186–192.
- LeVine, Robert A., Sarah E. LeVine, and Beatrice Schnell. 2001. "Improve the Women: Mass Schooling, Female Literacy, and Worldwide Social Change." *Harvard Educational Review* 71(1): 1–50.
- Lloyd, Cynthia B., Barbara S. Mensch, and Wesley Clark. 1998. "The Effects of School Quality on the Educational Participation and Attainment of Kenyan Boys and Girls." Presented at the Annual Conference of the Population Association of America. Chicago, Ill. April 2–4.

- Lloyd, Cynthia B., Carol E. Kaufman and Paul Hewett. 1999. "The Spread of Primary Schooling in Sub-Saharan Africa: Implications for Fertility Change." Policy Research Division Working Paper No. 127. New York: The Population Council.
- Lockheed, M. 1997. Primary Education in India, Development in Practice. Washington, D.C.: The World Bank.
- Lokshin, M., E. Glinskaya, and M. Garcia, 2000. "The Effect of Early Childhood Development Programs on Women's Labor Force Participation and Older Children's Schooling in Kenya." Washington D.C.: The World Bank. Poverty Reduction and Economic Management Sector Unit, Policy Research Working Paper, No. 2376.
- Lorgelly, P. K. and P. Owen. 1999. "The Effect of Female and Male Schooling on Economic Growth in ihe Barro-Lee Model." *Empirical Economics* 24 (3), 537–557.
- Love, John M., Peter Z. Schochet, and Alicia L. Meckstroth. 2002. "Investing in Effective Childcare and Education: Lessons from Research." In Mary Eming Young, ed., *Investing in Our Children's Future*. Washington D.C.: The World Bank.
- Lucas, A., R. Morley, and T.J. Cole. 1998. "Randomised Trial of Early Diet in Preterm Babies and Later Intelligence Quotient." *British Medical Journal* 317(7171): 1481–87.
- McCain, M.N., and J.F. Mustard. 1999. *Early Years Study: Reversing the Real Brain Drain*. Toronto: Publications Ontario.
- McGinn, Noel and Alison M. Borden. 1995. Framing Questions, Constructing Answers: Linking Research with Education Policy for Developing Countries. Cambridge, MA: Harvard University Press, Harvard Institute for International Development.
- Maclure, Robert. 1997. "Misplaced Assumptions of Decentralization and Participa-

tion in Rural Communities." *Comparative Education* 30(3), No. 3: 239–254.

- Malawi, Gender-Appropriate Curriculum Unit. 1998. Policy Report. Malawi: Gender-Appropriate Curriculum Unit.
- Martin, M.O. et al. 2000. *TIMMS 1999 International Science Report*. Boston: International Study Center, Boson College; International Association for the Evaluation of Educational Achievement, 2000.
- Mason, A. and S. Khandker. 1996. Measuring the Opportunity Costs of Children's Time in a Developing Country: Implications for Education Sector Analysis and Interventions. Human Capital Working Paper. Washington D.C.: The World Bank.
- Mensch, B.S. and C.B. Lloyd. 1998. "Gender Differences in ihe Schooling Experiences of Adolescents In Low-Income Countries: The Case of Kenya," *Studies in Family Planning*, Vol. 29(2):167–184.
- Mingat, A. 1999. Niger Education Sector Review. Washington D.C.: The World Bank.
- Mingat, A. and B. Suchat. 1998. Une Analyse Economique: Comparative des Systèmes Educatifs Africains. Paris: Ministère de la Coopération et du Développement.
- Mlama, Peninah and Christopher Colclough. 1999. "Empty Desks, Empty Futures: the Curse of Classroom Gender Gaps. *IDS Editorial Insights* #29. Sussex: Institute for Development Studies.
- Morison, L. et al. 2001. "The Long-Term Reproductive Health Consequences of Female Genital Cutting in Rural Gambia: a Community-Based Survey." *Tropical Medicine and International Health* 6.

