Stocktaking Report:

Education Sector Responses to HIV and AIDS

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Undertaken for the UNAIDS Inter-Agency Task Team (IATT) on Education

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Acronyms

AAU	Association of African Universities
ADEA	Association for the Development of Education in Africa
AED	Academy for Educational Development
AIDS	Acquired Immunodeficiency Syndrome
AIR	American Institutes for Research
ART	Antiretroviral therapy
AusAID	Australian Agency for International Development
CIDA	Canadian International Development Agency
DHS	Demographic and Health Survey
EDC	Education Development Center
EFA	Education For All
EI	Education International
ESART	EduSector AIDS Response Trust
GCE	Global Campaign for Education
GTZ	Deutsche Gesellschaft fur Technische Zusammenarbeit
HIV	Human Immunodeficiency Virus
IASC	Inter-Agency Standing Committee
IATT	Inter-Agency Task Team
IDP	Internally displaced person
ILO	International Labour Organisation
INEE	Interagency Network for Education in Emergencies
KAPB	Knowledge, Attitudes, Practices and Behaviours
MAP	Multi-Country HIV/AIDS Program
MICS	Multiple Indicator Cluster Survey
MoEs	Ministries of education
NGO	Non-governmental organization
NORAD	Norwegian Agency for Development Cooperation
OVC	Orphans and Vulnerable Children
PCD	Partnership for Child Development
SIDA	Swedish International Development Cooperation Agency
SSA	Sub-Saharan Africa
STI	Sexually Transmitted Infection
SWAp	Sector Wide Approach
UNAIDS	United Nations Joint Programme on HIV/AIDS
UNESCO	United Nations Education, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNODC	United Nations Office on Drugs and Crime
VCT	Voluntary Counselling and Testing
WHO	World Health Organization
WFP	World Food Programme

1.0 Introduction

While significant efforts have been made to expand prevention and treatment, there is ample evidence that multi-sectoral efforts are required at national, regional and global levels to halt the spread of the HIV and to address and mitigate the impacts of HIV and AIDS (UNAIDS and WHO, 2006). In the context of such a response, the education sector must play a major role. Education, in both formal and informal contexts, has been shown to be critical in HIV prevention (Kelly, 2005) and can play an important complementary role in ensuring care and support for those who are affected by HIV and AIDS (UNAIDS Inter-Agency Task Team (IATT) on Education, 2008a).

The UNAIDS Inter-Agency Task Team (IATT) on Education was established in March 2002 in recognition of the need to improve and accelerate the education response to HIV and AIDS. It has, as specific objectives, to promote and support good practices in the education sector related to HIV and AIDS; and to encourage alignment and harmonisation within and across agencies to support global and country level actions. To this end, the IATT contributes to the HIV and AIDS response by furthering dialogue and understanding around the role of education and by generating documents, experiences and research which can be shared.

Recent technical products produced by the IATT on Education have addressed: quality education and HIV & AIDS (IATT on Education, 2006a); girls' education and HIV prevention (IATT on Education, 2006e); HIV and AIDS treatment education (IATT on Education, 2006d); partner efforts in supporting coordination, harmonisation, alignment, information sharing and monitoring of the education sector response to HIV and AIDS (IATT on Education, 2008c); and mainstreaming HIV in the education sector. The IATT on Education also undertook the Education Sector Global HIV & AIDS Readiness Survey, the first international survey of education sector readiness to manage and mitigate the impact of HIV and AIDS. This survey, conducted in 2004, led to the publication of the *Education Sector Global HIV & AIDS Readiness Survey 2004: Policy Implications for Education and Development* and a CD-ROM with the results of the interviews with ministries of education in 71 countries and civil society organizations in 18 countries (IATT on Education, 2006b and 2006c, Boler and Carroll, 2005a). The IATT on Education is also currently revising its seminal publication, *HIV/AIDS and Education: A Strategic Approach,* to provide policy-makers in the education field and beyond with a strategic vision of the critically important role that education must play in addressing HIV and AIDS.

One of the objectives of the IATT on Education is to expand the evidence base. To do this, the IATT has commissioned and undertaken research in recent years, leading to a number of publications in multiple languages. At the November 2007 IATT meeting, the Secretariat put forward a number of options for potential areas of research for the coming biennium. In order to prioritise and make a decision on what to take forward, it was decided that the IATT would commission a stocktaking review of what research had been carried out to date by the IATT, its members and others, and with this information, identify gaps and ways of complementing and building on existing work.

This report presents findings from the stocktaking exercise. Following a description of the methodology used for this review, a summary of findings by theme and sub-theme is presented, followed by an annotated bibliography of the documents relevant to the theme/sub-theme. The future and potential research interests of members of the IATT, as listed in the questionnaires, are presented in boxes throughout the text, beside the appropriate theme/sub-theme.

2.0 Methodology

All members of the IATT, as well as the IATT working groups, were asked to respond to a set of questions, including identifying what research they had carried out, what relevant research they knew about, and what research they would like the IATT to prioritise (see Annex 1). The consultants received numerous responses and from them collated a list of documents (both grey literature and published materials) for review as well as a list of current and future research interests of IATT members and working groups. In addition to the documents identified by the IATT members, the consultants did further searches, leading to an additional set of documents being included for review[1]. In total, 133 documents were reviewed.

Discussions were also held with members of the IATT Secretariat and the writers supporting the revision of the Strategic Approach document. Guidance was sought regarding key documents to be included in the review as well as in the development of the framework for the current review. Resources drawn on for guiding the development of the framework included "HIV & AIDS and Education: A Strategic Approach" (IATT on Education, 2008a). This document, however, was focused more on operational and response aspects whilst the focus of the current document is on research. As such, exploration of grey literature and published research articles also influenced the development of the framework.

The consultants were recruited less than a month prior to the planned research meeting (September 23rd-24th) at which the document would be used as a resource, hence there was limited time to undertake an extensive review. Additionally, given the timing, many members of the IATT were at the Mexico AIDS Conference and/or on vacation, only responding upon their return. As such, information was still being submitted a few days prior to the meeting. Given this tight deadline it was decided to:

- focus on research articles and publications since this was the priority for the review; handbooks, guidelines and manuals were noted and were included in the list of documents but were largely not summarised nor included in the analysis text;
- limit the search in the first instance to documents published since 2000;
- review the latest article if there were multiple publications by one author; and
- where possible, to copy and paste existing abstracts into the annotated bibliography.

The framework is organised by 5 themes:
1. Knowledge, attitudes, practices and behaviours (KAPB);
2. Factors which contribute to behaviour change;
3. The learning environment;
4. Impact of HIV on education systems; and
5. Policy response.

Further sub-themes are then provided.

[1] Search sources included the UNESCO/IIEP HIV and AIDS Impact Clearinghouse, Web of Science, Google scholar and the Population Reporter Editor. In addition, informants knowledgeable on the sector were also contacted.

3.0 Thematic Overview

3.1 Theme 1: Knowledge, Attitudes, Practices and Behaviours (KAPB)

This first theme includes literature which captures teachers', students' (young people) and communities' knowledge, attitudes, practices and behaviours with regard to HIV & AIDS and HIV & AIDS education. Included in this discussion are issues around condom use, stigma and discrimination, abstinence and broader issues of HIV-related risks and vulnerabilities. Studies which looked at this in relation to the impact of a specific intervention, or in terms of behavioural change, are considered separately under the next theme.

3.1.1 Teachers

Research on KABP amongst teachers tends to either identify the level of risk they feel that they face (see Kiragu et al, 2006), or how their knowledge and attitudes affect their ability to teach (and interest in teaching) HIV and AIDS in school (Boler, 2003, Adamchak, 2005, Visser, 2006). Visser- Valfrey's research (2004) takes this one step further by looking at how teachers' practices affect their teaching. In her later literature review relating to teachers and HIV & AIDS, Visser also identifies gaps in the research available about teachers' knowledge, attitudes, beliefs and practices with regard to HIV and AIDS education (Visser, 2006). More generally, literature tends to focus predominantly on a single country, most frequently in Africa, although the ActionAid report, 'Sound of Silence' (2003) does compare the situation in India with Kenya.

Several reports indicate that teachers feel that they have a role to play in teaching young people about HIV (Kiragu et al, 2006, Adamchak, 2005), but their capacity or willingness to do this is influenced by a variety of factors (Visser, 2006). ActionAid's 'Sound of Silence' report noted that they felt that the responsibility for HIV and AIDS education should be shared with parents and religious leaders (Boler, 2003). It also established that teachers' sensitivities relating to the topics surrounding HIV and AIDS result in the practice of 'selective teaching' and an overly-scientific approach to the subject (ibid). All of the reports identified that teachers had gaps in knowledge about HIV and AIDS. For example Chege (2002) who undertook research into the KABP of primary school and student teachers in Rwanda found that a significant number did not have 'adequate general knowledge' of sexually transmitted infections including HIV, but also that 85% of them had encountered problems in accessing information which responded adequately to their questions on the subject (this was more of a problem for female teachers).

KAPB relating to condom use and promotion was the most consistently addressed issue in relation to teachers' knowledge (EI, 2006, Kiragu et al, 2006). Kiragu showed that in Kenya there are basic misconceptions as to the effectiveness of condoms as a mode of prevention. Negative attitudes and beliefs were highlighted by ActionAid (2003), which concluded that teachers were unwilling to talk about condoms due to social unacceptability, that messages were often contradictory, particularly with regard to abstinence, and that some teachers believed that condoms promoted promiscuity. Visser-Valfrey (2004), who approached the question from the perspective of how personal practices affect teaching, showed that teachers who consistently used condoms and had a high perception of their own risk were more likely to talk about HIV in class. Overall, there was much less focus on the practices of teachers with regard to their own risk and only Kiragu (2006) looked at teachers' attitudes to voluntary counselling and testing (VCT) and condom use.

Research often included indicators relating to teachers' levels of discrimination against people with HIV (Yanez and Velasquez, 2002, Kiragu, 2006, Adamchak, 2005), but a clear picture did not emerge from findings. Most studies suggested that teachers felt children with HIV should be allowed to attend school, and one supplemented this with information about teachers' fears of risk from HIV positive students. Yanez (2002) who surveyed teachers in Venezuela found that 63.8% confirmed that they wished to know the HIV status of children enrolling in their school, but overall the conclusions do not provide information as to the nature of stigma or how it might manifest in practice. There was more evidence of teachers' stigma towards other people in the community with HIV, for example not wanting to buy food from them (Kiragu et al, 2006, Chege, 2002). Kiragu's report also showed that fear of being discriminated against was a barrier to getting tested and disclosing one's positive status to school authorities.

3.1.2 Young people

Information on young people's KAPB in relation to HIV and AIDS comes from evaluations of prevention programmes for purposes of measuring impact (Halpern, et al 2008; El-Gadi, et al 2008), as well as from wider surveys undertaken for the purposes of establishing a baseline for future programming (UNICEF, 2006, Biddlecom, 2007). KAPB data can also be collected from demographic surveys like the Demographic and Health Survey (DHS) or Multiple Indicator Cluster Survey (MICS) which have been used to look at educational attainment (see Fortson 2007, Guarcello et al. 2004, Case et al. 2004, Ainsworth and Filmer 2006, Timaeus and Boler 2007). The depth of the data therefore varies widely. For example the UNICEF report on KAPB in Namibia presents a broad range of factors to do with sexual behaviour, attitudes towards condoms, stigma, risk perceptions, whereas other articles present more limited set of indicators, for example El-Gadi's article focuses only on stigma and knowledge related to HIV transmission (El-Gadi et al, 2008).

In relation to condom use, Fayorsey's research in Ghana found that whilst 81% of the students surveyed knew about condoms, only 9% had ever used one (Fayorsey, 2002). Bankole (2007), who used data from National Adolescent Surveys in four sub-Saharan African countries, found that numbers reporting consistent condom use in the preceding three months were below 50% for all four countries: Ghana was the highest with 47%, and Malawi the lowest with just 20%. Marson and King (2006) in their review of qualitative surveys of young people between 1990 and 2004 found that condoms 'are stigmatising and associated with a lack of trust'.

Maticka-Tyndale et al (2005) used 'scripting' theory to analyse the sexual encounters of young people in Kenya and found that they were described as 'mundane and inevitable', with a predetermined sequence of events and girls and boys playing complementary roles. Marson and King (2006) also found that gender played a strong role in social expectations relating to sexual activity.

Tables of results in the various articles show data to be largely disaggregated by sex, with most articles identifying some gendered differences in KAPB. However, gendered analysis tends to be inconsistently provided across the indicators. For example, UNICEF's Namibia report highlights differences in male and female behaviour in the 15-24 year old category but otherwise does not provide much information disaggregated by sex (UNICEF, 2006). Where gendered analysis is given, there are often clear differences between boys and girls. For example, Bastien's paper on out-of-school youth showed that boys had higher HIV and AIDS knowledge than girls and were more likely to know about tests to diagnose HIV. A higher proportion of girls, however, knew that HIV could be transmitted from mother to child and that a healthy looking person can have HIV (Bastien, 2008). As indicated above, Maticka-Tyndale (2005) and Marson

(2006) demonstrate that gender is an important factor in predicting sexual activity, roles and attitudes.

Jacob's article takes a slightly different approach by trying to capture young people's attitudes towards HIV and sex education (Jacob et al 2007). When asked whether they thought students have a good understanding of how to protect themselves against HIV, 46.4% said no, with younger students more likely than older students to report that students have a good understanding. 63.8% felt that students' reactions to HIV education in schools would be 'very positive'; with a further 25.5% feeling that it would be 'positive' (Jacob et al, 2007). Mturi and Hennink (2005) also found broad support amongst young people for HIV and AIDS education in Lesotho.

IATT members' research interests:

SIDA have expressed an interest in establishing young people's opinions (particularly 10-14 year olds) as to the relevance of the education that they receive, what they would like to receive and from whom. The Ford Foundation is also interested in better understanding where HIV and AIDS education should be situated from the perspective of young people.

3.1.3 Communities

There are very few KAPB articles which consider the impact of communities' or parents' KAPB on HIV education. ActionAid's 'The Sound of Silence' and Mbonile and Kayombo's study in Dar es Salaam in Tanzania both consider community attitudes to sex education in schools but come up with different results (Boler, 2003, Mbonile and Kayombo, 2008). Respondents in India and Kenya consistently put teachers in the top three trusted sources of HIV information, but in the Tanzanian study they were in 5th place after parents, religious leaders, the media and health workers. Mturi and Hennink's research into the perceptions of sex education for young people in Lesotho found that there was broad support from parents. The ActionAid report captured the level of awareness that parents had of sex education taking place in school, showing a sharp difference between India (12%) and Kenya (68%), but it was not evident whether they knew the content of the courses (Boler, 2003). The Tanzania study revealed that where parents did support sex education, they were opposed to teaching about condoms (Mbonile and Kayombo, 2008). Fayosey's research in Ghana found that 99% of parents interviewed agreed that HIV and AIDS should be taught in schools and 96% would be willing to let their children join 'anti-AIDS clubs' (Favorsey, 2002)

IATT members' research interests:

SIDA have expressed interest in knowing more about actual knowledge and attitudes related to sexuality, and STIs, including HIV.

3.2 Theme 2: Behaviour change and the education sector

Closely linked to the first theme, this second body of literature focuses on the factors related to education which contribute to changes in KAPB. The theme separates research by its focus on formal or non-formal education interventions. The analysis is weighted towards the formal education sector (and particularly at the primary and secondary school level) as this is where the majority of research focuses.

3.2.1 Formal Education

Under this section three areas will be addressed: curriculum content and development, teacher training and quality education. The first area (in which there has been a great deal of research) includes evidence of the impact of specific in-school HIV and AIDS education curricula and programmes on changing students' KABP. The section then addresses particular questions of curricula content and development in relation to life-skills and abstinence. Some attention will be given to the emerging question of how 'vulnerability' as well as 'risk' can be addressed, before considering the problem of 'selective teaching' and poor integration of HIV and AIDS related issues into national curricula. The second area includes research on the training needs of teachers and work which explores the impacts of training on the practices of students and teachers. The third area includes supporting evidence for the key arguments advocating for quality education as a way of protecting children and young people against HIV and AIDS, as well as identifying some gaps in understanding the relationship between level of education attained and HIV risk.

Curriculum content and development
In 2005 Kirby published a review of 83 'curriculum-based sex and HIV education programmes' exploring their impact on sexual risk behaviours, STI and pregnancy rates and mediating factors such as knowledge and attitudes (Kirby, Laris and Rolleri, 2005).[2] Through this, the authors identify a set of common characteristics of the most effective programmes. The overall findings showed that targeted sex and HIV education programmes were more likely to have a positive effect on behaviour than a negative impact, as well as having positive impacts on mediating factors of knowledge and attitudes towards safe sexual practices (Kirby et al, 2005). The positive impact of HIV and AIDS education has been established in other studies as well, for example Gordon's 2007 desk-based review of sex and HIV education in the formal education sector also concludes that programmes can help reduce risk by increasing knowledge and affecting related values and attitudes (Gordon, 2007). Gallant and Maticka-Tyndale (2004) also show that changes in knowledge, attitudes and behaviours occur as a result of HIV and AIDS education, but concluded that behaviour is much harder to change. The impact of such programmes on indicators such as pregnancy and STI rates is less conclusive: Gordon stated that 'some' programmes had had an impact on pregnancy and STI rates, and Kirby showed concern for the fact that of the few pieces of research in his review which looked at these indicators, most relied on self-reported data as opposed to laboratory tests.

Maticka-Tyndale and Gichuru (2007) show gender to be a factor in relation to the benefits students gained from HIV and AIDS education: boys reported increased condom use while girls were more likely to decrease or delay sexual activity. They also found that the programme had most impact on sexually inexperienced youth so concluded that it should be rolled out to the youngest age group possible.

[2] For more recent related research see also Kirby, D., Laris, B., & Rolleri, L. (2007), Kirby, D., Rolleri, L., & Wilson, M. (2007), Kirby, D., Laris, B., & Rolleri, L. (2006).

IATT members' research interests:

UNESCO and UNAIDS have expressed an interest in the question of how best to measure the effectiveness of education interventions in a more rigorous manner. UNAIDS particularly mentioned the need to measure 'non-events' such as the number of infections averted, as well as changes in behaviour and AusAID is interested in the use of 'dialogues outside school settings' as an indicator of change. The IATT Indicators working group would like guidance on common indicators for HIV prevention and mitigation at school level as well as the level of education systems.

The AAU is planning research into the impact of HIV and AIDS curriculum integration on behaviour change and institutional outreach programmes. UNESCO is already planning research into the cost-effectiveness of scaled up HIV and STI education in schools to start in 2009. SIDA is interested in learning more about the relevance and impact of sexuality education for younger learners (aged 10-14 years). Save the Children is interested in having further research into the best age to start HIV and AIDS education.

UNICEF is interested in documenting the learning outcomes of long-term efforts within formal education as opposed to one-off school based efforts implemented by external partners. They are also interested in comparing situations in education sector interventions between countries with different epidemic scenarios.

The common characteristics which Kirby identified for effective programmes were divided into curricula development, curricula content and curricula implementation (Kirby, 2005). Kirby argues that curricula content should have a clear health goal, with consistent messages about that goal and the behaviours associated with it. Activities should also be designed to suit age, culture and sexual experience and be participative in style. Gordon identified the need to combine consideration of these facts with discussion of values and intentions that affect behaviour, as well as developing 'inter-personal' skills (Gordon, 2007). Social learning and social cognitive theory was used as a basis in more than half the programmes evaluated by Kirby, highlighting widespread interest in the impact that inter-personal skills or more widely, 'life-skills' have on supporting safe sexual behaviour (Kirby et al, 2005).

One of the most common approaches to HIV and AIDS education has been the provision of life skills education (Boler and Aggleton, 2005). According to Boler and Aggleton (2005), life skills education aims to support learners to not only build knowledge, but develop the necessary skills to protect themselves from HIV infection. Although there is consensus amongst researchers and policy makers that skills-based work is a necessary component of HIV prevention, it is far from clear which skills are protective and how they can best be acquired. HIV risk reduction is just one among a wide range of outcomes that life skills education is sometimes claimed to achieve. For example UNODC has demonstrated the role of life skills education in reducing drug-abuse in young people, contributing to HIV prevention by decreasing risky sexual behaviour (UNODC, 2006).

There is increasing pressure from policy makers and programmers to define exactly which skills reduce the risk of acquiring or transmitting HIV. In a recent review of school-based HIV education programmes, Kirby et al. (2006) concluded that life skills programmes that are too generic and do not provide clear messages on sexual behaviour are unlikely to provide protection against HIV (ibid).

In a forthcoming publication, Aggleton and Yankah review 19 evaluations of life skills programmes for HIV prevention. In order to be included in the review, the evaluation had to include a comparison group, consist of more than one educational session and have a follow-up period of a minimum of four weeks. Although most of the studies reported positive outcomes, according to the authors, very few were able to show specific positive effects on sexual behaviour, especially for those young people who were already sexually experienced. In the few studies where behaviour change was achieved, change was often restricted to specific subgroups (e.g young men who had never had sex). The authors warn against using the term 'life skills' to incorporate all skills-based and participatory approaches to HIV prevention and suggest that more work is needed to identify which skills-focused approaches work best in which contexts, and with whom.

Considerable research has also been undertaken examining the effectiveness of abstinence-based approaches to sex and HIV education, largely in the US but also in developing countries, notably Uganda (Bruckner and Bearman, 2005, Santelli et al, 2006, Kholer, Manhart and Lafferty, 2008 and Boler and Ingham, 2007). A systematic review of all relevant studies published in October 2007, concluded, "Evidence does not indicate that abstinence-only interventions effectively decrease or exacerbate HIV risk among participants in high-income countries; trials suggest that the programs are ineffective." (Underhill, K., Operario, D. and Montgomery, P., 2007). The authors also noted, however, that there are few robust data available and that as most reviews have been undertaken in the US, the ability to generalise from these findings may be limited. An article by Lloyd (2007) argues that an over emphasis on 'abstinence' reduces effectiveness of HIV and AIDS education, as increased knowledge of HIV and AIDS will not necessarily change young people's behaviour because it does not help them to distinguish between levels of risk in their behaviour and make choices accordingly (Lloyd, 2007). In an article just published by Kirby (2008) reviewing evaluations of abstinence-based STI and HIV education programmes in the United States, he found that only 3 out of 9 had any impact on sexual behaviour, in contrast with more comprehensive programmes where two-thirds were shown to have an impact. Based on this, the paper argues that abstinence programmes have little evidence to support their widespread replication (Kirby, 2008).

Kabiru and Ezeh's study of factors associated with sexual abstinence notes that despite a large amount of research into correlates of sexual activity, relatively little focuses on characteristics of young people who choose to abstain from sex. Differences emerged for reasons of abstinence between primary abstainers (those who had never had sex) and secondary abstainers (who had sex in the past but been abstinent for at least a year). Primary abstainers were more likely to identify 'value-based' reasons such as waiting for marriage, in contrast to secondary abstainers who more frequented chose abstinence as a protective measure against STI or HIV infection. As a result, they recommended that prior sexual experiences and contextual circumstances be taken into account when developing abstinence programmes (Kabiru and Ezeh, 2007).

IATT members' research interests:

GTZ expressed an interest in knowing more about the competencies which enable young people to protect themselves against risky behaviour and UNAIDS would like to see research for the purposes of developing quality standards in this area. The World Bank is currently researching the cost-effectiveness of life skills education.

With regards to curriculum content, AusAID is interested in the role of school education in promoting male circumcision for HIV prevention, and the relevance of timing, place and content in dealing with topics of high cultural sensitivity. EI are interested in the 'C' option as a measure promoted in school programmes.

SIDA have put forward an interest expressed by one of their partners, ARROW, in understanding the influence of religious and fundamentalist groups on curricula and examining success stories of where sexuality education has taken place within a religious context. Finally, GTZ would like to know how school-based measures could encourage dialogue amongst students and their parents at home.

Gordon (2007) highlights that whilst an HIV-focused curriculum may help reduce risks it does not do much to address underlying causes of vulnerabilities. Most programmes he reviewed focused on eliminating risk (teaching abstinence) or reducing risk (promoting use of condoms, reducing numbers of partners); only a few programmes tried to address vulnerability through considering gender inequality, abuse and violence. Plummer's recent study into the gap between HIV awareness and safety in the Caribbean strongly emphasised the influence of gender stereotypes on promoting risky behaviours particularly in young men (Plummer, 2008). Whilst his report does not discuss the role of formal education in challenging these gender roles, it does draw attention to the importance of peer influence, which is of relevance when considering potential effectiveness of peer-education methods. The impact of education on gender roles and its relationship to vulnerability within the school environment will be considered further in section 3.3.2.

IATT members' research interests:

Both GTZ and The Ford Foundation expressed an interest in undertaking further research into the impact of gender roles, especially relating to young boys and masculinities and what this means for more contextually-relevant education programmes.

In terms of curriculum implementation, two ActionAid reports ("Deadly Inertia" and "Sound of Silence") highlight the fact that 'selective teaching' means that discussions around sex and relationships are sidelined in favour of more scientific, factual based information sharing (Boller and Carroll, 2005a and Boler, 2003). Smith et al's research in 11 Asian countries also found that sexual practices were rarely addressed apart from in the context of human anatomy and reproduction, although in countries most affected by HIV and AIDS increasing openness in communicating on sexual and drug-taking practices with young people is starting to become apparent (Smith et al, 2003). "Deadly Inertia" also highlights the problem of HIV and AIDS education being treated as a separate topic, not sufficiently integrated into the general curriculum development process, leading to it being overlooked in an already crowded curriculum (Boler and Carroll, 2005a).

Jacob et al's 2007 study into young people's perspectives on HIV education in Uganda draws attention to the lack of evaluation of national HIV curricula (as opposed to of individual education programmes). The responses to their survey on the HIV and AIDS curriculum in Ugandan Secondary Schools provide some insights into students' attitudes towards HIV education and how it could be improved: 58% of students said their school does not teach HIV in the school curriculum but schools were given as the primary response to the best space to learn about HIV. The primary recommendation they made on improved school-based learning was for more education in multiple classes, delivered through a variety of methods. In addition to formal education, informal methods such as films, the media, drama and youth groups were presented as being good ways of learning (Jacob et al, 2007). ActionAid's concerns of 'selective teaching' were echoed in responses by students who requested a "change the way the syllabus is taught because when teachers are teaching they talk in hidden language where students

don't understand easily" (Boler, 2003, Jacob et al, 2007; p110). Methods of teaching are also being considered as a factor in effecting behaviour change. Most models and good practice guides emphasise the need for teachers to adopt 'child-centred' teaching techniques which encourage participation and discussion (Senderowitz, 2007), but whilst the positives are emphasised it appears that there is little research which specifically addresses the impact of this factor on learning or behaviour outcomes.

IATT members' research interests:

SIDA has expressed an interest in finding out the extent to which education on sexuality and HIV & AIDS is actually being carried out in classrooms. EI is interested in knowing more about how HIV and AIDS are being integrated into primary and secondary curricula.

Teacher Training

Lack of training in the skills required to lead discussions and help change behaviour has been highlighted as a factor in poor quality HIV and AIDS education (Boler and Carroll, 2005a). Research relating to teacher training indicates a continuing lack of consistent teacher training (Boler and Carroll, 2005a; EI, 2007; UNAIDS IATT on Education, 2004). Whilst the majority of research is focused on Africa, recent research in 11 Asian countries also found that teacher training on HIV and AIDS tends to be short-term and in-service. Among the countries included in the review, only Papua New Guinea, Thailand and Vietnam conducted pre-service training on these issues (Smith et al, 2003). Research also reveals teachers' desire for better training and support, due to lack of confidence in delivering sexuality and HIV education (Boler, 2003, Chad, 2008, Matthews et al, 2006).

