



# Promoting adolescent sexual and reproductive health through schools in low income countries: an information brief

Department of Child and Adolescent Health and Development

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## ABBREVIATIONS

CDC	Centers for Disease Control and Prevention
DASH	Division of Adolescent and School Health
EDC	Education Development Center
EDC/HHD	Education Development Center, Health and Human Development
EDUCAIDS	Global Initiative on Education and HIV/AIDS
EFAIDS	Education for AIDS
FAO	Food and Agriculture Organization of the United Nations
FRESH	Focusing Resources on Effective School Health
GSHS	global school-based student health survey
IATT	UNAIDS Inter-Agency Task Team (on Education)
RAAPP	rapid assessment and action planning process
SRH	sexual and reproductive health
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDCP	United Nations Drug Control Programme
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
WHO	World Health Organization

## INTRODUCTION

This information brief has been prepared to support World Health Organization (WHO) staff working at the international, regional and national levels to promote the uptake of adolescent SRH through schools in low-income countries. It is drafted by Meena Cabral de Mello, Adolescent Health and Development Team, WHO and integrates the review and valuable suggestions of team members including Venkatraman Chandra-Mouli, Jane Ferguson, Paul Bloem, Krishna Bose, and Garrett Mehl. It is also enriched by constructive inputs from Gauden Galea, Coordinator, Health Promotion Team, WHO; Carmen Aldridge, Education Development Center, WHO Collaborating Center, United States of America; and Helen Herrman, Professor of Psychiatry and Director of WHO Collaborating Centre in Mental Health, Australia. Valentina Baltag, Regional Advisor in Adolescent Health, WHO EURO; Ewa Nunes Sorenson, Advisor on Adolescent Health, Pan American Health Organization; Matilde Maddaleno, Regional Advisor in Adolescent Health, Pan American Health Organization; Neena Raina, Regional Advisor in Adolescent Health, WHO SEARO; and Rajesh Mehta, National Programme Officer, WHO India, provided invaluable guidance and comments for improving the content of this brief.

School-based sexual and reproductive health (SRH) education is one of the most important and widespread ways to help adolescents to recognize and avert risks and improve their reproductive health (1, 2). This information brief stresses the public health importance of adolescent SRH. It also outlines the contribution WHO staff at global, regional and country levels can make in assisting countries select effective strategies and actions to support school health education interventions. The brief is based on research and evaluated programmes that have been effective with adolescents in similar circumstances.



It is consistent with the approaches and frameworks that the partnership of agencies of school health utilizes for designing and implementing programmes and policies for adolescents. Box 1 contains definitions of some key terms used in the text.

Education itself can be a powerful vehicle for improving the health of adolescents. Higher levels of education are linked with economic growth and better health and reproductive health outcomes, including condom use, use of health services, knowledge about HIV and lower HIV seroprevalence. School-based HIV and SRH education can provide the practical knowledge and skills needed to reduce adolescents' vulnerability to reproductive health problems, including HIV infection. The knowledge and tools necessary to implement effective programmes are also available as a result of research and programme evaluations. Education has been shown to be a cost-effective means of addressing adolescent reproductive health and the HIV pandemic (7).

### Box 1: DEFINITIONS

**Sexual and reproductive health (SRH) education.** Educational experiences that develop the capacity of adolescents to understand their sexuality in the context of biological, psychological, sociocultural and reproductive dimensions and to acquire skills in managing responsible decisions and actions with regard to SRH behaviour (3). SRH education aims to achieve a range of behavioural and health outcomes, including reduced sexual activity (including postponing age at first intercourse and promoting abstinence); reduced number of sexual partners; increased contraceptive use (especially use of condoms among adolescents who are sexually active, for dual protection); lower rates of child marriage; lower rates of early, unwanted pregnancy and resulting abortions; lower rates of infection with HIV and other sexually transmitted infections (STIs); and improved nutritional status (4). WHO recommends that SRH education be provided within the context of schools that promote health.

**Health promotion.** As stated in the Ottawa Charter (5), a process of enabling people to increase control over and to improve their health. This includes sexual and reproductive health.

**Health-promoting school.** Educational establishment where all members of the school community work together to provide students with integrated and positive experiences and structures that promote their health, including skills-based curricula in health, safe and healthy environments, appropriate health services and the involvement of families and the wider community in efforts to promote health (6).

## 1 WHY IS THE EDUCATIONAL SETTING IMPORTANT TO REACH ADOLESCENTS AND TO PROMOTE THEIR HEALTH?

In 2010, there will be more 10–19-year-olds on the planet than ever before – approximately 1.25 billion (8), 83% of whom will live in developing countries and will be most vulnerable to a range of reproductive health problems, including too-early pregnancy and childbearing; infertility; genital mutilation; unsafe abortion; STIs, including HIV; and gender-based violence, including sexual assault and rape. These problems are preventable and education is a key component of prevention. For example, the few countries that have successfully decreased national HIV prevalence have achieved those gains mostly by encouraging safer sexual behaviours in adolescents (9).

Schools are the primary institutions able to reach a majority of adolescents, while also having an impact at the community level. Four out of every five of the world's children aged between 10 and 15 are enrolled in secondary education (66% in 2005), which is now considered as part of compulsory education in most countries (10, 11). Schools have the infrastructure, the tools and the staff trained to teach. In many developing countries teachers assume an important role in the community, while also serving as

role models to many adolescents (12). In addition, schools may often be the only place where adolescents can obtain accurate information on reproductive health. By providing reproductive health programmes early, schools encourage the formation of healthy sexual attitudes and practices. This is easier than changing well-established unhealthy habits later. Thus schools can promote healthy messages and establish helpful norms about SRH (13). Schools can also help create health equity: school health programmes can ensure that health promotion and care are accessed by poor and disadvantaged adolescents, especially girls, who would not otherwise have access to health information and services (12).

Many of the elements needed to build school-based programmes already exist. Some countries have ongoing school health programmes that can be expanded to include reproductive health (14). Besides providing education, schools can also provide basic services and counselling, or refer students to local adolescent-friendly health or counselling services when appropriate.

## 2 WHAT EVIDENCE IS THERE TO SHOW THAT ACTIONS IN EDUCATIONAL SETTINGS CAN PROMOTE THE SRH OF ADOLESCENTS?

The 2007 *Lancet* article on global perspectives on the sexual and reproductive health of adolescents (15) recommends that public health officials and policy-makers seriously consider curriculum-based programmes as an important component of efforts to achieve regional and national goals for preventing STIs, including HIV, and early pregnancy in adolescents. This recommendation is based on the findings of a major review of the effect of 85 evaluated school-based sex education programmes in developed and developing countries. The findings show that in about two thirds (65%) of the studies reviewed, school health education interventions were effective in creating a significant positive effect on one or more of the five reproductive health behaviours evaluated; only 7% of the studies found a significant negative effect; and a third (33%) of the programmes had a positive effect on two or more outcomes. The behaviours evaluated were sexual initiation, frequency of sexual intercourse, number of sexual partners, condom use and contraceptive use. The programmes were successful in all types of settings and countries (developing and developed), among males and females, for different age groups and among varying income levels. Also, many programmes had positive effects on the factors that determine sexual risk behaviours, including knowledge about STIs and pregnancy, awareness of risk, values and attitudes toward sexual topics, self-efficacy (negotiating condom use or refusing unwanted sex) and intentions to abstain or restrict the number of sexual partners (15–17).

