

GLOBAL CAMPAIGN FOR

EDUCATION

Learning to survive: How education for all would save millions of young people from HIV/AIDS

Universal primary education (UPE) could save at least 7 million young people from contracting HIV over a decade. However, without dramatic increases in aid to education, Africa will not be able to get every child into school for another 150 years. This report sets out why UPE is crucial to halting the spread of HIV/AIDS, and outlines what both rich and poor countries need to do now to enable millions of children to learn ... to survive.

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Executive Summary

New analysis by the Global Campaign for Education suggests that if all children received a complete primary education, the economic impact of HIV/AIDS could be greatly reduced and around 700,000 cases of HIV in young adults could be prevented each year – 7 million in a decade.

HIV/AIDS is spreading fastest among young women (ages 15-24), not only because their physiology puts them at risk, but also because they have little access to knowledge, economic resources and decision-making power. Education changes this equation, giving women the information and the clout they need to keep themselves safe.¹ Literate women are three times more likely than illiterate women to know that a healthy-looking person can have HIV, and four times more likely to know the main ways to avoid AIDS, according to a 32-country UN study.² Evidence from 17 countries in Africa and four in Latin America shows that better-educated girls hold off longer on sexual activity, and are more likely to require their partners to use condoms.³ Women with some schooling are nearly five times as likely as uneducated women to have used a condom the last time they had sex.⁴ But education also accelerates behaviour change among young men, making them more receptive to prevention messages and more likely to adopt condom use.

Education is so strongly predictive of better knowledge, safer behaviour and reduced infection rates that it has been described as the “social vaccine”, and UN and World Bank experts say it may be ‘the single most effective preventive weapon against HIV/AIDS’.⁵ And in countries with high or fast-growing prevalence rates, getting every child into school now is essential to stop AIDS destroying the fragile stock of human capital on which poor people’s livelihoods –and developing countries’ economic futures – depend. Whereas experts postulate that economic growth in countries hard-hit by HIV/AIDS will drop by 1-4 per cent a year, UN research suggests that raising the average education of the labour force by one year raises GDP by 9 per cent. Each year of basic education, the ‘people’s asset’, increases the productivity of African peasant farmers by 3-14 per cent.⁶

Despite the proven efficacy of education in fighting the onslaught of HIV, over 100 million children worldwide are still missing school. Rich countries are not delivering the promised aid and debt relief that developing countries need to hire more teachers and build more classrooms. Without urgent action, including substantial increases in aid to education, Africa will not be able to get every child into school for another 150 years.⁷ As new figures published in this report show, even the developing countries that have gone furthest to reform their education systems have been stranded without effective support.

Yet, for relatively small amounts of money, donors *could* ensure that every girl and every boy receives a quality basic education. An additional US\$5.6 billion in aid to basic education, intelligently targeted via the Education for All Fast Track Initiative, would dramatically increase our chances of halting and reversing the HIV/AIDS epidemic in the next decade.

Universal primary education is not a substitute for expanded HIV/AIDS treatment and prevention. Both are complementary; and both are urgently necessary if we are to win the fight against the disease.⁸ To achieve UPE, halt and reverse HIV/AIDS, and fulfill the other UN development goals, overall aid budgets must rise to at least 0.7 per cent of GNI in line with the commitments made in Monterrey. At least 10 per cent of that should be devoted to basic education. In addition, about US\$10bn annually will be required to mount adequate treatment and prevention programmes in all developing countries, including an estimated US\$7bn to underwrite the Global Fund to Fight AIDS, Tuberculosis and Malaria.⁹ The

combined annual cost of UPE and expanded treatment and prevention – US\$16bn – is less than the amount Europeans and Americans spend on pet food every year.¹⁰

In the words of Angeline Mugwendere, leader of an African youth network, ‘Education is a lethal blow to AIDS. With access to school, many of my friends would be alive today.’ The World Bank Spring Meetings in April 2004 provide an opportunity for rich countries to start making a difference now by properly funding and coordinating the Education for All effort:

- 1.) Increases in aid to education must reach the countries that have greatest need of additional resources, and have shown the strongest commitment to achieving Education for All. Finance and development ministers should strengthen and expand the Fast Track Initiative to serve as the coordinating mechanism through which donors will identify and collectively support the countries whose funding needs deserve the highest priority. Fast Track partners should pledge to channel 75 per cent of new aid for basic education to Fast Track-endorsed countries.
- 2.) As a first step, rich countries must immediately make up the remaining funding shortfalls for the 12 low-income countries whose education plans they have already endorsed through the Education for All Fast Track Initiative.¹¹
- 3.) Finance and development ministers meeting in Washington this week should call for a review of the 34 additional countries that have already qualified for Fast Track status, but have not yet had plans endorsed.¹² The review should establish whether the country is in possession of a credible plan for achieving Education for All (EFA), whether existing donor commitments are adequate to support this plan, and whether outstanding finance needs can be met through existing in-country channels. Findings should be presented to the Fast Track partnership and the Development Committee in Spring 2005.
- 4.) Beyond this, rich countries must begin to work with developing countries in genuine partnership. Key markers of this would be the inclusion of Southern ministers on the steering committee of the Education for All Fast Track Initiative, an end to donor-only meetings, and full implementation of a transparent system to monitor the quality as well as the quantity of donor aid to education.
- 5.) Finance ministers of developing countries should ensure that they are increasing budgets for basic education alongside budgets for primary health care and AIDS prevention and care. Priorities for increased education spending should include abolishing primary school fees and charges; achieving gender parity in both primary and secondary education; improving teacher training; and incorporating sexual and reproductive health education and life skills training into the curriculum.

As Nelson Mandela has noted, ‘Education is the most powerful weapon you can use to change the world.’ It is also a weapon that the world cannot do without in the fight against HIV/AIDS. Education saves lives. And ignorance is lethal.

1. HIV/AIDS and the “Education Vaccine”

‘AIDS tell me, do we have a future?’ – Extract from a poem by Esther Wanjiku, a pupil at Kimuchu Primary School, Kenya¹³

HIV/AIDS is killing millions of people worldwide. On current trends, another 5 million people will contract HIV each year. Of these, nearly half will be 15-24-year-olds in the low-income countries – the overwhelming majority of them girls and young women. Recognising that young people hold the key to stopping AIDS, at the UN General Assembly Special Session on AIDS world leaders committed to reduce HIV prevalence among 15-24-year-olds by 25 per cent by the year 2010. Yet prevalence is still on the rise in this age group, and as long as this remains the case, the epidemic will continue to grow.

The causal factors are complex and there is no single intervention or policy that can protect everyone at risk. But new analysis suggests that 700,000 cases of HIV would be prevented each year if all children received a complete primary education.¹⁴

Education is so strongly predictive of better knowledge, safer behaviour and reduced infection rates that UN experts conclude education functions as a kind of “social vaccine”.¹⁵ Recent studies indicate that young people with little or no education may be 2.2 times more likely to contract HIV as those who have completed primary education.¹⁶ This implies that, while those without a complete primary education represent around 36 per cent of young adults in low-income countries¹⁷, they are likely to experience around 55 per cent of new HIV cases for that age group.¹⁸ Without universal primary education (UPE)¹⁹, we can expect 1.3 million young adults who lack primary education to become infected every year – a substantial proportion of the predicted 5 million new infections annually.²⁰ However, if everyone received a full primary education, we would expect over 700,000 of these cases (about 30 per cent of all new infections in this age group) to be prevented each year.²¹

These figures are only broad estimates, based on the limited data that is currently available. Evidence from around the world suggests that many more could be saved if HIV prevention was mainstreamed in schools, and universal primary completion was used to underpin an expanded prevention strategy.²² But even allowing for the difficulty of obtaining precise figures, it is clear that the continuing failure to provide all children with at least a primary education is leaving millions unprotected from infection and leading to chronic levels of avoidable suffering. It is literally a fatal mistake.

Alongside UPE and other prevention measures, there would still be an urgent and compelling need for expanded treatment, care and support for those infected. Only through comprehensive treatment measures, including anti-retroviral drugs, *and* universal education, can we stave off the insidious downward spiral of impoverishment and deskilling that may yet be the epidemic’s deadliest long-term legacy (see Box 1). As Bell, Gersbach and Devarajan point out, AIDS does more than destroy the knowledge and skills of those who die from it. ‘It also deprives their children of those very things they need to become economically productive adults – their parents’ loving care, knowledge and capacity to finance education.’²³ The erosion of human and social capital is gradual but relentless; enough, they argue, to lead hard-hit countries to the brink of economic and social collapse within a few decades. This is what Colin Powell had in mind when he said: “AIDS is more devastating than any terrorist attack, any conflict, or any weapon of mass destruction”.²⁴

By helping families keep children in school – through investing in steps such as making education free, expanding the number of classrooms and teachers, and providing additional incentives to poor parents – developing countries, supported by international donors, can

protect and even strengthen the base of skills and knowledge that is the main foundation of economic growth. Education has been described as ‘the people’s asset’, crucial to enable those who are most likely to be poor – girls, ethnic minorities, orphans, people with disabilities, those living in rural areas – to contribute to and benefit from economic growth.²⁵ Studies have shown that each year of schooling increases individual productivity, and hence income, by about 3-14 per cent.²⁶

Finally, investing in the ‘education vaccine’ would yield other well-documented economic and social benefits. It would free up badly-needed health sector resources, as the total costs of keeping a child in school for six to nine years are likely to be far less than the lifetime costs

Box 1: HIV and human capital: the deadliest legacy?