- Mullins, I. 2000. TIMMS 1999 International Mathematics Report. Boston: International Study Center, Boson College; International Association for the Evaluation of Educational Achievement.
- Murdock, G.P. and C. Provost. 1980. "Factors in the Division of Labor by Sex: a Cross-cultural Analysis Cross-cultural Samples and Codes, ed. Herbert Barry III and Alice Schlegel. Pittsburgh PA: University of Pittsburgh Press.
- Murphy, Paud, X. Liang and C. Bertoncino. April 2002. Achieving Universal Primary Education in Uganda: The "Big Bang" Approach. Human Development Network Education Notes, The World Bank.
- Mustard, J. Fraser. 2002. "Early Child Development and the Brain—the Base for Health, Learning, and Behavior Throughout Life." In Mary Eming Young, ed. 2002. *Investing in Our Children's Future*. Washington D.C.: The World Bank.
- Mwape, Gertrude and Robert Serpell, 1996. "Participatory Appropriation of Health Science by Primary School Students in Rural Zambia." http:www. ericae.net/ ericdb/ED417191.htm.
- Myers, Robert. 1996. The Twelve Who Survive: Strengthening Programs of Early Childhood Development in the Third World. 2nd Ed., Ypsilanit, Mich.: High/ Scope Press.
- Myers, Robert. 1992. "Towards an Analysis of the Cost and Effectiveness of Community-Based Early Childhood Education in Kenya: the Kilifi District." Aga Khan Foundation.
- National Institute of Child Health and Human Development. 1998. *The NICHD Study of Early Child Care*. Washington D.C. : National Institutes of Health.
- Odaga, A. and W. Heneveld. 1994. *Girls and Schools in Sub-Saharan Africa: From Analysis to Action*. World Bank Technical Paper No. 298. African Technical Depart-

ment Series. Washington D.C.: The World Bank.

- O'Gara, Chloe, Sharon Benoliel, Margaret Sutton and Karen Tietjen. 1998. More, but Not Yet Better: USAID's Programs and Policies to Improve Girls' Education in Developing Countries. Washington D.C.: Center for Development Information and Evaluation, Agency for International Development.
- Otaala, B. 1982. "The Child to Child Program in the Context of Educational Problems in Africa." *Botswana Educational Research Journal* 1 (1), 39–51.
- Pakistan. Directorate of Primary Education. 1994. Formative Evaluation of the Kachi Materials Developed by the IMDC. Peshawar, NWFP: Directorate of Primary Education.
- Palmer, Ingrid. 1991. Gender and Population in the Adjustment of African Economies: Planning for Change. Geneva, International Labor Office.
- Pandey, R. S. 2000. "Going to Scale with Education Reform: India's District Primary Education Program, 1995–99." Education Reform and Management Series I(4), July.
- Penn, Helen and Kimberly Ogadhoh. 1998."Review of Early Childhood Services in Developing and Transitional Countries."Report to Department for International Development Education.
- Peters, David, and Shiyan Chao. 1998. "The Sector-Wide Approach in Health: What Is It? Where Is It Leading?" *International Journal of Health Planning and Management* 13: 177–190.
- The Population Council. 2001. The Unfinished Transition: a Population Council Issues Paper. New York: The Population Council.
- PROBE. 1999. The Public Report on Basic Education in India. 1999. Oxford: Oxford University Press.

- Psacharopoulos, G. and H. Patrinos, 2001. "Returns to Investment in Education Up to the New Millennium." Mimeo.
- Quisumbling, Agnes R. "Improving Women's Agricultural Productivity as Farmers and Workers." Washington D.C.: The World Bank. Education and Social Policy Department Paper No. 37.
- Rao, Vijayendra and Ana Maria Ibáñez. 2001. "The Social Impact of Social Funds in Jamaica: A Mixed-Methods Analysis of Participation, Targeting and Collective Action in Community Driven Development." Washington D.C.: The World Bank.
- Rawley, Christina, Jeanne Moulton and M. U.
 Sedere. 2002. Bangladesh Education Sector Review: Report No. 2: "The Status of Gender Equity." Washington D.C.: USAID ABEL Project, Creative Associates International.
- Rawlings, Laura, Lynne Serburne-Benz and Julie Van Domelan. 2002. Evaluating Social Funds: A Cross-Country Analysis of Country Investments. World Bank Regional and Sectoral Studies. Washington D.C.: The World Bank.
- Ridker, Ronald G, ed. 1997. Determinants of Educational Achievement and Attainment in Africa: Findings from Nine Case Studies. SD Publication Series, Technical Paper Number 62. Washington D.C.: USAID, Office of Sustainable Development.
- Rose, P., G. Yoseph et al. 1997. "Gender and Primary Schooling in Ethiopia." IDS Research Report 31. (March).
- Rugh, Andrea. 2000. Starting Now: Strategies for Helping Girls Complete Primary. Washington, D.C.: SAGE: Academy for Educational Development.
- Rugh, Andrea and Heather Bossert. 1998. Involving Communities: Participation in Delivering Education. Washington D.C.: USAID ABEL Project, Creative Associates International.
- Saito, Mioko. 1998. "Gender vs. Socio-Economic Status and School Location Differ-

