

Ministry of Education, Youth and Sport – Cambodia/World AIDS Federation/UNESCO – Cambodia. 2002. *Strengthening HIV/AIDS/STDs Prevention Education for Secondary Schools in Cambodia*

This report describes the results of a study of the project "Strengthening HIV/AIDS/STDs Prevention Education for Secondary Schools in Cambodia" which was implemented from mid 1999 to mid 2000. All grade 9 and grade 12 students received instruction during this time period. Scores obtained from pre and post-tests of a sample of students in 11 provinces and municipalities and opinions collected through interview were analysed, using computer software.

1. Context

Cambodia is one of the poorest countries in the world, trying to recover from three decades of turmoil and conflict. With only 43% of the population of an economically productive age group (18-60) and 54.6% under 20 years of age, Cambodia has a high dependency ratio. There are few resources beyond families and communities to feed, educate and care for the school age Cambodian children and young people, due to a low national budget for education and other constraints.

1.1. Situation: Cambodia is reported to have one of the fastest growing HIV prevalence rates in the world. Results indicate that approximately 170,000 Cambodians are now infected with HIV, giving an adult HIV prevalence rate of around 3.5%. The majority of these people are either parents, or are at an age where their economic productivity is at its highest and they are responsible for supporting family members.

1.2. Economy: In Cambodia, the primary economic sector is agriculture, which absorbs about 82% of the labour force and is still the economic base of the nation. The secondary economic sector engages less than 3% of the labour force due to a lack of industrial infrastructure. Most equipment and materials for local use are generally imported from abroad. It is estimated that the growth of the Gross Domestic Product (GDP) is between 4-5% per annum. The GDP per capita is US \$286 per annum. The revenues collected by the Royal Government of Cambodia (RGC) are still very low and represent only about 11% of the country's GDP. The share of national budget for health and education is less than 10% of the national budget. Consequently, poor families in Cambodia spend over 25% of their income on basic health care and this has been reported as the main cause of landlessness, as farmers are forced to sell their land when coping with a health crisis in the family. Because of low government spending in education, local communities have to take a much greater responsibility in school construction.

1.3. HIV/AIDS Education: Since the transition from a one-party to a multi-party system in 1993, a series of reforms in education have taken place. The School Health Department (SHD) was established in 1998 within the Ministry of Education, Youth and Sports (MoEYS). The main tasks of this young institution are to include or integrate hygiene and health messages into the formal and non-formal education systems, including HIV/AIDS/STDs prevention education with assistance from non-governmental organisations (NGOs) and UN agencies, especially UNESCO, UNICEF, UNFPA, UNAIDS and WHO.

Thus, education is expected to play a key role not only in the country's rehabilitation, but also in preventing this man-made crisis of HIV/AIDS transmission. The majority of secondary school

graduates are likely to play active roles in various sectors of Cambodian society in the near future. The introduction of HIV/AIDS/STDs prevention education to secondary schools now, therefore, is one of the most important investments for the post-war rehabilitation of Cambodia and for ensuring that trained human resources will not be lost through the HIV/AIDS pandemic.

1.4. Target Groups: In collaboration with UNESCO, the SHD first launched its HIV/AIDS/STDs Prevention Education for Secondary Schools Programme through various training operations with excellent results. A series of training was conducted from 1998 to 1999, targeted at 22 national trainers, 60 regional trainers, 720 upper secondary school teachers and 22,000 grade 12 students. At the beginning of 2000, 665 grade 9 secondary school teachers were trained in all of the six regional teacher-training centres (RTTCs) using a common curriculum and activities for HIV/AIDS/STDs and a life skills' programme. During the 1999-2000 school year, a total of 46,524 grade 9 students were selected as the main target group, due to the fact that many of them would not continue onto upper secondary school. Some might pass directly to grade 10, others would have to repeat grade 9 and many would dropout entirely from the education system. The would-be dropouts would therefore miss an opportunity to acquire knowledge, attitudes and skills about HIV/AIDS/STDs prevention if the subject was not taught at this time.

1.5. Research: Educational research was carried out in 11 target provinces and municipalities of the country and covered the capital city of Phnom Penh, other towns and rural and remote areas. The SHD was the implementing agency, which worked in close collaboration with UNESCO in Cambodia. A series of training courses were provided for the SHD evaluation staff as part of a capacity building exercise in educational assessment and evaluation.

1.6. Purpose: The primary purposes of the research were to assess the effects and effectiveness of the project "*Strengthening HIV/AIDS/STDs Prevention Education for Secondary Schools in Cambodia*" and to provide recommendations for further improvement of the HIV/AIDS/STDs Prevention Education Programme, especially the learning and teaching methodology. The secondary purpose was to provide capacity building for the government staff of the SHD in teacher training methods and basic education analysis and research.

1.7. Objectives: The main objectives of the evaluation were: 1) to assess the learning achievements of grade 9 students by comparing their knowledge and experience before and after instruction by means of pre- and post-tests; 2) to assess the effectiveness of the training activities in secondary schools by comparing the controlled and experimental groups of teachers (trained and untrained teachers on HIV/AIDS/STDs prevention education); 3) to raise the capacity building in educational research and data analysis techniques amongst the evaluation staff of the SHD, MoEYS and 4) to provide recommendations to planners and practitioners for improvements in HIV/AIDS prevention education.