AIDS kills people in their prime, pushes their families into poverty, and wipes out skills and knowledge essential to productivity and growth. According to the World Bank, ‘When the prevalence of HIV/AIDS reaches 8 per cent – about where it is for 13 African countries today – the cost in growth is estimated at about 1 per cent a year.’ But beyond these immediate costs, the cumulative loss of skills, knowledge and productive assets to AIDS could set off a far more devastating spiral of long-term economic decline and impoverishment.

Several studies have found that agricultural output falls by up to 50 per cent in AIDS-affected households, not only decimating earnings, but leading to a reduction in total acreage under cultivation, the forced sale of productive assets, and the loss of farming knowledge as families revert to subsistence crops.

If falling incomes also force parents to withdraw children from school, the impact will be magnified in the next generation. Children who grow up with too little education will be poorer, less productive, less well nourished, more vulnerable to HIV/AIDS and other illnesses themselves, and less likely to send their own children to school. At the same time, if fewer children complete school, the general level of skills and knowledge in the population, and hence the economy’s capacity to grow, will be eroded even more deeply than through AIDS deaths alone.

Already, hard-hit countries such as Zimbabwe and Zambia, which were once close to universal enrolment, have begun to experience sharp drops in school participation, thanks to increased household responsibilities and falling household incomes. Girls, already disadvantaged in access to education, bear the brunt of these burdens. A dangerous cycle is setting in: more HIV, less education; less education, more HIV.

Developing countries’ stock of human capital is fragile. In Ethiopia, Niger, Mozambique and Mali the average adult has only a year of schooling. Research shows that countries need to achieve an average education level of at least six years of schooling before they can achieve economic take-off. But HIV/AIDS could actually push developing countries even further behind in the race to accumulate human capital, unless we counteract the threat with a massive push to get all children into school and keep them there.

Together with comprehensive anti-retroviral treatment, universal primary education could help to halt the spread of new infections and enable hard-hit countries to rebuild the human and social capital that has been destroyed by AIDS.

Sources: Azariadis and Drazen (1990); UNDP (1996); Bruns, Mingat and Rakotomalala (2003); ActionAid (2003); UNAIDS (2002); World Bank (2002); UNICEF (2004); Bell, Gersbach and Devarajan (2003); Mutangadura (2000).

of caring for her, and possibly her infected or orphaned children, should she become HIV positive.²⁷

Moreover, those saved from infection through schooling would also escape the crippling costs associated with sickness, lost work days and early death – which have been shown to reduce a family’s lifetime income by as much as 48 per cent.²⁸ Whether or not individuals

contract HIV, education will boost their earning power, as argued above, and their children's chances of a healthy and prosperous life. Mothers with even a few years of education are better able to ensure that their children grow up healthy, well-fed and educated – hence, less likely to become infected themselves.²⁹ As Kofi Annan has said of girls' education: "*No other policy is as likely to raise economic productivity, lower infant and maternal mortality, improve nutrition and promote health.*"³⁰

2. How the “Education Vaccine” works

‘Good quality education is in itself a powerful weapon against HIV/AIDs.’ – UNAIDS³¹

‘It is mainly women excluded from education who fall prey to this disease. I saw it happen to my friends.’ – Angeline Mugwendere, African youth network leader

What explains the protective effects of education? What children can learn about AIDS and reproductive health through targeted prevention and life skills programmes is important. However, the latest research shows that the role of education in reducing HIV prevalence amongst young adults cannot be explained by exposure to specific HIV prevention classes, as very few of those tested would have been at school when such classes were first introduced.³² Rather, it is general schooling that appears to make the most powerful impact on young people’s sexual behaviour and choices. A complete primary education leads to increased ability to evaluate, understand and apply facts; gains in confidence; and greater decision-making power in relationships. It creates the context in which preventative messages about HIV can best be understood and acted upon.

Box 2 Zambia’s precarious education reforms: Kazia’s future hangs in the balance

Kazia Sikayasa, 14, was bitten by the education bug during a drama performance put on by an NGO in her village, about the importance of sending girls to school. ‘I was excited to see so many women who could speak English, carrying big files and speaking with confidence in front of men. I thought I could be the same if only I could go for more education. My parents attended too. I think the drama really made them think about my future and education. They even started saying to their neighbours, “Education is not only for boys”.’

‘From then on, I worked hard in school and did well,’ says Kazia. ‘My parents decided to send me to Livingstone for my secondary education along with my brothers. I would like to be a teacher so that I can influence other girls back in my village, which made a difference [to my life].’

But for Kazia and millions of other Zambian children, achieving their dreams will depend on whether the government, and its donor partners, can pull the country’s education system out of crisis. The percentage of children who finish primary school has dropped sharply over the past decade, and of those who do finish, only 25 per cent will be offered a place in secondary school. Girls, who have traditionally been disadvantaged in education, are falling further behind boys. The shortage of schools, books, desks, and learning materials is severe and the teaching force, already demoralised and underpaid, is now being ravaged by AIDS deaths. Management and supervision systems have also been eroded over the years, and currently large amounts of funds never reach schools.

Zambia, one of the first 18 countries selected for the EFA Fast Track Initiative, is trying to rise to these challenges. The country has a new government with a new commitment to education reform. It has steadily increased the share of the budget going to health and education, and recently scrapped school fees and PTA charges. Zambian civil society is actively engaged in improving transparency and accountability. A recent external evaluation commissioned by 13 donors found that education policies are improving, thanks to strong government leadership and commitment to reforms.

Rich countries have increased support to basic education in Zambia, but need to do even more. At least US\$40 million annually in additional aid is required to help Zambia train more teachers, close the gender gap, improve quality, and provide extra support to help AIDS orphans, girls, and the poorest to stay in school.

Sources: Change Associates International; Zambia National Education Coalition; USAID; World Bank.

Education is especially empowering for girls and young women, and this is key to its efficacy against HIV/AIDS, a disease which thrives on the social and economic vulnerability of young women. Globally, about one-third of those currently living with HIV/AIDS are aged 15-24 and the majority of new infections also occur among young adults. Adolescent girls are the single most affected segment of the population. In Sub-Saharan Africa, more than two-thirds of newly infected 15-19-year-olds are female and over 8 per cent of young women are currently living with HIV/AIDS, compared with around 4 per cent of young men (see Table 1 below).³³ In the most devastated countries, the rate of new HIV infections among girls is five to six times higher than for boys.³⁴