The impact that quality teacher training has on changing their own behaviour, or that of their students, seems less systematically documented. The UNESCO 2006 report "HIV and AIDS Education: Teacher Training and Teaching" however identifies these as being the two key ways of measuring the effectiveness of teacher training programmes (UNESCO, 2006). An evaluation of a teacher training programme on STI and HIV prevention in Zimbabwe by the Zimbabwean Ministry of Higher Education and Technology found that, four years after the introduction of the programme, the course succeeded in developing confidence among student teachers to openly discuss sexuality issues, and to teach about them without feeling embarrassed. The course was less successful in developing positive attitudes toward people living with HIV; the majority had negative attitudes toward associating with and assisting colleagues living with HIV (Chifunyise, Benoy, Mukiibi, 2002). Chao, Gow, Akintola and Pauly (2006) demonstrated that teachers' estimates of HIV prevalence amongst students, teachers and community members, and perceived self-risk of infection went up significantly after receiving HIV and AIDS training, but it is not possible to conclude whether this changed their sexual practices. The UNAIDS initiative, EDUCAIDS, led by UNESCO has identified that in particular more research is needed to determine the long-term impact of teacher education programmes with relation to approaches and modes of delivery, effect of refresher courses and indicators to monitor and evaluate education programmes on HIV and AIDS (UNESCO, 2008b)

Duflo et al's background paper to the 2007 World Development Report attempts to capture the impact of teacher training in HIV and AIDS curriculum in western Kenya on the incidence of teenage pregnancy, as well as on knowledge, attitudes and behaviours related to HIV and AIDS (Duflo et al, 2006). In this trial, the impact of teacher training was shown to have "had little impact on students' knowledge and self-reported sexual activity and condom use, or on teen child bearing. However, it did increase students' tolerance toward people with HIV/AIDS and

girls exposed to the programme were more likely to be married to the fathers of their children" (Duflo et al 2006; p4). This suggests that more research is needed into how teacher training can be made more effective. In a discussion with Michael Kelly, he identified training for teacher trainers as a key programmatic gap, noting that teacher training institutes have not received adequate attention[3].

IATT members' research interests:

Interest in further research into how HIV and AIDS can be better integrated into teacher training programmes has been expressed by a number of members, including EI, SIDA, CIDA, UNESCO and UNAIDS. SIDA and CIDA have both asked what the results are of different approaches to teacher training and how teachers could be better equipped to deliver good quality HIV and AIDS education. SIDA is particularly interested in this operationally with regards to 10-14 year old learners. UNESCO is interested in the organisation of pre and in-service teacher training to make it good quality and cost-effective. UNAIDS is interested in how teacher training can be used to help mitigate the impact of HIV on the education workforce.

Access to Quality Education

Quality education – even without an HIV and AIDS focus - is also often identified as having an impact on reducing HIV-related vulnerabilities and risk (IATT for Education, 2008, Kelly, 2004), to the extent that education has been referred to as a 'social vaccine' for HIV and AIDS (Bundy, 2002. Vandemoortele and Delamonica, 2000). In the 2008 IATT on Education publication, "HIV and Education: A Strategic Approach", Education for All (EFA) is identified as an essential goal in itself for preventing the spread of HIV, even without a specific focus on HIV prevention (IATT on Education, 2008a). The 2004 Global Campaign for Education (GCE) report "Learning to Survive: How Education for All would help save millions of young people from HIV/AIDS" summarises the key reasons for basic primary education's effectiveness to respond to HIV and AIDS as follows (GCE, 2004):

1) A complete primary education provides people with the minimum skills required to process and evaluate information necessary to make decisions necessary to protect them from HIV and AIDS
2) Education increases status, independence and confidence to act on knowledge about how to stay safe (this is considered to be particularly important for girls).

A meta review of evaluations relating knowledge to behaviour change also confirms that "the cognitive and literacy skills required to make informed choices in respect of HIV/AIDS risk and behaviours change, are substantively based on levels of education and literacy" (Badcock-Walters et al, 2004; p20).

Evidence presented in various articles on the impact of quality education on HIV-related KAPB concludes that: literate women are three times more likely to know that a healthy-looking person can have HIV, four times more likely to know the main ways to avoid HIV and AIDS (Vandemoortele and Delamonica, 2000) and better-educated girls are more likely to start sexual activity later and require their partners to use condoms (ibid). Based on available data, the GCE report estimated that 700,000 new infections a year could be prevented if all children had a complete primary education (GCE, 2004). Rihani (2006) in support of girls' secondary education points to Zambia where HIV and AIDS are spreading twice as first amongst uneducated girls.

[3] Personal communication, September 9 2008

A study in western Kenya in 2007 compared the impacts of increased access to education with teacher training for HIV and AIDS education and students' participation in condom debates, on teenage pregnancy and KAPB relating to HIV and AIDS. Reduction in the cost of education (through provision of free school uniforms) was the only factor to make a marked difference to teenaged child-bearing (reduced by 10%); it also reduced likelihood of girls reporting having ever had sex by 13% and reduced girls' drop-out rates by 15%. Another recent study (Hargreaves, et al 2008) used a random population sample of unmarried young people aged 14-25 years from rural South Africa to establish whether attendance at school affected HIV infection rates and sexual behaviour. It also concluded that attendance was related to lower risk sexual behaviours and, among young men, lower HIV prevalence.

Early research into the impact of education on HIV and AIDS however showed a different story, with higher education levels more often associated with greater risk of HIV infection (Jukes and Desai, 2005, Boler and Hargreaves, 2006, Badcock-Walters, 2004). Hargreaves' 2008 review of the evidence in sub-Saharan Africa (SSA) between 1987 and 2003 documents the changing patterns of risk associated with educational attainment and concludes that early patterns of HIV prevalence seem to be reversing, with disproportionate new infections occurring among least educated members of society (Hargreaves et al, 2008). In 2001 Gregson, Waddell and Chandiwana (in Duflo et al, 2007) hypothesized that whilst various demographic and socioeconomic conditions put people with higher education at risk in the early stages of the epidemic, they would also be better able to respond to information about the disease and change their behaviour accordingly (Duflo et al, 2007). The problem of relying on 'reported behaviour' which may skew the results was again identified by Badcock-Walters (2004), as was the over-reliance on one-off 'snapshot' studies as opposed to longitudinal studies better able to track sustainability of change over time.

According to the WFP the relationship between the *level* of education and protection from HIV and AIDS is less clearly substantiated (WFP, 2006). ActionAid's Girl Power report (2006) which reviewed 45 articles on the impact of girls' education on HIV rates included 6 which compared results for primary and secondary level completion. All of these showed lower HIV risk for those who completed secondary education by having fewer sexual partners and greater condom use, the report therefore 'tentatively' suggests that higher levels of education provide greater protection from HIV and AIDS.

IATT members' research interests:

The World Bank is interested in research which demonstrates the attributable contribution of education to prevention and UNAIDS would like further consideration of the impact of literacy on HIV- and AIDS-related behaviour. AED would like to know how and why completing secondary education equips boys and girls with behaviours which reduce their risk of HIV infection.

3.2.2 Non-formal and non-school based interventions

This section looks at the connections made in the literature between non-formal education and HIV and AIDS related behaviour change. It emerges that there is a lack of systematic research in this area. Some popular 'non-formal' methods are identified and the section addresses literature relating to 'peer education' in particular.

The majority of articles discussing non-formal education in relation to HIV and AIDS focus on its ability to reach marginalised groups and those beyond school age (which will be discussed under the next theme). There is less research available, however, substantiating the impact of non-formal education on KAPB relating to HIV and AIDS. This is perhaps because 'non-formal' education covers a broad range of activities and target groups, defying easy definition or comparison between evaluations. In a 2006 report on the impact of non-formal education in Nigeria, 16 types of non-formal education programme were identified, with 10 different target groups (Odukoya, et al 2006). This report offers case studies of three projects each of which show evidence of improved knowledge, attitudes and behaviour of participants, but these have not been tested with the rigor of the studies presented in previous sections. A recent report by ADEA which looks at HIV education in a post-primary setting includes information on non-formal education and vocational training. It notes that the absence of published data makes it hard to make conclusions as to the effectiveness of such programmes on protecting learners and staff from HIV infection, or in facilitating access to care and support for those who are infected or affected by HIV and AIDS (Allemano and Nzioka, forthcoming).

Jakob et al's article which presents the views of young people in Uganda revealed strong positive reactions from the respondents for the potential of non-formal methods such as mass media, drama, youth groups, parent teacher associations and music for helping students learn about HIV (Jakob et al, 2007). ActionAid's Sound of Silence report also highlighted the role of media as a trusted source of HIV information (Boler, 2003). Bankole et al (2007) also found that exposure to mass media was an important predictor of consistent condom use among adolescents surveyed in Burkina Faso, Ghana, Malawi and Uganda.

Peer education is recognised as one 'entry point' for HIV education by the EDUCAIDS Framework for Action (UNESCO, 2008a). A recent review of evaluations of such programmes by Kim and Free (2008) has built on Harden's 1999 review of the effectiveness and appropriateness of peer-delivered health interventions for sexual health. Only 13 articles met the inclusion criteria and overall they did not provide convincing evidence that peer-led education improves sexual outcomes for adolescents, although most did have a positive effect on measures of knowledge, attitudes and intentions (Kim and Free, 2008). The article concluded that lack of process evaluations made it harder to assess why the jump between the theoretical effectiveness of peer education and the practice had not yet been successful (ibid).

IATT members' research interests:

CIDA would like to know whether formal education is the most effective avenue for HIV and AIDS education and if it is not, what would be. ADEA is planning to expand the scope of its previous research into non-formal post primary education and training in Africa.

3.3 Theme 3: The Learning Environment

The next theme reviews research which examines the way the learning environment has responded or could respond better to the various issues presented by HIV and AIDS. The first section considers the role of schools in mitigating the impacts of HIV and AIDS for students, teachers and the community by becoming centres of care and support. The second considers the relationship between education and vulnerability, particularly in relation to gender based violence and sanitation which strongly affects girls. The third section looks at the learning environment in relation to emergency settings.

3.3.1 Schools as Centres of Care and Support

This first sub-theme will look at the varying roles schools have been identified as playing in relation to HIV and AIDS mitigation. It will then go on to consider in more detail research which focuses on the areas of school feeding and support for students and teachers who are HIV positive.

As identified in the IATT on Education Strategic Approach publication, the education system also has a mitigation role to play in relation to the impacts of HIV and AIDS (IATT on Education, 2008). According to Kelly (2000), the relationship between education and HIV mitigation has not been developed to the extent that education for prevention has, but there is increasing interest in schools as sources of care and support for both students and teachers (Kelly, 2000). In an evaluation of the personal and environmental factors influencing the implementation of HIV and AIDS education in secondary schools in Cape Town, South Africa, by Matthew et al, 2006, the value and importance of interventions that go beyond teacher training to improve school functioning and climate were highlighted by respondents. For example, a school HIV and AIDS policy, a climate of equity and fairness, and good school-community relations were noted by respondents as critical (Matthews, Boon, Flisher and Schaalma, 2006).

A 2008 UNESCO technical consultation report draws together the main ways in which schools are already playing, or could potentially play a role in mitigating the impacts of HIV and AIDS. It lists these as follows (UNESCO, 2008c):

1) Ensuring continuation of education
2) Providing psychological support to children living with or affected by HIV
3) Facilitating access to treatment (through education about access and treatment regimes)
4) Facilitating home-based care (teachers and students providing outreach support to the community)
5) Responding to basic needs (for example through school-feeding, school gardens)
6) Developing livelihoods skills to support children's future livelihoods security
7) Taking universal precautions (policies and procedures which promote safety and prevent injury at school)

This report only includes countries in SSA, suggesting that such an extensive role for schools may not be appropriate in lower-prevalence settings. Despite growing numbers of programmes addressing one or more of these areas, very few appear to have been reviewed in depth in terms of impact or extent of coverage.

School feeding is one area in which research exists, in part because it builds on a considerable body of information showing it to be a successful way of increasing access to education and supporting the retention of poor students (WFP, 2004a). According to the WFP, this makes

school feeding relevant to HIV prevention by increasing the access of orphans and vulnerable children (OVC) to schools and the protective environment they provide (WFP, 2004c). The 2004 Global School Feeding Report identifies its potential to mitigate the impact of HIV and AIDS by helping keep students healthy and active, thereby slowing the progression of HIV, as well as reducing the need for students to engage in 'survival sex' and expose themselves to the associated risks (WFP, 2004b). Take-home rations, as an addition to school feeding, have recently been looked at by Edstrom in Malawi as a way of increasing support for vulnerable children, their carers and other household members, with positive results on reducing gender disparities. He raises the question of effective targeting, suggesting that a focus on all OVC as opposed to 'all girls' plus double orphan boys would be more effective (Edstrom, 2008).

Programmes that distribute food to communities can, according to the WFP, improve children's nutrition and provide an entry point for community education about HIV and AIDS. The World Food Programme has produced practical guidelines for integrating HIV awareness and prevention education into school feeding programmes, developed in partnerships with governments, UN agencies and civil society partners (WFP, 2004d).

The role of schools in supporting students and teachers who are HIV positive is not strongly addressed in the literature reviewed, beyond inclusion in policy recommendations and frameworks for action. Two UNESCO technical consultation reports "Supporting HIV-positive Teachers in East and Southern Africa" (UNESCO and EI, 2006), and "School-Centred HIV and AIDS Care and Support in Southern Africa" (UNESCO, 2007) review a range of programmes to identify good practices in relation to psychosocial support, treatment education and greater involvement of positive teachers and learners in the programmes. They also highlight major gaps in knowledge such as the need to identify the impact on teachers living with HIV. In 2007, the IATT on Education published a briefing paper on 'Teachers living with HIV' highlighting the fact that stigma and discrimination against teachers with HIV has reduced the effectiveness and documentation of response to their needs, and a comprehensive response is required to address this (UNESCO, 2008b). Teachers' unions are identified as having a significant role to play in this, but have so far been limited in their scope for response (UNESCO, 2008b, Education International, 2007, UNESCO and EI, 2007).

In 2006, UNESCO and WHO published a report based on the outcomes of a technical consultation on treatment education, which states that treatment education is the 'bridge' between treatment provision and the preparation and involvement of communities for a comprehensive HIV and AIDS response. It should therefore be seen as an integral component of HIV and AIDS planning rather than a new initiative and should be integrated into wider HIV and AIDS education (UNESCO and WHO, 2006). The IATT on Education also published a report on this theme (IATT on Education, 2006d), exploring some of the main issues in the definition of treatment education, signaling ways that the education sector can play a role along with others engaged in efforts to achieve universal access to prevention, treatment, and care, and considering some key strategies for implementation.

IATT members' research interests:

The Ford Foundation and SIDA have shown interest in understanding how students, teachers and staff who are HIV-positive can be better engaged with and supported through the school environment. The Ford Foundation is particularly interested in this with regard to better understanding the post-testing experience, also their potential leadership role in the education sector. UNESCO is interested in how school-based services (curricula, counselling and support) can be adapted to address the needs of HIV-

positive students. EI would like to know the level of teachers' access to antiretroviral therapy (ART) and VCT and SIDA is interested in how schools can collaborate with institutions in the health sector.

UNAIDS would like to know more generally the extent to which schools act as a buffer for children in high-burden HIV settings. The IATT advocacy group is interested in establishing the benefits and limitations of 'child-friendly' school models, school health and nutrition and extra-curricular clubs.

3.3.2 Reducing Vulnerability through Schools

This sub-theme will consider research which addresses the relationship between education and girls' vulnerability to HIV and AIDS, focusing particularly on the issue of gender based violence in schools and sanitation.

The 'feminisation' of the HIV epidemic in different regions of the world is highlighted in a number of articles. ActionAid's 'Girl Power' publication notes that in Africa 74% of young people living with HIV are women. At the same time, girls are less likely to have access to education which may help to protect them (Hargreaves and Boler, 2006). High levels of sexual violence against women have increased their susceptibility to contracting HIV (ActionAid, 2004) and research into levels of violence in schools has revealed them to be environments where gender based violence is taking place on an alarming scale (Mirsky, 2003; ActionAid, 2004; Abrahams, et al, 2006; Andersson, 2004; Burton, 2005). Recent research in more than ten countries in Africa and Asia found that the violence faced in and around schools was a significant factor in forcing girls out of the education system and included: sexual harassment in the school environment; corporal punishment and public shaming by school authorities and teachers; patriarchal practices, cultures and traditions, such as early marriage; the exclusion of married and/or pregnant girls and young women; fear of and actual violence on the route to school; poverty leading to vulnerability, to trafficking and transactional sex, especially with older men; and excessive household burdens and child labour (ActionAid, 2007). Burton's review of violence in schools in Malawi showed a third of students reported that teachers in their school demanded sex in exchange for good grades; research by Plan International in Togo also revealed that sex is expected in exchange for grades (Plan, 2006).

Mirsky's (2003) article which draws on data from research around the world argues that whilst there is evidence that sexual violence from harassment through to rape does take place in the education sector it remains an unaddressed problem. Many of the reports note high levels of acceptance by both men and women of gender based and sexual violence due to cultural gender roles and norms (ActionAid, 2004; ActionAid 2007, Mirsky, 2003; Plan, 2006). Mirsky (2003) argues that there is significant 'under-reporting' of violence, due in part to the problem of women believing it to be 'normal', but also because talking about it may lead to 'harm or shame'.

The role of schools in shaping behaviours is strongly made by various authors: Leach (2003) argues that schools are guilty of perpetuating the socialisation of violence if they do not take vigorous action to stamp out violence and also to promote 'constructive adolescent relationships'. ActionAid's 'Making the Grade' provides a model for national policy on preventing, managing and eliminating violence against girls in schools which includes a consideration of the roles and responsibilities of a variety of stakeholders as well as the activities which need to be undertaken to provide a comprehensive response (ActionAid, 2007). EFAIDS partners (Education International, Education Development Center (EDC) and WHO) have developed a toolkit for educator unions to help them challenge and change negative

gender stereotyping and gender inequalities in all aspects of learning institutions and to promote equal opportunities for female and male learners (Pullizi and Rosenblum, 2007).

Schools also need to have adequate water and sanitation facilities to promote good health and hygiene. This is especially important for children living with HIV who are more vulnerable to infections that cause diarrhoea. Separate toilets for girls and boys and for teachers and pupils, are also important to reduce the risk of sexual harassment of girls and to address girls' specific needs. Such facilities can enable girls, in particular, to stay in school, reducing the likelihood of drop-out and associated risk of HIV infection.[4]. The link between girls' vulnerability and inadequate sanitation at schools is made by Abrahams et al, in their review of the 'intersections of sanitation and sexual coercion and girls' safety in schools' (2006). They concluded that poor level of sanitation of toilets meant that both their use and avoidance put girls at risk. However, despite prevalence of sexual violence from male teachers and students, this was not linked specifically to the toilets and therefore both the social and physical environment needs to be addressed in meeting girls' safety (Abrahams et al, 2006). Despite the considerable amount of research into levels of violence in schools connecting it to vulnerability to HIV (Mirsky, 2003, ActionAid, 2004, Plan 2006), it does not seem to be consistently considered as a factor to be addressed in wider HIV and AIDS education literature.

IATT members' research interests:

UNHCR would like to know how the root causes of exploitation and abuse which are school-related are being addressed by different education stakeholders such as Government, UN, NGOs and communities. The Ford Foundation has also asked for a better understanding of the 'sexualised space' that schools are, how young people navigate through it and the limitations of an ABC approach to HIV and sex education when grounded in that reality.

SIDA's partner ARROW has shown particular interest in researching social or 'morality based' changes or reforms to curricula which may have affected the way that women are perceived and treated, for example through enforcing 'traditional' or 'secondary' status of women, curtailing or controlling women's roles or sexuality/ies; this may be within school systems, general curricula or sexuality modules specifically.

3.3.4 Emergencies

This third sub-theme considers research relating to HIV and AIDS education within an emergency situation. It will identify what the literature has to say about increased risks and vulnerability to HIV and AIDS in this context and how emergency education responses can be better tailored to address these issues.

It is widely accepted that emergency situations can increase vulnerability to HIV and AIDS in a variety of ways including through: increased levels of rape and sexual violence; severe impoverishment increasing need for 'survival sex' by women and girls; mass displacement leading to break-up of families and living in overcrowded and insecure refugee and camps for internally displaced persons (IDPs); break down in education, health or other communication systems used to prevent HIV transmission; and limited access to condoms and treatment for STIs. Post-conflict situations are considered to pose particular risks due to increased exposure

[4] The inter-agency initiative Focusing Resources on Effective School Health (FRESH) promotes healthy and safe schools as a way of ensuring better health and learning outcomes for children. Its framework has four components including school health policies; water, sanitation and the environment, skill-based health education and school based health resources. (See website: http://portal.unesco.org/education/en/ev.php-URL_ID=35163&URL_DO=DO_TOPIC&URL_SECTION=201.html accessed, 17/09/08)

combined with high vulnerability (IATT on Education briefing note, 2008; Samuels and Proudlock, 2007).

The UNESCO and UNHCR 2007 discussion paper on "Educational Responses to HIV and AIDS for Refugees and Internally Displaced Persons" highlights the fact that education competes for funds with basic necessities such as food and shelter and as a result does not receive the same level of support. It also notes that refugees and IDPs are generally excluded from national programmes, policies or strategies on HIV and AIDS, thus increasing the need for interventions targeted specifically at them. The 2007 IATT on Education symposium on "HIV, AIDS and Education in Emergency, Conflict, Post-Conflict, and Fragile States" produced a report called *Tailoring the Education Message,* which focused on issues of refugee and IDP formal and non-formal education. Building on the *Minimum Standards for Education in Emergency Situations* produced by the Interagency Network for Education in Emergencies (INEE) and *Guidelines for HIV and AIDS Interventions in Emergency Settings* by the Inter-Agency Standing Committee (IASC), the report recommends a comprehensive response to HIV and AIDS through education, which responds to the particular needs of refugees and IDPs (IATT on Education, 2007). It also highlighted the importance of 'non-formal' education within emergency contexts in order to reach out-of-school groups and the need for this to be integrated into humanitarian response (ibid).

Despite this interest, there is little research available which maps the extent to which, and how, HIV is currently being addressed by the education sector in emergency settings.

IATT members' research interests:

The INEE working group is currently looking at how the UNAIDS IATT on Education mainstreaming toolkit could be adapted for this setting. The working group has also expressed interest in surveying countries which have experienced emergencies in the past year to estimate the extent to which HIV and AIDS is being mainstreamed into emergency education responses in order to see how this could be strengthened.

3.4 Theme 4: Impact of HIV on education systems

This theme addresses literature which explores the impact of HIV and AIDS on the education systems. This is a very broad area so it will be broken down into two sub-themes. The first will look at how HIV and AIDS has affected the supply of education, considering mainly research on teacher mortality and systems disruption. The second will address the issue of demand through reviewing literature relating to orphans and vulnerable children (OVC).

3.4.1 Education Supply – Teacher mortality and systems disruption

Considerable attention has been given by various authors to estimating the impact that HIV has had and will continue to have on the functioning of education systems (Risley, 2007; Kelly 2000; Grant et al 2004). Kelly (2000) provides a comprehensive review of the various ways in which the education system will be affected by HIV by looking at the impact on children, teachers, curricula content, organisation of schools, role of education and planning and management. He argues that the 'person-intensive' nature of the education system makes it more vulnerable to the disruptive impacts of HIV and AIDS (Kelly, 2000). It is not however just a matter of personnel loss, as systems are disrupted, with 'bewilderment' and 'uncertainty' leading to 'chaotic conditions' and reactive responses which do not adequately reflect reality (ibid; p44). The IATT on Education report on 'Quality Education and HIV & AIDS' argues that education systems 'can and must change their operations in relation to HIV and AIDS', if they are to respond to the changing demands of the students and communities, as well as the educators themselves (IATT on Education, 2006a).

Impact on teacher-supply is a major area of concern and the focus of a large proportion of the research. Regions with the highest HIV prevalence rates have received the most attention: Southern and Eastern Africa, and to a lesser extent the Caribbean. Bennell's 2002 analysis of available data on the impact of the AIDS epidemic on schooling in SSA (focusing on Botswana, Malawi and Uganda) reveals that teacher mortality rates are lower than previously estimated and in some countries there is a downward trend (Bennell, Hyde and Swainson, 2002, Bennell, 2006). Badcock-Walters' (2003) research into teacher mortality in KwaZulu Natal, however reveals that teachers' deaths peak at an age below anticipated life expectancy without AIDS, and that teachers are dying at three times the rate of the equivalently aged general population without AIDS. From this, he argues that there is 'substantial and measurable impact' on the education systems. Both Bennell and Grant argue that there is a lack of good data available linking teachers' attrition rates with HIV and AIDS, or on the impact of HIV and AIDS on absenteeism. Current analysis also does not adequately reveal impacts on 'morale', 'motivation' and 'overall performance' which are other important factors effecting educational quality (Bennell, 2002; Grant et al, 2004). Grant however also warns that further research on impacts, although 'desirable', may be expensive and increase delays in response, whilst not providing significantly new information (ibid).

The increasing level of ART coverage is one factor which is seen as contributing to lower and decreasing teacher mortality rates (Bennell, 2002; Risley and Bundy, 2007). Risley and Bundy's 2007 report on the impact of HIV and AIDS on the supply of basic education looks specifically on the effect access to ART has (or could have) on teacher supply and found that in SSA achieving universal access to ART would greatly reduce the scale of the recruitment problem being faced (Risley and Bundy, 2007). Their article compares the situation for SSA with the Caribbean and Greater Mekong Region of Asia and finds that universal access is always beneficial, but the cost effectiveness varies depending on the nature of the epidemic: in SSA it

is cost-effective on education returns alone, in the Caribbean benefits to education would pay for access to ART but not VCT, and in Asia where the epidemic is having a lower impact the cost of testing and treatment is more than the education costs saved.

Another issue commonly raised by various authors is the fact that HIV and AIDS is not the only factor undermining the effectiveness of education systems, but it is exacerbating existing weaknesses in systems (Grant et al, 2004). HIV and AIDS should therefore be addressed within a wider context of meeting service delivery challenges. Allemano (2003) who looks at sub-Saharan Africa and the threat to educational quality that HIV and AIDS poses there, argues that policies which focus on a single factor, such as teacher supply or curricula development will be insufficient in protecting the system. Instead HIV and AIDS needs to be mainstreamed into strategies designed to promote and protect educational quality.

IATT members' research interests:

UNAIDS is interested in how teacher-centred HIV programmes (especially those which integrate HIV education for teachers in teacher training colleges) help to mitigate the impact of HIV on the education workforce. Irish Aid would like research into how to support capacity-building in MoEs in order that they can conduct and commission research into the impact of HIV and AIDS on education. AAU is interested in recording HIV incidence and prevalence in institutions to gain a better understanding of its impact at this level.

ESART is interested in focusing research on HIV and AIDS as a systematic management problem seeing it as one of the factors affecting the operation and performance of the education system.

3.4.2 Education Demand - Orphans and Vulnerable Children (OVC)

In 2007, the number of orphans attributed to AIDS in sub-Saharan Africa alone was estimated to be 12.1 million (UNICEF, 2008). Several studies in Africa have demonstrated that children who are orphaned are significantly less likely to be enrolled in school than non-orphans, and progress more slowly when enrolled (Case, Paxson, and Ableidinger, 2004; Case and Ardington, 2006; Evans and Miguel, 2007). Kelly (2000) argues that this changing demographic is not only taxing coping strategies of families and communities but the education system as well, which must respond to their needs.