More recently, the conclusions of a focused systematic review of school-based SRH education interventions in sub-Saharan Africa

show that the most significant changes occur in knowledge and attitudes regarding HIV and other STIs (18). The next most significant changes are in outcomes relating to future intentions, followed by changes in actual sexual risk behaviour. Behavioural change in relation to abstinence was easier to effect among baseline virgins, while condom use was the more practicable sexual risk protective behaviour for adolescents who were already sexually active before the school health intervention.

Evaluations of school health interventions have shown that to be effective specific features must be present in education and information programmes. The following features have proved to be critical for effective education and information programmes:

- **Provide evidence and reassurance to policy-makers, parents, teachers and school officials of the beneficial effects of SRH education programmes.**

Lessons learnt from a series of major reviews of research and programme data indicate that providing students in developing and developed countries with sex information, skills and services will not encourage earlier initiation of sex. Much evidence indicates that well-guided skill-based programmes are likely to promote abstinence and help adolescents to delay first sex, and tend to reduce the frequency of sex and number of sexual partners, thereby providing a definitive response to those who argue that reproductive health programmes for children may encourage sexual initiation or promiscuity (2, 13, 19–21).

- **Implement SRH education programmes that are curriculum based and led by adults.**

After comparing various curriculum-based and non-curriculum-based intervention programmes led by adults or by peers, a study of the effectiveness of sex education and HIV education interventions in schools in developing countries found that the most effective programmes were curriculum-based programmes led by adults, including teachers, health servers, social workers and community members, and recommended that they should be implemented more widely (22). Health education programmes, however, cannot be carried out solely by social workers, school nurses and school administrators, but require the hard work and collaboration of teachers. Teachers should receive sufficient support, time and training, including pre-service and in-service training and practice, and they must be supported by school authorities, policy-makers and the wider community (23).

- **Ensure skill-based intervention programmes**

Such programmes will be aimed at helping adolescents develop the knowledge, attitudes, values and skills – including interpersonal skills, critical and creative thinking, decision-making, and self-awareness – needed to make sound health-related decisions. For example, to avoid early pregnancy a young woman may need decision-making skills (“What

are my options?”), value clarification skills (“What is important to me?”), self-management skills (“How can I protect myself? How can I achieve my goals?”) and interpersonal skills (“How do I resist pressure to have sex and communicate my decision to others?”). Ultimately, it is the interplay between these skills that produces powerful behavioural outcomes (24).

**SRH education must also include information and skills about both abstinence and contraception** in order to be effective in delaying the onset of first sexual intercourse, reducing the frequency of sex and number of sexual partners and ensuring that adolescents protect themselves when they become sexually active (13, 19–21). Findings indicate that the effects of curriculum-based programmes are quite robust with different types of adolescents, and across communities, countries and cultures throughout the world. Typically, effective sex education programmes reduced the amount of sexual risk taking by up to a third (15).

- **Incorporate the identified characteristics of successful SRH education programmes**

Recent reviews of the impact of sex and HIV education programmes on the sexual behaviour of adolescents (25) and the prevention of HIV in adolescents in developing countries (16) have enabled identification of **17 common characteristics** that effective programmes share. Source: Kirby et al 2005 (25).

## Box 2: CHARACTERISTICS OF EFFECTIVE SEX EDUCATION PROGRAMMES

### Curriculum development

1. Involved people with different backgrounds in theory, research, and sex education.
2. Planned specified health goals and identified behaviours affecting those goals, risk and protective factors affecting those behaviours, and activities to address those factors.
3. Assessed relevant needs and assets of target group.
4. Designed activities consistent with community values and available resources (e.g. staff skills, staff time, space, supplies).
5. Pilot-tested curriculum activities.

### Content of curriculum

1. Created safe social environment for youth participants.
2. Focused on at least one of three health goals: prevention of HIV, of other STIs, and/or of unintended pregnancy.
3. Focused narrowly on specific sexual behaviours that lead to these health goals (e.g. abstaining from sex, using condoms); gave clear messages about these behaviours; addressed how to avoid situations that might lead to these behaviours.

4. Targeted several psychosocial risk and protective factors affecting these behaviours (e.g. knowledge, perceived risks, attitudes, perceived norms, self-efficacy).
5. Included multiple activities to change each of the targeted risk and protective factors.
6. Used teaching methods that actively involved youth participants, and helped them to personalize the information.
7. Made use of activities appropriate to the young people's culture, developmental level, and previous sexual experience.
8. Addressed topics in a logical order.

### Curriculum implementation

1. Selected educators with desired characteristics, and provided training in curriculum.
2. Secured at least minimum support from appropriate authorities (e.g. ministry of health, school district, community organization).
3. If needed, implemented activities to recruit youth and overcome barriers to their involvement in programme.
4. Implemented virtually all curriculum activities with fidelity.

These characteristics relate to the development, content and implementation of the curriculum. Based on these curricular characteristics and lessons learnt in implementing SRH curricula in different field contexts, Family Health International (FHI) has developed, and published in a manual, **24 standards** that can be applied to curriculum-based reproductive health and HIV education programmes (26). Programme designers, curriculum developers, educators, managers, evaluators and others can use the manual to assess the quality of existing programmes and guide the adaptation or development and implementation of a new curriculum. For example, the United

Nations Children's Fund (UNICEF) is using the standards to guide programmes in more than a dozen countries. For further tips, examples and context, see *Standards for curriculum-based reproductive health and HIV education programs* at: <http://www.fhi.org/en/Youth/YouthNet/Publications/otherpubs.htm>.

- **Provide access to services and commodities for prevention of reproductive health problems.**

In addition to information and life skills, SRH education interventions need to be complemented by adolescent-friendly

### Box 3: STANDARDS FOR SRH/HIV EDUCATION FOR ADOLESCENTS

Below are standards for developing or adapting a reproductive health or HIV education curriculum for young people in developing countries, based on a comprehensive review of evaluated programmes and field experiences. For tips, examples and context, see *Standards for curriculum-based reproductive health and HIV education programs* at: <http://www.fhi.org/en/Youth/YouthNet/Publications/otherpubs.htm>.