ences in Grade 6 Reading Literacy in Five African Countries." Paris: Southern African Consortium for Monitoring in Education Quality (SAQMEC).

- Samoff, Joel and E. Molapi Sebatane. 2001. "Scaling Up by Focusing Down: Creating Space to Expand Education Reform." ADEA Biennial Meeting. Arusha, Tanzania.
- Sangaré, Solomani, Alhandou Tounkara, Diassé Tangara and N'diaye Assetou Kéita. 2000. Genre et fréquentation scolaire au premier cycle de l'enseignment fondamental au Mali. 1999. Partnership for Strategic Resource Planning for Girls' Education in Africa. Forum for African Women Educationalists (FAWE) and the Institute of Development Studies. Sussex: Institute of Development Studies.
- Sanou, F. 1995. *Etude sur la Sous-scolarisation des Filles au Burkina Faso*. Ouagadougou: Université de Ouagadougou.
- Sathar, Zeba, Cynthia B. Lloyd, Cern Mete and Minhaj ul Haque. 2000a. "Investments in Children's Education and Family-Building Behavior in Pakistan: Findings From Rural NWFP and Punjab." Islamabad, Pakistan : Population Council.
 - —. 2000b. Schooling Opportunities for Girls as a Stimulus for Fertility Changes in Rural Pakistan. Policy Research Division Working Paper No. 143. New York: The Population Council.
- Schiefelbein, Ernesto. 1997. School-Related Economic Incentives in Latin America: Reducing Drop-Out and Repetition and Combating Child Labour. Innocenti Occasional Papers, Child Rights Series (12). New York: UNICEF International Child Development Center.
- Schultz, T. Paul. 1993. "Returns to Women's Education." In Elizabeth M. King and M. Anne Hill, eds. Women's Education in Developing Countries: Barriers, Benefits and Policies. Baltimore, MD: The Johns Hopkins University Press.

———. 2001. "School Subsides for the Poor: Evaluating the Mexican PROGRESA Poverty Program." New Haven CT: Economic Growth Center Discussion Paper No. 834.

- Sedere, M. U. 1995. Non-Formal Primary Education Program. Dhaka: The World Bank.
- Sedere, M. U. et al. 1999. A Pre-appraisal Study on Providers of Functional Skills, Education and Assessing Underserved Areas. SDC : Dhaka, Bangladesh.
- Sen, Amartya. 1999. Development as Freedom. New York : Knopf.
- Serpell, Robert, 1998. "Participatory Appropriation in Sociocultural Context: a Multi-Level Strategy For Applied Developmental Science." Paper for presentation at the 4th African Regional Workshop, International Society for the Study of Behavioural Development, Windhoek, Namibia.
 - ——. 1999. "Local Accountability to Rural Communities: a Challenge for Educational Planning in Africa." In *Education, Culture and Economics: Dilemmas for Development.* Ed. Fiona E. Leach and Angela W. Little. New York, London: Falmer Press.
- Serpell, Robert. and Gertrude Mwape, 1998/99. "Participatory Appropriation of Health Science and Technology: A Case Study of Innovation in Basic Education in a Rural District of Zambia." African Social Research, No. 41/42, December 1998/June 1999.
- Shore, Rima. 1997. *Rethinking the Brain* : *New Insights Into Early Childhood Development*. New York : Families and Work Institute.
- Shumba, Almon. 2001. "Child Abuse by Teachers in Zimbabwe." id21 insights, August 2001 Insights Gender Violence Special Issue. http://www.ids.ac.uk.
- Siddons, M., A. Norton and A. Seel. 2000. "Mainstreaming Gender Through Sector Wide Approaches In Education: Synthesis

Report." id21 Research Highlight: 10 October 2002.