Defining who make up this group remains a critical question; orphans are differentiated from other vulnerable children because they have particular psycho-social needs due to grief and loss of psychological and material support. The UNAIDS, UNICEF and USAID 2004 report 'Children on the Brink' defines orphans as having lost either one or both parents. Elsewhere distinctions are made between maternal and paternal orphans (Boler and Carroll, 2005b). 'Vulnerable children' are considered to be "children whose safety, well being and development are, for various reasons, threatened" (Holzmann and Jorgensen cited in IATT on Education, 2004; p13). The relevance of distinguishing children as 'vulnerable' is however questioned in high prevalence HIV regions where all children have already been affected by the epidemic (Boler and Carroll, 2005b). Boler and Carroll's paper also emphasises the 'spectrum of vulnerability', where children are affected by a range of factors (with varying outcomes), with some individuals being subject to multiple disadvantages (ibid). The heterogeneity of the group is not always adequately addressed (ibid). The category is also considered problematic for its potential to increase associated stigma and discrimination experienced by children labelled in this way (Landis, 2002, ActionAid, 2004). HIV-positive learners are sometimes subsumed into

the OVC group, which can help reduce the level of stigma and discrimination they otherwise experience (Badcock-Walters, forthcoming). Elsewhere in the literature the inclusion of HIV positive learners within the category of OVC is not as clearly stated, which seems to result in their particular issues of difficulties in accessing education due to ill-health, and even greater discrimination and stigma (ibid) being not as thoroughly addressed as those relating to orphans.

The 2002 Children on the Brink report refers to UNICEF research in 20 SSA countries showing that children aged 5-14 years who have been orphaned were less likely to be in school and more likely to be working more than a 40 hour week than those with both parents still alive (UNAIDS, UNICEF and USAID, 2002). The World Bank (2006) highlights the fact that the intersectoral nature of barriers OVC face in accessing education poses a significant challenge to the education system. Landis' report for the WFP identifies the following challenges faced by OVC as being detrimental to their ability to access or sustain education (Landis, 2002):

1) Differential treatment of OVC as a result of *stigma and discrimination* manifests in ways such as being denied access to food, adequate shelter, healthcare and education; forced to work harder or longer hours; subject to physical or emotional abuse
2) *Increased workload* of OVC as a result of caring for sick household members, or having to make up lost income by undertaking productive work (a factor which impacts disproportionately on girls)
3) Moving away from home to live with relatives temporarily or for longer periods reduces likelihood of enrolling in or maintaining attendance at school
4) Some children who have lost both parents and have no relatives to support them take on *head of household* responsibilities which means a heavy responsibility for providing for younger siblings and very little money for education
5) Children who *live on the street* are particularly vulnerable to abuse, and lack of security and other basic necessities of life make formal education impossible to attend
6) Increased pressure on OVC, due to hunger or household needs, to engage in *'survival sex'* (sex in exchange for money, food, clothing, school fees or favours) puts their education at risk and increases vulnerability to HIV, other STIs and sexual violence. Frequent reports of teachers demanding sex from female students in exchange for money, gifts and grades makes this a particular problem in the education sector.

Boler and Carroll (2005b) are critical of the fact that nearly all research relating to the impact on education for OVC focuses on the indicator of enrolment, failing to establish a wider picture of impact on progression through variables such as 'repetition, highest grade completion, learning outcomes, gendered equity and inclusivity of education' (ActionAid 2004)[5]. Badcock-Walters' 2005 article looks at 'social protection' responses to educationally marginalised children (which includes OVC) in southern and eastern Africa and concludes that most schemes which had educational benefit as a primary outcome had some element of assistance with or exemption from school fees (Badcock-Walters et al, 2005). Some addressed problems through 'taking education to the children'; other strategies included school nutritional programmes and creating safe and healthy school environments. Overall, he concluded that lack of coordination between programmes and lack of scale limited their impact (ibid).

[5] For examples of research focusing on enrolment see Ainsworth, M. and D. Filmer (2006), Bennel, P. (2005), Case, A. and C. Ardington (2006), Fortson, J. (2007) Guarcello, L., S. Lyon, F. Rosati and C.A. Valdivia (2004).

IATT members' research interests:

The World Bank is planning research on the impact of HIV on education for OVC. ESART would like to see research which can lead to tangible action and response to the needs of OVC and SIDA is interested in the cost-efficiency of different ways that schools / the community take care of orphans, especially related to HIV and AIDS.

Save the Children would like to consider the question of what the costs are to the education sector of responding to children affected by HIV and AIDS versus the costs of doing nothing.

The IATT Advocacy working group has expressed interest in the level of participation of people with disabilities into HIV and AIDS education programming and the extent to which materials and training for HIV prevention are accessible to people with disabilities. UNESCO is interested in the role of the education sector in helping meet universal access for most at risk populations of young people (i.e; young men who have sex with men, sex workers and injecting drug users).

3.5 Theme 5: Policy Response

This final theme addresses literature concerned with policy response to HIV and AIDS and education. Broken into two sub-themes, policy responses will be addressed firstly from a national perspective, reviewing literature which estimates the extent to which 'mainstreaming' of HIV and AIDS into education policy has taken place as well as how mainstreaming can be achieved effectively. The second section will consider international responses and the extent and quality of support that such responses have given to national mainstreaming efforts

3.5.1 Mainstreaming HIV and AIDS into education policy

Research promoting the role that education can play in prevention and mitigation of HIV and AIDS, or revealing its impact on the education system, frequently calls for response at the national level, through mainstreaming HIV and AIDS issues into education policy and planning. Kelly's report for UNESCO concludes that education will have to go through a 'radical transformation' if it is going to respond to the challenges which HIV and AIDS presents it with (Kelly, 2004). The IATT on Education *Toolkit for Mainstreaming HIV and AIDS into Education* (2008b), acknowledges the fact that ministries of education hold the main responsibility for mainstreaming HIV and AIDS into education sector response, but also identify the important role that 'development cooperation agencies', (including multi-lateral and bilateral agencies, and civil society) have to play in supporting this process (IATT on Education, 2008c).

The IATT on Education 2004 Global Readiness Survey provides the most comprehensive review of the extent to which HIV and AIDS has been mainstreamed into educational policy. It is based on surveys in 71 countries across different regions with high, medium and low prevalence rates and shows that steps are being made towards institutionalising HIV and AIDS through: evidence of HIV and AIDS management structures; HIV and AIDS being put on the agenda for discussion; the mainstreaming of HIV into education strategic plans; and the creation of partnerships with other Ministries, Government agencies and NGOs (UNAIDS IATT on Education, 2004). Despite this, it reveals that there are significant weaknesses which need to be addressed particularly in relation to policy to address the impact of HIV and AIDS on the supply and demand, quality and outcomes of the sector, workplace policies and policies which address prevention, treatment, care and support and management of the response.

ActionAid's 2005 report 'Deadly Inertia', produced in collaboration with the IATT on Education and in conjunction with the research for the Global Readiness Survey, includes input from Civil Society in 18 countries (Boler and Carroll, 2005a). This report states that "in the Asian and Latin American countries there was no policy response from Ministries of Education, firstly because HIV and AIDS was seen as the responsibility of Ministries of Health and secondly because HIV and AIDS was not deemed a serious problem" (Boler and Carroll, 2005a; p5). The Global Readiness Survey highlighted that HIV is still widely seen as a public health issue and not a systematic management concern (IATT on Education, 2004). The ActionAid report also noted that lack of system-wide planning results in a failure to tackle the systematic issues by instead focusing on high-visibility but stand-alone programmes such as classroom materials (Boler and Carroll, 2005a). It also highlighted that in Africa where greater progress has been made by ministries of education in establishing HIV and AIDS policies, they are still often not implemented due to being formulated in isolation from other policy and budgetary processes. HIV and AIDS units established to push forward the agenda are not changing attitudes within MoEs due to lack of power, resources and isolation from the decision making process.

A recent four country case study (Jamaica, Kenya, Thailand and Zambia) commissioned by the UNAIDS IATT on Education highlights key progress made in improving the education response. In this study, the education sector emerged as one of the strongest sectors within the overall response in Kenya and Zambia, and an important contributor to the multi-sectoral response in Jamaica. Evidence of joint action, better involvement of stakeholders, and improved coordination was found. The study also highlighted that in some contexts important progress has been made towards alignment and harmonisation of approaches (IATT on Education, 2007).

Workplace policies for teachers have drawn considerable attention as a way of instituting the following actions and behaviours: implementation of HIV prevention training for staff and students; reducing vulnerability arising from gender inequality in staff / student relationships; eliminating stigma and discrimination and ensuring the rights of HIV-positive staff and students; providing care, treatment and support; managing and mitigating the impact of HIV and AIDS in education institutions; and providing safe, healthy and non-violent work and study environments (ILO and UNESCO, 2006a and ILO and UNESCO, 2006b). ActionAid's report 'Deadly Inertia' recommends the establishment of 'workplace policies' to respond to the needs of HIV positive teachers, which should at the very least include confidential access to VCT and affordable treatment (Boler and Carroll, 2005a). This is echoed in UNESCO and EI's technical consultation report, which also identifies the role of teachers' unions in developing and supporting the implementation of such policies (UNESCO, 2006). The joint EI, EDC and WHO publication *Inclusion is the Answer* emphasises the importance of unions in tackling stigma and discrimination of educators who are living with HIV and provides a toolkit for unions to help them achieve this (EI, EDC and WHO, 2007).

IATT members' research interests:

There has been discussion at past IATT meetings about a potential follow-up to the 2004 Global HIV & AIDS Readiness Survey. Discussion papers for the scope of this work were produced for the November 2006 IATT on Education meeting, highlighting in particular the question of how methodology could be 'strengthened'. Increased involvement of civil society from the beginning of the process for purposes of data verification (helping to avoid the weakness of relying on self-reported activities by MoEs) and increased country ownership, was seen as key.

ESART has expressed their interest in seeing the Global Readiness report being used as a benchmark for continued country studies, measuring their trends and progress. Analyses could be used guide MoEs and development partners and also indicate outstanding issues for future research.

The IATT advocacy group is particularly interested in learning how many MoEs have prioritised teacher training in the area of HIV prevention, care and support education. They would also like to know if ministries are documenting behaviour change amongst youth.

EI is interested in further exploring the role of teachers' unions. SIDA would like to better understand how policy on sexual education is successfully (or why not successfully) translated into practice. The ILO would like to know more about the development, use and impact of workplace policies on HIV in the education sector.

INEE and UNESCO are both interested in understanding appropriate education responses in different epidemic contexts. CIDA would like to know how the health and education sectors could work together to ensure a co-ordinated response to HIV and AIDS.

AusAID is currently funding research in Papua New Guinea of the implementation of its HIV and AIDS

policy for the national education system.

3.5.2 International Support for HIV and AIDS education

ActionAid's report 'Deadly Inertia' states that the international donor community has failed to deliver on its commitment to the prevention of HIV, especially with regards to supporting programmes which provide free and universal access to education (Boler and Carroll, 2005a). A review of World Bank assistance to the education sector response to HIV and AIDS in Africa noted that an increasing number of education projects now include an HIV component, but few offer a comprehensive response which address issues such as teacher training, workplace policies and access for OVC (Bakilana, et al 2005). The report identified that there was a lack of engagement of education sectors with the Multi-Country HIV/AIDS Program (MAP) which reduced the amount of funds actually dispersed to the sector. It did however also highlight that current tracking systems only account for components designated as 'HIV/AIDS specific' as opposed to recognising support to activities with more general intent which also respond to HIV/AIDS issues, such as supporting girls education or removing financial barriers to educational access (ibid).

The IATT on Education report on coordination, harmonisation and alignment (2008c), found that development agencies can be credited with providing support to improving co-ordination of the HIV and AIDS response. With regard to harmonisation and alignment there have been serious challenges, with more progress made in countries which have a Sector Wide Approach (SWAp). Limitations to greater harmonisation and alignment include: 'the fact that key players are not part of coordination and harmonisation efforts; limited decentralisation by development partners, constraining commitment to alignment with government priorities and agendas; and insufficient staff among development partners to address the additional workload which arises from harmonisation and alignment efforts' (IATT on Education, 2008c; p8).

ActionAid's report also noted that education NGOs have provided only 'patchy' responses, are widely under-informed about the epidemic and have in some instances used the crisis "to promote ideological or religious beliefs of their own choosing" (Boler and Carroll, 2005a; p5).

Conclusion

A wealth of material exists exploring the various facets of the education sector's response to HIV and AIDS. Whilst this stocktaking exercise has reviewed a considerable number of documents, it has no doubt not done justice to the high quality materials and resources that have been produced over the years. In particular the handbooks, guidelines and manuals which are critical to the implementation of effective programmes within the education sector have not been reviewed in this process. The stocktaking exercise identified and reviewed a set of sources by theme and sub-theme; clearly there are further areas and themes which have not been dealt with in this review. It is also important to note that whilst this review categorized sources into these themes and sub-themes, there is considerable overlap, inter-linkages and blurring of the boundaries of these themes. Additionally, there are also a number of cross-cutting issues such as gender and stigma and discrimination which warrant further clarification and exploration. A next stage would be therefore, time and resources permitting, to identify further areas of interest and carry out a much deeper analysis of the available resources.

Annex 1: Questions to IATT members

IATT Research meeting: stocktaking exercise

Name and phone contact details of respondent:

Name of organization:

Website:

1. Research published by your organization related to HIV and education: (if documents are available on the web, please provide details)

2. Research planned by your organization related to HIV and education:

3. Pertinent research you would like to bring to the consultants' attention: (please provide as much detail as possible e.g. publication details, email addresses, websites)

- Publications
- Organizations
- Individual researchers

4. Research questions you would like to see the IATT prioritize in any future research effort:

Annex 2: Annotated bibliography

Note: when a document is referenced in more than one section, the abstract is not repeated. Readers are directed to the section in which the abstract is included.

1.0 Introduction

Kelly, M. J. 2005.*The Potential Contribution of Schooling to Rolling Back HIV and AIDS.* Commonwealth Youth and Development Series. Johannesburg, University of South Africa. http://hivaidsclearinghouse.unesco.org/ev_fr.php?ID=5689_201&ID2=DO_TOPIC
Increasing the salience of schooling in countering the AIDS epidemic suggests the need to confront many of the challenges posed by current education and school systems. The author considers these and proposes the ideal of schools that have been transformed into multipurpose development and welfare institutions that cater, among other things, for both formal and non-formal educational provision. Although this poses many challenges, it can be accomplished through a willingness to think differently, a thorough re-examination of the meaning and purpose of education in a world with HIV and AIDS, the establishment of effective partnerships, and the dynamic involvement of communities.

UNAIDS IATT on Education (2006a) *Quality Education and HIV&AIDS*
http://unesdoc.unesco.org/images/0014/001461/146115e.pdf
This paper presents a framework for quality education that demonstrates how education systems can and must change in their analysis and conduct in relation to HIV and AIDS. It summarises the ten dimensions of the framework, considers how HIV and AIDS manifests itself in relation to these quality dimensions and summarises some practical applications of how education has responded and can respond to the pandemic from a quality perspective. A more detailed annex to the paper provides evidence on the manifestations of the pandemic on education systems, and how systems have responded in practical ways. Some general conclusions are drawn and a final section promotes some practical and strategic actions in support of quality education that reflects and responds to HIV and AIDS.

UNAIDS IATT on Education (2006b) *Education Sector Global HIV & AIDS Readiness Survey 2004: Policy Implications for Education and Development*. Paris, UNESCO.
http://unesdoc.unesco.org/images/0014/001446/144625e.pdf
This report documents the outcomes of the first international survey of education sector readiness to manage and mitigate the impact of HIV and AIDS. It synthesizes the responses of Ministries of Education (MoEs) in 71 countries and civil society organizations in 18 countries regarding: Ministry of Education HIV and AIDS structures; Enabling environment for an effective response to HIV and AIDS; HIV and AIDS mainstreaming; Workplace issues and human resources; Workplace HIV and AIDS programmes; HIV and AIDS and the curriculum; Responses aimed at those infected and affected by HIV and AIDS; Partnership development in response to HIV and AIDS; Research guiding the response to HIV and AIDS in the education sector. The report interprets disagreements, identifies both the challenges and opportunities that present themselves, and address issues of operational importance. Finally, the report concludes by identifying policy implications and providing recommendations to influence future responses in the education sector.

UNAIDS Inter-Agency Task Team on Education. (2006c) *Education Sector Readiness to Respond to HIV and AIDS* (CD-ROM) http://portal.unesco.org/en/ev.php-URL_ID=38774&URL_DO=DO_TOPIC&URL_SECTION=201.html

This CD-Rom includes the findings of the first international survey of education sector readiness to manage and mitigate the impact of HIV and AIDS. Ministries of education in 71 countries and civil society organizations in 18 countries identified the responses taken to date and defined areas for future work and partnership. Recommendations are also included to influence future responses in the sector.

UNAIDS IATT on Education (2006d) ***Treatment Education: A Critical Component of Efforts to Ensure Universal Access to Prevention, Treatment and Care***
http://unesdoc.unesco.org/images/0014/001461/146114e.pdf This study explores some of the main issues contained within the definition of treatment education, signaling ways that the education sector can play a role along with others engaged in efforts to achieve universal access to prevention, treatment, and care. The paper considers some key strategies, including how to effectively engage and prepare communities and how to involve key constituencies and in particular people with HIV and those on treatment. The paper elaborates on the link between prevention and treatment, re-examines the harmful effects of stigma and discrimination and explores how these factors impede progress in prevention and expanding treatment access. In addition, the paper suggests some possible future directions, underscoring areas of particular priority

UNAIDS IATT on Education (2006e) ***Review of the Evidence: Girls Education and HIV Prevention (CD-ROM)*** **http://portal.unesco.org/en/ev.php-URL_ID=38773&URL_DO=DO_TOPIC&URL_SECTION=201.html)**
The UNAIDS Inter-Agency Task Team (IATT) on Education recently launched a CD-ROM, Review of the Evidence: Girls' Education and HIV Prevention. This CD-ROM aims to expand the evidence base on the link between girls' education and HIV prevention. It contains more than 100 recent resources produced by members of the UNAIDS IATT on Education and other leaders in the education, gender and HIV&AIDS communities. Included on the CD-ROM are policy documents, case studies, reports, tools, curricula and other materials from a range of settings and in several languages. Resources included on this CD-ROM demonstrate the importance of girls' education as a strategy for reducing the vulnerability of girls to HIV infection; provide examples of progress to date and suggestions for how the education sector can better meet the needs of girls; and advocate for intensified action around girls' education as part of national responses to HIV and AIDS.

UNAIDS IATT on Education (2008a) HIV & AIDS and Education: A Strategic Approach
This document updates the 2003 United Nations Joint Programme on HIV and AIDS (UNAIDS) Inter-Agency Task Team (IATT) on Education publication, HIV/AIDS and Education: A Strategic Approach. It presents a strategic vision of the important role that education must play in addressing HIV, identifies key priorities for responding to HIV and AIDS through education, puts forward two central objectives for education responses, and outlines how the response should be tailored to the local epidemiological situation and other factors

UNAIDS IATT on Education (2008c) ***Improving the education response to HIV and AIDS: lessons of partner efforts in coordination, harmonisation, alignment, information sharing and monitoring in Jamaica, Kenya, Thailand and Zambia,*** **UNESCO**
http://unesdoc.unesco.org/images/0015/001586/158683e.pdf
This report synthesises case study exercises undertaken to examine the quality, effectiveness and coordination of the education sector's response to the HIV epidemic in four countries – Jamaica, Kenya, Thailand and Zambia. In each country, stakeholders assessed: critical achievements and gaps in the education sector response to HIV and AIDS; the evolution and effectiveness of coordination mechanisms and structures; progress toward harmonisation and

alignment; information sharing on HIV & AIDS and education; key resources for the response; and monitoring and evaluation.

This report presents the overall findings from the study and makes recommendations for the UNAIDS IATT on Education and its partners to improve coordination in support of country level and global actions. Detailed information on the results for each country is included in appendices of this report.

2.0 Methodology

UNAIDS IATT on Education (2008a) *HIV & AIDS and Education: A Strategic Approach*
See section 1.0 for abstract.

3.0 Thematic Overview

3.1 Knowledge, Attitudes, Practices and Behaviours (KAPB)

3.1.1 Teachers

Adamchak, S E (2005) "Findings of a Survey of Teachers: Strengthening HIV/AIDS Partners in Education SHAPE 2", World Education, Ghana
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=5606_201&ID2=DO_TOPIC
This study is part of a research strategy to collect baseline data for a newly expanded project carried out by World Education, a non-governmental organization (NGO) established in Ghana in 2001. In partnership with local institutions, World Education strives to prevent the spread and mitigate the impact of HIV/AIDS in the education sector. In collaboration with 12 civil society organizations (CSOs), activities are carried out in nearly 250 schools in four regions targeting students, teachers and parents through an innovative program, Strengthening HIV/AIDS Partnerships in Education (SHAPE).
This effort was undertaken to develop an up-to-date picture of the HIV/AIDS knowledge, attitudes and behavior of teachers working in a sub-set of schools participating in the SHAPE 2 program. Among topics explored were teachers' willingness to participate in HIV/AIDS education programs in schools, their knowledge and capacity to do so, and the magnitude of personal risk taking that may put teachers at risk of contracting HIV/AIDS.

Boler (2003) *The Sound of Silence – Difficulties in Communicating on HIV/AIDS in Schools*. London, ActionAid http://www.actionaid.org/docs/hivsoundofsilence.pdf
This report attempts to elucidate how HIV/AIDS education is implemented and received by schools in India and Kenya – two countries chosen partly for their differences, but also a similarity: the existence in each of the chosen regions (Nyanza, Kenya and Tamil Nadu, India) of a state–sponsored HIV curriculum. Through a mixture of quantitative and qualitative approaches, the research catalogues the reported attitudes of 3,706 teachers, pupils, parents and other key stakeholders in the educational community. In doing so, the report aims to answer the four questions:
1 What is the parental and community demand for school–based HIV/AIDS education?
2 What role does the school have in teaching young people about HIV?
3 How is HIV/AIDS education being taught in the classroom?
4 What difficulties exist in successfully delivering school–based HIV/AIDS education?
The research indicates that in both Kenya and India teachers and schools play a pivotal role in teaching young people about HIV and AIDS. On the whole, parents appear to support schools in this endeavour, partly as it relieves their own responsibilities for discussing HIV/AIDS. However,

perceptions of risk of HIV appear not to be 'personalised' with an underlying attitude that HIV only happens to 'them' and not 'us'.

Chao, L, Gow, J., Akintola and Pauly (2006) Perceptions of Community HIV Prevalence, Own HIV Infection, and Condom Use among Teachers in KwaZulu-Natal, South Africa
http://www.springerlink.com/content/c14q534473714008/
A total of 120 teachers from KwaZulu-Natal, South Africa, underwent HIV/AIDS training. As part of the study, the teachers were surveyed, before and after the training, about their perceptions of HIV prevalence among pupils, other teachers, and community members, and about their perceptions of their own HIV status. Before the training, the teachers estimated average HIV prevalence among pupils, other teachers, and other community members to be 36%, 48%, and 61%, respectively. One-third of the teachers believed that they had a 50% or greater chance of currently being infected with HIV. Male teachers and teachers with a university degree gave lower HIV prevalence estimates for other people but not for themselves. Frequency of condom use was positively related to teachers' HIV prevalence estimates for other people. Teachers' estimates of HIV prevalence and perceived risk of own HIV infection increased significantly after the HIV/AIDS training.

Chege, F (2002) Primary School Teachers' Knowledge, Attitudes and Practices on HIV/AIDS, Life Skills, Gender and Sexuality.
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=2491_201&ID2=DO_TOPIC
This research was conducted using both the quantitative and qualitative approaches in order to assess comprehensively, the knowledge, attitudes, and practices of primary school teachers, student teachers, and other stakeholders in the education system with regard to life skills, gender, sexuality, and HIV/AIDS. The purpose was to provide adequate information to guide the introduction of an HIV/AIDS and life skills programme in primary schools and teachers training colleges. Altogether, 728 respondents were interviewed - 307 males (42.17%) and 421 females (57.83%) from 21 districts in four Provinces of Butare, Kibuye, Ruhengeri, Umutara and the city of Kigali. The target group comprised 508 primary school teachers (70% of all research participants), 16 TTC (Teacher Training Colleges) teachers, 120 TTC students, 18 parents, 10 heads of primary schools and 56 primary school children. The methodology used included FGDs (Focus Group Discussions), interviews, questionnaires, and observation techniques complemented by the review of existing literature on the subject.
The study revealed that a significant number of teachers did not have adequate general knowledge of the sexually transmitted diseases, including AIDS, while others had either incorrect or little information. The study revealed the absence of any standardised methodologies for teaching sexuality education; hence, teachers conducted HIV/AIDS lessons in the best ways they knew how. Teachers expressed the need for an appropriate pedagogy that was participatory, included audio-visual material and other relevant teaching aids.

Education International (EI) (2006) *Training for life: teacher training on HIV/AIDS*, EI, July 2007 http://data.ei-ie.org/docs/1/DHPJIJEDDCAACDPKJMHELKDAPDB39DBYGD9DW3571KM/education/docs/DLS/2007-00140-01-E.pdf
In May 2006, Education International (EI) published ' Training for Life' a draft report aimed at establishing a clear picture on the record of governments in providing pre- and in-service training to teachers on HIV and AIDS. The report was written on the basis of information submitted by EI affiliated teacher unions in 8 countries. This latest edition of Training for Life updates the situation regarding teacher training on HIV and AIDS in these countries (where new data was available), whilst also taking some newcomers, namely Sierra Leone and Guyana. What unites these countries is that they are all (or are in the process of becoming) participants

in the EI EFAIDS Programme on achieving Education for All and preventing HIV infection. In order to obtain a more detailed and local perspective on the situation regarding teacher training on HIV and AIDS, EI sent out a questionnaire to all unions involved in the HIV and AIDS programme in 2005. The questionnaire was sent out once again in early 2007 to update this study. It was specifically tailored to gather information on the place given to training on HIV and AIDS within official pre- and in-service training programmes. Though the survey was limited in scope, the replies that came back confirmed the fears expressed by EI and its affiliated unions: namely, that little or no time or resources are being devoted to HIV & AIDS in pre- and in-service training.

Kiragu, Karusa, Murungaru Kimani, Changu Manathoko, and Mackenzie. (2006) "Teachers matter: Baseline findings on the HIV-related needs of Kenyan teachers," *Horizons Research Update*. Washington, DC: Population Council. www.popcouncil.org/pdfs/horizons/ketchrsbslnru.pdf This study was motivated by concerns that teachers are an important national resource yet have been overlooked by workplace HIV and AIDS programs. Specifically, the Horizons study is assessing changes in teachers' knowledge of HIV and AIDS, risk behaviors (e.g., multiple partners and unprotected sex), and utilization of voluntary counseling and testing (VCT).Study findings show that teachers are in need of teacher-centered programs that provide education and services related to HIV prevention, care and support, and stigma reduction.

Maticka-Tyndale, E., Wildish, J., Gichuru.M. (2004) "HIV/AIDS and Education: Experience in changing behaviour: A Kenyan example" Commonwealth Education Partnerships. http://web2.uwindsor.ca/courses/sociology/maticka/psabh/published_papers/HIVAIDS_and_Education_experience_in_changing_behaviour.pdf
Abstract: The Primary School Action for Better Health (PSABH) project was first funded on a small scale by DFID in 1999, under a health umbrella programme called HIV and AIDS Prevention and Care (HAPAC). HAPAC was implemented throughout one rural region in Kenya, called Nyanza Province, which borders Lake Victoria. After initial, positive impressions the project was expanded in order to test the potential impact of a large-scale, school-based HIV and AIDS education intervention on pupil knowledge, attitudes and behaviour. The overall objective was to bring about positive, risk-reducing behaviour changes in pupils in Standards 6, 7 and 8 (approximate age range 10-16 years). This paper addresses the project methodology and design, key findings at the six-month evaluation point, and outcomes related to knowledge, attitudes and behaviours of pupils.