Table 1: Young People Living With AIDS and Children Out of School, By Sex³⁵

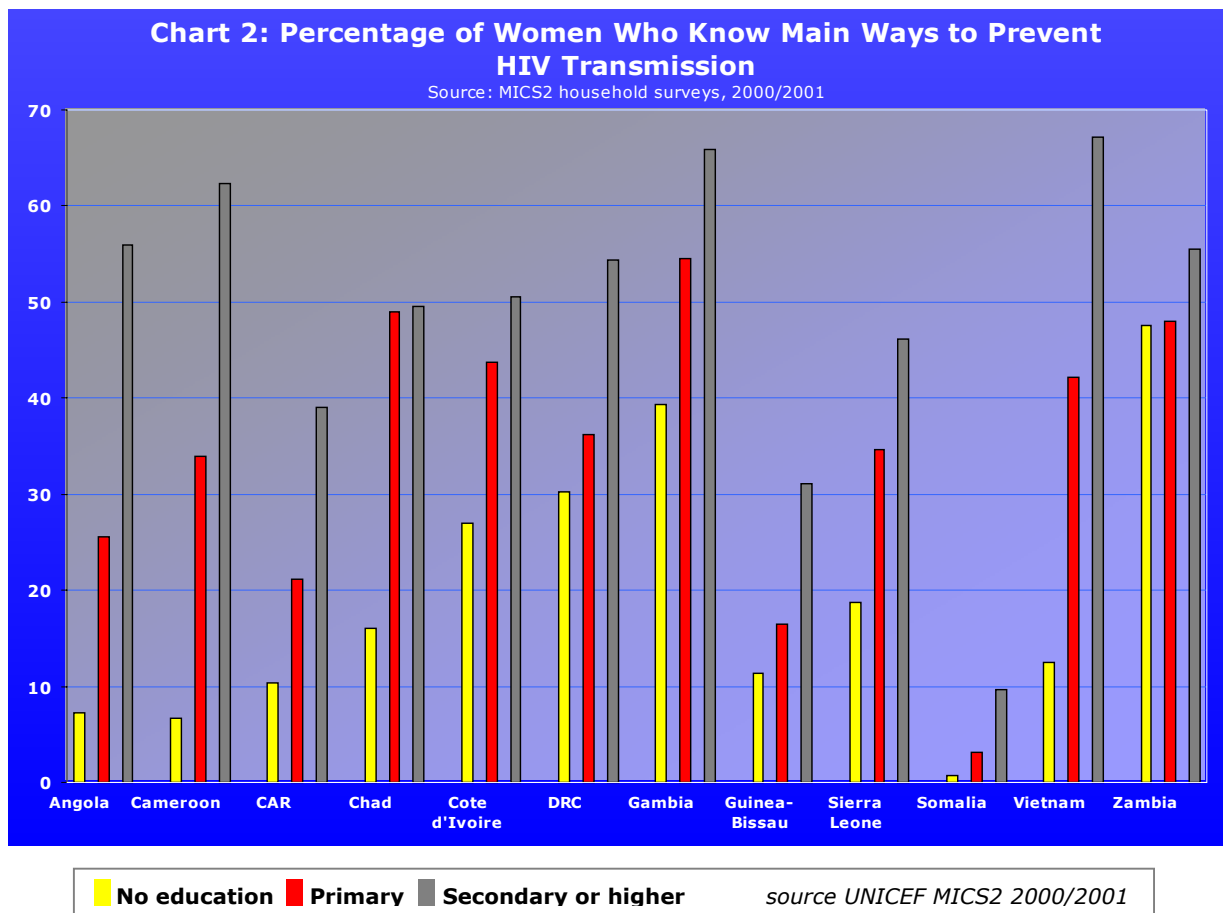
<i>Region</i>	<i>Total with AIDS (15-24)</i>	<i>Female</i>	<i>Male</i>	<i>Total out of school</i>	<i>Female</i>	<i>Male</i>
<i>Sources: UNFPA 2003; UNESCO 2003</i>	<i>(millions)</i>	<i>(per cent)</i>	<i>(per cent)</i>	<i>(millions)</i>	<i>(per cent)</i>	<i>(per cent)</i>
Sub-Saharan Africa	8.6	67	33	44	53	47
South Asia	1.1	62	38	32.4	66	44
East Asia and Pacific	0.74	49	51	14	49	51
Latin America and Caribbean	0.56	31	69	2	55	45
Central Asia and Eastern Europe	0.43	35	65	2.6	49	51
North Africa and Middle East	0.16	41	59	7.4	60	40
Industrialised countries	0.24	33	67	1.8	44	56
World	11.8	62	38	104.2	57	43

Young women's vulnerability to AIDS is not just physiological; more fundamentally, it is a result of women's disempowerment. As the World Association of Girl Guides and Girl Scouts and VSO point out, gender inequality keeps women economically dependent; makes it difficult for them to mention, let alone practise, safe sex; subjects them to sexual violence; and, once infected, pushes them to the end of the treatment queue. The same gender inequality is what currently deprives 67 million girls of schooling and keeps 553 million women illiterate.³⁶

Reversing economic and cultural discrimination against women requires structural changes that can take decades, but getting girls into school offers a clear start along this road. And new research shows that it makes an enormous contribution to efforts to reduce the spread of HIV.

Literate women are three times more likely than illiterate women to know that a healthy-looking person can have HIV, and four times more likely to know the main ways to avoid AIDS, according to a 32-country study.³⁷ Although knowledge levels are predictably greatest among women with secondary or better education, primary education in itself makes a very

significant impact. Analysing data from UNICEF’s Multi-Indicator Cluster Survey for 12 countries, we found that women with a primary education were 2.5 times more likely than women with no schooling to correctly identify the main ways to prevent HIV transmission (see chart 2 below). Among rural women, who have less access to media and information than urban women, the effects of primary education on HIV knowledge were even greater.



But education does more than give girls, and boys, access to facts; it also increases their confidence and power in society, so that they are in a better position to act on what they know.³⁸ The empowering effects of education reach into nearly all choices and relationships that statisticians have found ways to measure, from the number of children women have to whether or not they control their own income (see Box 3). Not surprisingly, then, education has also been shown to provide girls and women with a better negotiating position to avoid unwanted sexual intercourse and to insist on condom use, whilst also making young men more receptive to condom promotion messages.³⁹

Evidence from 17 countries in Africa and four in Latin America shows that better-educated girls hold off longer on sexual activity, and are more likely to require their partners to use condoms.⁴⁰ In Kenya, 17-year-old girls still in school were almost four times more likely to have delayed sexual activity than those who were out of school.⁴¹ Recent household surveys in 11 countries show that women with some schooling were nearly five times as likely as uneducated women to have used a condom the last time they had sex.⁴² The effects of education on reported condom use are equally striking for young men (See Charts 2 and 3).

In the past five to ten years, since the risks of HIV infection in developing countries have been recognised, better educated young people have increased condom use and reduced the number of casual partners at a much steeper rate than those with little or no education.⁴³

During the 1990s the HIV infection rate fell by almost half among educated women, but there was little decline for women without any formal schooling.⁴⁴ Likewise, in Uganda, infection rates fell among young women who had received schooling of any type. Secondary education provides additional protection from HIV. In Zambia, young women with a high school education were less likely to be HIV-positive than those who had not received a secondary education. In Zimbabwe, only 1.3 per cent of girls aged 15-18 who were still enrolled in school were HIV-positive. Girls of a similar age who had dropped out of school were more than six times more likely to be HIV-positive. What is more, young women with secondary education remained less vulnerable to HIV for years after they left school.⁴⁵

Box 3 The multiple benefits of girls' education

Education has a huge impact on young women's risk of contracting HIV. This is part and parcel of the many ways in which education can change women's lives, including:

- **Reducing poverty**

In Zambia, rural women with no education are twice as likely to be living in extreme poverty as those who have benefited from eight or more years of education.

- **Improving health of women and their children**

Educated mothers make more use of health care facilities, including the health services that effectively prevent fatal childhood diseases. Worldwide, the risk of a child dying prematurely is reduced by around 8 per cent for each year that its mother spent in primary school.

- **Delaying marriage**

In Ethiopia and Bangladesh, increasing education has played a vital role in reducing child marriage, in part by ensuring that girls have access to the information and social networks that can protect them.

- **Reducing female genital mutilation (FGM)**

Educated women are less than half as likely to be subjected to FGM, and four times more likely to oppose FGM for their daughters.

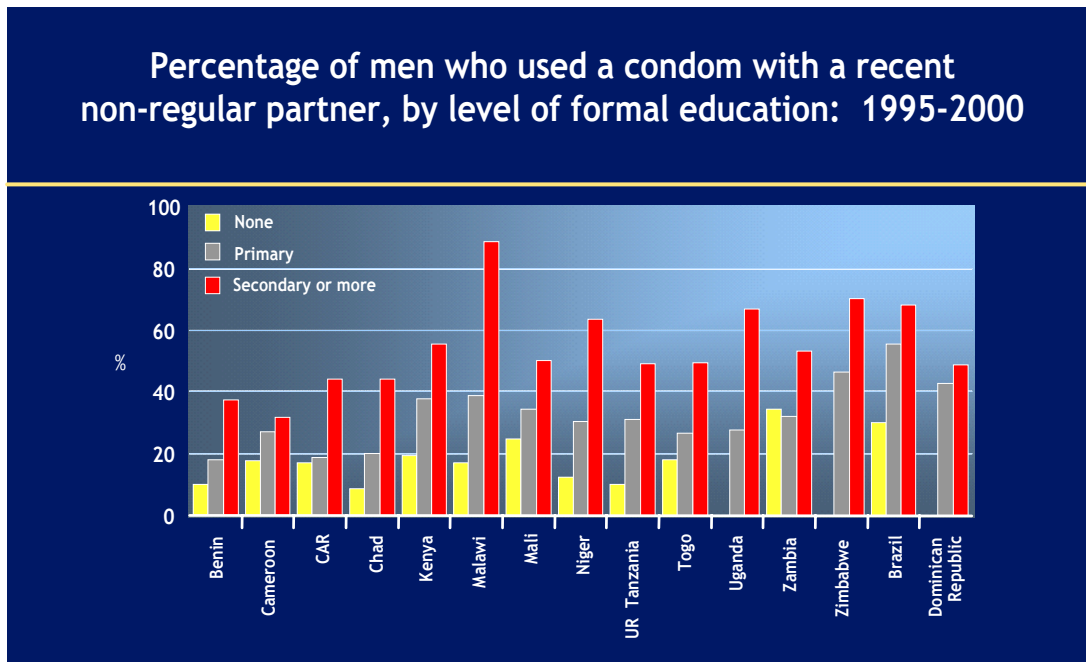
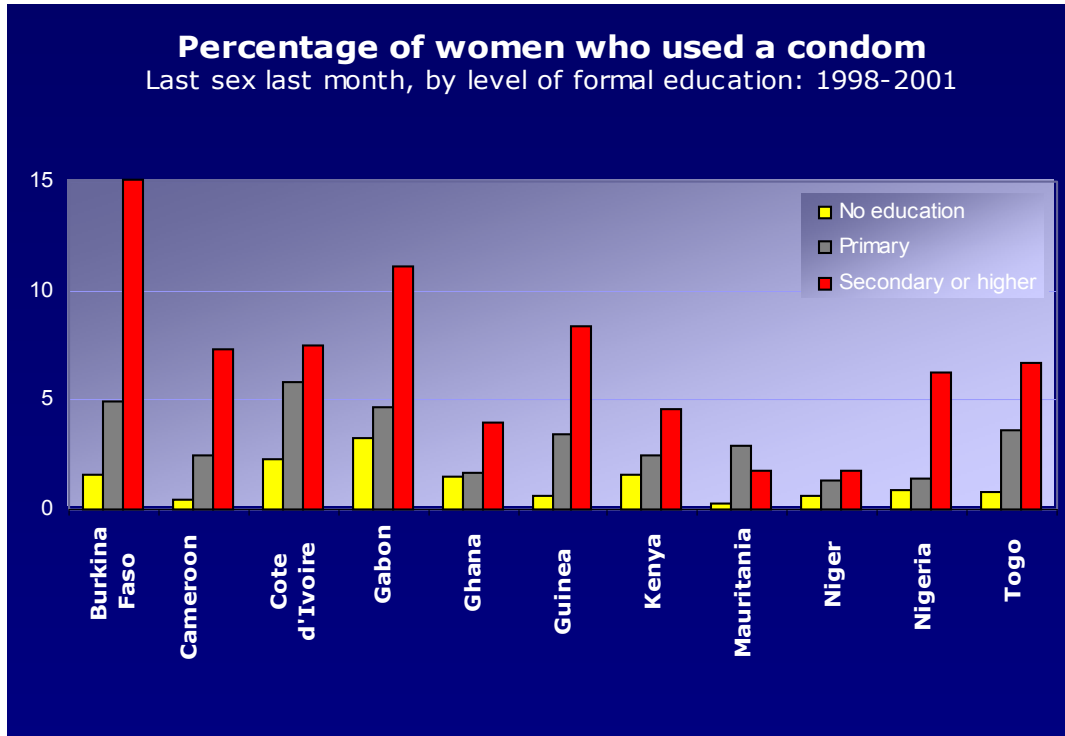
- **Increasing self-confidence and decision-making power**