#### Development and adaptation

1. Involve professionals, stakeholders, and those with relevant experience in the development process.
2. Conduct assessments of the target group(s)' needs and assets.
3. Use a planning framework that relates health goals, desired behaviour change, and activities.
4. Consider community values and norms in designing activities.
5. Consider availability of resources.
6. Pilot-test curriculum and revise as needed.

#### Content and approach

1. Incorporate a means to assure a safe environment for participating and learning.
2. Focus on clear health goals in determining curriculum content, approach, and activities.
3. Focus on specific behaviours that lead to or prevent unintended pregnancy, and STIs, including HIV.
4. Address multiple risk and protective factors affecting sexual behaviours.
5. Include multiple activities to change each of the targeted risk and protective factors.
6. Incorporate instructionally sound and participatory approaches.

7. Use activities, messages, and methods that are appropriate to the culture, age, and sexual experience of targeted populations.
8. Address gender issues and sensitivities in both the content and teaching approach.
9. Cover topics in a logical sequence.
10. Present information that is scientifically and medically accurate.

#### Implementation

1. Make relevant authorities and gatekeepers aware of the programme's content and timetable, keep them informed, and encourage them to support the programme.
2. Establish a process resulting in the selection of appropriate and motivated educators.
3. Provide quality training to educators.
4. Have in place management and supervision needed for implementation and oversight.
5. Implement activities, if needed, to recruit youth participants.
6. Implement activities to retain and monitor youth participants.
7. Establish monitoring and assessment systems to improve programme effectiveness on a continual basis.
8. Include activities to address all key topics designated by the curriculum and implement the activities in the order presented.

Source: Senderowitz and Kirby 2006 (26)



health services at school or linked with community health services in order to facilitate behaviour change (22, 27). It has been shown, for example, that strengthening connections between sex education and family planning services (especially access to contraceptives and condoms) can both delay sexual intercourse in non-sexually active students and increase contraceptive use in those who are sexually active (28).

### 3 ARE SRH EDUCATION PROGRAMMES COST-EFFECTIVE?

Effective school health education programmes that are developed as part of community partnerships can provide some of the most potentially cost-effective ways to reach adolescents and the broader community with sustainable means of promoting healthy practices and preventing SRH problems, including HIV, especially in developing countries (33). At relatively low cost, these programmes can help prevent early pregnancy, HIV and other STIs (34). A review of reproductive health programmes for adolescents in African countries found that such programmes costed between US\$ 0.30 and US\$ 71 per person per year, with a median cost of about US\$ 9 per person per year (35).

- **Support SRH education interventions by policies and actions addressing the psychosocial environment of schools,**

which shapes the learning ability and the SRH behaviour of adolescents and their mental health (29–32).

Moreover, recent studies have found that SRH education programmes offer a good return on investment. For example, a study in Honduras found that for each US\$ 1.00 invested in SRH education to prevent HIV infection among adolescents, the programme would generate up to US\$ 4.59 in benefits from improved health and reduced medical care costs. This estimate only included the economic benefits of averted HIV infection and did not include the benefits of other potential programme outcomes, such as increased education, reduced STIs and reduced teen pregnancies and abortions (36).

### 4 WHAT IS CURRENTLY BEING DONE TO PROMOTE THE SRH OF ADOLESCENTS IN EDUCATIONAL SETTINGS IN DEVELOPING COUNTRIES?

A large number of SRH and HIV education interventions are being implemented in schools worldwide in response to the urgent need to contain the rapid spread of HIV and other STIs. It is estimated that school health education programmes of some form are taking place in well over 50% of countries worldwide, varying widely with regard to their objectives, structure, length, content, implementation strategy and other characteristics. They are aided by a number of international efforts to improve both learning and health through schools. These are described in the ensuing subsections.

#### 4.1 Global School Health Initiative

The Global School Health Initiative was launched by WHO in 1995 to mobilize and strengthen health promotion and education activities at the local, national, regional and global levels. The initiative is designed to improve the health of students, school personnel, family and community members through schools. Its goal is to increase the number of schools that can truly be called “health-promoting schools”. These schools constantly strive to improve the health of students, families, school personnel and communities through, for example, creation of healthy school environments, curriculum-based health education, provision of school health and nutrition services or referrals to linked services, health promotion interventions for school personnel, providing opportunities for physical education and recreation, and interventions for social support and counselling. Such wide-ranging activity requires the engagement of health and education officials, teachers and their representative organizations, students, parents and community leaders. Regional and national

networks have been established to help work towards the ultimate aim of assisting all schools to become health-promoting schools. The networks include governmental and nongovernmental organizations, development banks, organizations of the United Nations system, interregional bodies, bilateral agencies, the labour movement and cooperatives, and private sector concerns. (Annex 1 gives a link to more information and provides an example of a relevant country programme; see Annexes 2, 3 and 4 for related resources).

#### 4.2 Education for AIDS (EFAIDS)

Education for AIDS (EFAIDS) is an initiative of Education International and its partners, WHO and the Education Development Center (EDC). Launched in January 2006, it combines the efforts of teachers’ unions in advocating Education for All<sup>1</sup> at a national level with their commitment to HIV prevention in schools locally. Bringing Education for All and EFAIDS under one umbrella recognizes that a lack of education will exacerbate the HIV crisis, just as the HIV crisis can severely weaken the education sector. The EFAIDS programme also deals with such related issues as the elimination of child labour, developing gender-safe schools and combating stigma and discrimination (see Annex 5 for related resources).

1 Education for All is an international commitment, launched in 1990, to bring the benefits of education to “every citizen in every society”. See <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,contentMDK:20374062~menuPK:540090~pagePK:148956~piPK:216618~theSitePK:282386,00.html>.

### 4.3 Focusing Resources on Effective School Health (FRESH)

FRESH, a partnership comprising the United Nations Educational, Scientific and Cultural Organization (UNESCO), UNICEF, WHO, the World Bank, Education International, EDC and the Partnership for Child Development, was formed to develop a basic framework for comprehensive school health programming. The partnership has agreed on a common language for describing school health activities and endorsed a common set of recommendations for school health programming. FRESH cosponsors are now aiming to work more effectively together and with education and health authorities at all levels. Since its launch at the Dakar World Education Forum in April 2000, FRESH has been joined by a variety of other agencies and initiatives, including the World Food Programme, the Food and Agriculture Organization of the United Nations (FAO), the United Nations Office on Drugs and Crime (UNODC), Roll Back Malaria, the Child-to-Child Trust, EDC and the IRC International Water and Sanitation Centre.

The four essential components of the FRESH framework, which should be applied in all schools, are:

- health-related policies in schools;
- safe water and sanitation facilities;
- skills-based health education that focuses on the development of knowledge, attitudes, values and life skills needed to make, and act on, decisions to establish lifelong healthy practices and to reduce the vulnerability to HIV;
- school-based health and nutrition services that are simple, safe and familiar.