Visser-Valfrey, M (2004) "The impact of individual differences on the willingness of teachers in Mozambique to communicate about HIV/AIDS in schools and communities http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=4930_201&ID2=DO_TOPIC
The overall purpose of this study was to understand what factors contribute to teachers' willingness to communicate about HIV/AIDS in the broad educational setting (schools and communities). The study sought to fill the gap in the research on teachers and HIV/AIDS which has typically focused on cataloguing teachers' knowledge and attitudes, but without relating them directly to practice.

This study found that age, personal experience with HIV/AIDS, level taught, and value expressive attitude functions toward talking about HIV/AIDS have a consistent impact on teachers' intentions to talk about HIV/AIDS and on their past behaviour of talking about HIV/AIDS in schools and communities. Thus younger teachers, teachers who know someone who is sick/has died of HIV/AIDS, teachers who teach upper primary, and teachers who hold weak value expressive attitude functions are more likely to talk about HIV/AIDS across all three

behaviours. Future intentions to talk about HIV/AIDS are also influenced by high perceived behavioural control. With respect to school behavior, it was found that teachers who had a high consistent record of talking about HIV/AIDS in schools had a high overall perception of personal risk, a high positive overall attitude toward talking about HIV/AIDS. Finally, with respect to past behaviour of talking in the community it was found that in addition to the influence of age, personal experience, level taught, and value expressive attitude, teachers who were more likely to talk about HIV and AIDS if they consistently used condoms, had a high perception of personal risk, and a high positive overall attitude toward talking about HIV and AIDS.

Visser, R (2006) **"Communicating About HIV/AIDS: Attitude Functions and Willingness to Talk About Condoms and Sexuality in Mozambique"** ***Paper presented at the annual meeting of the International Communication Association, Dresden International Congress Centre, Dresden,***
http://www.allacademic.com/meta/p_mla_apa_research_citation/0/9/2/6/4/p92645_index.html
Teachers have been given a major role in creating awareness of HIV and AIDS and in ensuring that young people have the knowledge and skills to protect themselves. This study examines the extent to which attitude functions towards talking about condoms and sexuality impacts on teachers' willingness to address HIV and AIDS in school and community settings in Mozambique. Data were collected through a survey among a stratified sample of 606 primary and secondary school teachers.
The results of the study provide support for the fact that attitude functions selectively impact on teachers' willingness to talk about HIV and AIDS in Mozambique and suggest that a better understanding of attitude functions may improve communication messages and bean important input into training and support of teachers. Using multinomial logistic regression the study found that teachers holding weak or moderate value expressive attitude functions were more than twice as likely to have talked about HIV and AIDS in their school and in their community in the past month and to intend to do so in the future, than those holding strong value expressive attitude functions. A similar relationship was found between strong and moderate utilitarian attitude functions and both past school and community communication behaviour as well as future intentions. A third - socio-defensive - attitude function impacted on past communication behaviour in schools and on future intentions, but not on past behaviour in communities. Possible implications for support to teachers as part of HIV and AIDS prevention and awareness are discussed.

Yanez I, Miles M, Velasquez G, Torres A (2002) "Knowledge, attitudes and behavior about HIV infection in teachers at Miranda Municipium, Carabobo State, Venezuela"; ***International Conference on AIDS*** **Jul 7-12; 14: abstract no. MoPeE3810.**
http://gateway.nlm.nih.gov/MeetingAbstracts/ma?f=102250159.html
BACKGROUND: Until December 2.000 there were confirmed almost 15.200 cases of AIDS and it was presumed that the real number of HIV's carriers overcame 400.000 persons (AIDS National Program). This article expose the results from a study about knowledge, attitudes and behaviour about HIV infection, made in October 2001 to a group of teachers from public schools at Miranda Municipium, Carabobo State, Venezuela. METHODS: Was applied a voluntary and anonymous survey with a questionnaire that included close and multiple selection questions, about knowledge, HIV transmission's ways, preventive measures, perception about condom's use and attitudes about people with HIV. Dates were analyzed using the statistic program STATISTICAL RESULTS: The survey included a total of 83 teachers, 78.3% were female and 21.6% were male. The media for the age was 37 years old. Knowledge: 44.6% answered that really exists a difference between a person infected with HIV and other person who has AIDS. Transmission's ways:48.2% recognized the main ways of spread infection; taken in

consideration the most frequently form: sexual relationships. Preventive measures: 89% asserted that through sexual abstinence and 79.5% answered by using condoms. Populations` attitude: 51% showed a discriminative attitude to persons with HIV. To ask them in what situation must use condoms: 60% said that it must be used in "some" sexual relationship. 63.8% affirmed to ask HIV's probe to children that wish to register in a school. Information's source: 45.7% affirmed to have knowledge about AIDS by their friends, 37.3% said to have information through several ways (newspaper, school). 80.7% affirmed their knowledge about HIV and AIDS problem were incomplete. CONCLUSIONS: the studied sample had a low grade of knowledge with respect to HIV and AIDS and it's corresponded with the personal perception about their preparation about this problematic.

3.1.2 Young People

Bankole, A. *et al.* 2007. Knowledge of Correct Condom Use among Adolescents in sub-Saharan Africa. *African Journal of Reproductive Health;* 11 (3), pp. 197-220.
http://lib.bioinfo.pl/pmid:18458741
Using data from the 2004 National Adolescent Surveys, this paper undertook a detail analysis of knowledge of correct condom use and consistency of use, as well as their covariates, among adolescents in Burkina Faso, Ghana, Malawi and Uganda. The strongest predictor of knowledge of correct condom use among both male and female adolescents is exposure to a condom use demonstration. In Burkina Faso, Ghana and Uganda, adolescents who have seen a condom demonstration are 2 to 5 times as likely as those who have not to have good knowledge of correct condom use. Age, ever received sex education in school, ever attended school and exposure to the radio are also significant predictors of knowledge of correct use, particularly among men. As indicated by behaviour among young men, the extent to which adolescents use the condom consistently varies across countries. Yet, it is nowhere near the required 100% level. The proportion reporting consistent use of the method in the 3 months preceding the survey is 38% in Burkina Faso, 47% in Ghana, 20% in Malawi and 36% in Uganda. Age difference between partners is a major determinant of consistent use of condoms: young men whose partner is 0-4 years younger are about two and a half times more likely to use condoms consistently than those who whose partner is 5-9 years younger. Other important predictors of consistent condom use are residence, education, living arrangement and exposure to mass media, specifically the radio and newspaper. Findings from this study point to areas that policy and program can address to provide adolescents access to the kinds of information and service they need to achieve healthy sexual and reproductive lives.

Bastien S (2008) “Out-of-school and 'at risk'? Socio-demographic characteristics, AIDS knowledge and risk perception among young people in Northern Tanzania” *International Journal of Educational Development*. Jul;28(4):393-404.
http://dx.doi.org/10.1016/j.ijedudev.2007.11.005
This paper investigates the reasons why young people in urban and rural Kilimanjaro, Tanzania do not attend school, their socio-demographic characteristics, AIDS knowledge and risk perception. A structured face-to-face interview was conducted with 1007 young people between the ages of 13 and 18. Findings suggest that non-attendance is the product of a complex interaction of economic, individual, family and school-related factors. Boys have more AIDS knowledge than girls, and those from urban areas are more knowledgeable than their rural counterparts. AIDS knowledge increased significantly at each level of education. Those with the highest risk perception were male, of young age and from rural areas. Expanding access to AIDS information, particularly in rural areas, while concomitantly addressing the social and structural determinants of educational attainment is crucial to improving the health of young people.

Biddlecom (2007) ***Protecting the Next Generation in Sub-Saharan Africa: Learning from adolescents to prevent HIV and unintended pregnancy.*** **New York, Guttmacher Institute. http://www.guttmacher.org/pubs/2007/12/12/PNG_monograph.pdf**
This report presents key findings from nationally representative surveys conducted in 2004 among 12–19-year-olds in four African countries—Burkina Faso, Ghana, Malawi and Uganda—with the goal of guiding programs, policies and investments aimed at improving adolescent sexual and reproductive health. It is based on research conducted as part of a multiyear project, called Protecting the Next Generation: Understanding HIV Risk Among Youth. The project seeks to contribute to the global fight against the HIV epidemic among adolescents by documenting and raising awareness of young people's sexual and reproductive health needs regarding HIV and AIDS, other STIs and unintended pregnancy. It also seeks to communicate new knowledge to a broad audience (including policymakers, health care providers and the media) in each country, as well as regionally and internationally, and to stimulate the development of improved policies and programs to serve young people.

El-Gadi S, Abudher A, Sammud M (2008) "HIV-related knowledge and stigma among high school students in Libya" ***International Journal of STD and AIDS*****. 2008 Mar; 19(3):178-183. http://dx.doi.org/10.1258/ijsa.2007.007170**
This study aims to measure indicators of HIV-related stigma among students of high schools in the North West of Libya. The results will be part of baseline data and evaluation of the impact of successive interventions. Understanding the behaviour of risk groups in a society, such as young people, is essential in order to draw effective prevention strategies. Behavioural surveillance surveys have been shown to make an important and useful contribution to informing the response to HIV. This study was part of a large Knowledge, Attitude, Beliefs and Practice survey. A self-administrated questionnaire method was used. The response rates were high (83-92%). Despite high level of stigma shown by both boys and girls in the study, 91% of students supported providing free care to HIV infected individuals. The HIV intervention programmes for young people should operate within a comprehensive strategy to combat HIV/AIDS. The stigmatizing and the discriminatory perceptions of HIV infected individuals should be addressed as part of the education campaign.

Fayorsey, C (2002) "Knowledge Attitudes and Practice on HIV/AIDS among Students, Researchers and Parents in Selected Schools in Ghana"
http://hivaidsclearinghouse.unesco.org/ev.php?ID=2434_201&ID2=DO_TOPIC
This document is a report on a baseline survey commissioned by the World Education/Ghana partly to identify the most urgent areas requiring interventions and establish a basis for the future evaluation of such interventions in the campaign against the spread of HIV/AIDS and attendant problems. The study involved a demographic sample of 1,625 students, 133 teachers and 204 parents drawn from three regions of Ghana. Survey tools used included in-depth interviews and focus group discussions. Analyzed results were presented on socio-demographic and economic context of the HIV/AIDS threat among Ghanaian youths; students knowledge, attitude and practice (KAP) regarding sexuality, STIs and HIV/AIDS; teachers' knowledge, attitude and practice regarding sexuality, STIs and HIV/AIDS; parents' knowledge, attitude and practice regarding sexuality, STIs and HIV/AIDS and finally, recommendations were put forward for specific interventions.

Gallant, M. & Maticka-Tyndale, E. (2004) School-based HIV Prevention Programmes for African Youth. Social Science and Medicine. 58: 1337-1351.
http://web2.uwindsor.ca/courses/sociology/maticka/psabh/published_papers/ss&m.pdf
The high rate of HIV infection among youth in Africa has prompted both national and

international attention. Education and prevention programmes are seen as the primary way of decreasing this rate. This paper reviews 11published and evaluated school-based HIV/AIDS risk reduction programmes for youth in Africa. Most evaluations were quasi-experimental designs with pre-post test assessments. The programme objectives varied, with some targeting only knowledge, others attitudes, and others behaviour change. Ten of the 11 studies that assessed knowledge reported significant improvements. All seven that assessed attitudes reported some degree of change toward an increase in attitudes favourable to risk reduction. In one of the three studies that targeted sexual behaviours, sexual debut was delayed, and the number of sexual partners decreased. In one of the two that targeted condom use, condom use behaviours improved. The results of this review suggest that knowledge and attitudes are easiest to change, but behaviours are much more challenging. The article provides details about programmes and identifies characteristics of the most successful programmes. Clearly, however, more research is needed to identify, with certainty, the factors that drive successful school-based HIV/AIDS risk reduction programmes in Africa.

Ghabili K, Shoja MM, Kamran P The Iranian female high school students' attitude towards people with HIV / AIDS: a cross-sectional study. AIDS Research and Therapy. 2008 Jul 22;5(15):p;16.

AIDS has become an important public health hazard in Iran. It is believed that AIDS-related knowledge does not necessarily translate into behavior modification. Hence, it has been suggested that culturally appropriate educational campaigns should be implemented to obtain satisfactory outcomes. Here, we evaluated the female high school students' attitude towards HIV/AIDS in Tabriz, Iran to assess the cultural needs for the related educational programs and to discover sources of information about AIDS. Anonymous, self-administered questionnaires were filled by the young female students. Among 300 students, 91% agreed that being an HIV carrier should not be an obstacle to obtaining education and employment. Moreover, 72.5% of the students declared that the community should be informed of HIV-positive people. In addition, one-tenth declared that they would feel extremely uncomfortable towards their HIV infected classmate. In addition, only 16% of the students stated that they would continue to shop at HIV infected grocer's store. The mass media and the experts were the major source and the most reliable source of information about AIDS, respectively. Tabrizian female students have overall negative attitudes towards HIV/AIDS. HIV/AIDS related educational campaigns should target the students, society and the families with emphasizing the leading roles of health staff.

Halpern CT, Mitchell EM, Farhat T, Bardsley P (2008) “Effectiveness of web-based education on Kenyan and Brazilian adolescents' knowledge about HIV / AIDS, abortion law, and emergency contraception: Findings from TeenWeb” in *Social Science and Medicine*.;1-10.

http://dx.doi.org/10.1016/j.socscimed.2008.05.001

Little evidence is available about the utility of web-based health education for students in low resource settings. This paper reports results from an evaluation of the TeenWeb project, a multi-year, web-based health education intervention implemented in two urban settings: Nairobi, Kenya (N = 1178 school students) and Rio de Janeiro, Brazil (N = 714 school students). A quasi-experimental, school-based pre-test/post-test design was implemented at each study site to determine if easy access to web-based reproductive health information, combined with intellectual 'priming' about reproductive health topics, would result in improved knowledge and attitudes about topics such as condom use, access to HIV testing, emergency contraception and abortion laws. Students in web-access schools completed one web-based module approximately every 6-8 weeks, and in return, had access to the Internet for at least 30 min after completing each module. Although students were encouraged to access project-supplied web-

based health information, freedom of web navigation was an incentive, so they could choose to access other Internet content instead. Most measures showed statistically significant differences between students in 'web' and 'comparison' conditions at post-test, but only about half of the differences were in the hypothesized direction. Results of an embedded experiment employing more directed feedback tripled the likelihood of correctly reporting the duration of emergency contraception effectiveness. Review of URL logs suggests that the modest results were due to inadequate exposure to educational materials. Future intervention should focus on teen's purposeful searching for health information when they are in personal circumstances of unmet health needs.

Jacob, Shaw, Moriky, Hite and Nsubuga (2007) "HIV/AIDS Education: What African Youth Say is Effective" ***Families in Society*** **p104-114 http://www.popline.org/docs/317571**
This study on HIV/AIDS-education programs was conducted with the Uganda Ministry of Education and Sports in a national sample of 76 secondary schools in Uganda. Participants included secondary students (N = 883) who critiqued their formal and informal school curricula and offered youth perspectives regarding what teaching mediums and programs of HIV/AIDS prevention are most effective. Results indicated that HIV/AIDS education is not taught in their respective school curricula. Students report on informal ways that are helpful in learning about AIDS, recommend changes to their school's curriculum, and report that reactions from various groups in their lives to HIV/AIDS education in their school would be positive. This study provides students, parents of students, educators, social workers, and policymakers with insights on how to better develop, update, and improve HIV/AIDS programs

Lal P , Nath A, Badhan S, Ingle GK A study of awareness about HIV / AIDS among senior secondary school children of Delhi. Indian Journal of Community Medicine. 2008 Jul;33(3):190-192. http://www.ijcm.org.in/article.asp?issn=0970-0218;year=2008;volume=33;issue=3;spage=190;epage=192;aulast=Lal
School children of today are exposed to the risk of being victims of HIV/AIDS - which was quite unknown to their predecessors a few decades ago. The epidemic of HIV/AIDS is now progressing at a rapid pace among young people. Studies have reported that young people form a significant segment of those attending sexually transmitted infection (STI) clinics and those infected by HIV. Programme managers and policy makers have often recommended that schools can act at the center point for disseminating information and education on HIV/AIDS. Hence school education has been described as a 'social vaccine', and it can serve as a powerful preventive tool. In India, there is a wide gap between the inputs in the HIV/AIDS curriculum for schools and the actual education that is imparted. As children are a valuable resource for the future of a country, it is imperative that they be equipped with ample information so as to protect themselves and their counterparts from falling prey to this still incurable killer disease. With this background, the present study was conducted with the following objectives: (i) To assess the awareness of school children regarding HIV/AIDS; (ii) to provide suggestions for school AIDS education.

McManus A, Dhar L; Study of knowledge, perception and attitude of adolescent girls towards STIs / HIV, safer sex and sex education: (A cross sectional survey of urban adolescent schoolgirls in South Delhi, India). BMC Women's Health. 2008 Jul 23;8(12):p. 13;
Sexually Transmitted Infections (STIs), including HIV (Human Immunodeficiency Virus) mainly affects sexually active young people. Young adults aged 15-29 years, account for 32% of AIDS (Acquired Immunodeficiency Syndrome) cases reported in India and the number of young women living with HIV/AIDS is twice that of young men. The aim of the study was to evaluate adolescent school girls' knowledge, perceptions and attitudes towards STIs/HIV and safer sex

practice and sex education and to explore their current sexual behaviour in India. A cross sectional study was carried out in 2007 in South Delhi, India to investigate the perception, knowledge and attitude of adolescent urban schoolgirls towards sexually transmitted Infections (STIs), HIV/AIDS, safer sex practice and sex education. The self-administered questionnaire was completed by 251 female students from two senior secondary schools. More than one third of students in this study had no accurate understanding about the signs and symptoms of STIs other than HIV/AIDS. About 30% of respondents considered HIV/AIDS could be cured, 49% felt that condoms should not be available to youth, 41% were confused about whether the contraceptive pill could protect against HIV infection and 32% thought it should only be taken by married women. Though controversial, there is an immense need to implement gender-based sex education regarding STIs, safe sex options and contraceptives in schools in India.

Marson C. and E. King. (2006) "Factors that Shape Young People's Sexual Behaviour: A Systematic Review". *The Lancet* 368;9547, 4 Nov.. http://www.thelancet.com
The article is based on a systematic review of 268 qualitative studies of young people's sexual behaviour published between 1990 and 2004. Researchers identify 7 key themes from the review, five related to sexual behaviour in general and two to condom use in particular: young people assess potential sexual partners as "clean" or "unclean"; sexual partners have an important influence on behaviour in general; condoms are stigmatising and associated with lack of trust; gender stereotypes are crucial in determining social expectations and, in turn, behaviour; there are penalties and rewards for sex from society; reputations and social displays of sexual activity or inactivity are important; and social expectations hamper communication about sex. The themes do not seem to be exclusive to any particular country or cultural background, and all themes were present, in varying degrees, in all countries assessed.

Maticka-Tyndale, E., Gallant, M., Brouillard-Coyle, C., Metcalfe, K., Holland, D., Wildish, J., Gichuru, M. (2005) The Sexual Scripts of Kenyan Youth and HIV Prevention. Culture, Health and Sexuality. 7, 27-41.
http://web2.uwindsor.ca/courses/sociology/maticka/psabh/published_papers/chsfinalscriptpaper.pdf
The scripting of sexual encounters among young people in Kenyan is described using results of 28 focus group discussions conducted with young people attending primary school standard 7, from four different ethnic groups and living in 22 different communities. Sexual encounters were described as both mundane and inevitable and followed a predetermined scripted sequence of events and interactions in which girls and boys played complementary roles. These scripts were set within discourses of force and the exchange of gifts for sex. The gendered nature of the script and its social and cultural foundations are discussed. Potential strategies for developing HIV prevention programming are discussed from the perspective of existing sexual scripts.

Maticka-Tyndale, E., Wildish, J., Gichuru.M. (2004). HIV/AIDS and Education: Experience in changing behaviour: A Kenyan example. Commonwealth Education Partnerships 2004.
http://web2.uwindsor.ca/courses/sociology/maticka/psabh/published_papers/HIVAIDS_and_Education_experience_in_changing_behaviour.pdf
See section 3.1.1 for abstract.

Maticka-Tyndale, E., Wildish, J Gichuru, M (2007) Quasi-experimental evaluation of a national primary school HIV intervention in Kenya. Evaluation and Program Planning. 30. p. 172-186.
http://web2.uwindsor.ca/courses/sociology/maticka/psabh/published_papers/Maticka-Tyndale_et_al_Evaluation_2007.pdf

This study examined the impact of a primary-school HIV education initiative on the knowledge, self-efficacy and sexual and condom use activities of upper primary-school pupils in Kenya. A quasi-experimental mixed qualitative-quantitative pre- and 18-month postdesign using 40 intervention and 40 matched control schools demonstrated significant program impact on targeted objectives of (1) adequate program delivery and, for standard 6 and 7 pupils (ages 11-16 years), (2) increased HIV-related knowledge; (3) increased communication with parents and teachers about HIV and sexuality; (4) increased assistance to fellow pupils to avoid sexual activity; (5)increased self-efficacy related to abstinence and condom use; (6) decreased exposure to HIV through delayed first intercourse, decreased sexual activity and increased condom. Results support the conclusions that the existing infrastructure is adequate for national roll-out of the program; that the program has its most beneficial effect on sexually inexperienced youth and should therefore be implemented with the youngest age groups possible; and that gains are gender specific, with boys reporting increased condom use while girls are more likely to decrease or delay sexual activity. Based on these results, the program began national roll-out to all primary schools in 2005. By June 2006, the program was operating in 11,000 of the country's nearly 19,000 schools.

Mturi, A.J. and Hennink, M.M. (2005) Perceptions of Sex Education for Young People in Lesotho. *Culture, Health and Sexuality*; 7(2), pp. 129-44
http://www.popline.org/docs/303934
This study aimed to identify the views of young people, parents and teachers concerning sex education in Lesotho. It was conducted at a time when the national government was considering the introduction of Population and Family Life Education, which includes sex education, into the national school curriculum. Forty-six focus group discussions were held with young people (10), parents (30) and teachers (6) to identify current sources of sex education and views of the proposed introduction of school-based sex education in Lesotho. Findings show the limited and problematic sources of sex education for adolescents in Lesotho. They also highlight broad support for the introduction of sex education in the national school curriculum among young people, parents and teachers. Of key importance for the development of a sex education curriculum is the balance between providing young people with information and developing their skills in sexual empowerment and negotiating sexual pressure. The use of pupil-centred interactive pedagogies was seen as essential. Teachers, however, highlighted the need for training in the delivery of sex education, which includes instruction on course materials, teaching methodologies and developing sensitivity to teaching sexual issues to young people.

Snelling D et al. (2006) "HIV/AIDS knowledge, women's education, epidemic severity, and protective sexual behaviour in low- and middle- income countries" *Journal of Biosocial Science Online*, http://dx.doi.org/10.1017/S0021932006001465
Although knowledge about HIV/AIDS and protective sexual behavior are linked theoretically, relatively little is known about their empirical relationship. In addition to other factors, this study examined the relationship between HIV/AIDS knowledge and protective behavior (condom use and restricted sex). There was an association between increased knowledge of HIV/AIDS and condom use that varied in strength and form cross-nationally. However, this study indicates that protective sexual practices are disturbingly low. In eight of 23 countries, overall levels of condom use to prevent STDs and HIV/AIDS were less than 5%.

UNICEF (2006*) HIV and AIDS knowledge, attitudes, practices and behaviour (KAPB) study in Namibia: key findings*
(http://hivaidsclearinghouse.unesco.org/ev.php?ID=8110_201&ID2=DO_TOPIC
The main purpose of this study was to assess the current state of HIV risk behaviour through knowledge, attitudes and practices of young Namibians aged 10 to 24 as a baseline and to

inform future programming. This study was conducted in three regions namely: Kavango, Omaheke and Ohangwena. It captured the perceptions of 1000 respondents in three categories: 10-14 year olds, 15-24 year olds (in and out of school) and adults. A particular emphasis was placed on the most sexually active group of 15-24. This summary reflects the key findings only. For an in-depth analysis and to review statistical procedures, reference should be made to the main report. Some of the key results include:

1. Knowledge of HIV transmission and prevention is high amongst youth but knowledge of sexually transmitted infections (STIs) is extremely low**.**
2. Males are more likely to take sexual risks than females for instance; younger male respondents are less likely to use condoms. Males are more likely to engage in sexual risks due to their direct actions while females are put at risk through actions of their partners.
3. The 10-14 year old group expressed most stigma and the most negative attitudes towards HIV-positive people. There is less stigma in older groups and the least in the adult group.
4. HIV anxiety was highest amongst 10-14 years and least among adults.
5. Condom efficacy is lowest among females 15-24 years. Coupled with the fact that they are more likely to have sex with unfaithful partners, they are particularly vulnerable to HIV.
6. As age increases intent for safe sex declines and more people put themselves at risk for HIV through their own sexual experiences.
7. The most important social relationship that young people report having is with their parents. Discussions of HIV/AIDS were the most common between parents and children.
8. Exposure to antisocial behaviour is extremely high which could have detrimental effects on young people.
9. One in four respondents of the 10-14 year olds and 15% of the 15-24 year olds experienced one or more forms of sexual abuse.

Alcohol abuse was the only single significant risk factor that contributed to the spread of HIV through higher sexual risk taking. Exposure to antisocial behaviour regarding alcohol use and drunkenness was extremely high among 10-14 and 15-24 year olds

See also:

Timaeus, I. and T. Boler (2007) "Father figures: the progress at school of orphans in South Africa." Unpublished manuscript, London School of Hygiene and Tropical Medicine.

3.1.3. Communities

Boler (2003) *The Sound of Silence – Difficulties in Communicating on HIV/AIDS in Schools*. London, ActionAid. http://www.actionaid.org/docs/hivsoundofsilence.pdf
See section 3.1.1 for abstract.

Fayorsey, C (2002) "Knowledge Attitudes and Practice on HIV/AIDS among Students, Researchers and Parents in Selected Schools in Ghana"
http://hivaidsclearinghouse.unesco.org/ev.php?ID=2434_201&ID2=DO_TOPIC
See section 3.1.2 for abstract.

Mbonile L, Kayombo EJ (2008) "Assessing acceptability of parents / guardians of adolescents towards introduction of sex and reproductive health education in schools at Kinondoni Municipal in Dar es Salaam city" *East African Journal of Public Health*. Apr;5(1):26-31. **http://www.bioline.org.br/abstract?id=lp08007&lang=en**

Objectives: To assess acceptability of parents/guardians of adolescents towards the introduction of sex and reproductive health education in the community and schools.
Methods: A multi-stage random sampling technique was used to get 150 participants for this study. A structured questionnaire was used to interview the sampled participants and was supplemented with guided focus group discussion in Kinondoni Municipality of Dar es Salaam, Tanzania.
Results: The analysis of the findings shows that there is a mixed feeling on the introduction of sex and reproductive health education in schools. Participants strongly supported that they should talk with their adolescents about sexuality and reproductive health (88.6%) but their culture prohibits them from doing so (76.7%). Also supported that condoms could protect against HIV/AIDS and sexually transmitted infections (82%), but strongly opposed the use of condoms to their adolescents because it would encourage promiscuity (78%). When the data were analysed by faith of the religions of the participants, 64% were in favour of introducing sex education and reproductive health, but were opposed to use of condoms to their adolescents. All participants were against *vijiweni*, which were recreation centres for the youths because they taught bad manners to their adolescents. The preferred source of information about sex education and reproductive health should be from the parents/guardians (86%), religious leaders (70%), media (62%), health workers (61%) and school teachers (59%).
Conclusion: All in all the will of introduction of sex education and reproductive health in the community is there but the approach need to be worked out carefully by taking into account of the cultural and religious factors. Parents/guardians, religious leaders and traditional charismatic leaders should take part in designing the programme and even being involved in teaching it. The other option is to lump together sex education and reproductive health education in science especially in biology which is already in place in Tanzania education programmes

Maticka-Tyndale, E., Wildish, J., Gichuru.M. (2004). HIV/AIDS and Education: Experience in changing behaviour: A Kenyan example. Commonwealth Education Partnerships 2004. http://web2.uwindsor.ca/courses/sociology/maticka/psabh/published_papers/HIVAIDS_and_Education_experience_in_changing_behaviour.pdf
See section 3.1.1 for abstract.