- Skoufias, E. 2000. Is PROGRESA Working? Summary of the Benefits of an Evaluation by IFPRI. Washington D.C. : International Food Policy Research Institute.
- Smith, Lisa C. and Lawrence Haddad, 2000. "Explaining Child Malnutrition in Developing Countries: A Cross-Country Analysis." Washington D.C.: International Food Policy Research Institute. Research Report 111.
- Stromquist, Nelly P. and Paud Murphy. 1996. Leveling the Playing Field: Giving Girls an Equal Chance for Basic Education—Three Countries' Efforts. EDI Learning Resource Series. Washington D.C.: The World Bank.
- Stromquist, Nelly P., Steven J. Klees, and Shirley J. Miske. 2000. "USAID Efforts to Expand and Improve Girls' Primary Education in Guatemala." In Regina Cortina and Nelly P. Stromquist. 2000. *Distant Alliances: Promoting Education for Girls and Women in Latin America*. New York: RoutledgeFalmer.
- Subbarao, Kalanidhi and Laura Raney. 1995. "Social Gains From Female Education: A Cross-national Study." *Economic Development and Cultural Change*, 44: 105–128.
- Summers, Lawrence. 1994. *Investing in All the People: Educating Women in Developing Countries.* Washington D.C.: The World Bank. EDI Seminar Paper No. 45.
- Swainson, N., S. Bendera, R.Gordon and E. Kadzamira. 1998. Promoting Girls' Education in Africa: the Design and Implementaiton of Policy Interventions. Sevenoaks UK: DFID Education Reseach Paper No. 25.
- Sweingart, L.J. et al. 1993. Significant Benefits: The High/Scope Perry Preschool Study Through Age 27. Ysilanti: High/Scope Press.
- Tansel, A. 1997. "Schooling Attainment, Parental Education and Gender in Cote

d'Ivoire and Ghana." *Educational Development and Cultural Change* 45: 825–856.

- Tembon, M., I. S. Diallo et al. 1997. "Gender and Primary Schooling in Guinea." IDS Research Report 32. (May)
- Thomas, Elizabeth. 2002. *Healthy Futures: Reducing Barriers to Primary School Completion for Kenyan Girls*. Baltimore: John Hopkins University.
- Thomas, Vinod, et al. 2000. *The Quality of Growth*. New York: Oxford University Press.
- Tietjen, K. 1991. Educating Girls: Strategies to Achieve Access, Persistence and Achievement. Washington D.C.: Creative Associates International.
- Tumushabe, Joseph, Catherine A. Barasa, Florence K. Muhanguzi and Joyce Otim-Nape. 1999. Gender and Primary Schooling in Uganda. Partnership for Strategic Resource Planning for Girls' Education in Africa. Forum for African Women Educationalists (FAWE) and the Institute of Development Studies. Sussex: Institute of Development Studies.
- Tzannatos, Z. 1998. "Women's Labor Incomes." In Nelly Stromquist, ed., Women in the Third World: an Encyclopedia of Contemporary Issues. New York and London: Garland Publishing.
- Uganda National Examinations Board. 2000. The Achievements of Primary School Pupils in Uganda in English and Mathematics; The Achievements of Primary School Pupils in Uganda in Science and Social Studies. Kampala.
- Ul Haq, M. and K. Ul Haq. 1998. Human Development in South Asia: the Education Challenge. Oxford: Oxford University Press.
- UNAIDS. 2000. "Report on the Global HIV/AIDS Epidemic." Geneva.
- ——. 2003. "Progress Report on The Global Response to the HIV/AIDS Epidemic 2003." Geneva.