A key area of focus is SRH, including HIV, for which a number of resources and tools have been developed by partner agencies and organizations as the FRESH movement has gained momentum in countries (see Annex 5 for related resources).

### 4.4 UNAIDS Inter-Agency Task Team (IATT) on Education

The Joint United Nations Programme on HIV/AIDS (UNAIDS) IATT on Education was created in 2002 to support accelerated and improved education sector responses to HIV and AIDS. It is convened by UNESCO and its membership includes the UNAIDS cosponsors, bilateral agencies, private donors and civil society partners. The IATT on Education helps to accelerate and improve the education sector response to HIV and AIDS by promoting and supporting good practices in the education sector related to HIV and AIDS and encouraging alignment and harmonization within and across agencies to support global and country-level actions. Specific activities undertaken by the IATT include:

- strengthening the evidence base and disseminating findings to inform decision-making and strategy development;
- encouraging information and materials exchange;
- working jointly to bridge education and HIV-affected communities;
- ensuring stronger education sector responses to HIV and AIDS.

The IATT on Education is complemented by the EDUCAIDS programme (see next subsection).

### 4.5 Global Initiative on Education and HIV/AIDS (EDUCAIDS)

EDUCAIDS, which is led by UNESCO with the collaboration of UNAIDS cosponsors and other key stakeholders, seeks to promote, develop and support comprehensive education sector responses to HIV and AIDS. EDUCAIDS has two primary goals: to prevent the spread of HIV through education, and to protect the core functions of the education system from the worst effects of the epidemic. Through EDUCAIDS, UNESCO and its partners support efforts at the country level to promote comprehensive education sector responses to HIV and AIDS; plan and prioritize actions; and build partnerships and promote coordination. EDUCAIDS activities are coordinated in consultation with the UNAIDS IATT on Education (see previous subsection), and include advocacy, partnership building and the joint development of technical materials. IATT members bring a wealth of experience that can be channelled towards supporting strengthened country-level responses, ensuring opportunities for collaboration and the integration of emerging policy trends at national level.

### 4.6 Ministerial Declaration to promote sexual health to stop HIV in Latin America and the Caribbean

At the 1st Meeting of Ministers of Education and Health to prevent HIV in Latin America and the Caribbean, August 2008, Ministers of Education and Health signed an historic declaration pledging to provide comprehensive sex education as part of the school curriculum in Latin America and the Caribbean. In the **Ministerial Declaration**, the ministers committed to promoting concrete actions for HIV prevention among young people in their countries by implementing sex education and sexual health promotion programmes. The sex education programmes will cover a broad range of topics including biological information, social and cultural information with discussion on gender, diversity of sexual orientation and identity along with ethics and human rights. The Declaration also recognized the responsibility of the State to promote human development, including education and health, as well as to combat discrimination. It includes an analysis of the barriers to strengthening sexuality education and sexual health promotion programmes and ways of enhancing collaboration between the Ministries of Health and Education.

### 4.7 Strategies of other international organizations

Several United Nations and other agencies recognize the inextricable links between health and education, the increasingly important role that schools play in addressing health and the relevance of school health to their agency's mandate. The United Nations Population Fund (UNFPA), UNAIDS, UNESCO and UNICEF, as well as the World Bank, are major actors in shaping and implementing country programmes. Annex 2 gives a list of agencies and organizations involved in school health and summarizes their main objectives. These agencies, and many countries and non-governmental organizations, have decades of experience in school health programmes. There is considerable potential for these agencies to broaden the scope of school health programmes and make them more effective through concerted action within a more integrated approach.

## 5 WHAT CAN THE HEALTH SECTOR DO TO STIMULATE AND SUPPORT EFFECTIVE ACTIONS FOR PROMOTING ADOLESCENT SRH IN EDUCATIONAL SETTINGS?

### 5.1 Challenges and opportunities

The emergence of HIV gave many governments the impetus to strengthen and expand SRH education efforts and, currently, it is estimated that well over 100 countries have such programmes, including almost every country in sub-Saharan Africa (8, 37, 38). It has proved difficult, however, to develop a consistent approach to SRH education, due to the variety of country settings with different adolescent SRH policies and programmes, within different cultural traditions and ideologies, and with different quality standards.

Despite the need, few countries have been able to mount ambitious, nationwide efforts to mobilize all schools in response to the challenges surrounding adolescent SRH, including HIV. Research undertaken in 2004 in coordination with the United Nations Education sector global HIV and AIDS readiness survey found that only two of the 18 countries reviewed had a coherent education sector HIV strategy that was being implemented. In other cases, strategic plans either did not yet exist, or were largely ignored because they had been developed in isolation from other policy and budgetary processes. In some cases, national plans may exist but are not costed or implemented. In most cases, donor aid was not helping governments to address these problems systematically. Rather, aid tended to be directed towards a series of stand-alone initiatives that enjoyed little ownership by government (39).

Despite enormous progress in the development of effective school health education programmes, substantial challenges remain. Obstacles to the implementation of school health programmes common to most countries include a lack of (i) active support, commitment and coordination from ministries of health and education and school officials; (ii) national standards for quality; (iii) resources such as skilled personnel, training and materials; (iv) mechanisms to supervise, monitor and evaluate programmes; (v) research and infrastructure in school health programmes; and (vi) well-defined national policies and strategies for promotion, support, coordination and management of school health programmes.

In the last decade, many countries in Africa, Asia, Europe, the Middle East, the Caribbean and the Americas have attempted to implement reproductive health programmes in schools. In almost every country, the provision of sex education has faced legal, financial, cultural and religious barriers as well as opposition from school leaders, teachers, parents and students themselves. Although the issue is on the agenda of ministries of health and education in most countries, implementation continues to be constrained and limited to small areas. Moreover, decision-makers and educators are often unsure about what works to improve SRH outcomes among school-going adolescents.

While there is no single SRH education model or plan that will fit schools in all countries, cultures or circumstances, collaboration with the education sector provides an enormous opportunity

to respond to the SRH education needs of adolescents in those countries where action can be taken. The WHO Global School Health Initiative and the FRESH partnership offer important entry points for child and adolescent health staff at country level to support actively the implementation of evidence-based approaches for improving the content and process of SRH education in schools. By working closely with the partnership, WHO staff can help to address some of the common obstacles to school health education across countries by engaging in selected activities, according to the environmental preparedness, time availability and opportunities present.