Mturi, A.J. and Hennink, M.M. (2005) Perceptions of Sex Education for Young People in Lesotho. *Culture, Health and Sexuality*; 7(2), pp. 129-44
http://www.popline.org/docs/303934
See section 3.1.2 for abstract.

3.2 Behaviour change and the education sector

3.2.1 Formal Education

Curriculum Content and Development

Boler (2003) *The Sound of Silence – Difficulties in Communicating on HIV/AIDS in Schools*. London, ActionAid. http://www.actionaid.org/docs/hivsoundofsilence.pdf
See section 3.1.1 for abstract.

Boler T and Aggleton P. (2005) "Life Skills-based Education for HIV Prevention: a Critical Analysis." London, UK Working Group on Education and HIV/AIDS, Policy & Research: Issue 3.
www.aidsconsortium.org.uk/Education/Education%20downloads/life_skills_new_small_version.pdf

Over the last decade, there has been increased support for the teaching of life skills to young people, partly due to the perceived limitations of information-based HIV and AIDS education. However, implementing life skills education in schools to date has proved to be examines the challenges that have arisen in terms of implementation, pedagogy and relevance, and discusses potential ways to overcome some of these obstacles.

Boler and Carroll (2005a) Deadly Inertia? A Cross-Country Study of Educational Responses to HIV and AIDS Global Campaign for Education. Brussels, www.campaignforeducation.org/resources/Nov2005/ENGLISHdeadlyinertia.pdf
This report analyses responses to the HIV and AIDS crisis, both by Ministries of Education and civil society groups working on education, in 18 countries across Asia, Latin America and Africa. The report aims to synthesise learning from the 18 countries and, in particular, to answer the following three questions:
1. What progress have Ministries of Education made in responding to the epidemic?
2. How have civil society organisations working on education responded to the epidemic?
3. How can the educational response to HIV and AIDS be strengthened and galvanised?

This study was conducted by the Global Campaign for Education, in coordination with the first-ever Education Sector Global HIV and AIDS Readiness Survey.

Boler, T. Ingham, R. (2007) "The abstinence debate: condoms, the President's Emergency Plan for AIDS Relief (PEPFAR) and ideology". London, UK Working Group on Education and HIV/AIDS. http://www.actionaid.org/assets/pdf%5Caa_abstinence_reportPRINT.pdf
This paper was developed on behalf of the Working Group on Education and HIV & AIDS and summarises issues raised by a meeting to discuss the contribution of abstinence-only HIV and AIDS education. The summary presents the key arguments for and against abstinence only education that were presented at the meeting, as well as the ensuing discussions. The two positions are presented: in favour of abstinence-centred programmes, such as those incorporated in the ABC (Abstain, Be faithful, use a Condom) approach in Uganda, and a comprehensive approach to HIV and AIDS education.

Bruckner, H. and Bearman, P. (2005) After the promise: the STD consequences of adolescent virginity pledges, *Journal of Adolescent Health* 36: 271-278. http://download.journals.elsevierhealth.com/pdfs/journals/1054-139X/PIIS1054139X05000558.pdf
Purpose: To examine the effectiveness of virginity pledges in reducing STD infection rates among young adults (ages 18–24).
Methods: Data are drawn from the National Longitudinal Study of Adolescent Health, a nationally representative study of students enrolled in grades 7–12 in 1995. During a follow-up survey in 2001–2002, respondents provided urine samples, which were tested for Human Papilloma Virus, Chlamydia, Gonorrhea, and Trichomoniasis. We report descriptive results for the relationship of pledge status and sexually transmitted disease (STD) rates as well as health behaviors commonly associated with STD infection.
Results: Pledgers are consistently less likely to be exposed to risk factors across a wide range of indicators, but their STD infection rate does not differ from nonpledgers. Possible explanations are that pledgers are less likely than others to use condoms at sexual debut and to be tested and diagnosed with STDs.
Conclusions: Adopting virginity pledges as intervention may not be the optimal approach to preventing STD acquisition among young adults.

Cheng Y, Lou CH, Mueller LM, Zhao SL, Yang JH The purpose was to evaluate the feasibility and Effectiveness of a school-based AIDS education program among rural students in HIV high epidemic area of China. Journal of Adolescent Health. 2008 Feb;42(2):184-191. http://dx.doi.org/10.1016/j.jadohealth.2007.07.016
The purpose was to evaluate the feasibility and effectiveness of a life-planning skills training program using participatory methods among rural senior high school students in Shangcai County, Henan Province, China. The study was a quasi-experimental study conducted in three Shangcai County senior high schools with comparable socioculture-economic and demographic characteristics (two interventions and one control). The intervention, a life-planning skills program that uses participatory training methods, combining information education with effective skills building, was provided to all first-grade students (14-18 years old; 87% of them are between 15 and 17 years old) in the intervention group from October 2003 to December 2003. In total, 717 students from the intervention group, and 457 from the control enrolled at baseline, and over 91% of these were followed up at posttest. Group x time interaction effects in ordinal logistic regression analysis were found on HIV/AIDS-related knowledge (p less than .0001), attitudes toward daily contact with HIV-positive persons (p less than .0001), and subjects' protection self-efficacy (p less than .0001), suggesting the intervention increased subjects' knowledge significantly, changed their attitudes positively, and improved their protection self-efficacy. The intervention also significantly improved subjects' communication with teachers and peers on HIV/AIDS issues (p less than .0001). However, no significant change was observed on respondents' attitudes toward premarital sex or their communication with parents between the two surveys (p greater than .05). Three months of short-term HIV/AIDS education through life-planning skills training was welcomed by students and positively influenced HIV/AIDS-related knowledge, attitudes, protection self-efficacy, and communication among senior high school students in a rural area with high HIV prevalence.

Duflo, Dupas, Kremer and Sinei (2006) "Education and HIV/AIDS Prevention: Evidence from a randomized evaluation in Western Kenya" Background paper to the 2007 World Development Report http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2006/10/04/000016406_20061004093411/Rendered/PDF/wps4024.pdf
This report presents results from a randomised evaluation comparing three school-based HIV and AIDS interventions in Kenya: 1) training teachers in the Kenyan Government's HIV and AIDS education curriculum; 2) encouraging students to debate the role of condoms and to write essays on how to protect themselves against HIV; and 3) reducing the cost on education. The primary measure of the effectiveness of these interventions is teenage childbearing, which is associated with unprotected sex. Other measures including knowledge, attitudes, and behaviour regarding HIV and AIDS were collected. After two years, girls in schools where teachers had been trained were more likely to be married in the event of a pregnancy. The programme had little other impact on students' knowledge, attitudes and behaviour or in the incidence of teen childbearing. The condom debates and essays increased practical knowledge and self-reported use of condoms without increasing self-reported sexual activity. Reducing the cost of education by paying for school uniforms reduced drop-out rates, teen marriage and childbearing.

Family Health International (FHI) (2007) School-Based Reproductive Health and HIV Education Programs: An Effective Intervention. *YouthLens on Reproductive Health and HIV/AIDS*, No. 20. Arlington:FHI.
http://www.fhi.org/NR/rdonlyres/eigijwd5fk77pulmn347njeecnlxnh6yuxeofplsqgsmrvfqwzclu3woaiki64h6o7akxuxysyggso/YL20e.pdf
Recent research has confirmed and expanded earlier findings concerning the positive impacts of reproductive health and HIV education programs. More guidance regarding developing and

adapting curricula for diverse settings has also emerged based on sharing of field implementation experiences. Even so, implementing this guidance at the country level remains challenging, given inadequate teacher training, varying availability of funds, and cultural sensitivities about discussing sexuality. In 2005, Family Health International (FHI)/YouthNet sponsored the first comprehensive review of sex and HIV education programs for youth in both developing and developed countries, covering programs that had been implemented among groups of youth using a written curriculum and had been evaluated. Douglas Kirby of ETR Associates led the study, building on methodologies used in earlier reviews. This most recent review identified 83 program evaluations that matched the study criteria, of which 18 were in developing countries: Belize, Brazil, Chile, Jamaica, Kenya, Mexico, Namibia, Nigeria, South Africa, Tanzania, Thailand, and Zambia.

Gallant, M. & Maticka-Tyndale, E. (2004) School-based HIV Prevention Programmes for African Youth. Social Science and Medicine. 58: 1337-1351.
http://web2.uwindsor.ca/courses/sociology/maticka/psabh/published_papers/ss&m.pdf
See section 3.1.2 for abstract.

Gordon, P (2007) *Review of Sex, Relationships and HIV Education in Schools*. Background document for the Global Advisory Group Meeting on HIV and Sex Education. 13-14 December 2007. Paris, UNESCO
In 2007, UNESCO commissioned this desk-based review of the global state of sex and HIV education in the formal education sector in order to inform its possible future work in this area. The review is based on twenty-two key informant interviews with experts from Africa, Europe and North and South America, together with searches of published and grey literature obtained from the internet, databases and personal recommendation, as well as manual searching of key journals.

There is overwhelming evidence to demonstrate that sex, relationships and HIV education programmes can increase knowledge and affect values and attitudes. Some programmes have been successful at reducing the risk of unintended pregnancies and sexually transmitted infections (STIs).

There continues to be a debate about the focus of sex, relationships and HIV education and whether the focus should be firmly upon what can be measured in strictly behavioural terms, or whether it should be expanded to become a more all-embracing reflection of life as it is lived beyond the school gates. Clearly, each approach will have implications for its design, implementation and evaluation.

Halpern CT, Mitchell EM, Farhat T, Bardsley P (2008) "Effectiveness of web-based education on Kenyan and Brazilian adolescents' knowledge about HIV / AIDS, abortion law, and emergency contraception: Findings from TeenWeb" in *Social Science and Medicine*.;1-10.
http://dx.doi.org/10.1016/j.socscimed.2008.05.001
See section 3.1.2 for abstract.

Hargreaves, J. and Boler, T. 2006. *Girl Power – The Impact of Girls' Education on HIV and Sexual Behaviour.* London, ActionAid.
www.actionaid.org.uk/doc_lib/girl_power_2006.pdf).
Girl Power shows that, early in the epidemic (before 1995), more highly educated women were more vulnerable to HIV than women who were less well educated. The most likely reason is that more highly educated people had better economic prospects, which influenced their lifestyle

choices such as mobility and number of sexual partners. At that stage, there was also a general information vacuum about HIV and AIDS in Africa.

However, as the epidemic has evolved, the relationship between girls' education and HIV has also changed. Now, more highly educated girls and women are better able to negotiate safer sex and reduce HIV rates. The more education the better. Across all the countries reviewed, girls who had completed secondary education had a lower risk of HIV infection and practised safer sex than girls who had only finished primary education. Put simply, education is key to building "girl power"!

Despite the power of girls' education and numerous international commitments to education, the reality is that the vast majority of girls in Africa will not complete primary education, let alone manage to get to secondary school. A key obstacle is the rising cost of education. Most children in Africa have to pay to go to primary school which leads to the exclusion of many children from education, especially girls. If we are to see the real benefits of educating girls, then fees need to be removed and governments and donors need to be urged to invest more in primary and secondary education.

The gap between the epidemic and the response is – in some countries – narrowing. This report shows that it is possible to stay ahead of the virus – but only when individuals (particularly women and girls) have the power to choose who they have sex with, and when and how they do so. Educating girls and women is one huge step towards turning around the AIDS epidemic in Africa

Jacob, Shaw, Moriky, Hite and Nsubuga (2007) "HIV/AIDS Education: What African Youth Say is Effective" *Families in Society* p104-114
See section 3.1.2 for abstract.

Kabiru, C.W. and Ezeh, A. (2007) "Factors Associated with Sexual Abstinence among Adolescents in four sub-Saharan African Countries". *African Journal of Reproductive Health* http://www.guttmacher.org/pubs/journals/reprints/AJRH.11.3.111.pdf
Drawing on nationally representative data collected from Burkinabé, Ghanaian, Malawian, and Ugandan adolescents, this study examines differences among four groups of never married, 15-19 year olds: primary abstainers (sexually inexperienced), secondary abstainers (last sex more than 12 months prior to the survey), recent abstainers (sexually active in last year but not in the last 3 months), and sexually active (had sexual intercourse in the last 3 months). The percentage of primary abstinent adolescents ranged from 42% (Malawian males) to 85% (Ghanaian males). In general, a greater proportion of females than males were primary abstainers. Primary abstainers were younger than sexually experienced adolescents. Current involvement in a romantic relationship was a significant predictor of sexual status with primary abstainers being the least likely to be romantically involved. Overall, findings suggest that adolescents' gender, prior sexual experiences and contextual circumstances, such as romantic partnerships, should be considered when designing abstinence promotion programmes.

Kirby, D., Laris, B.A. and Rolleri, L. (2005) *Impact of Sex and HIV Education Programs on Sexual Behaviors of Youth in Developing and Developed Countries*. Family Health International. Youth Research Working Paper No. 2. Research Triangle Park, Family Health International.
http://www.fhi.org/en/Youth/YouthNet/Research/researcheducation.html
Sex and HIV education programs that are based on a written curriculum and that are implemented among groups of youth in school, clinic, or community settings are a promising

type of intervention to reduce adolescent sexual risk behaviours. This paper summarizes a review of 83 evaluations of such programs in developing and developed countries. The programs typically focused on pregnancy or HIV/STI prevention behaviours, not on broader issues of sexuality such as developmental stages, gender roles, or romantic relationships. The review analyzed the impact programs had on sexual risk-taking behaviours among young people. It addressed two primary research questions:
1) What are the effects, if any, of curriculum-based sex and HIV education programs on sexual risk behaviours, STI and pregnancy rates, and mediating factors such as knowledge and attitudes that affect those behaviors? 2) What are the common characteristics of the curricula-based programs that were effective in changing sexual risk behaviours?

Kirby, D., Obasi, A., Laris, B. (2006). The Effectiveness of Sex Education and HIV Education Interventions in Schools in Developing Countries in Ross, D. *et al.* (eds.) *Preventing HIV in Young People: A Systematic Review of the Evidence from Developing Countries*. Geneva, WHO and UNAIDS Inter-Agency Task Team (IATT) on Young People.
The authors undertook a systematic review to examine the impact of sex education and HIV education interventions in schools in developing countries on both risk behaviours for HIV and the psychosocial factors that affect them. Searches identified studies in developing countries that evaluated interventions using either experimental or strong quasi-experimental designs and measured the impact of the intervention on sexual risk behaviours. Each study was summarized and coded, and the results were tabulated by type of intervention. The authors found that twenty-two intervention evaluations met the inclusion criteria: 17 were based on a curriculum and 5 were not, and 19 were implemented primarily by adults and 3 by peers. These 22 interventions significantly improved 21 out of 55 sexual behaviours measured. Only one of the interventions (a non-curriculum-based peer-led intervention) increased any measure of reported sexual intercourse; 7 interventions delayed the reported onset of sex; 3 reduced the reported number of sexual partners; and 1 reduced the reported frequency of sexual activity. Furthermore, 16 of the 22 interventions significantly delayed sex, reduced the frequency of sex, decreased the number of sexual partners, increased the use of condoms or contraceptives or reduced the incidence of unprotected sex. Of the 17 curriculum-based interventions, 13 had most of the characteristics believed to be important according to research in developed and developing countries and were taught by adults. Of these 13 studies, 11 significantly improved one or more reported sexual behaviours, and the remaining 2 showed non-significant improvements in reported sexual behaviour. Among these 13 studies, interventions led by both teachers and other adults had strong evidence of positive impact on reported behaviour. Of the 5 non-curriculum-based interventions, 2 of 4 adult-led and the 1 peer-led intervention improved one or more sexual behaviours.

Kirby, D., Laris, B., & Rolleri, L. (2007). Sex and HIV Education Programs: Their Impact on Sexual Behaviors of Young People Throughout the World. *Journal of Adolescent Health*, *40*, 206-217.
This paper reviews 83 studies that measure the impact of curriculum-based sex and HIV education programs on sexual behaviour and mediating factors among youth under 25 years anywhere in the world. Two thirds of the programs significantly improved one or more sexual behaviours. The evidence is strong that programs do not hasten or increase sexual behaviour but, instead, some programs delay or decrease sexual behaviours or increase condom or contraceptive use. Effective curricula commonly incorporated 17 characteristics that describe the curricula development; the goals, objectives, and teaching strategies of the curricula themselves; and their implementation. Programs were effective across a wide variety of countries, cultures, and groups of youth. Replications of studies also indicate that programs

remain effective when implemented by others in different communities, provided all the activities are implemented as intended in similar settings.

Kirby, D., Rolleri, L., & Wilson, M. (2007). *Tool to Assess the Characteristics of Effective Sex and STD/HIV Education Programs*. Washington, DC: Healthy Teen Network.
The Tool to Assess the Characteristics of Effective Sex and STD/HIV Education Programs (TAC) gives communities the tools they need to select and implement the most effective pregnancy and STD prevention programs for youth.

The TAC is designed to help practitioners assess whether curriculum-based programs have incorporated the common characteristics of effective programs. Knowing which curriculum-based programs have incorporated the common characteristics of effective programs and which have not can help practitioners select, adapt, develop and implement more effective pregnancy, STD and HIV prevention programs in their communities.

Kirby, D (2008) "The Impact of Abstinence and Comprehensive Sex and STD/HIV Education Programs on Adolescent Sexual Behavior" in *Sexuality Research and Social Policy* Vol 5 (3) p18-27
In an effort to reduce unintended pregnancy and sexually transmitted disease (STD) in adolescents, both abstinence and comprehensive sex and STD/HIV education programs have been proffered. Based on specified criteria, the author searched for and reviewed 56 studies that assessed the impact of such curricula (8 that evaluated 9 abstinence programs and 48 that evaluated comprehensive programs) on adolescents' sexual behavior. Study results indicated that most abstinence programs did not delay initiation of sex and only 3 of 9 had any significant positive effects on any sexual behavior. In contrast, about two thirds of comprehensive programs showed strong evidence that they positively affected young people's sexual behavior, including both delaying initiation of sex and increasing condom and contraceptive use among important groups of youth. Based on this review, abstinence programs have little evidence to warrant their widespread replication; conversely, strong evidence suggests that some comprehensive programs should be disseminated widely.

Kohler PK, Manhart LE, Lafferty WE. (2008) Abstinence-Only and Comprehensive Sex Education and the Initiation of Sexual Activity and Teen Pregnancy. Journal of Adolescent Health 2008 42 ;4, pp. 344-35.
The role that sex education plays in the initiation of sexual activity and risk of teen pregnancy and sexually transmitted disease (STD) is controversial in the United States. Despite several systematic reviews, few epidemiologic evaluations of the effectiveness of these programs on a population level have been conducted. The authors compared the sexual health risks of adolescents who received abstinence-only and comprehensive sex education to those of adolescents who received no formal sex education among never-married heterosexual adolescents, aged 15–19 years, who participated in Cycle 6 (2002) of the National Survey of Family Growth and reported on formal sex education received before their first sexual intercourse (n = 1719). Weighted multivariate logistic regression were generated population-based estimates. The authors found that adolescents who received comprehensive sex education were significantly less likely to report teen pregnancy (ORadj = .4, 95% CI = .22– .69, p = .001) than those who received no formal sex education, whereas there was no significant effect of abstinence-only education (ORadj = .7, 95% CI = .38–1.45, p = .38). Abstinence-only education did not reduce the likelihood of engaging in vaginal intercourse (ORadj = .8, 95% CI = .51–1.31, p = .40), but comprehensive sex education was marginally associated with a lower likelihood of reporting having engaged in vaginal intercourse (ORadj = .7, 95% CI = .49–1.02, p = .06). Neither abstinence-only nor comprehensive sex education significantly reduced the

likelihood of reported STD diagnoses (ORadj = 1.7, 95% CI = .57–34.76, p = .36 and ORadj = 1.8, 95% CI = .67–5.00, p = .24 respectively). In conclusion, the authors noted that teaching about contraception was not associated with increased risk of adolescent sexual activity or STD. Adolescents who received comprehensive sex education had a lower risk of pregnancy than adolescents who received abstinence-only or no sex education.

Lloyd, C (2007) "Poverty, Gender and youth: The role of schools in promoting sexual and reproductive health among adolescents in Developing Countries" Working Paper for the Population Council. www.popcouncil.org/publications/wp/pgy/006.html
This paper reviews the state of knowledge about relationships between schooling and adolescent reproductive health. With the spread of mass schooling and the growing share of adolescents who attend school, the opportunities for synergies between health and education policies and programs are growing. Data on cross-country variations in health conditions on the one hand, and variations in attendance and attainment patterns and school systems on the other hand, provide a framework for assessing alternative approaches to the promotion of adolescent sexual and reproductive health in different contexts. Disappointing findings from recent school-based reproductive health interventions in poor rural settings raise questions about the widespread applicability of current school-based approaches to promoting sexual and reproductive health.

Maticka-Tyndale, E., Wildish, J Gichuru, M (2007) Quasi-experimental evaluation of a national primary school HIV intervention in Kenya. Evaluation and Program Planning. 30. p. 172-186.
http://web2.uwindsor.ca/courses/sociology/maticka/psabh/published_papers/Maticka-Tyndale_et_al_Evaluation_2007.pdf
See section 3.1.2

Plummer (2008) "How Risk and vulnerability become 'socially embedded': insights into the resilient gap between HIV awareness and safety in the Caribbean"
Background: The gap between HIV awareness and safe practice is a familiar one for people working in HIV prevention. This gap (sometimes known as the 'KAP gap') is both real and resilient and typically does not respond predictably to further information or rational argument. The task for researchers is to explain this gap better with the aim of developing more effective interventions.
Methods: The present paper reports on insights into the 'KAP gap' that have arisen out of our own qualitative research into Caribbean masculinities in 7 Caribbean countries (Guyana, Trinidad & Tobago, Grenada, St Vincent & the Grenadines, St Lucia, Anguilla and Jamaica) and from revisiting the work of other Caribbean researchers.
Results: We have found evidence that risk and vulnerability are 'socially embedded' due to the obligations and taboos imposed by: gender roles, peer group pressures, social taboos and stigma, and economic power. Religion can play a role too.
Conclusions: We argue that 'social embedding' of risk and vulnerability is an important factor in maintaining the 'KAP gap' and in entrenching vulnerability despite high levels of awareness and knowledge. It is clearly insufficient to rely on behaviour change strategies derived from individualistic approaches that merely take the social context into account. For prevention to be effective 'social embedding' needs to be addressed, presumably through strategies for fundamental social change which have 'embedded' behavioural outcomes.

Rosen, J., Murray, N. and Moore, S. 2004. *Sexuality Education in Schools: The International Experience and Implications for Nigeria.* Policy Working Paper Series No.

12. Washington, DC, Futures Group/The POLICY Project.
http://www.policyproject.com/pubs/workingpapers/wps-12.pdf
In Nigeria, as elsewhere in Africa and the developing world, schools play a key role in imparting important information on health and human relations. Although too many Nigerian youth still lack access to secondary or even primary education, for those young people who do attend school, the school setting provides an important venue to transmit information and skills that can protect youth against risky behaviors.

School-based sexuality and reproductive health education is one of the most important and widespread ways to help young people improve their reproductive health. Countries in every region have organized sexuality education programs of one type or another. Such programs, if thoughtfully designed and well implemented, can provide young people with a solid foundation of knowledge and skills. This paper summarizes the international experience in carrying out school-based sexuality education programs and the applicability of this experience to Nigeria. It was originally commissioned to provide input for the National Stakeholders Meeting on Adolescent Sexuality and Reproductive Health Education, held in Abuja, Nigeria, in September 2003. The authors incorporated feedback and results from that meeting to revise and update the report. Our hope is for the paper to support the efforts of Nigerians to implement the country's new policy on sexuality and reproductive health education.

Santelli J et al. (2006) Abstinence and abstinence-only education: A review of U.S. policies and programs. Journal of Adolescent Health 38 ;1, pp. 72-81.
Abstinence from sexual intercourse is an important behavioural strategy for preventing human immunodeficiency virus (HIV), other sexually transmitted infections (STIs), and pregnancy among adolescents. Many adolescents, including most younger adolescents, have not initiated sexual intercourse and many sexually experienced adolescents and young adults are abstinent for varying periods of time. There is broad support for abstinence as a necessary and appropriate part of sexuality education. Controversy arises when abstinence is provided to adolescents as a sole choice and where health information on other choices is restricted or misrepresented. Although abstinence is theoretically fully effective, in actual practice abstinence often fails to protect against pregnancy and STIs. Few Americans remain abstinent until marriage; many do not or cannot marry, and most initiate sexual intercourse and other sexual behaviours as adolescents. Although abstinence is a healthy behavioural option for teens, abstinence as a sole option for adolescents is scientifically and ethically problematic. A recent emphasis on abstinence-only programs and policies appears to be undermining more comprehensive sexuality education and other government-sponsored programs. We believe that abstinence-only education programs, as defined by federal funding requirements, are morally problematic, by withholding information and promoting questionable and inaccurate opinions. Abstinence-only programs threaten fundamental human rights to health, information, and life.

Senderowitz, J. and Kirby, D. (2006) *Standards for Curriculum-Based Reproductive Health and HIV Education Programs*. Arlington, Family Health International, (http://www.fhi.org/NR/rdonlyres/ea6ev5yqicx2nukyntbvjui35yk55wi5lwnnwkqko3touyp3a33aiczutoyb6zhxcnwiyoc37uxyxg/sexedstandards.pdf
Worldwide, more than 1.5 billion young people are in the transitional years, ages 10 to 24. The knowledge they acquire, the values and attitudes they develop, and the skills they learn will have enormous effects on their future well-being -- and also that of their societies. Most of these young people live in developing countries, where their reproductive health is vulnerable, especially for girls and young women. Rates of unintended pregnancy and sexually transmitted infections (STIs) remain high, and HIV has become the leading cause of death for young people

in some areas, such as sub-Saharan Africa. In order for young people to make good decisions about sexual and reproductive health (RH) matters, they need good information, values and attitudes consistent with health goals, skills to behave consistently with their knowledge and values, and access to quality health services. Curriculum-based education can contribute to providing what young people need in a structured format, with flexible approaches that can be implemented in a variety of settings. With these features, curriculum-based approaches constitute an important strategy in addressing HIV/AIDS and unintended pregnancy. Program evaluations and overview studies have found that curriculum-based RH/HIV education can be effective in widely differing geographic areas, various cultural settings, and among youth of different income levels and both sexes.

Smith, Kippax, Aggleton and Tyrer (2003) "HIV/AIDS school-based education in selected Asia-Pacific countries". Sex Education April 2003; 3(1):3-21.
This paper describes findings from a recent UNAIDS-funded study of how education systems in selected countries in East Asia, South East Asia and the Pacific are responding to HIV/AIDS-related education. Data were collected by means of postal questionnaire and key informant interviews in Brunei, Cambodia, China, Indonesia, Malaysia, Mongolia, Myanmar, the Philippines, Papua New Guinea, Thailand and Vietnam. Findings suggest that the education provided is largely information-based, but with a developing emphasis on life-skills such as assertiveness and negotiation. Specific sexual practices are rarely discussed in the region's schools, except in a somewhat mechanistic way, focusing mainly on human reproduction and anatomy. However, those countries most affected by the epidemic are beginning to re-think their approaches. An increasing openness about sexual and drug injecting practices, and how to communicate these issues with young people, is beginning to become apparent.