- UNESCO. 1999. Statistical Yearbook. Paris: UNESCO.
 - ——. 2000. The Dakar Framework for Action: Meeting Our Collective Commitments.
- ———. 2001. *Girls' Education*. Paris: UNESCO.
- ——. 2002a. The Challenge of Achieving Gender Parity in Basic Education. Paris: UNESCO.
- -------. 2002b. Education for All: is the World on Track? The EFA Global Monitoring Report. Paris: UNESCO.
- UNICEF. 1999. State of the World's Children: Education. New York: UNICEF.
- *——. 2002. Quality Education From a Girl's Point of View.* New York: UNICEF.
- ———. 2003a. "The World's Finance Ministers Must Act Now in Fight Against Poverty." unicefusa.org/girls_education/ release
- ——. 2003b. "Benefits of Girls' Education." unicefusa.org/girls_education/ benefits
- UNFPA. 1997. The State of World Population: The Right to Choose: Reproductive Rights and Reproductive Health. New York: UNFPA.
- USAID. ABEL Project. 1994. "Factors Contributing to Educational Achievement in Botswana: An Analysis of Educational Gains of Male and Female Students." ABEL Information Bulletin No. 40. Washington D.C.: Academy for Educational Development.
- USAID. 2002. USAID Girls' Education Initiatives in Guatemala, Guinea, Mali, Morocco, and Peru: A Performance Review. GEMS: Girls' Education Monitoring System. Washington D.C.: Juarez and Associates, Inc.
- Uvin, Peter and David Miller. 2001. "Scaling Up: Thinking Through the Issues." http:// www.brown.edu/Departments/World_ Hunger_Program/hungerweb/WHP/ SCALINGUP.

- Valad, Paula T. 1995. "The Female Secondary School Assistance Project in Bangladesh: Enhancing Women's Opportunities for Empowerment and Development through Stipends for Secondary Education." Paper prepared for Education Week 1995 Module on Household Financing of School and Local Control of Educational Resources. Washington, DC: World Bank.
- Verspoor, Adriaan, Angel Mattimore and Patrick Watt. 2001. A Chance to Learn: Knowledge and Finance for Education in Sub-Saharan Africa. Sector Assistance Strategy, Regional Human Development Facility. Washington D.C.: The World Bank.
- Watkins, Kevin. 2000. *The Oxfam Education Report.* London: Oxfam.
- Watt, Patrick. 2001. Community Support for Basic Education in Sub-Saharan Africa. Washington D.C.: The World Bank: Africa Region Human Development Working Paper Series.
- White, Martin King. 1978. The Status of Women in Pre-Industrial Societies. Princeton, New Jersey: Princeton University Press.
- Whiting, B.B. and C.P. Edwards. 1988. Children of Different Worlds. Cambridge, MA: Harvard University Press.
- Wickelgren, I. 1999. Nurture Helps Mold Able Minds. *Science* 283:1832–34.
- Winter, Carolyn and Rebecca Macina. n.d. "Girls' Education: World Bank Support Through IDA." Washington D.C.: The World Bank. Human Development Network.
- Wolf, Joyce, Eileen Kane and Brad Strickland. 1997: *Planning for Community Participation in Education*. USAID ABEL 2.
- Wolf, Joyce and Kate Kainja. 1999. Changes in Girls' Lives: Malawi from 1990 to 1997. London: Commonwealth Secretariat, and Washington D.C.: The World Bank.