### 5.2 Ways in which the health sector can make a useful contribution

In addition to the activities for which the health sector is primarily responsible, such as the provision of health services, it is important that the health sector interact with the education sector in several important areas:

- **The health sector needs to help the education sector** act in ways that strengthen and facilitate the interventions that are being provided through the health sector. For example, the education sector needs to be providing information to adolescents about the availability of services, helping to **generate demand and create support for the provision and use of health services by adolescents**.
- The health sector needs to play a role in mobilizing and supporting the response to SRH that is being initiated by schools in providing adolescents with information, education, skills and services. **The health sector should be involved in the development of the health promotion curriculum if such is implemented**, and as a minimum, needs to be in a position to ensure that the information that is provided through schools is technically sound and is consistent with other messages that adolescents are receiving about SRH (including HIV), and that the strategies that are being implemented are evidence based. Working through international and regional health-promoting school networks and FRESH networks can help to facilitate and strengthen collaboration between the health and education ministries.
- The health sector's collective expertise and strong credibility make it a valuable ally for **mobilizing partners, dispelling misperceptions, providing evidence-based arguments and encouraging the development of sound policies and practices** for the promotion of SRH in schools.
- The health sector needs to ensure that school based health services (SBHS), whenever available, are tailored to the health and development needs of adolescent in the country, linked to health promoting schools initiatives and with community services, and that they work towards priorities and actions of country

health strategies. It is a health sector responsibility to ensure that school based health services operate based on sound evidences of effectiveness, that health personnel' roles and responsibilities are clearly defined in collaboration with the educational sector, and that training programmes and educational opportunities respond to the health priorities as identified by countries.

- To be effective programmes must “do it right”. It will be important to recommend that policy-makers and decision-makers implement programmes according to the principles that have worked in other similar settings and to assist nationals by providing strategic information, technical support, and materials and tools for programme development. The health sector can also be instrumental in helping to forge linkages with appropriate professional and donor organizations.
- An important requirement of FRESH and essential to effective SRH education in schools is the provision of school-based services and linkages with community SRH services. Here also the health sector has a special role to play in making selected services and counselling available to adolescents through schools

or through health services that are linked to schools and made adolescent friendly.

It is clear that within the public health sector, many departments are directly or indirectly involved in the promotion of adolescent SRH. The department of health promotion or equivalent often has the prime responsibility of dealing with school health and collaborating with the education sector. It also often coordinates the health sector's inputs into school health programmes. In decisions regarding the priorities and strategies for promoting adolescent SRH through schools, it is desirable that health promotion staff be supported by technical staff dealing with HIV, maternal and child health and reproductive health, gender issues and women's health, adolescent health, family and community development, and health systems.

Table 1 shows potential health sector actions to stimulate and support the promotion of SRH education within the context of the health-promoting schools and FRESH frameworks. The table is based on the state of current evidence and may be adapted according to the circumstances and opportunities available in countries for action to improve the state of SRH education in schools.

## 6 WHAT RESOURCES ARE AVAILABLE TO ASSIST?

### 6.1 Summary of information sources

In order to assist the health sector in strengthening school SRH education, a number of resources are available through:

- national ministries of health and education;
- national health promotion coordinators in the ministry of health who may have information on country plans and activities regarding school health, and on the health-promoting schools and FRESH networks at regional and national levels;
- WHO Departments of Health Promotion, Reproductive Health and Research, and Child and Adolescent Health and Development at headquarters and regional offices;
- FRESH cosponsors and partners, including UNESCO, UNICEF, the World Bank, Education International, EDC, the Partnership for Child Development, the World Food Programme, FAO, UNODC, Roll Back Malaria, the Child-to-Child Trust and the IRC International Water and Sanitation Centre;
- other organizations involved in school health, including donor agencies, private sector concerns and nongovernmental organizations at local, national and regional levels.

The following subsection summarizes selected sources of further specific information and resources related to school health. Annex 3 provides more detail on WHO resources; Annex 4 provides additional detail on other sources. Both annexes provide numerous links to relevant web sites.

### 6.2 Sources of specific information and resources

#### 6.2.1 WHO resources (Annex 3)

- WHO Information Series on School Health: evidence-based information documents;
- Department of Child and Adolescent Health and Development: documents and resources;
- Global School Health Initiative, including regional networks for the development of health-promoting schools;
- WHO regional offices: information on school health and health promotion activities;
- School health tools: rapid assessment and action planning process (RAAPP), global school-based student health survey.

#### 6.2.2 Resources available from WHO partners and other organizations (Annex 5)

- UNESCO: Focusing Resources on Effective School Health (FRESH) initiative;
- Schools & Health: health, nutrition, HIV and AIDS, including links to web sites of agencies and organizations that support school health programmes;
- Centers for Disease Control and Prevention (CDC), including the Division of Adolescent and School Health (DASH);
- Education Development Center: Health and Human Development programme;
- Education International: Education for AIDS (EFAIDS);
- Partnership for Child Development, Imperial College School of Medicine, London.

#### 6.2.3 Additional resource materials

- Additional resource materials are listed under the heading “Further reading”, following the reference list.

**TABLE 1** Potential health sector actions to support promotion of SRH education

Objectives of health sector	Actions	Beneficiaries
<b>Health-related school policies</b>		
Increase/improve SRH/HIV education and access to adolescent-friendly SRH services by adolescents by using school infrastructure	<ul style="list-style-type: none"> <li>Advocate clear, consistent and evidence-based policies for safe and enabling environments and for the inclusion of age-appropriate skills-based SRH/HIV education in secondary school curricula, the provision of selected adolescent-friendly SRH services in schools, and the creation of linkages with such services in communities</li> </ul>	Adolescents School staff
Reduce drop-out rates in girls' education due to pregnancy Promote girls' right to education	<ul style="list-style-type: none"> <li>Advocate a clear policy that pregnant girls can stay in school and continue schooling during pregnancy and after delivery</li> </ul>	Adolescent girls
Prevent sexual harassment, gender-based violence and aggressive behaviour	<ul style="list-style-type: none"> <li>Advocate policies for zero tolerance of sexual harassment, gender-based violence, bullying and other inappropriate behaviour by staff and students</li> </ul>	School population
Prevent discrimination against people with HIV and their families	<ul style="list-style-type: none"> <li>Advocate policies to avoid discrimination against people with HIV and their families</li> </ul>	School population, families, communities
<b>Skills-based health education</b>		
Prevent/reduce the number of unwanted, high-risk pregnancies	<ul style="list-style-type: none"> <li>Collaborate to review accuracy of information and appropriateness of skills-based training in primary and secondary school curricula in order to ensure attitudinal and behavioural change in adolescents</li> <li>Use health-promoting schools and FRESH initiatives to increase access to SRH education by vulnerable and marginalized school-attending groups</li> <li>Encourage development/adaptation and use of standards for SRH/HIV education curricula for adolescents</li> </ul>	Adolescents School staff
Prevent/reduce risk behaviours and improve knowledge, attitudes and skills for prevention of STI/HIV	<ul style="list-style-type: none"> <li>Provide inputs for development of age-appropriate skills-based STI/HIV education in primary and secondary school curricula that is based on evidence</li> <li>Facilitate linkages with professional groups such as Education International, EDC, and Centers for Disease Control and Prevention for materials and teacher training support</li> </ul>	All school children School staff
Reduce fear and misperceptions in staff, parents and communities about SRH/HIV education	<ul style="list-style-type: none"> <li>Provide evidence-based information and arguments on benefits of SRH education and dangers of ignorance at different stages of development; facilitate teacher training and retraining through professional organizations such as Education International</li> </ul>	School population Parents and community
<b>School-based health services</b>		
Prevent, reduce and avoid complications from STIs and unwanted pregnancies through selected counselling and SRH services in schools or establish linkages/collaboration with SRH services in the community	<ul style="list-style-type: none"> <li>Advocate the need to complement SRH education with counselling and selected adolescent-friendly SRH services in schools or a close collaboration between schools and local health services, ensuring that adolescents have the knowledge and confidence to make use of them</li> <li>Propose set of counselling and services to be delivered</li> </ul>	Adolescents Staff
<b>Collaboration and coordination</b>		
Enhance collaboration and coordination between health sector departments and between ministries of health and education and other partners involved in school health	<ul style="list-style-type: none"> <li>Foster collaboration between relevant health departments and between ministries of health and education using self-help initiatives/ FRESH recommendations</li> <li>Foster partnerships with technical support organizations, donors, FRESH partners and regional networks</li> <li>Provide strategic information and support and useful resources for school health, including advisers and consultants</li> </ul>	Schools Partners Communities Adolescents