Thato R, Jenkins RA, Dusitsin N (2008) “Effects of the culturally-sensitive comprehensive sex education programme among Thai secondary school students” in *Journal of Advanced Nursing* May;62(4):457-469 http://dx.doi.org/10.1111/j.1365-2648.2008.04609 .
This paper reports on a study to evaluate the effectiveness of a culturally-sensitive comprehensive sex education programme among Thai secondary school students. Increasing number of adolescents in Thailand have been engaging in premarital sex. No theory-based, abstinence-oriented models of sex education have been evaluated in this population. A quasi-experimental study was conducted in 2006-2007. Outcome measures included sexual behaviour, condom use, intention to refuse sex, intention to use condoms, and knowledge regarding sexually transmitted infections/human immunodeficiency virus/acquired immunodeficiency syndrome and pregnancy. Students in the experimental group had lower levels of reported sexual intercourse at 3- and 6-month follow-ups, compared with those in control group (P less than 0.01). Students participating in the programme had significantly greater intention to refuse sex in the future across time than controls (P less than 0.05). Sexually active adolescents participating in the programme reported significantly lower frequencies of sexual intercourse across time than controls (P less than 0.01). However, the programme did not influence consistent condom use (P greater than 0.05), although the intervention was associated with increased intention to use condoms (P less than 0.01). Knowledge about sexually transmitted infections/human immunodeficiency virus/ acquired immunodeficiency syndrome and pregnancy among students in the intervention group was significantly greater than that of the controls (P less than 0.05). School nurses can play a major role by applying this kind of sex education programme. For nurse researchers, it would be useful to extend this research by considering alternative ways to foster condom use in the non-commercial partnerships that have become common among adolescents.

UNAIDS Inter-Agency Task Team on Education (2006b). *Education Sector Global HIV & AIDS Readiness Survey 2004: Policy Implications for Education and Development*. Paris, UNESCO. http://unesdoc.unesco.org/images/0014/001446/144625e.pdf
See section 1.0

UNODC (2006) *Monitoring and Evaluating Youth Substance Abuse Prevention Programmes*, Global Youth Network
http://www.unodc.org/youthnet/youthnet_action_planning_evaluation.html
This is a handbook for practitioners who want to improve the monitoring and evaluation of their programmes for the prevention of substance and drug abuse among youth. It was prepared on the basis of the available literature and of the experience of the members of the Global Youth Network, as well as the local partners of the Global Initiative on Primary Prevention of Substance Abuse.

Underhill, K., Operario, D. and Montgomery, P. (2007) "Abstinence-only programs for HIV infection prevention in high-income countries", Cochrane Database Systematic Review.
http://www.cochrane.org/reviews/en/ab005421.html
Abstinence-only interventions promote sexual abstinence as the only means of preventing sexual acquisition of HIV; they do not promote safer-sex strategies (e.g., condom use). Although abstinence-only programs are widespread, there has been no internationally focused review of their effectiveness for HIV prevention in high-income countries. This study aimed to assess the effects of abstinence-only programs for HIV prevention in high-income countries. The authors searched 30 electronic databases (e.g., CENTRAL, PubMed, EMBASE, AIDSLINE, PsycINFO) ending February 2007. Cross-referencing, handsearching, and contacting experts yielded additional citations through April 2007.Randomized and quasi-randomized controlled trials evaluating abstinence-only interventions in high-income countries (defined by the World Bank) were included. Interventions were any efforts to encourage sexual abstinence for HIV prevention; programs that also promoted safer-sex strategies were excluded. Results were biological and behavioural outcomes. Three reviewers independently appraised 20,070 records and 326 full-text papers for inclusion and methodological quality; 13 evaluations were included. Due to heterogeneity and data unavailability, the authors presented the results of individual studies instead of conducting a meta-analysis. Studies involved 15,940 United States youth; participants were ethnically diverse. Seven programs were school-based, two were community-based, and one was delivered in family homes. Median final follow-up occurred 17 months after baseline.

Results showed no indications that abstinence-only programs can reduce HIV risk as indicated by self-reported biological and behavioral outcomes. Compared to various controls, the evaluated programs consistently did not affect incidence of unprotected vaginal sex, frequency of vaginal sex, number of partners, sexual initiation, or condom use. One study found a significantly protective effect for incidence of recent vaginal sex (n=839), but this was limited to short-term follow-up, countered by measurement error, and offset by six studies with non-significant results (n=2615). One study found significantly harmful effects for STI incidence (n=2711), pregnancy incidence (n=1548), and frequency of vaginal sex (n=338); these effects were also offset by studies with non-significant findings. Methodological strengths included large samples, efforts to improve self-report, and analyses controlling for baseline values. Weaknesses included underutilization of relevant outcomes, underreporting of key data, self-report bias, and analyses neglecting attrition and clustered randomization. The authors conclude that evidence does not indicate that abstinence-only interventions effectively decrease or exacerbate HIV risk among participants in high-income countries; trials suggest that the programs are ineffective, but generalizability may be limited to US youth. Should funding

continue, additional resources could support rigorous evaluations with behavioral or biological outcomes. More trials comparing abstinence-only and abstinence-plus interventions are needed.

Yankah E., Aggleton P. 2008. "A Review of the Effectiveness of Life Skills Education for HIV Prevention in Developing Countries". AIDS Education and Prevention, Nov 20(6): in press.

See also:

Kirby, D. (2006). *What works best in sex/HIV education?* San Francisco, CA: University of California Center for AIDS Prevention Studies.

Kirby, D., Laris, B., & Rolleri, L. (2006). *The Characteristics of Effective Curriculum-Based Sex and HIV Education Programs for Adolescents*. Scotts Valley, CA: ETR Associates

Teacher Training

Boler 2003. *The Sound of Silence – Difficulties in Communicating on HIV/AIDS in Schools*. London, ActionAid. http://www.actionaid.org/docs/hivsoundofsilence.pdf
See section 3.1.1 for abstract.

Boler and Carroll (2005a) Deadly Inertia? A Cross-Country Study of Educational Responses to HIV and AIDS Global Campaign for Education. Brussels, www.campaignforeducation.org/resources/Nov2005/ENGLISHdeadlyinertia.pdf
See section 3.2.1 for abstract.

Chao, L, Gow, J., Akintola and Pauly (2006) Perceptions of Community HIV Prevalence, Own HIV Infection, and Condom Use among Teachers in KwaZulu-Natal, South Africa http://www.springerlink.com/content/c14q534473714008/
See section 3.1.1 for abstract.

Chifunyise, T. Benoy,H, Mukiibi, B. (2002) "An impact evaluation of student teacher training in HIV/AIDS education in Zimbabwe. Evaluation and Programme Planning" 25:377-85.
Zimbabwe introduced a nation-wide program to teach AIDS education in 1994. This paper evaluates changes in student teachers' level of knowledge about transmission, symptoms and prevention of STDs and HIV/AIDS; their attitude towards persons living with AIDS; and their sensitivity to the impact of the epidemic and to discussing and teaching about these issues. There was an increase in knowledge of HIV prevention and in teachers' ability to discuss reproductive health and sexual issues. However, as students were exposed to other HIV material outside the programme, not all of this change is due to the programme. Course attendance needed to be enforced and the curriculum needed to be updated with student participation. Peer educators and participatory techniques are needed to get students to internalise positive attitudes and behaviour. The education materials need to address the lack of female empowerment in making decisions and negotiating for safer sex.

Duflo, Dupas, Kremer and Sinei (2006) "Education and HIV/AIDS Prevention: Evidence from a randomized evaluation in Western Kenya" Background paper to the 2007 World Development Report
See section 3.2.1 for abstract.

Education International (2007) "Training for life: teacher training on HIV/AIDS"
http://data.ei-ie.org/docs/1/DHPJIJEDDCAACDPKJMHELKDAPDB39DBYGD9DW3571KM/education/docs/DLS/2007-00140-01-E.pdf
See section 3.1.1 for abstract.

Gordon (2007) "Review of Sex, Relationships and HIV Education in Schools" UNESCO IATT\External docs for review\Gordon _HIV and sex education_June_2008_FINAL.doc
See section 3.2.1 for abstract.

Kirby, D., Laris, B.A. and Rolleri, L. 2005. *Impact of Sex and HIV Education Programs on Sexual Behaviors of Youth in Developing and Developed Countries*. Family Health International. Youth Research Working Paper No. 2. Research Triangle Park, Family Health International.
http://www.fhi.org/en/Youth/YouthNet/Research/researcheducation.html
See section 3.2.1 for abstract.

Mathews, C. Boon, H, Flisher, AJ, Schaalma, HJ.(2006) "Factors associated with teachers' implementation of HIV/AIDS education in secondary schools in Cape Town, South Africa". *AIDS Care* May;18(4):388-97
This study investigated the factors influencing whether high school teachers implemented HIV/AIDS education. The independent variables included constructs derived from expectancy value theories, teachers' generic dispositions, their training experience, characteristics of their interactive context and the school climate. The authors conducted a postal survey of 579 teachers responsible for AIDS education in all 193 public high schools in Cape Town. Questionnaires were completed and returned by 324 teachers (56% response rate) from 125 schools. Many teachers (222; 70%) had implemented HIV/AIDS education during 2003, and female teachers were more likely to have implemented than males (74% vs. 58%). The teacher characteristics associated with teaching HIV/AIDS were previous training, self-efficacy, student-centeredness, beliefs about controllability and the outcome of HIV/AIDS education, and their responsibility. The existence of a school HIV/AIDS policy, a climate of equity and fairness, and good school-community relations were the school characteristics associated with teaching HIV/AIDS. These findings demonstrate the value of teacher training and school policy formulation. They also demonstrate the value and importance of interventions that go beyond a sexual health agenda, focussing on broader school development to improve school functioning and school climate.

Smith,G, Kippax, Aggleton Tyrer.(2003) "HIV/AIDS school-based education in selected Asia-Pacific countries". *Sex Education* April; 3(1):3-21.
See 3.2.1 for abstract.

UNESCO (2006) "HIV/AIDS education. Teacher training and teaching: a web-based desk study of 10 African countries"
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=5850_201&ID2=DO_TOPIC
UNESCO's Teacher Training Initiative in Sub-Saharan Africa (TTISSA) is a new 10-year project to improve the quality and teacher training capacities in 46 sub-Saharan countries. The

programme is designed to assist countries to synchronize their policies, teacher education and labour practices with national development priorities for Education for All (EFA) and the Millennium Development Goals (MDG) through a series of four-year cycles. The acute shortage of qualified teachers has been identified as one of the biggest challenges to EFA; some 4 million more teachers are needed in sub-Saharan Africa to meet the goal of Universal Primary Education (UPE) by 2015.

The effectiveness of an HIV and AIDS teacher training programme can be measured at two levels, namely; the change in attitude and behaviour of teacher training graduates and secondly, the change in attitude and behaviour of the students they teach. There is a strong case in favour of starting early in teaching about HIV and AIDS, yet attitudes and behaviour seem to be more dramatic in teenage years when youth start to be sexually active before onset of adulthood. There is merit in teaching HIV and AIDS in order to prevent youth from acquiring the pandemic through their sexual behaviour and other methods such as sharing syringes, hence the importance of relevant secondary school programmes.

This report partly focuses on teachers, both in their capacity as agents of HIV/AIDS education as well as a section of the population that has been shown to be vulnerable to the epidemic. The report is a web-based desk study providing background information on HIV/AIDS and the teaching profession in 10 African countries and should be viewed as a working document in order to facilitate the development of effective mechanisms and more useful tools for dealing with the pandemic. The countries described are selected from a list of 17 first wave target countries identified for the TTISSA: Angola, Burundi, Burkina Faso, Central African Republic, Chad, Democratic Republic of Congo, Ethiopia, Ghana, Guinea, Madagascar, Niger, Nigeria, Republic of Congo, Sierra Leone, United Republic of Tanzania and Zambia.

It is planned that this report be followed by an in-depth study of three countries, namely Angola, Central African Republic and Zambia to further analyse the complexity, the constrains and the level of efficiency of HIV/AIDS programmes for teachers.

UNESCO (2008b) *EDUCAIDS Technical Briefs*, Paris
http://unesdoc.unesco.org/images/0015/001584/158436e.pdf
EDUCAIDS Technical Briefs are two-page summaries of key issues related to the five essential components of a comprehensive education sector response to HIV and AIDS. Each brief can be used as a stand-alone reference, and together they offer comprehensive and flexible guidelines to the continuum of activities required to respond to the epidemic at country level.

See also:

Carr-Hill R. 2002. Practical and Theoretical Problems in Training Teachers to Confront HIV/AIDS. In E. Thomas (Ed.), World Yearbook of Education 2002: Teacher Education, Dilemmas and Prospects. 193-204. London: Taylor & Francis.

Access to Quality Education

Allemano E (2003) *HIV/AIDS: A Threat to Educational Quality in Sub-Saharan Africa - Analytical Framework and Implications for Policy Development*. Draft Working Document.
http://www.adeanet.org/biennial2003/papers/10B_IIPE_ENG.pdf
This study is intended to provide an analytical framework to assist educational decision-makers of sub-Saharan Africa and their partners in assessing the impact of the HIV/AIDS epidemic on

educational quality. The practical value of the framework is to provide guidelines in setting educational policy priorities and designing planning strategies to support national efforts in reaching the Education for All goals. Evidence of the impact of the HIV/AIDS on educational quality is still limited and too often anecdotal. While more systematic research is required, enough information is currently available to draw some implications for policy development. The author argues that the theme of educational quality is particularly appropriate for developing policy responses to HIV/AIDS in the education sector, because the responses must be multifaceted and holistic to take into account the complex factors that mediate the achievement of educational quality. A focus on a single factor, such as teacher supply or curriculum, would be insufficient to protect the education sector from the impact of the epidemic. In essence, the effort to prevent and mitigate the impact of HIV/AIDS in the education sector must be mainstreamed in strategies to promote and protect educational quality.

Badcock-Walters, P.J.; Kelly, M.J.; Görgens-Albino, M. (2004) *Does Knowledge Equal Change?: HIV and AIDS Education and Behaviour Change.*
This paper sets out to demonstrate that clear links exist between HIV/AIDS education, both inside and outside the education system, and levels of awareness and knowledge about HIV/AIDS and associated risk behaviour. It also examines evidence of consequent behaviour change in relation to such information and linked understanding of the risks posed by HIV/AIDS.

Bundy, D (2002) *Education and HIV/AIDS: A Window of Hope*, Washington DC, World Bank
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=1383_201&ID2=DO_TOPIC
The paper highlights that the education of children, and youth merits the highest priority in a world afflicted by HIV/AIDS, specifically because a good basic education ranks among the most effective - and cost-effective - means of HIV prevention. It also merits priority because the very education system that supplies a nation ' s future, is being greatly threatened by the epidemic, particularly in areas of high, or rising HIV prevalence. The paper confronts the destructive power of the epidemic, with the need to accelerate efforts towards achieving " education for all " goals, aiming at prioritizing education, because education is a major engine of economic, and social development, and, because education is a proven means to prevent HIV/AIDS. It aims at setting promising directions for such responsiveness, as revealed by a review of country experience to date: based on strategic planning in pursuit of educational goals, school-based prevention programs, and health education, focused on resources for effective school health (in partnership with the United Nations Educational, Scientific, and Cultural Organization (UNESCO), World Health Organization (WHO), the United Nations Children ' s Fund (UNICEF), and the Bank, should expand skills-based for youth peer education, and support for orphans. The broad principles of Bank support for education, underline the need to asses the impact of the epidemic vs. educational systems, to mobilize resources, reinforced by government commitments for sharing knowledge, and building capacity, within strategic partnerships.

Duflo, Dupas, Dremer, Sinei (2006) “Education and HIV/AIDS Prevention: Evidence from a randomized evaluation in Western Kenya” background paper to the 2007 World Development Report
See section 3.2.1 for abstract.

Global Campaign for Education (2004) “Learning to Survive: How Education for All Would Save Millions of Young People from HIV/AIDS”
http://hivaidsclearinghouse.unesco.org/ev.php?ID=3547_201&ID2=DO_TOPIC
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

Hargreaves J and Boler T (2006) *Girl Power: The Impact of Girl's Education on HIV and Sexual Behaviour*, ActionAid, GCE
See section 3.2.1 for abstract.

Hargreaves, Morison, Kim, Bonell, Porter, Watts, Busza, Phetla and Pronyk (2008) "The association between school attendance, HIV infection and sexual behaviour among young people in rural South Africa. *Journal of Epidemiology and Community Health*, 62; 113-119
Objectives: To investigate whether the prevalence of HIV infection among young people, and sexual behaviours associated with increased HIV risk, are differentially distributed between students and those not attending school or college.
Design: A random population sample of unmarried young people (916 males, 1003 females) aged 14–25 years from rural South Africa in 2001.
Methods: Data on school attendance and HIV risk characteristics came from structured face-to-face interviews. HIV serostatus was assessed by oral fluid ELISA. Logistic regression models specified HIV serostatus and high-risk behaviours as outcome variables. The primary exposure was school attendance. Models were adjusted for potential confounders.
Results: HIV knowledge, communication about sex and HIV testing were similarly distributed among students and non-students. The lifetime number of partners was lower for students of both sexes (adjusted odds ratio (aOR) for more than three partners for men 0.67; 95% CI 0.44 to 1.00; aOR for more than two partners for women 0.69; 95% CI 0.46 to 1.04). Among young women, fewer students reported having partners more than three years older than themselves (aOR 0.58; 95% CI 0.37 to 0.92), having sex more than five times with a partner (aOR 0.57; 95% CI 0.37 to 0.87) and unprotected intercourse during the past year (aOR 0.60; 95% CI 0.40 to 0.91). Male students were less likely to be HIV positive than non-students (aOR 0.21; 95% CI 0.06 to 0.71).
Conclusions: Attending school was associated with lower-risk sexual behaviours and, among young men, lower HIV prevalence. Secondary school attendance may influence the structure of sexual networks and reduce HIV risk. Maximising school attendance may reduce HIV transmission among young people.

Jukes and Desai (2005)" Education and HIV/AIDS", Background paper for 2006 EFA Global Monitoring Report,
http://unesdoc.unesco.org/images/0014/001460/146012e.pdf
This background paper examines the relationship between education and HIV prevalence, the evidence of impact of HIV/AIDS on education systems in Africa with particular reference to teachers, and the relationship between education and literacy and treatment adherence.

Kelly, M.J. (2006a) *The Potential Contribution of Schooling Rolling Back HIV and AIDS,* Commonwealth Youth Development , University of South Africa.
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=5689_201&ID2=DO_TOPIC
See section 1.0 for abstract.

Rihani, M (2006) "Keeping the Promise: Five Benefits of Girls Secondary Education"
http://www.ungei.org/resources/index_1361.html
Benefits of girls' secondary education

1. A commitment to educating girls at the secondary level will pressure communities and countries to build more secondary schools for girls —Existence of secondary schools increases primary enrollment and quality.
2. Girls' secondary education results in social benefits to the whole society — Secondary education equips students with critical thinking enabling civic participation and democratic change.
3. Girls are a valuable health resource — Perhaps the most important benefits are found in the health field where girls and women are uniquely positioned to address some of the most significant health challenges facing developing countries.
4. Girls' secondary education can mitigate HIV and AIDS — Half of the over 40 million people living with HIV and AIDS are women and girls. Secondary school offers a valuable opportunity to catch girls when they are most vulnerable, when they can and must learn healthy behaviors. In Zambia, for example, AIDS spreads twice as fast among uneducated girls .
5. Girls' secondary education is a tool for poverty alleviation — Primary and secondary education produce high returns in terms of wage growth. Increasing the share of women with secondary education by 1 percentage point can boost the annual per capita income growth by 0.3 percent on average, according to a 100-country study by the World Bank.
Strategies:
- Increasing access and retention— Building more schools will reduce travel and costs and improve girls' safety. Clean, separate toilets for female students and teachers increases retention. Providing a safe environment, including reporting procedures for students and teachers, reduces sexual harassment.
- Improving equity/relevance/quality — Once girls gain access to secondary school education, they often become discouraged or drop out not only for financial reasons, but also out of frustration with a school environment where gender inequities prevail, classes are not participatory, teachers and teaching examples are biased towards males, and the curriculum is not relevant to their lives. Teachers must be trained in student-centered practices. Schools also should seize the opportunity for HIV and AIDS prevention education and teach responsible behavior and life skills.
- Enhancing motivation and payoff — To truly value their education, students, especially girls, need to see that it will lead to a job and an income. Additional training and strong female role models can help.

UNAIDS IATT on Education (2006a) Quality Education and HIV & AIDS. Paris, UNESCO.
http://unesdoc.unesco.org/images/0014/001461/146115e.pdf
See section 1.0 for abstract.

Vandemoortele and Delamonica (2000) *The 'Education Vaccine' Against HIV*, UNICEF
http://www.tc.columbia.edu/cice/archives/3.1/31vandemoortele_delamonica.pdf
This article focuses on the correlation between HIV infection and the level of education, the latter being a good proxy indicator for a person's overall socio-economic status. If the hypothesis holds true that, beyond the initial stage of the AIDS pandemic, education reduces the risk of HIV infection, then the new HIV infections will gradually become concentrated among illiterate and poor people as the epidemic spreads among the population.

World Food Programme (2006) *Literature Review on the Impact of Education Levels on HIV/AIDS prevalence Rates*, Rome: WFP accessed 21/08/08
http://www.wfp.org/food_aid/doc/Literature_Review.pdf
While HIV and AIDS continue to spread rapidly throughout Africa and Asia, especially among young people aged 15-24, children aged 5-14 remain largely free of the virus. This group has been termed the "window of hope" for limiting the spread and mitigating the damage being

wreaked by HIV. Education has been cited by several well-respected sources, including the World Bank, as one of the most important factors in helping to prevent this group from contracting HIV and AIDS. Relatively little research exists on the impact that education levels (i.e. number of school years completed) have on new cases of HIV (incidence) and the percentage of a population group which is HIV positive (prevalence). This literature review summarizes the research undertaken to date, drawing upon both qualitative and quantitative studies undertaken mostly in sub-Saharan Africa. It identifies gaps in the available research and raises some issues for WFP's programming on HIV and AIDS.

It appears that there is a shift in the quantitative evidence surrounding education and HIV prevalence. In the early 1990s, evidence suggested that populations with higher education levels were likely to have higher HIV rates. More recent evidence in countries such as Zambia and Uganda suggests that now, more years of education are increasingly associated with safer sexual behaviour and lower HIV prevalence. This is particularly true for young women with secondary education, who demonstrated
significantly lower HIV prevalence rates than their peers who had dropped out of school earlier. These findings argue in favour of WFP continuing to expand its efforts to attract children, especially girls, into school, and to link closely with effective HIV prevention education and awareness.

3.2.2 Non-formal education

Allemano and Nzioka (2008) "HIV and AIDS in formal and non-formal post-primary education and training in Africa: A Review of Selected Initiatives and Interventions" Working Document for ADEA Biennale on Education in Africa, May 2008, Mozambique
The study is an exploratory effort to identify issues and entry points for the consideration of HIV and AIDS in post-primary education and training (PPET) in Africa. The areas of education covered are general secondary and tertiary education as well as various types of non-formal education and training focused on preparing youth for employment. The study documents the importance of the HIV and AIDS issue by showing that the clients of PPET (particularly aged 12 to 18) are highly vulnerable to HIV infection because they are, in most cases, unmarried adolescents; young men and women preparing to enter their most productive years. Adolescent girls and young women are particularly vulnerable to HIV because of gender roles and physiological factors. It is therefore important that PPET play a more prominent role in protecting African youth from HIV infection in low-prevalence as well as in high-prevalence countries.

Boler 2003. *The Sound of Silence – Difficulties in Communicating on HIV/AIDS in Schools*. London, ActionAid. http://www.actionaid.org/docs/hivsoundofsilence.pdf
See section 3.1.1 for abstract.

Jacob, Shaw, Moriky, Hite and Nsubuga (2007) "HIV/AIDS Education: What African Youth Say is Effective" *Families in Society* p104-114
See section 3.1.2 for abstract.

Kim CR, Free C (2008) "Recent evaluations of the peer-led approach in adolescent sexual health education: A systematic review" in *International Family Planning Perspectives*. 2008 Jun;34(2):89-96
http://www.guttmacher.org/pubs/journals/3408908.html
Peer-led interventions have become a popular method of providing sexual health education to adolescents, but the efficacy of this approach and the methodological quality of recent trials

have not been systematically reviewed. Electronic and hand searches were conducted to identify quasi-randomized and randomized controlled trials of peer-led adolescent sexual health education published from 1998 to 2005. Studies were eligible if they had an appropriate comparison group, provided pre-intervention and post- intervention data, and reported all outcomes. Study results were summarized and, where appropriate, pooled; in addition, 10 aspects of studies' methodological quality were assessed. Thirteen articles met the inclusion criteria. Pooled, adjusted results from seven trials that examined the effects of peer-led interventions on condom use at last sex found no overall benefit (odds ratio, 1.0). None of the three trials that assessed consistent condom use found a benefit. One study reported a reduced risk of chlamydia (0.2), but another found no impact on STI incidence. One study found that young women (but not young men) who received peer-led education were more likely than non-recipients to have never had sex. Most interventions produced improvements in knowledge, attitudes and intentions. Only three studies fulfilled all 10 of the assessed quality criteria; two others met nine criteria. Despite promising results in some trials, overall findings do not provide convincing evidence that peer-led education improves sexual outcomes among adolescents. Future trials should build on the successful trials conducted to date and should strive to fulfil existing quality criteria.

Miller AN, Mutungi M, Facchini E, Barasa B, Ondieki W. An outcome assessment of an ABC-based HIV peer education intervention among Kenyan university students. Journal of Health Communication. 2008 Jun;13(4):345-356.
http://dx.doi.org/10.1080/10810730802063470
This study reports an outcome assessment on an HIV peer education intervention at the main campus of Kenyatta University in Nairobi, Kenya. A quasiexperimental separate sample pretest-posttest design was used. Campus-wide baseline and endline surveys were conducted with 632 and 746 students, respectively, soliciting information on HIV-related knowledge, attitudes, and behavior. After 2 years of on-campus intervention, no changes in behavior were evident with respect to either abstinence or number of sexual partners. Small but statistically significant changes were found in condom attitudes and behavior, and a large increase in HIV testing was evident. It is recommended that future research more specifically compare abstinence versus multiple option peer education programs, giving special attention to the role of peer educators as models.

Odukoya, Busari, Ateh-Abang (2006) “Contributions of non formal education to HIV prevention education in Nigeria: case study and inventory of NGO practices”
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=6784_201&ID2=DO_TOPIC
This paper is concerned with the need to address the fact that with over 5% of the population of Nigeria infected with HIV, and the adult mortality rate continuing to rise, Nigeria is now at a potentially explosive stage of the epidemic. In particular it is concerned with the role of Non-Formal Education (NFE) in combating the spread of HIV/AIDS. It begins by first outlining the numerous positive steps taken by the following organisations: the Nigerian Government, the education sector, Federal Parastatals, civil society, non-governmental organisations and donor agencies. Key target populations are then identified to clarify how HIV/AIDS preventive education can be integrated into existing NFE programmes. Three case studies on the Association for Reproductive and Family Health then follow showing how NFE can rapidly communicate HIV/AIDS prevention messages, effecting lasting behavioural change in people of all age groups and social classes, literate or not, and providing real hope of controlling the spread of the virus. With over 500 NGO´s using NFE approaches to combat the spread of HIV in Nigeria there is a clear need for their efforts to be coordinated. The paper concludes with an inventory of the main NGO´s and agencies using NFE interventions in Nigeria.

3.3. The Learning Environment

3.3.1 Schools as Centres of Care and Support

Association for the Development of Education in Africa (ADEA) (2006) Film: *The Teaching Profession United Against HIV/AIDS*. Paris: ADEA.
This video draws attention to the issues that teachers living with HIV face in their personal and professional lives through interviews with HIV-positive teachers talking about their experiences, classroom footage and conversations with students and parents. The video addresses the important role that people living with HIV and AIDS, and HIV-positive teachers in particular, have to play in HIV and AIDS education. It also examines the challenges, stigma and discrimination that HIV-positive teachers face from other educators, learners, parents and community members. The video was filmed in Kenya and highlights the work of the Kenya Network of HIV-Positive Teachers (KENEPOTE), an organization founded in 2003 by two HIV-positive teachers. The video supports the vision, mission and objectives of KENEPOTE, which include advocating for the rights and needs of HIV-positive teachers and working to reduce stigma and discrimination.