Evidence from across the world shows that, though women everywhere continue to be constrained by unequal power relations, increased education helps women to gain in status and secure greater decision-making power in the family and the wider community.

Sources: GCE (2003); UNICEF (2003); Govindasamy and Ramesh (1997).

By contrast, unequal access to education for women is correlated with higher infection rates among all adults, men as well as women. A study in 72 capital cities found significantly higher infection rates where the literacy gap between women and men was larger.⁴⁶ According to another study, countries where the literacy gap between boys and girls is above 25 per cent were more likely to reach the commonly cited 'outbreak' level of 5 per cent HIV prevalence.⁴⁷ Lack of education, particularly among girls and women, may also help to speed the spread of AIDS by reducing general levels of health and nutrition. Children born to uneducated mothers are more likely to be malnourished, less likely to be immunised, and have lower average height, a strong indicator of poor health.⁴⁸

Charts 2 and 3: Reported Condom Use by Education Level, Women and Men



Sources: Women's condom use: GCE graphic using DHS data from www.statcompiler.com. Men's condom use: UNAIDS/WHO graphic using DHS and UNICEF data from www.macrointernational.com.

As Herz and Sperling conclude, 'Education helps girls gain the clout and the standing in society to avoid high-risk behaviours and save their own lives.'⁴⁹

Education not only helps individuals to protect themselves against HIV but also helps societies as a whole to work together to keep people safe. Universalising education, and including life skills and sexual and reproductive health within the UPE curriculum, is particularly important in this regard. As the World Bank points out, societies with better levels of education across the population are better and faster at creating, applying and spreading new ideas and information.⁵⁰ The silence and stigma that hold back individuals from accessing preventative services and advice are exacerbated not only by the lack of education of those individuals, but by lack of education amongst the communities in which they live. Escaping taboos requires collective social change.⁵¹

To date, no medical vaccine has been discovered for HIV. The education vaccine is not only the best one available, but is also, as UNICEF notes, 'likely to be the only one available for the foreseeable future.'⁵²

Box 4 Education over income

One hypothesis that has been advanced to explain the lower recent incidence of HIV amongst educated people is that education is simply a proxy measure for income, and that it is money, not education, that is keeping people safe. But the relationship between education and reduced HIV prevalence is not contingent upon incomes. Even controlling for income, education's impact on HIV prevalence is robust. This is consistent with other findings showing that infant mortality rates and other health outcomes are powerfully influenced by education levels, independently of income.

Furthermore, it should be noted that in the early years of the HIV epidemic, before the risks were known, educated people were actually more at risk of contracting HIV, as higher incomes made them more mobile. However, once information emerged about HIV, educated people were much quicker to process that information and modify their behaviours. Over the same period, risky behaviours among less educated people changed much less, and their HIV prevalence grew. This reinforces the finding that it is knowledge rather than income which protects people from HIV.

Sources: De Walque (2004); World Bank (2002); Vandemoortele and Delamonica (2000); Glynn, Caraël, Buve, Anagonou and Zekeng (2004); Bhalla, Saigu and Basu (2003).

3. How school-based HIV/AIDS education can enhance the impact of universal primary completion

'I feel I could have not contracted HIV/AIDS if I was well informed. This disease for me was sounding only like for truck drivers, prostitutes and people like "call boys" and not for me who is leading a decent life apart from all of that. Anyway, I got it and I wish I was well educated to understand AIDS. It is too late for me now.' – Saul Mutemba, Livingstone, Southern Province, Zambia.⁵³

As set out above, the general cognitive and social gains from a basic education are the most important factor in protecting adolescents and young adults from infection. But schools also provide a crucial opportunity to reach children with prevention messages before they become sexually active, and if this opportunity is seized through well-designed sexual and reproductive health education programmes, the protective impact of schooling can be considerably enhanced.

Schools, as the World Bank points out, 'offer an organized and efficient way to reach large numbers of school-age youth' at an age when they are highly receptive to adult influence.⁵⁴ In fact, a recent systematic review found stronger evidence for the efficacy of school-based programmes than for any other prevention measure. School-based interventions had a clearer impact on age at first sex and number of sexual partners than any other measure; and they had an equally strong impact on condom use as peer counselling, workplace education and voluntary testing and counselling.⁵⁵ Similarly, a review of 113 studies from 5 continents found that school-based AIDS education that focus on specific age-appropriate behavioral objectives are effective in reducing early sexual activity and high-risk behavior.⁵⁶ A Ugandan school-based AIDS education programme reduced self-reported risky behavior by three-quarters. A controlled two-year study found that of students in their final year of primary school who had been exposed to the programme, only 11 per cent were sexually active, as opposed to 43 per cent of students who received only standard health education.⁵⁷

Information received in the classroom is especially important to girls, who are far less likely than boys to have basic knowledge about how to protect themselves from HIV/AIDS and have less access to other sources of accurate information, as explained by this young girl from Chennai, India:

*'Children get most of their information from school. This is especially true with girls, as we remain confined to the home outside school hours. Boys have the freedom to go out with their friends, to the movies etc., so they have a better chance of getting additional information. As girls, after a certain age we stay at home and only go out to study. School is therefore the basic source for girls.'*⁵⁸

Yet a recent worldwide study found that about 40 per cent of countries have not yet taken the basic step of including AIDS in their school curriculum.⁵⁹ And even where school-based programmes have been developed, not all of them have been effective.

Most importantly, school-based programmes will work best when the school itself is working properly. Effective AIDS education demands that policy-makers address the wider quality challenges facing schools, and tackle problems such as class sizes of 60 or more; absence of books and chalk; students who arrive too hungry to concentrate; overworked, under-trained and underpaid teachers; and lack of community involvement in school affairs.⁶⁰

Secondly, the chances of success are slim unless teachers are involved in designing school-based preventative classes, and receive specific training and support to implement them. Frank discussions of sexual issues in the classroom may be impossible in such

circumstances.⁶¹ Through a unique programme initiated by Education International and the World Health Organisation, teachers' unions in 17 countries are working hand in hand with ministries of education and health to train thousands of teachers on the life skills needed to prevent HIV/AIDS. The programme has increased teachers' confidence in discussing HIV/AIDS issues in a school setting and has helped to break down the 'walls of silence' surrounding HIV.