2. Methods

2.1. The sample size was 2,543 students, which represented a percentage of the total of the 55,695 estimated grade 9-student population. These students were selected through the *simple random sampling* of about 6% of the total grade 9 student population, which was classified into three separate categories: those from the capital city, those from other urban areas and those from rural and remote areas of each of the targeted 11 provinces and municipalities. These sites were Phnom

Penh and Preah Sihanoukville municipalities, Takeo, Kampong Cham, Kratie, Svay Rieng, Battambang, Banteay Meanchey, Siem Reap, Stung Treng and Ratanakiri provinces.

2.2. Coverage: In addition to the grade 9 students tested and interviewed as stated above, the research covered the following sampled size: 39 secondary schools of which there were approximately 149 classes, 134 teachers, 24 head teachers and 99 parents. Interviews were conducted with teachers, parents and selected groups of students.

2.3. Test Instruments: Various tools and techniques were used in the evaluation. First, a *standardised test* developed by the MoEYS was used in pre-testing and post-testing grade 9 students. In addition to grade 9 students, a pre-test was also used for 953 of the estimated 72,679 students in grades 10, 11 and 12 in order to measure knowledge, attitudes and skills amongst these students in the upper grades.

The second instrument was *questionnaires* or lists for targeted students, teachers, trainers, head teachers and parents. Interviewing and observation administered this set of instruments. These questionnaires were developed for each target group in order to acquire their opinion on the implementation of the programme by teachers, the involvement of head teachers toward the implementation of the programme and the co-ordination between schools and parents toward the HIV/AIDS/STDs prevention education programme at secondary school level. It attempted to measure the effectiveness of the programme and the awareness building provided for concerned parties in the secondary educational system. Training was conducted for evaluation staff on how to use these questionnaires.

2.4. Looping is one method for conducting the processes of testing and interviewing for research when there is a scarcity of human resources. Four loops were designed according to the geographical condition in the country. *Loop one* was conducted in three provinces: Battambang, Banteay Meanchey and Siem Reap (the north west region). *Loop two* for the provinces of Kampong Cham, Kratie and Svay Rieng (the eastern region). *Loop three* for Phnom Penh, Takeo and Preah Sihanoukville (the central and southwest region). *Loop four* for Stung Treng and Ratanakiri (the north east region). All members in each loop (3 in each, with the exception of 1 member for loop 4) were responsible for taking and collecting all of the documents related to their fieldwork, in close collaboration with provincial and district education offices and for supervising the tests and interviews.

2.5. Staffing. Nine staff members of SHD were involved in the first round of testing and student training and ten staff in the second round of interviews with assistance from senior officers of the provincial and district education offices. One consultant for the UNESCO's HIV/AIDS programme was also involved and worked with these staff in both rounds. Post-appraisal facilitation training for these staff was conducted with assistance from another local expert in statistics and data analysis for analyzing quantitative data. Eight key staff received training in data collection, data entry and data analysis through the use of the Statistical Package for Social Sciences (SPSS).

2.6. Limitations:

1. Only grade 9 students were fully involved in the testing and interviewing.
2. Teaching for students' was conducted only during a 3-day-period, which was

- too short for students to reflect on what they had learnt from the programme.
- The testing for the upper grades were done on different dates, three months after the grade 9 student training and eventually it was difficult to compare the knowledge gained by the different grades.

3. Findings

3.1. Students' Learning Achievements: The achievement of grade 9 students learning was satisfactory based on the results of the pre- and post-test of standardised and additional tests. Before any instruction on HIV/AIDS/STDs prevention education was launched in all secondary schools in the country, all grade 9 students were tested for 15 minutes during the first day of learning. Then they learned all four units of the programme for 3 days. Finally, they were tested again for 15 minutes at the end of the programme.

The results of the student learning are presented below. For more detailed information, please see the section on data analysis in the quantitative report on student learning achievements.

**Table 1: Students' Learning Achievements
Standardised Test**

	Pre-test	Post-test
Mean	72.45	84
Median	72.25	87.50
Mode	90	95
Standard	18.09	14.40
Deviation		

- The high pre-test mean score (72.45) indicates that grade 9 students had quite good knowledge prior to being exposed to the project activities.
- The mean score increase's from 72.45 in pre-test to 84 in post-test indicating a significant gain in learning achievements, despite the short-duration of training (3 days only).
- The number of students who gained a high score (90-100 score) increased from 400 students to 1,600 students in post-test, while those who gained low score dropped drastically.
- The female students' scores increased more than the average and more than their male counterparts.
- When compared by location, students from the capital city (Phnom Penh) achieved higher scores than their counterparts in rural areas and other cities.