Badcock-Walters, P.J.; et al (in production); *Supporting the Educational Needs of HIV-Positive Learners: Country studies in Namibia and Tanzania*, UNESCO/ESART and Raison (Namibia) and Tamasha (Tanzania).

Bennell (2005) The Impact of the AIDS Epidemic on Teachers in Sub-Saharan Africa" in *Journal of Development Studies*, 41:3 440-466
http://pdfserve.informaworld.com/Pdf/AddCoversheet?xml=/mnt/pdfserve/pdfserve/23368-731304413-714003670.xml
This report presents the main findings and recommendations of an international research project, which has focused on assessing the impact of the HIV/AIDS epidemic on primary and secondary schooling in three countries, namely Botswana, Malawi and Uganda (BMU). Adult HIV prevalence rates were estimated to be 36% in Botswana, 21% in Malawi and 8% in Uganda in 1999. The report explores the following three areas: student prevention and the impacts on students and teachers.

Education International, the Education Development Center (EDC) and WHO. 2007. *Toolkit: Inclusion is the Answer: Unions Involving and Supporting Educators living with HIV*. Brussels, EI.
This toolkit was developed by EI, WHO, EDC to be used by teachers' unions and educators in countries around the world participating in the EFAIDS programme. It contains activities and suggestions to help unions work to eliminate HIV-related discrimination within teachers' unions and provide greater support for, and involvement of, HIV-positive educators in union activities. The information and suggested actions are organised around five themes – research, policy development, advocacy, publicity campaigns and training.

Kiragu, Karusa, Murungaru Kimani, Changu Manathoko, and Caroline Mackenzie. "Teachers matter: Baseline findings on the HIV-related needs of Kenyan teachers" *Horizons Research Update*. Washington, DC: Population Council. www.popcouncil.org/pdfs/horizons/ketchrsbslnru.pdf
See section 3.1.1 for abstract

Kelly, M (2000) *Planning for Education in the Context of HIV/AIDS* UNESCO/IIEP, Paris

http://hivaidsclearinghouse.unesco.org/ev.php?ID=1023_201&ID2=DO_TOPIC
This booklet examines briefly the nature and features of HIV/AIDS and the impact of the epidemic on development. Within this context, it examines the interaction between the epidemic and education from two perspectives: the use of education in preventing HIV transmission, and the impact of the disease on education systems. It deals more extensively with the latter aspect, analyzing how HIV/AIDS affects education in terms of demand, clientele (with special reference to orphans), supply, and such quality-related aspects as content, organization and funding. A recurrent theme is that the extensive two-way interaction between HIV/AIDS and educational provision necessitates a radical re-examination of many of the premises underlying education as currently delivered - education in an AIDS-infected world cannot be the same as education in an AIDS-free world.

Mathews, C. Boon, H, Flisher, AJ, Schaalma, HJ.(2006) "Factors associated with teachers' implementation of HIV/AIDS education in secondary schools in Cape Town, South Africa". *AIDS Care* May;18(4):388-97
See section 3.2.1 for abstract.

Sefhedi, S (2008) "In-school HIV &AIDS counselling services in Botswana: An exploratory study" Perspectives in Education , Uni of Pretoria, South Africa 26(1) 63 -
This exploratory study describes the provision of HIV&AIDS counselling services in Botswana junior secondary schools as perceived by teachers. A total of 45 teachers (age range = 20-55; teaching experience range = 0-21 years) from three schools participated. The participants completed a questionnaire on the types of HIV&AIDS-related counselling services provided in the junior secondary schools services, their self-rated HIV&AIDS counselling training needs and their perceived importance of the HIV&AIDS-related counselling services. Descriptive statistical analysis revealed a broad range of HIV&AIDS-related counselling services including life-skills education, care and support education and stigma reduction counselling. Teachers perceived a greater need for training in HIV&AIDS counselling skills and also in the use of information technology to support counselling.

UNAIDS Inter-Agency Task Team (IATT) on Education. (2006d) *Treatment Education: A Critical Component of Efforts to Ensure Universal Access to Prevention, Treatment and Care*. Paris, UNESCO. http://unesdoc.unesco.org/images/0014/001461/146114e.pdf
See section 1.0 for abstract.

UNAIDS IATT on Education. *Advocacy Briefing Note: Teachers Living with HIV.* Paris: UNESCO. http://unesdoc.unesco.org/images/0015/001586/158673e.pdf
This advocacy brief provides a brief analysis of the current situation with regard to HIV among teachers, identifies key advocacy actions and questions to ask for more information, and highlights IATT or IATT members' recent activity in this area.

UNESCO and Education International. (2007) *Supporting HIV-Positive Teachers in East and Southern Africa: Technical Consultation Report, 30 November – 1 December, 2006, Nairobi, Kenya*. Paris, UNESCO and EI-EFAIDS.
http://unesdoc.unesco.org/images/0015/001536/153603e.pdf
The report summarises the key points and recommendations that emerged over the course of the technical consultation co-organized by UNESCO and EI-EFAIDS on 30 November to 1 December in Nairobi, Kenya, to commemorate World AIDS Day 2006. The technical consultation brought together a range of different stakeholders including ministries of education, teachers' unions and HIV-positive teachers' networks from six countries in East and Southern Africa – the two regions in the world which are the most highly affected by HIV and AIDS –

namely Kenya, Namibia, Tanzania, Uganda, Zambia and Zimbabwe. The participants reviewed actions at global, country and community levels, examined barriers and success factors to responding to the needs of HIV-positive teachers, and made recommendations on how challenges can be overcome.

UNESCO. (2008c). *School-centred HIV and AIDS Care and Support in Southern Africa: Technical Consultation Report.* Paris, UNESCO.
http://unesdoc.unesco.org/images/0015/001578/157860e.pdf
This report provides a synthesis of discussions held at a UNESCO technical consultation on school-centred care and support in Southern Africa, held from 22 to 24 May 2007 in Gaborone, Botswana. The event brought together representatives from ministries of education, international and local NGOs, multilateral agencies and UNAIDS Cosponsors. The report provides a synthesis of discussions and highlights a set of principles and key elements needed to provide integrated care and support services for vulnerable children in schools.

UNESCO and WHO. (2006) *HIV and AIDS Treatment Education Technical Consultation Report: 22-23 November 2005, Paris*. Paris, UNESCO.
http://unesdoc.unesco.org/images/0014/001461/146120e.pdf
This report presents the key points and recommendations arising from a two-day technical consultation held in Paris in November 2005, within the framework of scaling-up HIV treatment and preparedness efforts in support of Universal Access to treatment, prevention, care and support. The meeting brought together technical practitioners with experience in HIV and AIDS treatment education from Government agencies, international and local NGOs, UN agencies, and networks of people living with HIV. Presenters provided insight into programme experience and lessons learned from activities in settings as diverse as: Belarus, Brazil, Bulgaria, Burkina Faso, Estonia, India, Kazakhstan, Kenya, Kyrgyzstan, Lithuania, Moldova, Nepal, Poland, Russia, South Africa, Swaziland, Thailand, Ukraine, Uganda, Uzbekistan, and Zambia.

WFP (2004a) *School Feeding Works: WFP School Feeding Surveys 2003-2004,* Rome
http://www.wfp.org/food_aid/school_feeding/LearnMore_Publications.asp?section=12&sub_section=3
This report summarises the results from the second set of school feeding surveys in 25 WFP assisted countries which collects data from 2003/2004. 14 of these countries are assisted through a development programme, 10 through a protracted relief and recovery operation (PRRO) and one in an emergency operation (EMOP). Seventeen out of the 25 countries surveyed are in Sub-Saharan Africa. These countries are Angola, Armenia, Burkina Faso, Central African Republic, China, the Republic of Congo, Democratic Republic of Congo, Djibouti, Eritrea, Guinea Bissau, Haiti, Iran, Kenya, Liberia, Mauritania, Myanmar, Nicaragua, the Russian Federation, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, The Gambia, Yemen, Zambia. Throughout the analysis, WFP-assisted schools have been classified into two groups: Schools with *existing* WFP programs and schools with *new* WFP programs. Schools with *existing* programs have been receiving WFP school feeding for at least one year prior to the year of survey. Schools belonging to *new* programs are scheduled to implement WFP assisted school feeding in the immediate future, or have just begun implementing school feeding.

WFP (2004b) *The Global School Feeding Report,* Rome
http://www.wfp.org/food_aid/school_feeding/LearnMore_Publications.asp?section=12&sub_section=3
The 2006 annual report on WFP's Global School Feeding Campaign. The report gives an overview of the status of WFP Food for Education programmes in the world and provides

highlights of activities carried out during the last year, such as work on the Essential Package of complementary activities around school feeding, WFP's work with other partners or school feeding in emergencies.

WFP (2004c) "School meals for an AIDS free future" ***In Brief***
http://hivaidsclearinghouse.unesco.org/ev.php?ID=4779_201&ID2=DO_TOPIC
In the lead up to World AIDS Day on 1 December, the heads of WFP and World Vision joined forces to urge a massive increase in donor funds for school feeding – a largely untapped yet effective way to attract children to school and stem HIV/AIDS infections among the young. In areas of extreme poverty and high HIV prevalence, overstretched families who are forced to spend their increasingly scarce resources on health care, find it difficult to keep their children in class, unless they have the incentive of school meals and take home rations. "We are calling for additional funds from major donors for school feeding because it is remarkably effective; it is cheaper to protect children now rather than treat adults later," said Hirsch, adding: "There's also a moral imperative to act." "School feeding is only one component in tackling HIV/AIDS, but it is key in the fight against the pandemic," said Morris. "We already have proof that it works. Governments and communities recognise this. What's lacking is sufficient investment and commitment to make a major difference."

WFP (2004d) ***Getting Started: HIV Education in School Feeding Programs,*** **Rome, WFP.**
School feeding programmes provide an entry point for supporting HIV and AIDS education. This document provides ideas and suggestions for integrating HIV and AIDS awareness as well as prevention activities into school feeding programmes. Readers are encouraged to select activities that fit their country context and capacities. Gathering information and becoming familiar with existing HIV and AIDS activities are noted as important first steps, along with initiating partnerships with other key stakeholders at the national, school and community level. The document includes suggestions, guiding principles and five programme examples from Uganda, Lesotho and Madagascar.

See also:

Edstrom, J, Lucas, Sabates-Wheeler, Simwaka (2008) ***A Study of the Outcomes of Take-Home Food Rations for Orphans and Vulnerable Children in Communities Affected by AIDS in Malawi*****, IDS, REACH, WFP and UNICEF, Nariobi**
UNESCO IATT\External docs for review\school feeding OVCs_Edstrom J.pdf

Media in Education Trust (MiET). 2006. ***Schools as Centres of Care and Support - Changing the Lives of Rural Children*****. Africa Ignite. Durban, MiET.**

Ministers of Education of East and Southern Africa. 2005. ***Regional Meeting of Ministers of Education of East and Southern Africa Communiqué. Delivery of Essential Services for Children: Care and Support for Children in Schools.***

World Bank, 2007. ***Courage and Hope: Stories from Teachers Living with HIV and AIDS in sub Saharan Africa.*** **Meeting of African Networks of Ministry of Education HIV & AIDS Focal Points, Nairobi, Kenya.**

3.3.2 Reducing Vulnerability

Abrahams, Matthews and Ramela (2006) "Intersections of 'sanitation, sexual coercion and girls' safety in schools" in *Tropical Medicine & International Health* 11 (5); 751-756
Objective: To explore safety for girls in schools, particularly how girls perceive and negotiate dangers and risks associated with the use of toilets. Methods: Participatory action research over a period of 3 days at three schools in South Africa. Informants were 81 girls 16 years and older, teachers and other relevant school personnel. Data were collected through focus group discussions, in-depth interviews, participant observation, mapping and photography. Results: Toilets had inadequate or no sanitation. Both their use and their avoidance were risky for female students and discouraged hygienic practices. Experience of sexual violence from male students and teachers was a major theme, but unrelated to school toilets. Male teachers used various strategies and opportunities to gain sexual access to the girls and previous experience of victimization prevented the girls from reporting them. Conclusion: To ensure a healthy school environment that promotes gender equality, all threats to safety, including the physical and social environment, must be considered.

ActionAid (2004) "Stop Violence Against Girls in School", Briefing Paper, ActionAid, Johannesburg
http://www.actionaid.org.uk/_content/documents/violenceagainstgirls.pdf
—Violence or the fear of violence is an important reason for girls not attending school. Besides being in itself an infringement of girls' rights, violence is also denying girls their right to education.
—ActionAid has carried out an initial study of the violence that girls encounter in and around schools and on the way to school, in 12 countries in Africa and Asia. It indicates that much violence against girls goes unreported and the scale of the problem has been underestimated.
—Violence against girls is a serious obstacle to the attainment of internationally agreed education goals including the Millennium Development Goals (MDGs) (UN 2000).
— Violence against girls takes many forms including rape, sexual harassment, intimidation, teasing and threats. It affects all girls, regardless of age, race, class, caste or location. Poverty, war and long journeys to school put girls at additional risk.
— The causes are rooted in male-dominated cultures which belittle or condone violence against girls and women. Violence is used as a tool for imposing male power. Girls themselves often regard violence as inevitable and feel powerless to complain.
— The HIV/AIDS epidemic is compounding the problem. Rape now carries the additional danger of HIV infection. Girls are the first to be taken out of school as families are affected by HIV/AIDS.
— ActionAid is demanding action from governments and the international community to protect girls from violence and increase the number of girls attending school.
— ActionAid's 12 demands to governments cover legislation and law enforcement, monitoring and data gathering, confidential complaint systems, abolition of school fees and changes to teacher training and the school curriculum.
—ActionAid calls on the international community to implement existing international frameworks, including the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (UN 1979) and to recognise the importance of violence and other barriers to girls' education by making these the subject of new targets in the MDGs.

ActionAid. (2007) *Making the Grade: A Model National Policy for the Prevention, Management and Elimination of Violence against Girls in School*. London, ActionAid.
http://www.actionaid.org/main.aspx?PageID=175
This model policy was developed by a group of education policy experts, civil society activists, teachers' unions, and women's rights experts. All of them were participants in a subregional

conference on violence against girls held in Harare,May 2006, which was convened by ActionAid International and The Open Society Initiative for Southern Africa. This model is designed to help SADC governments develop an integrated single comprehensive policy on violence against girls. It can be adapted to suit the local context because there is never a 'one size fits All' policy. Civil society groups and movements can use it as an advocacy tool in their negotiations with governments. This model policy focuses only on violence against girls within schools or the education sector. It does not claim to address violence in the family, or in society generally. Therefore, in adapting this model to your own context, it will be important to look at what already exists and how this will complement it – policy coherence is important.

Andersson, (2004) "National cross sectional study of views on sexual violence and risk of HIV infection and AIDS among South African school pupils" in *British Medical Journal*: Vol. 328 Issue 952
The authors aimed to investigate the views of school pupils on sexual violence and on the risk of HIV infection and AIDS and their experiences of sexual violence through a national cross-sectional study, comprised of 5162 classes in 1418 South African schools, or 269 705 school pupils aged 10-19 years in grades 6-11. The study aimed to answers to questions about sexual violence and about the risk of HIV infection and AIDS. The authors found that there were misconceptions about sexual violence were common among both sexes, but more females held views that would put them at high risk of HIV infection. One third of the respondents thought they might be HIV positive. This was associated with misconceptions about sexual violence and about the risk of HIV infection and AIDS. Around 11% of males and 4% of females claimed to have forced someone else to have sex; 66% of these males and 71% of these females had themselves been forced to have sex. A history of forced sex was a powerful determinant of views on sexual violence and risk of HIV infection.The authors could that the views of South African youth on sexual violence and on the risk of HIV infection and AIDS were compatible with acceptance of sexual coercion and "adaptive" attitudes to survival in a violent society. Views differed little between the sexes.

Burton, P (2005) "Suffering at school: results of the Malawi gender-based violence in schools survey" Institute for Security Studies, Pretoria
http://www.issafrica.org/pubs/Books/SufferingAtSchoolOct05/SufferingAtSchool.pdf
This report presents the major findings of the 2005 Violence against School Children in Malawian Schools Survey. This survey is the first of its kind to be conducted on a national scale in Malawi. The survey was conducted in government and government-aided primary and secondary schools. The violence fell into four categories: physical, sexual, economic and emotional. The children were divided into two groups: those who were 9-13 years of age and those who were 13 years and older. The objective of the survey was to determine the extent of personal safety (in relation to the nature of violence and perpetrators of violence) in schools and also to obtain perceptions of security and insecurity in and around schools (getting information on areas where children are at risk). The survey was conducted in February and March 2005.

Hargreaves J and Boler T (2006) *Girl Power: The Impact of Girl's Education on HIV and Sexual Behaviour*, ActionAid, GCE
See section 3.2.1 for abstract.

Mirsky, J. (2003) *Beyond Victims and Villains: Addressing sexual violence in the education sector*, Panos, London
http://www.panos.org.uk/PDF/reports/Beyond%20Victims.pdf
In this piece Mirsky argues that violence in the education sector is largely an unaddressed issue. Thus, in an attempt to fill the void that exists within the available information, Mirsky looks

at the role of the education system itself and its pivotal position in remedying the issue. The report begins with a presentation of the matters surrounding gender violence, human rights movements, definitions of violence, dialogue, sexual harassment in relation to the education sector, and more. Towards the end of the report, the author concludes that as a practical measure, institutions need to change the way they deal with gender relations and norms at all levels in the education system.

Leach, F. (2003) "Learning to be Violent: the role of the school in developing adolescent gendered behaviour" in *Compare* Vol 33 (3) 385-400.
This paper examines the role of the school, and of the peer group culture in particular, in constructing male and female identity among adolescents within the context of high levels of gender violence. It draws on a DfID-funded study into the abuse of girls in schools in three African countries (Zimbabwe, Malawi and Ghana). This study documents incidents of male teachers and older male pupils aggressively propositioning female pupils for sex, 'sugar daddies' preying on schoolgirls in the vicinity of the school, and generally high levels of corporal punishment and bullying. The abusive behaviour of boys towards girls (and also towards younger or more vulnerable boys) in school is in part the product of a peer culture which stresses male competition and sexual prowess as part of the process of learning to 'be a man'. Alongside other studies (Wood & Jewkes, 1998; Leach & Machakanja, 2000; Human Rights Watch, 2001) it reveals a worrying sexual socialisation process in which male violence is accepted as the norm in adolescent relationships while obedience and tolerance continue to be expected of girls. This can lead to aggressive male behaviour being normalised and perpetuated in adulthood. Schools and education authorities are guilty of contributing to this socialisation as long as they fail to take vigorous measures to stamp out all forms of violent behaviour and to actively promote constructive adolescent relationships. Lessons can be learnt from those few innovative programmes with adolescents which provide genuine examples of the promotion of equal gender relations, personal responsibility, respect for others and cooperation between individuals. It is part of the school's mission not just to foster academic learning but to teach life skills which include supporting adolescents in developing constructive relationships.

Plan Togo (2006) "Suffering to Succeed? Violence and abuse at schools in Togo"
http://www.crin.org/violence/search/closeup.asp?infoID=7937
This document is informed by 5 pieces of work commissioned by Plan Togo, with partnering organisations and consultants consisting of the Forum for African Women Educationalists (FAWE), Dr Maboudou Akouvi, Professor Amenyedzi, Judge Kounte Koffi, Passinda Kodjo Tapetlou, Houinato Bell'Aubr and Gbesso Assouan. Having established in the UN report that 'everyday violence against children' is a serious threat to the attainment of the Millennium Development Goals. In order for organisations and governments to work towards eradicating these problems a sufficient amount of information must be available so that an understanding of why children suffer in schools – and this is what Plan Togo has aimed to do in collating relevant information and data concerning violence against children in schools. On the basis of the 5 studies commissioned, Plan Togo has been able to comprehensively address the scale of the problem of violence in schools. Accordingly, the report calls the figures collated 'shocking' and points towards the 'broad social context' which often tolerates and helps perpetuate violence against children in schools – particularly violence against girls.
One of the most significant findings in this report demonstrates a 'crisis of confidence in the education system' amongst schoolchildren in regard to their marked work. The report states that 'none of the secondary schoolchildren we interviewed, from at least four schools, believes that the marks they receive at the end of the year reflect the amount of work they have done. There is a widespread belief that marks are the result of a series of trade-offs' which may include:

- Agreeing to have sex with your teacher

- Working in your teacher's fields
- Offering money and gifts to a teacher
- Discrimination on the basis of sex (e.g. between male teachers and male students).

Pulizzi and Rosenblum,(2007) *Building a Gender Friendly School Environment: A toolkit for educators and their unions*. Education International and Education Development Center, Inc, Brussels
This toolkit was developed by Education International, Education Development Center, Inc. and the World Health Organization to be used by teachers' unions and educators in countries around the world participating in the EFAIDS programme. The aim and activities of the toolkit are concerned with creating safe learning environments with equal opportunities for male and female learners. Key background information is provided such as the link between gender roles and well-being. The bulk of the toolkit is organised around fi ve identified priority areas to assist teachers' unions and educators in challenging gender stereotypes and helping learners develop a healthy gender identity.

3.3.3 Emergencies

UNAIDS IATT on Education (2007) *Tailoring the Education Message: Symposium Report.* Washington, DC: AED.
http://hivaidsclearinghouse.unesco.org/ev.php?ID=8387_201&ID2=DO_TOPIC
This is a report on the Symposium that accompanied the 15 – 16 May, 2007 meeting of the UNAIDS Inter-Agency Task Team (IATT) on Education. It consists of five parts:
1. The Introduction gives a brief summary of the purpose and operating procedures of the IATT, outlines the purposes, organization, and structure of the May 2007 Symposium, and briefly describes each of the hosting organizations.
2. This section reflects the morning talk on HIV, AIDS and education in emergency, conflict, post-conflict and fragile states, a panel discussion thereupon, break-out group findings, and implications for the IATT.
3. This section covers the afternoon talk on Masculinity – how male gender roles affect learning and learning spaces and impact on vulnerability to HIV, a panel discussion thereupon, break-out group findings, and implications for the IATT.
4. Informational session on US Presidential initiatives in relation to HIV, AIDS and Education
5. Conclusion

UNESCO/UNHCR (2007) "Educational responses to HIV and AIDS for refugees and internally displaced persons" Discussion Paper
unesdoc.unesco.org/images/0014/001493/149356e.pdf
This paper is intended for policy-makers and implementers in ministries of education, civil society organizations, and donor and development agencies involved in emergency, reconstruction and development responses. It examines the current situation with regard to conflict, displacement and HIV, and notes the protection risks faced by refugees and internally displaced persons. It recognises the importance of education for affected populations, and refers to the existing and significant work undertaken to develop minimum standards for education in emergency situations.

The paper then focuses on the key components of education sector responses to HIV and AIDS, and addresses the policy and programmatic measures required to address the prevention, treatment, care and support needs of refugees and internally displaced persons as well as the HIV-related stigma and discrimination that they often face.

3.4 Impact of HIV and AIDS on education systems

3.4.1 Education Supply – Teacher mortality and systems disruption

Badcock-Walters, P., Desmond, C., Wilson, D. and Heard, W. (2003) *Educator Mortality In-service in KwaZulu-Natal – A Consolidated Study of HIV/AIDS Impact and Trends*. Demographic and Socio-Economic Conference, Durban, March 2003.
http://hivaidsclearinghouse.unesco.org/ev_fr.php?ID=2562_201&ID2=DO_TOPIC
This study constitutes the second step in analysis of educator data in KwaZulu Natal, as part of an on-going research agenda, following the development of an educator demand model (described below) and linked to the development of a monthly data collection system (DEMMIS). The purpose of the study is to attempt to answer several important questions in the context of education planning in a high prevalence environment in the HIV/AIDS era, specifically:
• How important is educator mortality and attrition in the face of declining enrolment?
• What is the current rate of educator mortality in-service in the KwaZulu Natal (KZN) education system, by gender and age?
• What trends can be observed in the data?
• How much will the projected rate of attrition increase the demand for new educators?
• What implications will this have for teaching and learning?
The objective of the study therefore was to attempt to benchmark the mortality rate amongst educators *in-service* in KZN in order to inform future educator demand and supply planning and modelling.

Badcock-Walters, P.J., et al (2005); *Educator Attrition and Mortality in South Africa*: A study into gross educator attrition rates and trends, including analysis of the causes of these by age and gender, in the public schools system in South Africa 1997/8 – 2003/04
http://hivaidsclearinghouse.unesco.org/ev_fr.php?ID=5224_201&ID2=DO_TOPIC
This report provides the first overview of education attrition and mortality trends not reliant on estimates, models or projections, but on primary data contained in government registers. As such there was no sampling frame and no statistical deduction in terms of attrition - only analysis of hard data. The aim of the study is to estimate gross educator attrition rates and trends, including an analysis of the causes of these by age and gender, in the public schools system in South Africa. The magnitude and dimensions of educaor attrition and its components, including mortality were examined.

Bennell, Hyde and Swainson (2002) "The impact of the HIV/AIDS epidemic on the education sector in sub-Saharan Africa: A synthesis of the findings and recommendations of three country studies" Centre for International Education, Sussex University
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=1127_201&ID2=DO_TOPIC
This report presents the main findings and recommendations of an international research project, which has focused on assessing the impact of the HIV/AIDS epidemic on primary and secondary schooling in three countries, namely Botswana, Malawi and Uganda (BMU). Adult HIV prevalence rates were estimated to be 36% in Botswana, 21% in Malawi and 8% in Uganda in 1999. The report explores the following three areas: student prevention and the impacts on students and teachers

Bennell (2006a) "Teacher Mortality in sub-Saharan Africa: An Update", Brighton, Knowledge for Skills and Development
http://hivaidsclearinghouse.unesco.org/ev_fr.php?ID=5531_201&ID2=DO_TOPIC
The HIV/AIDS epidemic is expected to have a catastrophic impact on teachers in sub-Saharan Africa. It is also widely asserted that teachers themselves are a relatively high-risk group with respect to HIV infection. This note presents the most recent information that is available on HIV prevalence and mortality rates among teachers in ten countries, which are among the most seriously affected by the epidemic, namely South Africa, Botswana, Kenya, Lesotho, Malawi, Namibia, Swaziland, Tanzania, Uganda, and Zambia.

Bennell (2006b) *Antireroviral Drugs are Driving down Teacher Mortality in sub-Saharan Africa*, Brighton, Knowledge for Skills and Development
http://hivaidsclearinghouse.unesco.org/ev_fr.php?ID=7237_201&ID2=DO_TOPIC
The purpose of this note is to further update the data on teacher deaths in five high HIV prevalence countries, namely Botswana, South Africa, Swaziland, Tanzania and Zambia.

Grant, K.B., Gorgens, M. and Kinghorn, A. 2004. *Mitigating the Impact on HIV on Service Providers: What Has Been Attempted, What Is Working, What Has Not Worked, Where and Why?* A study commissioned by DfID Service Delivery Team in collaboration with USAID
http://www.mttaids.com/site/files/5562/Final_Research_Report_Mitigating_Impact_Of_HIV_On_Service_Providers.pdf

DFID commissioned this rapid assessment of strategies to mitigate the impact of HIV/AIDS on service providers in order to guide DFID strategy. However, other international partners also wish to obtain similar information, and the assessment was also supported by USAID through the Mobile Task Team on the Impact of HIV/AIDS on Education (MTT). The objectives of the study were to: 1) record strategies or interventions to mitigate the impacts of HIV/AIDS on service providers, and 2) improve understanding of which interventions have been successful or unsuccessful, and key factors that may explain successes and difficulties. Key sectors that were considered were the public service, health, welfare, education, agriculture, local government and uniformed services. The main focus was on resource-constrained countries in Africa and Asia. The investigation sought examples of formal and informal strategies, as well as public and non-state service providers' experience. The report is intended to feed into the development of DFID's Global HIV Strategy, as well as inform sectoral advisers, public sector reform initiatives, and dialogue with other development agencies.