Building links between what happens in the classroom and what happens in the community can improve results. The Ghana Education Service's Girls Education Unit has launched a program to improve the capacity of 11- to 15-year-old girls to protect themselves from HIV infection. The campaign targets all primary and junior secondary schools in Ghana but also addresses child welfare NGOs operating at the community level, as well as boys, teachers, parents, and community members.⁶² In Congo, Tanzania, Nigeria and other countries, successful projects have trained students to act as peer educators outside the classroom, and groups like the Forum of African Women Educationalists (FAWE) and the Girl Guides use after-school clubs and activities to combat stigma and promote awareness.⁶³ 'During guiding we are taught about these diseases and how to protect ourselves from getting infected,' says Fallon, aged nine, who belongs to a Girl Guide troupe in Ghana. 'We also visit people living with HIV and AIDS to let them know they are not alone in this world. With all this talk and knowledge that we have about HIV and AIDS, I learned to be more confident and responsible,' she says.⁶⁴

As school-based prevention programmes are still quite new, their full impact on HIV incidence is not yet known. But their strong effect on behaviour suggests that the number of lives that could be saved through universalising both general education and school-based HIV education could be significantly greater than the figure estimated in this paper for general education alone.

4. Beyond school walls: A comprehensive approach to HIV/AIDS prevention

Uganda and Senegal's success stories (see Box 5) show that preventing HIV/AIDS requires an integrated approach. In addition to ensuring access to education, key aspects of any successful strategy include:

- Providing meaningful information to enable people to know how best to protect themselves from HIV/AIDS and how they can get support;
- Providing condoms, HIV counselling and testing, and treatment of sexually transmitted infections, and ensuring that services are properly accessible;
- Developing a political, media and public culture in which issues surrounding HIV/AIDS can be discussed in an open and non-stigmatising way, and challenging prejudice and discrimination;
- Increasing the constructive involvement of men and boys in activities designed to reduce gender inequality and prevent the spread of HIV/AIDS;
- Providing real social and economic opportunities so that people can choose safer life strategies;
- Ensuring that the 'hardest to reach' groups are included in all HIV prevention work – as they are often the people most at risk.

Box 5 Putting the puzzle together: schools at the heart of prevention strategies in Uganda and Senegal

Through determined action, Uganda cut HIV prevalence rates from 15 per cent in 1990 to 5 per cent in 2000. The ingredients of its success include strong political leadership from the top, starting with President Museveni; and equally strong engagement from the local level, with more than 700 government agencies and NGOs getting involved in a multi-sectoral campaign to disseminate information, change behaviour and fight discrimination. 'Community-based and face-to-face communication was key to spreading behaviour change messages,' says UNFPA.

Free primary education, which doubled enrolments when it was introduced mid-decade, played an essential role in accelerating the communication and change process. Because of UPE, Uganda was able to reach growing numbers of girls and boys with vital information. The government estimates that some 10 million young people now receive AIDS education in the classroom. And, because of UPE, more and more young people are able to process and use the information they receive, whether it comes from radio and TV, billboards and posters, teachers and books, or a visit to one of the testing and counselling centres that the government has opened across the country.

The end result has been a sea change in sexual behaviour. In one school district in 1994, more than 60 per cent of students aged 13-16 reported that they were already sexually active. In 2001, the figure was fewer than 5 per cent.

With the same combination of strong political leadership and cross-cutting strategies, other countries are also experiencing results. In Senegal, sexual health and AIDS education was introduced in primary and secondary school curricula early in the 1990s. By 1997, two out of five women under 25 and two-thirds of men reported using condoms with non-regular partners, compared with less than 5% at the start of the decade.

These successes demonstrate the need for a comprehensive approach, making full use of community mobilisation, media campaigns, voluntary testing and counselling and other outreach measures. But the experience of Uganda and Senegal also suggests that schools should be at the heart of every country's prevention strategy.

Sources: Hogle (2002); UNFPA (2003).

Each of these measures is mutually reinforcing. Crucially, all of them rest in large part on the provision of universal education. Without education, young people – especially girls, and those from ‘hardest to reach’ groups – are less likely to understand the information provided; less confident in accessing services; less likely to be able to discuss HIV issues openly and without stigma; and less likely to have real social and economic opportunities. Higher levels of education have also been shown to increase women’s ability to seek and receive medical treatment for themselves. As UNICEF concluded, ‘The four allies that make the virus so prevalent in many developing countries are silence, shame, stigma and superstition. These all thrive in a climate of ignorance and illiteracy.’⁶⁵

Box 6 Developing country education ministers work with UN to accelerate education sector responses to HIV/AIDS

UNAIDS has established an Inter-Agency Task Team for Education, coordinated by UNESCO, to facilitate the international education response to HIV/AIDS. In 2002, a working group of the UNAIDS co-sponsors, bilateral aid organisations, and civil society was launched, and has since worked directly with ministries of education in more than 20 countries in Africa to accelerate the education sector response to HIV/AIDS.

According to the World Bank’s Don Bundy, coordinator of the working group, ‘Ministries of education increasingly recognise that education is an effective “social vaccine” against HIV/AIDS, but that the impact of the epidemic is compromising their ability to deliver this vaccine. This implies a stronger and more innovative effort to achieve EFA in a world of AIDS, and a commensurate increase in investment in the education sector.’

5. Achieving education for all in the context of AIDS

'Education is crucial in the fight against AIDS, yet while many of us have committed ourselves to ambitious reform of our education systems in order to get every girl and boy into school, donors have failed to deliver the funding they promised.' – Education Ministers of Pakistan, Nigeria, Niger, Guinea, Guyana, and The Gambia, writing in the *International Herald Tribune*, 8 March 2004

With good national plans backed up by effective support from donor countries, the 2005 Millennium Development Goal on gender parity in education and the 2015 Goal on universal completion of primary education can be achieved. Success stories from some of the world's poorest countries – such as Bangladesh, Kenya, Niger, and Uganda – prove that it is possible to increase enrolments dramatically within only a few years (see Box 7). Despite this, 36 per cent of children in low-income countries still miss out on a full primary education. Most of them are girls. In the past decade, the number of children out of school in the world has decreased only by 3.7 per cent – and in Sub-Saharan Africa, it has actually grown.⁶⁶

Box 7 The Millennium Development Goals

The Millennium Development Goals are a set of eight vital and achievable time-bound commitments agreed by the international community in 2000. Lack of sufficient progress on four key Millennium Development Goals sets the context for this paper:

- Goal 2: Ensure that all boys and girls complete primary school by 2015.
At current rates of progress, this will be missed.
- Goal 3: Eliminate gender disparities in primary education by 2005, and at all levels by 2015.
The target for gender equality by 2005 is now certain to be missed. At current rates of progress, gender equality will not be reached at any level of education by 2015.
- Goal 6: Halt and begin to reverse the spread of HIV/AIDS and other major diseases.
At current rates of progress, this will be missed.
- Goal 8: Develop a global partnership for development between rich and poor countries.
This remains elusive, as donor countries continue to undermine potential global partnerships such as the Education for All Fast Track Initiative by failing to provide the required funding and by deliberately excluding developing countries from participating in key decisions.

The AIDS epidemic, and the impoverishment and deskilling that follows in its wake, add enormous urgency to the task of achieving the education goals. AIDS places a heavy strain on government budgets, and as outlined earlier, an effective response to the crisis will demand even more spending on treatment, care and prevention. In this context, it is doubly important for developing countries to ensure that available resources for education are being used as effectively and equitably as possible; and for donors to ensure that sound policies are backed with the full external support needed to implement them (see Box 6).

The following measures, if planned and implemented with the full involvement of parents, teachers and civil society, will help to ensure that the life-saving benefits of education will be extended to those most likely to be poor and most vulnerable to HIV/AIDS.

Abolish school fees and charges. Countries that have abolished primary school fees have experienced huge increases in enrolment (see Box 8), and there is growing evidence from Malawi and Uganda that girls, the poorest children, and AIDS orphans have gained the most from free education. Nevertheless, over 100 developing countries still impose charges for primary education, ranging from annual tuition fees to charges for sitting exams, mandatory lunch fees, school maintenance levies, and the purchase of books and uniforms.⁶⁷ These charges put school out of reach of many poor families. When education becomes hard to afford, girls and orphans are usually the first to be withdrawn from school. 'In my region, families only have limited resources to buy uniforms, sandals and school materials for one or a few of their children – and they choose the boys first,' explains Mariama Mohammed, a programme coordinator for CAMFED in northern Ghana.

Angeline Mugwendere, a 24-year-old Zimbabwean who leads a network of young women school-leavers fighting for the rights of girls and women in Africa, agrees that fees and charges have to go:

*'My fees were paid by an NGO, but I had to watch with pain in my heart as my friends got desperate to find ways to stay in school. Like me, they wanted to be recognised because of their education, and knew that schooling was the only way out of poverty for them. So they took the shortest possible way to achieve that, dangerous as it was. They went on to sleep with sugar daddies in return for cash to pay their fees. And many of them contracted AIDS. With access to school, these girls would be alive today and would have had a chance to make something out of their lives, as I have. We can break this vicious cycle of poverty, by abolishing fees and supporting girls through school. World leaders should do everything it takes to keep girls in school – whatever the cost, it's worth it.'*⁶⁸

Box 8 Kenya in the FTI waiting room

John Nzomo, 11, is in class two at Shadrach Kimalel school in Kibera slum, Nairobi, Kenya, one of the most deprived parts of the city. In 2002 he dropped out of school because his parents could not afford to pay school fees. Then in January 2003, the new Kenyan government abolished school fees in all government primary schools, and across the country 1.3 million additional children enrolled in school. John was one of them. His parents say, 'It was a miracle for us that free primary education came; otherwise, John would still be at home.'