## 7 CONCLUSION

This information brief has attempted to bring together relevant research and empirical information on SRH education in schools in developing countries, on the basis of which a framework for action has been proposed. As such, it is hoped that this will be a useful tool for WHO staff and others working for the improvement of adolescent SRH through school education and care programmes. It is also hoped that the brief will enable stakeholders to make well-founded arguments for the inclusion of SRH education in schools, supported by evidence of what is working in other developing countries around the world. Research

and implementation experiences show enormous progress in school-based SRH and HIV education programmes and most have demonstrated a positive impact for adolescents in a wide variety of settings. The evidence seems clear: schools in all countries and settings should actively encourage and enable students to attain high levels of education, and they should implement curriculum-based SRH education programmes to prevent sexual risk-taking behaviours as part of their larger efforts to improve the SRH of their young people.



## ANNEX 1 SCHOOLS & HEALTH WEB SITE

The Schools & Health web site (<http://www.schoolsandhealth.org/Pages/default.aspx>) is administered by the Partnership for Child Development. The web site includes information on numerous examples of individual school health programmes in about 80 countries (<http://www.schoolsandhealth.org/Pages/Country.aspx>). An example from Sierra Leone is given below.

<b>Country</b>	Sierra Leone
<b>Programme</b>	2007–2012: Youth Reproductive Health Programme
<b>Area or region</b>	Eight districts with plans to go nationwide in 2011
<b>Intervention</b>	<p>The objectives are:</p> <ul style="list-style-type: none"> <li>• to equip young people with the skills and knowledge to make and act upon informed decisions regarding their sexual and reproductive health and to live positive and healthy lives;</li> <li>• by 2012, SPM SL [Students Partnership Worldwide Sierra Leone] to have equipped young people with increased life-skills and leadership capabilities; and</li> <li>• to enable schools and communities in Sierra Leone to mainstream an effective sexual reproductive health and HIV/AIDS programme through government interventions and technical support from SPW Sierra Leone.</li> </ul> <p>Non-formal education techniques are being used. The programme is evaluated every year by external consultancy.</p>
<b>Number of schools</b>	50 secondary schools with plans to expand
<b>Target population</b>	12 to 35 years olds with both in-school and out-of-school youth
<b>Project period</b>	2007–2012
<b>Implementation</b>	Students Partnership Worldwide Sierra Leone is leading the programme, in collaboration with Ministry of Youth and Sports, Ministry of Education, Ministry of Health, National AIDS Secretariat, and UNAIDS.
<b>Funding/donor agencies</b>	DFID
<b>Cost</b>	
<b>Notes</b>	
<b>Source of information</b>	<a href="http://www.spw.org">www.spw.org</a> Sebastien Barraud (sebastien.barraud@spw.org)
<b>Topic</b>	HIV prevention education

## ANNEX 2 INTERNATIONAL AGENCIES AND ORGANIZATIONS INVOLVED IN SCHOOL HEALTH

A number of international agencies and organizations have programmes and interventions in school health promotion corresponding to their mandates and their comparative advantages:

### Food and Agriculture Organization of the United Nations (FAO)

FAO is the largest autonomous agency within the United Nations system. It has a mandate to raise levels of nutrition and standards of living, to improve agricultural productivity and to better the condition of rural populations. FAO-assisted projects attract more than US\$ 3000 million per year from donor agencies and governments for investment in agricultural and rural development programmes. As well as funding school feeding programmes in developing countries, the FAO's current focus on school nutrition involves the development of nutrition education materials for children aged between 6 and 14 years.

Web site: <http://www.fao.org>

### United Nations Children's Fund (UNICEF)

UNICEF aims to protect children's rights, to ensure that their basic needs are met and to enable them to expand their opportunities and potential. UNICEF has a long track record of commitment to school-based health initiatives, working with WHO, UNESCO, UNFPA and more recently in a series of programmes with national governments. Programmes supported by UNICEF include the following areas:

- water, sanitation and hygiene
- life skills/AIDS
- child-to-child
- health and nutrition
- situation analysis.

New strategies being developed examine the possibilities of integrated programme implementation, with the school as a focal point for health intervention within the community. This may include medical and nutritional interventions for working children who do not normally attend school.

Web site: <http://www.unicef.org> and <http://www.unicef.org/life-skills/index.html>

### United Nations Drug Control Programme (UNDCP)

UNDCP works to reduce the global supply of and demand for narcotics. It works within the school structure to educate adolescents on the health and educational dangers associated with drug misuse. The programme runs many projects in Central and Latin America.

Web site: <http://www.undcp.org>

### United Nations Development Programme (UNDP)

The objective of UNDP is to help countries in their efforts to achieve sustainable human development. UNDP assists countries to build their capacity to design and carry out development programmes in poverty eradication, the creation of employment and sustainable livelihoods, the empowerment of women and the protection and regeneration of the environment. It gives highest priority to poverty eradication. The UNDP has a record of promoting school-based health initiatives and in 1992 helped to create the Partnership for Child Development, of which it remains a cosponsor.

Web site: <http://www.undp.org>

### United Nations Educational, Scientific and Cultural Organization (UNESCO)

The main objective of UNESCO is to contribute to peace and security in the world by promoting collaboration among nations through education, science, culture and communication. UNESCO was one of the first United Nations organizations to work in the field of school health and nutrition, and it continues to provide technical support, funding and training for school-based projects.