Kelly, M.J. 2000. *Planning for Education in the Context of HIV/AIDS*. Paris, UNESCO/IIEP.
http://unesdoc.unesco.org/images/0012/001224/12405e.pdf
See section 3.3.1 for abstract.

Kelly, M. J. (2003) HIV/AIDS and Education in Eastern and Southern Africa: The Leadership Challenge and the Way Forward
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=1249_201&ID2=DO_TOPIC
This synthesis document was compiled by Michael Kelly baed on specially commissioned case studies from Kenya, Rwanda, Zimbabwe, Uganda, Tanzania, Malawi, Ethiopia, and South Africa. The national consultants convened to discuss the individual studies in order to produce a draft synthesis report which would be prepared by the lead consultant. Issues such as strategic plans, enrolment, teachers, orphans, young people, impact, school management and many others are addressed in the document. The way forward was also discussed and objectives for

working with communities, creating response programs and continuing support to educational institutions are also proposed.

Risley, C.L., and D.A.P. Bundy. (2007). *Estimating the impact of HIV&AIDS on the supply of basic education.* Paper presented at the second meeting of the World Bank/UNAIDS Economics Reference Group. London, Partnership for Child Development.
http://hivaidsclearinghouse.unesco.org/ev_fr.php?ID=8365_201&ID2=DO_TOPIC
The study described here explores, for three regions with generalized HIV and AIDS epidemics, the impact of the epidemic on teacher supply now and up to 2015, the target date for the achievement of education for all. The study uses the Ed-SIDA model to make projections of the impact on education supply for 53 countries in three areas hardest hit by the epidemic: sub-Saharan Africa, the Caribbean and the Greater Mekong sub-region of south-east Asia. The study estimates the incremental economic cost attributable to HIV, of providing sufficient teachers to achieve universal primary education by 2015, and projects the costs under two scenarios reflecting different levels of availability to teachers of care and support, including anti-retroviral therapy. The results suggest that, in sub-Saharan Africa, the 2006 costs to education are less than half those estimated in 2002, reflecting reductions in HIV prevalence and better understanding of HIV epidemiology. Never-the-less, the impact on teacher supply is estimated to be sufficient to derail efforts to achieve EFA in sub-Saharan Africa unless teachers have universal access to treatment, care and support. We compare regions and examine the impact on basic education of two treatment scenarios: status quo and provision of ART and VCT to all teachers requiring it between 2007-2015. The results suggest that universal access to testing and treatment is always beneficial to education supply. In sub-Saharan Africa, universal access is cost-effective on education returns alone. In the Caribbean, the benefits to education could pay for universal access to ART (but not VCT), and in South-East Asia, where the epidemic has a lower impact, the cost of testing and treatment is greater than the education costs saved.

UNAIDS IATT on Education (2006a) *Quality Education and HIV & AIDS.* Paris, UNESCO.
http://unesdoc.unesco.org/images/0014/001461/146115e.pdf
See section 1.0 for abstract.

See also:

Risley, C.L., and L.J. Drake. 2007. *Impact of HIV and AIDS on education in the Greater Mekong Sub-Region.* Study produced for "Greater Mekong Sub-Regional Workshop Strengthening the Education Sector Response to School Health, Nutrition and HIV&AIDS Programmes" Angkor Century Hotel Siem Reap, Cambodia 5 – 9 March 2007. London, Partnership for Child Development.
http://www.schoolsandhealth.org/documents/estimating%20the%20impact%20of%20hiv%20and%20aids%20on%20education%20in%20the%20greater%20mekong%20sub-region.pdf

3.4.2 Education Demand – Orphans and Vulnerable Children (OVC)

Ainsworth, M. and D. Filmer (2006) "Inequalities in Children's Schooling: AIDS, Orphanhood, Poverty and Gender." *World Development* 34(6):1099-1128.
The relationship between orphan status, household economic status, and child school enrollment across low-income countries varies substantially. Orphans sometimes have lower enrollment than non-orphans, but in many countries, the difference is small and not statistically significantly different from zero. The orphan enrollment gap is typically dwarfed by the gap between children from richer and poorer households. Often, even children from richer

households have low enrollments—suggesting constraints to enrollment for all children. Girl orphans are typically not disproportionately affected in terms of enrollment. Policies need to assess country-specific situations, focusing on the interaction between orphan status, poverty, and the education system more generally—before considering school-related orphan-specific mitigation measures.

Badcock-Walters, P.J.; et al (in production); *Supporting the Educational Needs of HIV-Positive Learners: Country studies in Namibia and Tanzania*, UNESCO/ESART and Raison (Namibia) and Tamasha (Tanzania).
See 3.1.1

Badcock-Walters, P.J., et a (2005) *Education Access and Retention for Educationally Marginalized Children: Innovations in Social Protection* (UNICEF/MTT) at
http://www.mttaids.com/site/files/5562/MTT_UNICEF_Report.pdf
A review of social protection mechanisms for orphans and vulnerable children (OVC) in the education sector in the Eastern and Southern Africa Region (ESAR) was commissioned by the United Nations Children's Fund (UNICEF) in 2005. This review was conducted by the MTT, and is one of three components of UNICEF's review of social protection mechanisms in the ESAR region, including reviews of the role of public works and cash transfers. The purpose of the education review was to: a) Identify sectoral players and the scope of their social protection programmes; b) Identify lessons learned; c) Provide a representative list of social protection programmes in the education sector; d) Identify a combination of these with the potential to provide a coordinated social protection programme; and e) Identify actions required to scale up social protection within the education sector in ESAR. In summary, the review set out to obtain answers to three questions: What is needed to get children into school (access) and keep children in school (retention) – particularly those who are educationally marginalised in some way? What factors are critical for their learning achievement? And, how can a strategic combination of these social protection mechanisms for education be scaled up and replicated?

Bennell, P. (2005) "The Impact of the AIDS Epidemic on the Schooling of Orphans and Other Directly Affected Children in sub-Saharan Africa" *The Journal of Development Studies* 41(3):467-48.
See section 3.3.1 for abstract.

Boler and Carroll, (2005b) "Addressing the educational needs of orphans and vulnerable children". London, ActionAid.
http://www.actionaid.org.uk/_content/documents/ovcpaper.pdf
This paper was developed by the working group on education and HIV/AIDS and summarises issues raised from a meeting in London on 10 December 2003. Millions of children around the world have been orphaned by the AIDS crisis. Aside from the emotional and psychological effects that losing a parent can have, there is clear evidence that orphaned children are dropping out of school at a higher rate than nonorphaned children. International agencies have been vocal in demonstrating this risk; however, the question remains open on how to best meet the educational needs of these orphans and vulnerable children (OVCs). This paper draws together discussion between interested researchers, practitioners and policy makers at a meeting in December 2003. The paper will briefly describe the educational disadvantage faced by OVCs, identifying a spectrum of vulnerability. A number of educational responses will then be summarised, with a specific focus on three: open and distance learning; school feeding schemes; andthe index for inclusion.

Case, Anne, Christina Paxson, and Joseph Ableidinger (2004), "Orphans in Africa: Parental Death, Poverty and School Enrollment," *Demography*, 41(3), pp. 483-508.
This article examines the impact of orphanhood on children's school enrollment in 10 sub-Saharan African countries. Although poorer children in Africa are less likely to attend school, the lower enrollment of orphans is not accounted for solely by their poverty. The authors find that orphans are less likely to be enrolled than are nonorphans with whom they live. Consistent with Hamilton's rule, the theory that the closeness of biological ties governs altruistic behaviour, outcomes for orphans depend on the relatedness of orphans to their household heads. The lower enrollment of orphans is largely explained by the greater tendency of orphans to live with distant relatives or unrelated caregivers.

Case, A., and C. Ardington (2006), "The Impact of Parental Death on School Outcomes: Longitudinal Evidence from South Africa," *Demography*, 43(3), pp. 401-420;
We analyze longitudinal data from a demographic surveillance area (DSA) in KwaZulu-Natal to examine the impact of parental death on children's outcomes. The results show significant differences in the impact of mothers' and fathers' deaths. The loss of a child's mother is a strong predictor of poor schooling outcomes. Maternal orphans are significantly less likely to be enrolled in school and have completed significantly fewer years of schooling, conditional on age, than children whose mothers are alive. Less money is spent on maternal orphans' educations, on average, conditional on enrollment. Moreover, children whose mothers have died appear to be at an educational disadvantage when compared with non-orphaned children with whom they live. We use the timing of mothers' deaths relative to children's educational shortfalls to argue that mothers' deaths have a causal effect on children's educations. The loss of a child's father is a significant correlate of poor household socioeconomic status. However, the death of a father between waves of the survey has no significant effect on subsequent asset ownership. Evidence from the South African 2001 Census suggests that the estimated effects of maternal deaths on children's outcomes in the Africa Centre DSA reflect the reality for orphans throughout South Africa.

Evans, D.K, and E. Miguel. (2007) "Orphans and Schooling in Africa: A Longitudinal Analysis," *Demography*, 44(1), pp. 35-57.
AIDS deaths could have a major impact on economic development by affecting the human capital accumulation of the next generation. The authors estimate the impact of parent death on primary school participation using an unusual five-year panel data set of over 20,000 Kenyan children. There is a substantial decrease in school participation following a parent death and a smaller drop before the death (presumably due to pre-death morbidity). Estimated impacts are smaller in specifications without individual fixed effects, suggesting that estimates based on cross-sectional data are biased toward zero. Effects are largest for children whose mothers died and, in a novel finding, for those with low baseline academic performance.

Fortson, J. (2007) The effect of HIV/AIDS on educational attainment *Background paper prepared for meeting of the World Bank/UNAIDS Economics Reference Group, 8 and 9 November 2007*
http://www.ukzn.ac.za/heard/ERG/EffectonEducationalAttainment.pdf
Using data from Demographic and Health Surveys for eleven countries in sub-Saharan Africa, the author estimates the effect of local HIV prevalence on individual human capital investment. The author finds that the HIV/AIDS epidemic has reduced human capital investment: living in an area with higher HIV prevalence is associated with lower levels of completed schooling and slower progress through school. These results are consistent with a model of human capital investment in which parents and children respond to changes in the expected return to schooling driven by mortality risk.

Gordon (2007) "Review of Sex, Relationships and HIV Education in Schools" Paris, UNESCO.
http://unesdoc.unesco.org/images/0016/001629/162989e.pdf
See section 3.2.1

Guarcello, L., S. Lyon, F. Rosati and C.A. Valdivia (2004) "The influence of Orphanhood on Children's Schooling and Labour: Evidence from Sub Saharan Africa." UCW Working Paper, UNICEF.
This paper explores possible links between orphanhood and two important determinants of child vulnerability - child labour and schooling - using household survey data from 10 Sub Saharan Africa countries. It forms part of a broader, on-going effort to improve policy responses to the orphan crisis and to child vulnerability generally. Marginal effects calculated after a bivariate probit indicate that becoming an orphan makes it generally less likely that a child has the opportunity to attend school and generally more likely that a child is exposed to work. The size and significance of these effects varies considerably across the 10 analysed countries, but in only one - Lesotho - does orphanhood appear to have no significant effect on either work involvement or school attendance. Double orphans appear to be especially vulnerable to schooling loss and work exposure in the analysed countries, underscoring the importance of the distinction between single and double orphans for policy purposes.

Landis, (2002) "Widening the Window of Hope: Using Food Aid to Improve Access to Education for Orphans and Other Vulnerable Children in Sub-Saharan Africa". Rome, World Food Programme
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=2768_201&ID2=DO_TOPIC
This study was undertaken to help the World Food Programme better understand the situation of orphans and other vulnerable children, especially their access to education, and to determine the role that food aid might play in helping them.

The paper is organized into the following main sections: an introduction that lays out some of the difficulties in addressing the educational situation of orphans and vulnerable children; a description of the characteristics of orphans and vulnerable children, including where they live and some of the challenges they face; the impact of HIV/AIDS on the education sector; important considerations for WFP involvement; possible food and non-food interventions to improve children's access to education, support the family and enhance the quality of service among those caring for and educating children affected by HIV/AIDS; and a conclusion.

Kelly, M.J. 2000. *Planning for Education in the Context of HIV/AIDS*. Paris, UNESCO/IIEP.
http://unesdoc.unesco.org/images/0012/001224/12405e.pdf
See section 3.3.1

Mishra et al (2005) "Education and nutritional status of orphans and children of HIV-infected parents in Kenya"
http://pdf.dec.org/pdf_docs/PNADD695.pdf
We examine how school attendance and nutritional status differ between orphaned and fostered children, and between children of HIV-infected parents and non-HIV-infected parents in Kenya. Our analysis is based on information on 2,756 children age 0-4 years and 4,172 children age 6-14 years included in the male subsample of the 2003 Kenya Demographic and Health Survey (DHS). The 2003 Kenya DHS is one of the first population-based, nationally representative surveys to link individual HIV test results for both males (age 15-54 years) and females (age 15-49 years) in one-half of the sample households with the full set of behavioral, social, and

demographic indicators included in the survey. Data are analyzed using both descriptive and multivariate logistic regression methods. The results indicate that orphaned and fostered children (age 6-14 years) are significantly less likely to be attending school than nonorphaned, non-fostered children of HIV-negative parents. We find no clear pattern of relationship between orphanhood and nutritional status of children, although fostered children are somewhat more likely to be stunted, underweight, and wasted than children of HIV-negative parents. Children of HIV-infected parents are significantly less likely to be attending school, more likely to be underweight and wasted, and less likely to receive treatment for ARI and diarrhea than children of non-HIV-infected parents. We also find that children of non-HIV-infected single mothers (with no spouse) are generally more disadvantaged in nutrition, health care, and schooling than children who live with both non- HIV-infected parents. There is no relationship between parent HIV status and either stunting or immunization coverage

Nyamukapa C, Gregson S. (2005) Extended family's and women's roles in safeguarding orphans' education in AIDS-afflicted rural Zimbabwe. *Soc Sci Med*. May;60(10):2155-67.
The extended family forms the basis for orphan care and education in sub-Saharan Africa. Initial absence followed by emergence of differentials in primary school enrollment between orphans and non-orphans have been attributed to the strength and subsequent HIV/AIDS-induced breakdown of extended family orphan care arrangements. Yet, few attempts have been made to describe how these arrangements are affected by HIV/AIDS or how they relate to observed patterns of childhood outcomes by sex and orphan status. We use a combination of quantitative and qualitative data to show that maternal orphans but not paternal or double orphans have lower primary school completion rates than non-orphans in rural Zimbabwe, and that these patterns reflect adaptations and gaps in extended family orphan care arrangements. Sustained high levels of primary school completion amongst paternal and double orphans--particularly for girls--result from increased residence in female-headed households and greater access to external resources. Low primary school completion amongst maternal orphans results from lack of support from fathers and stepmothers and ineligibility for welfare assistance due to residence in higher socio-economic status households. These effects are partially offset by increased assistance from maternal relatives. These findings indicate that programmes should assist maternal orphans and support women's efforts by reinforcing the roles of extended families and local communities, and by facilitating greater self-sufficiency.

UNAIDS Inter-Agency Task Team on Education (2004) *The Role of Education in the Protection, Care and Support of Orphans and Vulnerable Children Living in a world with HIV and AIDS*. Paris, UNESCO.
http://unesdoc.unesco.org/images/0013/001355/135531e.pdf
This report describes the contribution of education to the protection, care and support of orphans and other vulnerable children, as set out in the Framework for the Protection, Care and Support of Orphans and Vulnerable Children Living in a World with HIV/AIDS. Intended to provide guidance for investments and interventions, it presents the broad lines of action considered necessary for education-related responses to orphans and other children made vulnerable by HIV and AIDS. In particular, this paper draws upon and seeks to logically relate education responses to the overlapping commitments made in the United Nations General Assembly Special Session on HIV/AIDS (2001), the Millennium Development Goals, Education for All, and the Convention on the Rights of the Child.

UNAIDS Inter-Agency Task Team on Education. (2006a) *Education Sector Global HIV & AIDS Readiness Survey 2004: Policy Implications for Education and Development*. Paris, UNESCO.
http://unesdoc.unesco.org/images/0014/001446/144625e.pdf.

See section 1.0 for abstract.

UNICEF, UNAIDS, USAID (2004) "Children on the Brink"
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=4272_201&ID2=DO_TOPIC
This report contains the most current and comprehensive statistics on children orphaned by AIDS and other causes (appendix 1). Unlike previous editions of *Children on the Brink*, which included data for children under age 15, this edition provides data for children under age 18. This change brings the statistics in line with the international definition of childhood. It also recognizes that orphans and vulnerable children are not necessarily young children and that problems caused by orphaning extend well beyond age 15. The available data in fact suggest that adolescents make up the majority of orphans in all countries. As another new feature, this report also includes estimates of the number of children who became orphans in the last year. The methodology explaining how all estimates are calculated is described in appendix 2. This edition of *Children on the Brink* also examines the changing developmental needs of orphans and other children made vulnerable by HIV/AIDS as they progress through childhood. From infancy through age 17, a child passes through a number of life-cycle stages. HIV starts to affect a child early in a parent's illness, and its impact continues through the course of the illness and throughout the child's development after the parent's death.
Children who are deprived of the guidance and protection of their primary caregivers are more vulnerable to health risks, violence, exploitation, and discrimination. Policymakers, leaders and practitioners in public health and other development sectors, and communities and families need to provide care and support to orphans (from all causes) and children made vulnerable by HIV/AIDS with an understanding of their stages of development and changing needs.

UNICEF (2008) *Children and AIDS: Second Stocktaking Report*. New York, UNICEF.
http://www.unicef.org/publications/files/ChildrenAIDS_SecondStocktakingReport.pdf
This report reviews advances made over the past year or so in four areas where HIV and AIDS affect children. It finds that most countries have made important gains in preventing mother-to-child transmission of HIV and in paediatric treatment. Some countries have made progress towards HIV prevention goals, and more AIDS-affected children are benefiting from protection, care and support services. But much more remains to be done. The report also explains the need for improved norms, standards and guidelines to ensure effective implementation of programmes.
This is the second stocktaking report since UNICEF, as part of its work as a UNAIDS cosponsoring agency, issued a Call to Action to *Unite for Children, Unite against AIDS* in October 2005. A companion volume, *Children and AIDS: Country Fact Sheets*, presents statistical data for 157 countries and territories.

See also:

Timaeus, I. and T. Boler (2007) "Father figures: the progress at school of orphans in South Africa." Unpublished manuscript, London School of Hygiene and Tropical Medicine.

3.5 Policy Response

3.5.1 Mainstreaming HIV and AIDS into education policy

Boler and Carrol (2005a) *Deadly Inertia? A Cross-Country Study of Educational Responses to HIV and AIDS*. Brussels, GCE.

www.campaignforeducation.org/resources/Nov2005/ENGLISHdeadlyinertia.pdf
See section 3.2.1 for abstact.

ILO and UNESCO. (2006a) *HIV/AIDS Workplace Policy for the Education Sector in the Caribbean*. Geneva, ILO.
http://unesdoc.unesco.org/images/0014/001472/147278E.pdf.
The policy is the result of a sub-regional workshop held in 2005 in Jamaica, which brought together representatives of government (Ministries of Education and Labour and National AIDS Commissions), labour (unions representing teachers and other education sector workers) and private sector employers from five Commonwealth Caribbean countries (Barbados, Belize, Guyana, Jamaica and Trinidad & Tobago).

The workplace policy discussed and agreed during the workshop is adapted and specific to the region. Key issues addressed in the HIV & AIDS workplace policies include the following key areas of action: prevention of HIV through workplace prevention, education and training programmes; reduction of vulnerability arising from unequal gender and staff/student (or learner) relationships; elimination of stigma and discrimination on the basis of real or perceived HIV status; care, treatment and support of staff and students who are living with and/or affected by HIV; and management and mitigation of the impact of HIV and AIDS in education institutions.

ILO and UNESCO. (2006b) *An HIV and AIDS Workplace Policy for the Education Sector in Southern Africa*. Geneva, ILO.
http://unesdoc.unesco.org/images/0014/001469/146933E.pdf
The policy is the result of a sub-regional workshop held in 2005 in Maputo, which brought together tripartite representatives from seven countries (Botswana, Lesotho, Mozambique, Namibia, South Africa, Swaziland, Zambia), along with representatives of regional and international organizations.
The workplace policy discussed and agreed during the workshop is adapted and specific to the region. Key areas of action addressed in the HIV & AIDS workplace policies include: prevention of HIV through workplace prevention, education and training programmes; reduction of vulnerability arising from unequal gender and staff/student (or learner) relationships; elimination of stigma and discrimination on the basis of real or perceived HIV status; care, treatment and support of staff and students who are living with and/or affected by HIV; and management and mitigation of the impact of HIV and AIDS in education institutions.

Kelly, M. J. 2005.*The Potential Contribution of Schooling to Rolling Back HIV and AIDS.* Commonwealth Youth and Development Series. Johannesburg, University of South Africa. http://hivaidsclearinghouse.unesco.org/ev_fr.php?ID=5689_201&ID2=DO_TOPIC
See section 1.0 for abstract.

Kelly, M.J. (2006b). Module 1.2: The HIV/AIDS Challenge to Education. *Educational Planning and Management in a World with AIDS: Training Materials*. Paris, UNESCO/IIEP.
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=5938_201&ID2=DO_TOPIC
In partnership with the Mobile Task Team on the Impact of HIV/AIDS on Education (MTT), a series of training materials has been developed to:

- increase access for a wide community of practitioners to information concerning HIV/AIDS and educational planning and management;

- expand the capacity and skills of educational planners and managers to conceptualize and analyse the interaction between the epidemic and educational planning and management, as well as;
- plan and develop strategies to mitigate its impact.

By pooling together the unique expertise of both organizations, the series provides a comprehensive guide to developing effective responses to HIV and AIDS in the education sector. The extensive range of topics covered, from impact analysis to policy formulation, resource mobilisation and management structures, constitute an invaluable resource for all those interested in understanding the processes of managing and implementing strategies to combat HIV and AIDS.

Accessible to all, the modules are designed to be used in various learning situations from independent study to face-to-face training. As such they can be used by individuals as well as training institutions in different courses and workshops.
As the series develops, it will be complemented by additional modules to respond to the wide-ranging development of professional competence needed to manage HIV and AIDS in the education sector. Below is the list of modules currently available or forthcoming. Other modules are in preparation and will cover issues related to the workplace, tertiary education and responses at the school level.

UNAIDS Inter-Agency Task Team on Education. (2006b). *Education Sector Global HIV & AIDS Readiness Survey 2004: Policy Implications for Education and Development*. Paris, UNESCO.
http://unesdoc.unesco.org/images/0014/001446/144625e.pdf.
See section 1.0 for abstract.

UNAIDS Inter-Agency Task Team (IATT) on Education. (2008b) *Toolkit for Mainstreaming HIV and AIDS in the Education Sector: Guidelines for Development Cooperation Agencies.* Paris, UNESCO.
http://unesdoc.unesco.org/images/0015/001566/156673E.pdf
This toolkit aims to help education staff from development cooperation agencies, including both development- and humanitarian-oriented multilateral and bilateral agencies as well as non-governmental organizations (NGOs) and other civil society organizations, to support the process of mainstreaming HIV and AIDS into education sector planning and implementation. It provides resources and support to assess the progress countries have made with respect to HIV and AIDS mainstreaming; to identify entry points; and to establish priorities for advocacy and action. It is designed to be used as a reference tool or a resource for training and discussion, depending on the local needs and context.

UNAIDS Inter-Agency Task Team on Education (2008c) *Improving the education response to HIV and AIDS: lessons of partner efforts in coordination, harmonisation, alignment, information sharing and monitoring in Jamaica, Kenya, Thailand and Zambia,* UNESCO
http://unesdoc.unesco.org/images/0015/001586/158683e.pdf
See section 1.0 for abstract.

See also:

IIEP/UNESCO Educational Planning and Management in a world with AIDS.
www.unesco.org/iiep/HIV_CD_ROM/home.pdf

3.5.2 International Support for HIV and AIDS education

Bakilana, A, Bundy, D, Brown, J and Fredriksen, B (2005) *Accelerating the Education Sector Response to HIV/AIDS in Africa: A Review of World Bank Assistance*, Discussion Paper for World Bank Global HIV/AIDS Program, Washington
http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=6455_201&ID2=DO_TOPIC
This report examines World Bank financing for the Education Sector HIV/AIDS Response in Sub-Saharan Africa up to mid-2004. The review was undertaken in response to a consultation with African countries which identified a need for information on how the World Bank education sector was responding to the epidemic through its sectoral assistance programs and through its participation in the Multi-Country HIV/AIDS Program (MAP). Documents and data were reviewed, and key informants interviewed. There are four key findings of the review. (1) There is a need to increase significantly World Bank assistance for the education sector response to HIV/AIDS, from both the MAP and education sector sources. (2) The perception that MAP funding is substituting for education sector funding of the HIV/AIDS response is not supported by the evidence. (3) Successful MAP disbursement to education followed the development of a strong education sector response which was associated with national commitment, motivated and knowledgeable task team leaders, and specialized technical assistance for program preparation. (4) Lack of strong National HIV/AIDS Commission (NAC) involvement in the education sector is still a major challenge to the successful implementation of education sector activities through the MAP processes. The review offers recommendations for countries and donors, and specifically for the World Bank.

Boler and Carrol (2005a) *Deadly Inertia? A Cross-Country Study of Educational Responses to HIV and AIDS*. Brussels, GCE.
www.campaignforeducation.org/resources/Nov2005/ENGLISHdeadlyinertia.pdf
See section 3.2.1 for abstract.

UNAIDS (2005) *Global Task Team on Improving AIDS Coordination among Multilateral Institutions and International Donors*. Geneva, UNAIDS.
http://data.unaids.org/Publications/IRC-pub06/JC1125-GlobalTaskTeamReport_en.pdf.
The Global Task Team recognizes that the world must do more to effectively tackle AIDS in the years to come. Strengthening coordination, alignment and harmonization, in the context of the "Three Ones" principles, UN reform, the Millennium Development Goals, and the OECD/DAC Paris Declaration on Aid Effectiveness, is essential for rapid scale-up of the AIDS response. National ownership of plans and priorities is the overarching rubric that efforts to harmonize and align must support and under which coordination efforts should occur. Within this rubric, the Global Task Team has focused primarily on ways UN system organizations and the Global Fund to Fight AIDS, Tuberculosis and Malaria can rapidly improve the alignment and quality of their support to national AIDS responses, make money currently available work for people infected and affected by HIV, and ultimately support the scale-up of prevention and treatment programmes.

UNAIDS Inter-Agency Task Team on Education. (2008c). Improving the education response to HIV and AIDS: lessons of partner efforts in coordination, harmonisation, alignment, information sharing and monitoring in Jamaica, Kenya, Thailand and Zambia.
http://unesdoc.unesco.org/images/0015/001586/158683e.pdf
See section 3.4.3 for abstract.

UNESCO (2008) *EDUCAIDS Framework for Action.* Paris, UNESCO.
http://unesdoc.unesco.org/images/0014/001473/147360e.pdf

This revised framework for EDUCAIDS (the UNAIDS Global Initiative on Education and HIV & AIDS) identifies the need for strong education sector involvement in HIV and AIDS. It explains what EDUCAIDS is (emphasising partnership and action at the country level) and implementation support that is available (tools, technical support and capacity building, and resource mobilisation). It outlines five essential components for comprehensive education sector responses to HIV and AIDS and emphasises that all of these five components need to be in place and working well to ensure optimal success in the response to the epidemic.