Studies in Kenya show that HIV risk-increasing behaviour is less common amongst better-educated young people. The latest UN figures indicate that 15 per cent of the Kenyan population has HIV. Yet around 40 per cent of primary school age children in Kibera are still missing out on education because of a lack of government schools.

One of them is 10-year-old Dorcas Oendi. She recounts: 'My grandmother enrolled me in school [a few years ago]. Before she died, I had already dropped out of school due to lack of fees. I've been staying at home washing clothes and taking care of my brother and sister. This year my half-sister and mother say they will try to get me admission in a city council school, but they have not succeeded.' With schools already overcrowded, her chances are not good.

But the determination of the new government offers an opportunity for comprehensive preventative action underpinned by universal education. Kenya has qualified to join the Fast Track Initiative, and the country's Education Minister hopes that the FTI will deliver on its promise of fast, flexible response to positive policy changes. UN special envoy on HIV/AIDS in Africa, Stephen Lewis, has been outspoken in his backing for the Kenyan government's search for additional education resources: "The new government and the voters understood that abolishing school fees would be costly in financial terms, but the free education campaign slogan said it all: *If you think education is expensive, try ignorance.* The Ministry is scrambling to put together the dollars to finance the policy. If ever there was a time to turn the pandemic around in Kenya, that time is now. But they'll need lots of help: they must get it."

Sources: Oxfam International; UN 2003.

Offer extra support to help girls and the poor stay in school, such as free school meals, ‘food-for-education’ (in-kind payments), scholarships, stipends or ‘education credits’. Beyond just raising enrolments, such incentives can be a highly effective anti-poverty tool: they provide extra resources to poor households in the short term, while also ensuring that the household invests in its future through education. Bangladesh’s secondary school scholarship programme for girls, requiring a commitment from parents that their daughters are enabled to attend school and kept protected from child marriage, more than doubled enrolments within six years and had an immediate effect in delaying marriage.⁶⁹ Designing and managing a package of support that is appropriate to local circumstances is a challenge. But examples from Brazil, Cambodia, Mexico, Bangladesh, India, Lesotho and The Gambia show that with strong community involvement, such programmes can achieve dramatic success (see Box 9 below).

Box 9 Lesotho: Teachers join hands with community to keep children in school

Thaba Tseka is one of the districts in Lesotho worst hit by AIDS, but at Katlehong school, enrolments are actually growing by leaps and bounds, UNICEF reports. The reason? Word is out that not only orphans, but in fact all children who are poor and hungry, are cared for in this school.

Julia Likhama, a teacher at Katlehong, says that the government’s decision to abolish user fees is half of the story. ‘We never saw this thing before, just in the past couple of years,’ says Ms. Likhama. ‘But now free education is bringing more and more orphans back to school.’

The other half of the story belongs to a band of dedicated and driven teachers, who set out to find ways to stem the gradual exodus of children from the classroom, and, with the support of the local community, hit on a school feeding programme as the answer.

‘The children get porridge in the morning and pap (maize meal) and vegetables, sometimes meat at lunch,’ Ms. Likhama explains. The food is a draw to the growing numbers who are hungry, whether or not they are orphaned. The feeding programme has become a model for other schools in the district, but with nearly 40% of young women already HIV positive and nearly half of Lesotho’s children orphaned, the cash-strapped Ministry of Education needs more resources to scale up measures such as these.

Source: UNICEF (n.d.).

Increase investment in teachers. More teachers must be trained to replace those lost to AIDS, and better ways to support HIV-positive teachers are needed. Improving teacher training, motivation and morale is also essential to the success of school-based prevention programmes.

Expand universal education beyond primary level, with a particular focus on increasing opportunities for women and girls. Once children have a primary education, the benefits to society and to individuals increase even further if they can complete a secondary education as well. Unfortunately, in many developing countries secondary schools are still the preserve of an affluent and largely male minority.⁷⁰ Getting all children through primary school is a necessary first step towards equitable access to secondary and further education. However, to unlock the full economic and social impact of universal education, an important next step is extend free and compulsory schooling to at least age 15. What is more, among the 15-24 age group most at risk of HIV infection in the developing world, one in three have already dropped out of school without basic literacy skills, and are therefore doubly at risk from HIV.⁷¹ Adult literacy classes and non-formal education programmes are needed to reach this critical segment of the population with information and skills that could save their lives.

Mainstream life skills and sexual and reproductive health education in the primary and secondary curriculum and upgrade teacher training to ensure that teachers can teach these

topics effectively. Take further steps to ensure that schools are empowering, positive and safe environments for girls.

Of course, all of these measures require good planning and political will, but they are also all impossible without increased resources from developing country governments themselves, and from rich countries. UNESCO estimates the additional external funding required to achieve universal primary education at US\$5.6 billion a year, of which some US\$550 million per year represents the costs of coping with HIV/AIDS (mainly additional teacher training and recruitment, as well as targeted subsidies to AIDS orphans).

To put this figure into perspective, it is:

- Less than a third of global annual spending on video games;
- Less than one-tenth of the cost of the invasion of Iraq;
- Less than 0.03 per cent of donor countries' combined annual gross national income.

World leaders meeting in Dakar in 2000 pledged that no developing country seriously committed to education for all would be denied the external resources necessary to achieve it. However, international funding provided for Education For All has remained woefully inadequate. Of the US\$7 billion required annually from rich countries for UPE, only US\$1.4 billion is being provided. Only the Netherlands and Luxembourg are providing their fair share of the funding required, with the USA, Germany, and Japan amongst the worst laggards, needing to increase their aid to basic education by at least 10 times.⁷²

Warped geographical distribution of aid means that those countries with the greatest need do not receive their fair share of even that meagre support. Much too little of the aid for education is provided to where the largest number of out-of-school children live. South and West Asia and Sub-Saharan Africa, which together hold 73 per cent of the world's out-of-school children, receive just 36 per cent of the education aid.⁷³ And key G7 countries USA, Japan, and France still provide only half of their aid to poor countries, with the other half spent on middle-income allies.⁷⁴

Finally, much aid to education remains highly ineffective because it is too short-term or too restricted to allow countries to plan comprehensive action on the EFA goals. Lack of predictable and coordinated donor funding for recurrent costs (such as teachers' salaries) remains a major barrier.

A major step towards more effective donor support to EFA was taken at the World Bank Spring Meetings in 2002, with the launch of the Education for All Fast Track Initiative (FTI). For the first time, the FTI establishes clear and transparent criteria, agreed by all donors, for identifying the countries which both need additional resources and have put in place the policies needed to use those resources most effectively. Many of the first 18 countries invited to join the FTI have already committed to far-reaching and ambitious reform of their education systems in order to get every child into school. The first 10 FTI countries to receive donor endorsement for their plans have been raising enrolments and primary school completion at a rate many times faster than other developing countries, and with more aid, they could achieve even more.⁷⁵

Box 10 Rich countries leave Niger's children without the protection of education

Niger, once protected from HIV/AIDs through its relative isolation, is now seeing the disease spread. Health workers report that increasing numbers of migrant workers are returning to Niger infected, and passing the disease on to partners through unprotected sex. HIV prevalence among women attending antenatal clinics in the capital Niamey quadrupled in just over a decade, from 0.5 per cent in 1987-88 to 2 per cent in 2000, and is now estimated at 4 per cent. A government paper concluded that it has so far been unsuccessful in holding back the spread of the disease.

Education is crucial to breaking down this wall and to enabling people to respond effectively to HIV/AIDS information. As the Peace Corps in Niger concluded, 'prevention through education can halt the spread of the virus'. UN figures show that while only 13 per cent of uneducated Nigerien men used a condom with their most recent casual partner, 30 per cent of men with some primary education did so, and 64 per cent of men with some secondary education. Tribal chiefs recently agreed to work with UNICEF and the government to spread messages on effective prevention. But in a country where less than a quarter of children complete primary education (and only 42 per cent of children even begin it) HIV/AIDS prevention is seriously hampered.

The government of Niger understands the importance of education for all. It has already increased the primary education enrolment rate from 34 per cent to 42 per cent in just five years, and has developed a comprehensive strategy to deliver increased education that representatives of donor countries agree is of a very high standard. Donors accept that, despite significantly increasing its own spending on education, Niger (the poorest peaceful country in the world) requires additional international funding. In June 2002, Niger was invited into the Fast Track Initiative and in November 2002 the country's education plan was endorsed and the required additional international funding was promised in full.