Web site: <http://www.unesco.org>

### United Nations Population Fund (UNFPA)

UNFPA is the largest internationally funded source of population assistance in developing countries. UNFPA assists developing countries to improve reproductive health and family planning services on the basis of individual choice, and to formulate population policies in support of efforts towards sustainable development. It supports initiatives for adolescent reproductive health in approximately 100 countries through improved education, information and communication, and health service programmes. Under UNAIDS it also supports HIV prevention activities in approximately 95 countries.

Web site: <http://www.unfpa.org>

### United States Agency for International Development (USAID)

USAID is a large, independent federal United States government agency that conducts foreign assistance and humanitarian aid. USAID supports large school-based health programmes, such as deworming and micronutrient supplementation in Africa. The USAID Bureau for Africa, Office of Sustainable Development



is cosponsor of the World Bank's International School Health Initiative. USAID also funds holistic programmes targeted at adolescents, featuring many aspects of education, nutrition and health. The Agency is also committed to such approaches in Latin America.

Web site: <http://www.info.usaid.gov>

### Joint United Nations Programme on HIV/AIDS (UNAIDS)

UNAIDS brings together the efforts and resources of seven United Nations organizations to help the world prevent new HIV infections, care for those already infected and mitigate the impact of the epidemic. UNAIDS acts a source of information on HIV and AIDS and aims to help mount and support an expanded response – one that engages the efforts of many sectors and partners from government and civil society. Within UNAIDS there is a working group dedicated to promoting school-based initiatives, with a special emphasis on school-level interventions to teach life skills.

Web site: <http://www.unaids.org>

### The World Bank

A multilateral finance agency, the World Bank is the largest provider of development assistance, committing about US\$ 20 billion a year in new loans. The Bank also plays a vital role in

coordinating other organizations – private, governmental, multi-lateral and nongovernmental – to ensure that resources are used to full effect in supporting a country's development agenda. The Bank coordinates information on adolescent health and nutrition through an International School Health Initiative based within its Human Development Network. The key types of programme advocated by the Bank are:

- life skills training, as part of a strategy to promote healthy lifestyles, and avoid violence, substance abuse, HIV and teenage pregnancy;
- school snacks, fortified with micronutrients and provided early in the day;
- exemplary school environment that supports health education messages about hygiene and sanitation;
- equitable school health policies that ensure the rights of schoolchildren;
- strategies beyond the school that use the school as a community centre to provide services to out-of-school children.

The World Bank, through its intensified efforts to help countries fight HIV, particularly through the FRESH approach, has also become a major funder of school health initiatives.

Web site: <http://www.worldbank.org>



## ANNEX 3 WHO RESOURCES RELATED TO SCHOOL HEALTH

This annex provides detail on the information resources available from WHO, outlined in subsection 6.2.1.

### WHO Information Series on School Health

The WHO Department of Health Promotion has produced a series of evidence-based information documents on priority health issues and on school health implementation strategies:

[http://www.who.int/school\\_youth\\_health/resources/information\\_series/en/](http://www.who.int/school_youth_health/resources/information_series/en/)

Each document in the series provides arguments that can be used to gain support for addressing important health issues in schools. The documents illustrate how selected health issues can serve as entry points in planning, implementing and evaluating health interventions as part of the development of a health-promoting school. Documents in the series include:

- *Creating an environment for emotional and social well-being: an important responsibility of a health-promoting and child-friendly school*
- *Family life, reproductive health, and population education: key elements of a health-promoting school*
- *Healthy nutrition: an essential element of a health-promoting school*
- *Improving health through schools: national and international strategies*
- *Local action: creating health-promoting schools*
- *Preventing HIV/AIDS/STDs and related discrimination: an important responsibility of health-promoting schools*
- *Skills-based health education and life skills*
- *Teacher's exercise book for HIV prevention*
- *The physical school environment: an essential component of a health-promoting school*
- *Violence prevention: an important element of a health-promoting school*
- *WHO's Global School Health Initiative: health-promoting schools*

### Child and adolescent health and development

A number of documents and resources related to child and adolescent health and development are available at: [http://www.who.int/child\\_adolescent\\_health/documents/adolescent/en/index.html](http://www.who.int/child_adolescent_health/documents/adolescent/en/index.html)

Among the resources available are:

- *Adolescent-friendly health services: an agenda for change*  
[http://www.who.int/child-adolescent-health/publications/ADH/WHO\\_FCH\\_CAH\\_02.14.htm](http://www.who.int/child-adolescent-health/publications/ADH/WHO_FCH_CAH_02.14.htm)
- *Achieving the global goals: access to services. Technical report of a global consultation on the health services response to the prevention and care of HIV/AIDS among young people*  
[http://www.who.int/child-adolescent-health/New\\_Publications/ADH/ISBN\\_92\\_4\\_159132\\_3.pdf](http://www.who.int/child-adolescent-health/New_Publications/ADH/ISBN_92_4_159132_3.pdf)
- *Protecting young people from HIV and AIDS: the role of health services*  
[http://www.who.int/child\\_adolescent\\_health/documents/9241592478/en/index](http://www.who.int/child_adolescent_health/documents/9241592478/en/index).
- *Preventing HIV in young people: a systematic review of the evidence from developing countries*  
[http://www.who.int/child-adolescent-health/publications/ADH/ISBN\\_92\\_4\\_120938\\_0.htm](http://www.who.int/child-adolescent-health/publications/ADH/ISBN_92_4_120938_0.htm)
- *Orientation programme on adolescent health for health-care providers*  
[http://www.who.int/child\\_adolescent\\_health/documents/9241591269/en/index.html](http://www.who.int/child_adolescent_health/documents/9241591269/en/index.html)

### Global School Health Initiative and health-promoting schools

Under the Global School Health Initiative (section 4.1), WHO and its partners have developed networks at global, regional and national levels for the development of health-promoting schools. These networks may constitute the world's most comprehensive and successful international effort to mobilize support for school health promotion. The first network included the WHO Regional Office for Europe, the Council of Europe and the Commission of the European Communities. It now includes 40 countries. Regional networks have also been created in Latin America and southern Africa. Each network is composed of public and private organizations interested in planning and working together to promote school health. In addition to the resources in the WHO Information Series on School Health listed above, more information and resources are available on the web sites of the WHO programme on school health and youth health promotion, and the Global School Health Initiative:

[http://www.who.int/school\\_youth\\_health/en/](http://www.who.int/school_youth_health/en/)

[http://www.who.int/school\\_youth\\_health/gshi/en/](http://www.who.int/school_youth_health/gshi/en/)



### WHO regional offices

Information on school health and health promotion activities can be found on the web sites of the WHO regional offices:

- WHO Regional Office for Africa: the health-promoting schools initiative:  
<http://www.afro.who.int/healthpromotion/project.html>
- WHO Regional Office for the Eastern Mediterranean  
<http://www.emro.who.int/index.asp/>
- WHO Regional Office for Europe (EURO): School for Health in Europe  
[www.schoolsforhealth.eu](http://www.schoolsforhealth.eu)
- WHO Regional Office for South-East Asia  
<http://www.searo.who.int/EN/Section13/Section1245.htm>
- WHO Regional Office for the Americas (PAHO):  
<http://www.paho.org/Project.asp?SEL=TP&LNG=ENG&ID=151>
- WHO Regional Office for the Western Pacific:  
[http://www.wpro.who.int/health\\_topics/adolescent\\_health/](http://www.wpro.who.int/health_topics/adolescent_health/)

### School health tools available from WHO

**Rapid assessment and action planning process (RAAPP)** is a country-driven and evidence-based process that equips ministries of education and health and other national organizations with methods, instruments and professional development activities to prepare in-country teams to collect their own data and engage in a customized action planning process:

[http://www.who.int/school\\_youth\\_health/assessment/raapp/en/index.html](http://www.who.int/school_youth_health/assessment/raapp/en/index.html)

**Global school-based student health survey (GSHS)** is a collaborative surveillance project designed to help countries measure and assess the behavioural risk factors and protective factors in 10 key areas, including SRH among adolescents aged 13 to 15. GSHS is a relatively low-cost school-based survey that uses a self-administered questionnaire to obtain data on adolescents' health behaviour and protective factors. It is implemented at country level by a survey coordinator who is nominated by the ministry of health or ministry of education. To date, 80 countries have either implemented GSHS, or are in the process of doing so. Complete information can be found at:

<http://www.who.int/chp/gshs/en/index.html>

<http://www.cdc.gov/GSHS/>

## ANNEX 4 OTHER RESOURCES RELATED TO SCHOOL HEALTH

This annex provides further detail on the information resources available from WHO partners and other organizations, outlined in subsection 6.2.2.

### UNESCO: Focusing Resources on Effective School Health (FRESH) initiative

The UNESCO FRESH (section 4.3) web site gives information and resources on the FRESH framework and provides links to a range of online tools:

[http://portal.unesco.org/education/en/ev.php-URL\\_ID=35174&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=35174&URL_DO=DO_TOPIC&URL_SECTION=201.html)

### Schools & Health

The Schools & Health web site (see also Annex 1) provides a number of documents and resources related to school health, including nutrition and HIV:

<http://www.schoolsandhealth.org/Pages/default.aspx>

It also provides information about some of the agencies and organizations that support school health programmes, with links to their web sites:

<http://www.schoolsandhealth.org/Pages/Agencies.aspx>

### Centers for Disease Control and Prevention (CDC)

CDC is a WHO collaborating centre for health education and promotion. In 1988, CDC established the National Center for Chronic Disease Prevention and Health Promotion, within which it created the Division of Adolescent and School Health (DASH). The mission of DASH is to identify the highest priority health risks among adolescents, monitor the incidence and prevalence of those risks, implement national programmes to prevent risks, and evaluate and improve those programmes. DASH collaborates with the Health Workforce Education and Production Unit of WHO and provides technical support to improve health through schools:

<http://www.cdc.gov/nccdp/health/publications/aag/dash.htm>

### Education Development Center, Inc.

Education Development Center, Inc. (EDC) is a not-for-profit, international nongovernmental organization with country offices across the world. Its Health and Human Development (EDC/HHD) programme serves as a WHO collaborating centre to promote health through schools and communities. EDC/HHD provides technical expertise in behaviour change, social science, teacher education and training, materials and curriculum development. It works to rapidly transfer the most up-to-date social science and educational research on effective behaviour change strategies, and research on teacher development, to health and education agencies worldwide:

<http://www.edc.org/HHD>

### Education International: Education for AIDS (EFAIDS)

Education International, the largest global federation of teachers' unions, is a singular institutional means of reaching a major portion of the world's teachers. Its 319 affiliated teachers' unions in 162 countries represent more than 29 million teachers and workers in the education sector. Education International is headquartered in Brussels with regional offices in Costa Rica, Fiji, Malaysia, Saint Lucia and Togo. It provides access to the world's teachers through its affiliates and their international and national administrative structures and communication channels:

<http://www.ei-ie.org>

**The Education for AIDS (EFAIDS) programme** (section 4.2) is implemented by 46 teachers' unions in 35 countries and is coordinated by Education International together with its partners WHO and EDC. It deals with Education for AIDS within the broader issue of Education for All. The HIV component of the EFAIDS programme functions via a cascading system through which over 150 000 teachers have already received training. A skills-based teacher training programme has been developed based on state-of-the-art research and programme experience. In addition to teaching HIV prevention skills, the training has also provided teachers with the capacity to lobby their governments to institutionalize training on HIV and AIDS:

[http://www.who.int/school\\_youth\\_health/hivaids\\_project/en/index.html](http://www.who.int/school_youth_health/hivaids_project/en/index.html)

An evaluation of the EFAIDS programme can be found at:

<http://hhd.org/documents/EIProject-Evalu.pdf>

### Partnership for Child Development

Based at the Department of Infectious Disease Epidemiology, Imperial College School of Medicine, London, the Partnership for Child Development is an organization committed to improving the education, health and nutrition of school-age children and adolescents in low-income countries through research, programming, monitoring and evaluation. It helps countries and international agencies turn the findings of evidence-based research into national interventions. The Partnership for Child Development lends technical assistance, training and support to ministries of education and health, donor agencies and civil society organizations in low-income countries around the world. It supports FRESH efforts to develop systematic and sustainable programmes that can be effectively monitored, evaluated and taken to scale (for example in Eritrea, Kenya and Zambia). The partnership is a major resource centre for school health and nutrition:

<http://www.child-development.org>

## ANNEX 5 INTERNATIONAL JOURNALS THAT PUBLISH MATERIALS ON SCHOOL HEALTH RELATED ISSUES

JOURNAL OF SCHOOL HEALTH	ARCHIVES OF PEDIATRICS & ADOLESCENT MEDICINE	PUBLIC HEALTH
JOURNAL OF HEALTH COMMUNICATION: INTERNATIONAL PERSPECTIVES	SOCIAL SCIENCE & MEDICINE	ACTA PAEDIATRICA
PEDIATRICS	HEALTH EDUCATION RESEARCH	CANADIAN JOURNAL OF PUBLIC HEALTH-REVUE
JOURNAL OF ADOLESCENT HEALTH	JOURNAL OF THE AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY	BMC PUBLIC HEALTH
AMERICAN JOURNAL OF PUBLIC HEALTH	JAMA – JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION	PSYCHOLOGY IN THE SCHOOLS
PREVENTIVE MEDICINE	PUBLIC HEALTH REPORTS	INTERNATIONAL JOURNAL OF OBESITY
INTERNATIONAL JOURNAL OF MENTAL HEALTH PROMOTION		



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**WHO promotes school health programmes as a strategic means to prevent important health risks among youth and to engage the education sector in efforts to change the educational, social, economic and political conditions that affect risk.**

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