- World Bank. 1993a. World Development Report. Washington D.C.: The World Bank.
- ——. 1993b. *The Gambia: An Assessment* of *Poverty*. Washington D.C.: The World Bank.
- ——. 1994. Enhancing Women's Participation in Economic Development. Washington D.C.: The World Bank.
- . 1995a. The Poor and Cost Recovery in the Social Sectors of Sub-Saharan Africa. Human Resources and Poverty Division. Washington D.C.: The World Bank.
- ——. 1995b. Zambia Poverty Assessment. Washington D.C.: The World Bank.
- ——. 1996. The Gambia: Why Gambian Households Underinvest in Girls' Education. Washington D.C.: The World Bank, AFTHR.
- 1997. "Bangladesh: Female Secondary School Assistance Project: Mid-Term Review." Washington, D.C.: The World Bank, South Asia Regional Office, Population and Human Resources Division.
- ——. 1998. *The Gambia Third Education Sector Program*. Washington D.C.: The World Bank.
 - —. 1999a. The Success Factors in Four Francophone African Countries. Washington D.C.: The World Bank.
 - —. 1999b. Program Appraisal Document on a Proposed Credit to the Republic of Zambia (BESSIP). Washington D.C.: The World Bank.
- ——. 2000 (March). "Gender and Law in Francophone Africa: The Role of the World Bank." *Findings*, Africa Region. No. 155. http://www/worldbank.org/afr/ findings/english/find155.htm
- ——. 2000 (July). "Indigenous Knowledge Goes to School: Potentials and Perils of Community Education in the Western Sahel." *IK Notes*. Washington D.C.: The World Bank.

- ——. 2000a. Education for All: From Jomtien to Dakar and Beyond. Washington D.C.: The World Bank.
- ——. 2000b. Effective Schooling in Rural Africa: Report 4: Frequently Asked Questions about Effective Schooling in Rural Communities. Washington D.C.: The World Bank Effective Schools and Teachers Thematic Group.
- ——. 2001. (February) Integrating *Gender in World Bank Assistance*, (OED). Washington D.C.: The World Bank.
- ——. 2001a. Community Support for Basic Education in Sub-Saharan Africa. Washington D.C.: The World Bank: African Region Human Development Working Paper Series.
- ——. 2001b. Engendering Development Through Gender Equality in Rights, Resources and Voice. World Bank and Oxford University Press: Washington D.C.
- ——. 2001c. Education and Health in Sub-Saharan Africa: A Review of Sector-Wide Approaches. Africa Region Development Series. Washington D.C.: The World Bank.
- ——. 2002a. The Gender Dimension of Bank Assistance: An Evaluation of Results. Washington D.C.: The World Bank Operations Evaluation Department Report No. 23119.
- ——. 2002b. Integrating Gender into the World Bank's Work: a Strategy for Action. Washington D.C.: The World Bank.
- ——. 2002c. (April) Achieving Education for All by 2015: Simulation Results for 47 Low-Income Countries. Draft. Washington D.C.: The World Bank. Human Development Network. Africa Region and Education Department.
 - —. 2002d. Technical Annex to Achieving Education for All by 2015: Simulation Results for 47 Low-Income Countries. Washington D.C.: The World Bank.

Human Development Network. Africa Region and Education Department.

—. 2002e (April). "EFA: The Lessons from Experience. The Impact of Policy in 20 Case Studies." Draft.

- —. 2002g. (June). *The Gambia. Poverty Reduction Strategy Paper.* Joint IDA— IMF Staff Assessment. Washington D.C.: The World Bank.
- —. 2002h. "Accelerating Progress Toward Education for All: Building on Success and Failures." Paper Prepared by the Staff of the World Bank for the Fall 2002 Development Committee Meeting.
- ——. 2002i. *Education and HIV/AIDS: A Window of Hope*. Washington D.C.: The World Bank.
- —. 2003a. "Educational Quality: Defining What's Important." Africa Region Findings No. 59. http://www.world bank.org/afr/findings/english/find59.htm

- ------. 2003a. "Gender and Law." Africa Region Findings No. 126. http:// www.worldbank.org/afr/findings/english/find126.htm
- -----. 2003b. "Investing in the People: The World Bank in Action." http:// www.worldbank.org/html/extdr/hnp/ health/inv_ppl/ploutcome.htm.
- World Bank Development Committee. 2002f. "Education for Dynamic Economies: Action Plan to Accelerate Progress Towards Education for All (EFA)." Draft.
- Wright, Cream. 2001. "Learning How to Mainstream: Experiential Knowledge and Grounded Theory." *ADEA Biennial Meeting*. Arusha, Tanzania.
- Young, Mary Eming, ed. 2002. *Investing in Our Children's Future*. Washington D.C.: The World Bank.