Yet rich countries continue to ignore their own promise and to neglect Niger's children, 1.3 million of whom remain out of school. A US\$32 million dollar shortfall remains in the plan for the next two years, and funding after that looks even more uncertain. One Western diplomat admitted it was 'a scandal, an absolute scandal'. Unless the shortfall is made up in full, Niger's children will continue to be without the opportunity and protection that education provides

Sources: Irin, Restininc, Oxfam International, UNAIDS, UNESCO, UNICEF

By using the FTI process to make decisions about how to allocate *all* of their aid to education, donors could target their resources where they will make the greatest impact. But most donors are putting only a tiny fraction of their aid budgets into new resources for FTI-approved plans. As new figures show, far from being rewarded for good performance, not one of the first 12 countries endorsed by international donors for the FTI has been provided with the funding required for even the next two years – and funding is even more uncertain after that. (See Table 2 below.)

**Table 2:
Outstanding funding needs for the 12 FTI countries with fully endorsed plans**

Recipient Country	Shortfall (USD millions)
Burkina Faso	\$20m
Gambia	\$4m
Ghana	\$27.9m
Guinea	\$47m
Guyana	\$11m
Honduras	\$48m
Mauritania	\$4m
Mozambique	\$183m
Nicaragua	\$43m
Niger	\$32m
Vietnam	\$288m
Yemen	\$44m

Even the official “progress report”, prepared by the FTI secretariat for the Development Committee meeting in Washington this week, admits that the funding so far provided “falls far short of the level required” and notes that the prospects of achieving education for all “are dim unless there is a substantial improvement in international response”.

This represents a missed opportunity that is not only shameful, but in the context of AIDS, totally inexcusable. Donors could make an immediate difference to the future of over three million out-of-school children in the first 12 FTI countries by finding the extra funds needed to fully back their EFA strategies. That, however, is only the start of the story. By increasing budgets for aid to education, and targeting these increased resources to countries collectively endorsed by donors through the FTI process, donors would be working together to create powerful incentives for all developing countries to scale up their education efforts – our best chance of helping *all* the world’s 100 million out-of-school children.

Another 34 countries⁷⁶ are eligible to join the FTI partnership, but have not yet had plans endorsed for accelerated donor support. Donors should undertake a review of education plans and funding needs in each of these countries, in order to establish whether the country is in possession of a credible plan for achieving Education for All, whether existing donor commitments are adequate to support this plan, and whether outstanding finance needs can be met through existing in-country channels. Findings should be presented to the Fast Track partnership and the Development Committee in Spring 2005, and donors should pledge to direct at least 75 per cent of new aid commitments to countries given priority status through this process.

Conclusion and Recommendations

'Since knowledge is power, it has to be used to protect and educate not only our girl-children, but all children everywhere.' – Maimouna, Chief Guide Commissioner, Gambia Girl Guides Association⁷⁷

Staying safe from HIV requires education. But education for all remains impossible while a shortage of schools and teachers and unaffordable fees and charges keep millions of children out of school.

Rich countries' failure to deliver their promised funding is not only leaving children unable to read, it is also leaving them unable to keep safe from infection, and may even be leading over 700,000 preventable cases of HIV in young adults each year.

Many donor countries are planning significant and welcome increases in their aid to basic education. Others must follow suit. To achieve UPE, halt and reverse HIV/AIDS, and fulfill the other UN development goals, aid budgets must rise to at least 0.7 per cent of GNI in line with the commitments made in Monterrey. At least 10 per cent of that should be devoted to basic education.

Failure by donor countries to invest in achieving universal education now will mean increased poverty later, and will condemn countries hard-hit by AIDS to a grim future of underdevelopment and dependence. As UNAIDS points out, 'early investment in prevention offsets later and much larger social and developmental costs.'⁷⁸ In an increasingly interdependent world, developed countries will never be able to isolate themselves from the consequences if they fail to act now.

The World Bank Spring Meetings in April 2004 provide an opportunity for rich countries to start making a difference now by properly funding and coordinating the Education for All effort:

- 1.) Increases in aid to education must reach the countries that have greatest need of additional resources, and have shown the strongest commitment to achieving Education for All. Finance and development ministers should strengthen and expand the Fast Track Initiative to serve as the coordinating mechanism through which donors will identify and collectively support the countries whose funding needs deserve the highest priority. Fast Track partners should pledge to channel 75 per cent of new aid to basic education to Fast Track-endorsed countries.
- 2.) As a first step, rich countries must immediately make up the remaining funding shortfalls for the 12 low-income countries whose education plans they have already endorsed through the Education for All Fast Track Initiative.⁷⁹
- 3.) Finance and development ministers should call for a review of the 34 additional countries that have already qualified for Fast Track status, but have not yet had plans endorsed.⁸⁰ The review should establish whether the country is in possession of a credible plan for achieving Education for All, whether existing donor commitments are adequate to support this plan, and whether outstanding finance needs can be met through existing in-country channels. Findings should be presented to the Fast Track partnership and the Development Committee in Spring 2005.

4.) Beyond this, rich countries must begin to work with developing countries in genuine partnership. Key markers of this would be the inclusion of Southern ministers on the steering committee of the Education for All Fast Track Initiative, an end to donor-only meetings, and full implementation of a transparent system to monitor the quality as well as the quantity of donor aid to education.

5.) Finance ministers of developing countries should ensure that they are increasing budgets for basic education alongside budgets for primary health care and AIDS prevention and care. Priorities for increased education spending should include abolishing primary school fees and charges; achieving gender parity in both primary and secondary education; improving teacher training; and incorporating sexual and reproductive health education and life skills training into the curriculum.

As Nelson Mandela has noted, 'Education is the most powerful weapon you can use to change the world.' It is also a weapon that the world cannot do without in the fight against HIV/AIDS. Education saves lives. And ignorance is lethal.

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- ⁴ Data compiled by GCE from DHS website, <http://www.statcompiler.com>, for 11 countries where AIDS modules are now included in DHS questionnaires.
- ⁵ Vandemoortele and Delamonica (2000) *op. cit.*; UNAIDS (2002) *HIV/AIDS and Education: A Strategic Approach*, Geneva: UNAIDS; World Bank (2002) *A Window of Hope*. Washington: World Bank.
- ⁶ UNDP (1997); Appleton, S. (2000) 'Education and health at the household level in sub-Saharan Africa', Center for International Development Working Paper no 33, Harvard University. <http://www2.cid.harvard.edu/cidwp/033.pdf>.
- ⁷ UNDP/UNICEF (2002) *The Millennium Development Goals in Africa: Promises and Progress*. New York: UNDP.
- ⁸ In fact, expanding access to education without supporting an adequate treatment plan would be irrational and wasteful, particularly in countries that have a high or fast-growing prevalence rate, since the benefits of much of the education spending would be lost through early deaths. What is needed is both increased care and increased prevention. Developing countries need to be supported both to cope with HIV/AIDS and to protect more people from contracting it.
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- ¹² Albania, Armenia, Azerbaijan, Bolivia, Benin, Cambodia, Cameroon, Chad, Djibouti, Ethiopia, Guinea, Georgia, India, Kenya, Kyrgyz Republic, Lesotho, Macedonia, Madagascar, Malawi, Mali, Mauritania, Mongolia, Nepal, Nicaragua, Niger, Pakistan, Rwanda, Sao Tome & Principe, Senegal, Sri Lanka, Tajikistan, Tanzania, Uganda, Zambia.
- ¹³ Poem by courtesy of Mrs Shiprah N. Gichaga, National Coordinator, FAWE Kenya Chapter.
- ¹⁴ I.e., five to six years of schooling (the length of the primary cycle in most developing countries), as specified in the UN's Millennium Development Goal on primary education. Five to six years of education is necessary to acquire and sustain functional lifelong literacy and is a threshold for unlocking many of the social and health benefits of education; see Bruns, B., A. Mingat, R. Rakotomalala (2003), *Achieving Universal Primary Education by 2015: A Chance for Every Child*, Washington: World Bank, pp. 28-29.
- ¹⁵ Vandemoortele and Delamonica (2000) *op. cit.*; UNAIDS (2002) *HIV/AIDS and Education: A Strategic Approach*, Geneva: UNAIDS; World Bank (2002) *A Window of Hope*. Washington: World Bank.
- ¹⁶ De Walque, D. (2004), "How does the impact of an HIV/AIDS information campaign vary with educational attainment? Evidence from rural Uganda," Working Paper, The World Bank, Development Research Group, March. The key impact appears to take place at completion of primary school. Having some primary education reduces the risk of HIV infection to 87% of completely uneducated levels; complete primary to 43% of completely uneducated levels; some secondary to 31% of completely uneducated levels; full secondary to 23% of completely uneducated levels. We have used World Bank estimates based on UNESCO enrolment data and UNDP population figures (see Bruns, Mingat and Rakotomalala, *op cit.*) to calculate primary completion rates, weighted by population, for 55 low-income countries. According to these estimates about 36% of all children in low-income countries do not finish primary school. Reliable global figures are not available for the proportion of non-completers who *never* attend school, but it is large: DHS household surveys in 32 low-income countries over the period 1997-2002 showed that about 30% of all young people (ages 10-24) had no education at all. (However, this is probably an overestimate as it does not reflect educational gains over the last few years.) We have therefore used an estimated HIV risk factor midway between the risk for those who never attended and those who obtained some but not all of their primary education. As the difference in risk between never-attenders and non-completers is relatively small this does not significantly affect the overall estimate.
- ¹⁷ Figures calculated by the GCE from World Bank data. See Bruns, Mingat, and Rakotomalala (CD-Rom accompanying book).
- ¹⁸ Risk calculation by the GCE advised by Imperial College, London, and other experts. The calculation uses the relative risk for the "educated" and "uneducated" groups (1R and 2.2R) and the share of the population they make up in low income countries (64% and 36%) to calculate the weighted risk (0.640 and 0.792) which expressed as a proportion of the new cases amongst young adults is 45% and 55%. This means that of 2.4 million new infections among young adults in low income countries each year, the estimated number of those who are "uneducated" is 1,327,374, rounded down to 1,300,000. Because reliable global figures are not available regarding the share of people obtaining post-primary education, we have not factored this into the calculation and therefore necessarily underestimate the proportion of those with little or no primary education amongst the new cases, and thus underestimate the impact of universal primary education on reducing incidence.
- ¹⁹ Throughout this report, as noted above, we use UPE to mean universal completion of a full primary cycle, i.e. five to six years of schooling, as specified in the UN Millennium Development Goal on universal primary education.
- ²⁰ We used the baseline projection for new adult HIV-1 infections between 2002 and 2010, without an expanded prevention response, calculated by Stover, J. et al (2002), "Can we reverse the HIV/AIDS pandemic with an expanded response?" *The Lancet*; July 6, vol. 360. As the authors note, "Obviously, all such projections are uncertain. Although further work with national experts is needed to refine the country projections, the regional and global totals are more robust. UNAIDS and WHO continue to work with national and international partners to increase the quality of data that can be used for assessments of the epidemic, and the methods used for modelling and projections" [Stover et al. : 73].
- ²¹ Risk calculation by the GCE advised by Imperial College, London, and other experts. If the 1,327,374 "uneducated" infected amongst young adults had been exposed to the lower risk that "educated" young adults have, the number who would have still been infected (*ceteris paribus*) would be 1/2.2 multiplied by 1,327,374, i.e. 603,352 (rounded down to