3.2. Opinions of School Directors:

When asked about their general views of the programme, all school directors' felt that the programme was very good and they were very enthusiastic in having it taught in their schools. They thought that this programme was important for young people in their schools. In addition, they all expressed their interest in using this programme again next year not only for grade 9 students, but also for other grades. Of the general response of their teachers to the programme, they disclosed that most teachers were happy with it. They suggested that the HIV/AIDS/STDs Prevention Education Programme should be conducted every year in their secondary schools.

3.3. Opinions of Teachers & Trainers:

Regarding teachers' attitudes toward the programme, all of the teachers and trainers indicated they wanted to have the HIV/AIDS/STDs Prevention Education again in their schools. Although they recognised the student-centred activities of teaching/learning methods, they had experienced some difficulties in carrying out the activities due to the short period of time and crowded classes in Cambodia. Teachers were very satisfied with the programme, despite the short period of teacher training.

Due to cultural taboos, most of the women teachers experienced difficulties teaching sex education with the youths and they were reluctant to demonstrate how to use a condom properly in front of the students. They suggested that the students training period should be longer than three days, group work should be smaller, monitoring work should be more systematic and regular teachers who were trained on HIV/AIDS should teach and be responsible for this programme at the school level.

3.4. Opinions of Parents:

The majority of parents felt that the programme was good and useful and they were very satisfied with the learning achievements of their children about HIV/AIDS at school. There was only the exception of one parent who was somewhat hesitant that the introduction of sex education in schools might have brought their children prematurely into early sexual activity, because their children were still too young and could not perhaps control his or her own behaviour. Due to poverty and being very busy in their daily jobs and routines, parents admitted that they rarely participated at the schools in discussions about the programme, but that they usually gave some advice on the risks of HIV/AIDS to their children at home, through the knowledge they have gained from the public media.

In Cambodia, talking about sex and such matters at home with children is a sensitive issue and thus they rarely raise it with their sons and daughters. Discussions on sexual issues generally take place between only married adults and inside the family setting. The parents suggested that the programme of HIV/AIDS prevention education should be conducted on a yearly basis, at least twice a year, at secondary school level and should be extended to all of the country, especially schools in rural and remote areas and for girls and women in particular.

3.5. Students' Feedback:

All of the grade 9 and upper grade students expressed through the interviews that they all liked the programme directed at secondary schools with a variety of positive comments or reasons. Compared to the upper grades, there were facts and content that the grade 9 students could absorb well. They showed their high commitment to prevent themselves from the risks of HIV/AIDS now and in the future. Speaking on how to protect themselves from the risks, they all expressed a variety of responses, especially using condoms and delaying sex. In their suggestions, they all recommended that the learning of HIV/AIDS prevention education should be conducted continuously and using smaller working groups, which would produce far better results. They suggested that it would be better to organise students into male and female groups with male and female trainers in order to avoid shyness between female trainers and students. This programme

should also they suggested be integrated formally into the existing national curriculum for secondary schools. The training period should be extended longer for better understanding and enough time for the role-plays suggested in the activities. More activities should also be conducted and more teaching/learning materials should be provided and used.

3.6. The Student Books & Teachers' Guide on HIV/AIDS/STDs Prevention

Education: Student books and teachers' guides were given to all students and trainers, except for in the very remote provinces. It was reported that trainers did not use any extra learning/teaching materials, e.g. videotapes and posters, other than the student books and teachers' guide provided by the programme, due to the absence of equipment and poor electricity.

The language used in both of the books/manuals was regarded as proper for the target population, including the pictures, graphs and activities. The teachers' guide was useful for teachers and teacher training, especially in regard to conducting activities. They all indicated that activity-based learning was easy for the students. Besides the two manuals, it was recommended that videotapes should be produced and distributed. Posters with lifelike images of HIV/AIDS/STDs symptoms or other information such as how to recognise HIV/AIDS/STDs should also be provided for more information and knowledge.

4. Recommendations

Based on these pilot experiments, the following is recommended:

- 4.1. Access to secondary education should be expanded, to a larger number of school aged children from the current 14.4% to at least 50% by 2005.
 - 4.2. Education for the prevention of HIV/AIDS/STDs should be taught as a separate subject for a period of at least 3 months amongst grade 9 and grade 12 students as they are the first to leave school, while students of other grades should receive instruction through an integrated curriculum.
 - 4.3. Experience from this pilot study should be shared amongst all schoolteachers and administrators and other stakeholders.
 - 4.4. More video or visual materials should be provided, distributed and utilised by schools.
 - 4.5. Role-play and student-centred methods should be promoted because they allow for a greater student involvement.
 - 4.6. Professional health personnel, social workers, HIV/AIDS activists and people living with HIV/AIDS should be invited to take part as valuable resource persons.
 - 4.7. During the condom use demonstration, classes should be separated by sex. That is, female teachers should be required to supervise only female students and male teachers work with only male students.
 - 4.8. The programme should also be implemented through non-formal education to include out-of-school youth and adults and expanded through mass media and peer group education.
 - 4.9. All secondary school teachers of all subjects should receive awareness/methodology training as soon as possible. To date only 5% of secondary school teachers have received training in this important subject.
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