600,000) and the number who would not have been infected would be 724022 (rounded down to 700,000). As demonstrated later in the paper, the decreased risk obtained from education is not a proxy for another factor but a result of the benefits of education itself. Even controlling for other factors the relationship remains as strong. Asked to review the calculation used in this paper, Professor Don Bundy, World Bank Lead Specialist on Education and HIV/AIDS assessed it to be “scientific and robust” and noted that “it may well be conservative” (personal communication, 13 April 2004).

²² See for example Bollinger, L., K. Cooper-Arnold, J. Stover (2004), “Where are the gaps? The effects of HIV-prevention interventions on behavioral change,” *Studies in Family Planning* 35(1): 27-38; Kirby, D. et al. (1994), “School-based programs to reduce risk behaviors: A review of effectiveness,” *Public Health Reports* 109: 339-61; Shuey, D. et al. (1999), “Increased sexual abstinence among in-school adolescents as a result of school health education in Soroti District, Uganda,” *Health Education Research* 14(3): 411-19; Stover et al., *op cit.*; Herz and Sperling, *op cit.* As the GCE’s calculation of 700,000 cases prevented amongst young adults each year is based only on the impact of general primary education, the impact of mainstreaming HIV prevention as part of primary education would be additional to this.

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²⁴ Quote from DATA website, <http://www.data.org> (accessed 31 March 2004).

²⁵ Bruns, Mingat, and Rakotomalala, p. 27.

²⁶ Appleton, *op cit.*

²⁷ The World Bank estimates it would cost about \$100 per year to enrol each out of school child and sustain her attendance through the primary cycle (Devarajan, Miller and Swanson). Many countries spend far less than this; Zambia, for example, government spends about \$20, or about 10% of per capita GDP, to keep a child in primary school for a year. In Southern Africa, the annual per patient costs of anti-retroviral therapy and associated medical care have been estimated at more than \$1000 per patient, even assuming that ARV costs fall to \$100 per year; whilst palliative care alone, without ARVs, has been costed at about \$800 per year. Comprehensive national programmes for care, treatment and support of HIV/AIDS patients are both necessary and, if rich countries keep their promises, affordable. However, it is clearly in the public interest to reduce the number of persons requiring such treatment.

²⁸ Russell, S. (2003), “The economic burden of illness for households: A review of cost of illness and coping strategy studies focusing on malaria, tuberculosis and HIV/AIDS,” Working Paper 15, Disease Control Priorities Project, London School of Hygiene and Tropical Medicine; United Nations Population Division of the Department of Economic and Social Affairs (2003), *The Impact of AIDS*, Geneva: UN; Pitayanon, S., S. Kongsin, and Janjaroen W. (1997), “The economic impact of HIV/AIDS mortality on households in Thailand,” in Bloom, D. and P. Godwin, eds., *The Economics of HIV and AIDS: The Case of South and South East Asia*, Delhi, Oxford University Press; Menon, R., M.J. Wawer, et al. (1997), “The economic impact of adult mortality on households in Rakai district, Uganda” in World Bank, *Confronting AIDS: Public Priorities in a Global Epidemic*. Washington, World Bank; Bechu, N. (1997), “The impact of AIDS on the economy of families in Cote d’Ivoire: changes in consumption among AIDS-affected households” in World Bank, *Confronting AIDS*.

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Available: http://www.campaignforeducation.org/documents/action_week_downloads/gce-wldless-kofiannan_en.doc (accessed 12 April 2004).

³¹ UNAIDS, *HIV/AIDS and Education*.

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³³ United Nations (2002), *Millennium Development Goals: Data and Trends*, Report of the Inter-agency and Expert Group on MDG Indicators, New York, April 2002.

³⁴ UNAIDS (2001), “Global Crisis-Global Action,” Geneva: UNAIDS.

³⁵ UNESCO (2003), *EFA Global Monitoring Report 2003/4*, Paris: UNESCO, Tables 2 and 5; data for 2000.

³⁶ World Association of Girl Guides and Girls Scouts (2003), *HIV/AIDS: Fighting Ignorance and Fear*, London: WAGGGS World Bureau; VSO (2003), *Gendering AIDS: Women, Men, Empowerment, Mobilisation*, London: VSO.

³⁷ Vandermoortele and Delamonica *op cit.*

³⁸ Education could and should do even more to empower girls. Perhaps the most important step is to cultivate a “pro-girl” environment in schools, where girls are valued, protected and nurtured. Unfortunately this is seldom the case in most developing countries, and a large body of research now exists on overt and hidden sexism in education and how to overcome it, some of which is summarised in Global Campaign for Education (2003), *A Fair Chance: Attaining Gender Equality in Basic Education by 2005*, London: GCE. Much needs to be done, but in this context, the need for effective health education, which focuses on interpersonal skills and gender relations as well as reproductive and sexual health, is worth a special mention.

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- ⁴⁹ Herz and Sperling, *op cit*.
- ⁵⁰ Bruns, Mingat and Rakotomalala *op cit*.
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- ⁵² Vandermoortele and Delamonica *op cit*.
- ⁵³ ActionAid (2003), *The Sound of Silence. Difficulties in Communicating on HIV/AIDS in Schools*. London: ActionAid.
- ⁵⁴ World Bank, *Window of Hope*.
- ⁵⁵ Bollinger et al. *op cit*. The authors synthesised evidence from 186 impact studies in order to assess the impact of various prevention interventions on condom use, age at first sex and number of sex partners. School-based programmes were found to be most effective in changing sexual behaviour for all risk groups except commercial sex workers.
- ⁵⁶ Kirby et al *op cit*; cited in Herz and Sperling.
- ⁵⁷ Shuey et al *op cit*; cited in Herz and Sperling.
- ⁵⁸ ActionAid *op cit*.
- ⁵⁹ Population Reference Bureau (2000), *The World's Youth 2000*, Washington, D.C.: Population Reference Bureau. Cited in UNFPA (2003), *State of the World's Population Report 2003*, Geneva: UNFPA.
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- ⁶⁶ UNESCO, *Global EFA Monitoring Report 2003/4*. Figures are for 1990 to 2000.
- ⁶⁷ *Ibid*.
- ⁶⁸ Ms Mugwendere is director of the CAMFED Association (CAMA) and this is an extract from a speech she gave at the launch of *I Have a Story to Tell* (CAMFED, 2004). Personal communication, Angeline Mugwendere, 08/04/2004.
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- ⁷² This is calculated as a share of GNI. Contributions from each donor country to basic education aid as a share of their GNI are set out in Global Campaign for Education (2003), *Must Try Harder: A "School Report" on 22 rich countries aid to basic education in developing countries*, Brussels: GCE.
- ⁷³ UNESCO, *Global EFA Monitoring Report 2003/4*.
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