優質教育基金
Quality Education Fund

M:FR/E

Final Report of Project	**Project No. : 2009/0241**

Part A

Project Title: Development of tool kit for schools to respond to new health challenges of young generation using the Healthy School model

Name of Organisation/School: Centre for Health Education and Health Promotion, The Chinese University of Hong Kong

Project Period: From **July 2010** *(month/year)* to **Feb 2012** *(month/year)*

Part B

*Please read the **Guidelines to Completion of Final Report of Quality Education Fund Projects** before completing this part of the report.*

Please use separate A4-size sheets to provide an overall report with regard to the following aspects:

1. Attainment of objectives
2. Project impact on learning effectiveness, professional development and school development
3. Cost-effectiveness – a self-evaluation against clear indicators and measures
4. Deliverables and modes of dissemination; responses to dissemination
5. Activity list
6. Difficulties encountered and solutions adopted

Name of Project Leader: _____ Name of Grantee*: _____

Signature: _____ Signature: _____

Date: _____ Date: _____

** Final Report of Project prior to the 8th call should be signed by the supervisor of the school/the head of the organisation or the one who signed the Quality Education Fund Agreement for allocation of grant on behalf of the organisation.*

** Final Report of Project under the 8th and subsequent calls should be submitted via "Electronic Project Management System" (EPMS). Once submitted, these reports are regarded as already endorsed by the supervisor of the school/the head of the organisation or the one who signed the Quality Education Fund Agreement for allocation of grant on behalf of the organisation.*

1. Attainment of Objectives

Table 1: Attainment of Objectives

Objective statement	Activities related to the objective	Extent of attainment	Evidence or indicators of having achieved the objective	Reasons for not being able to achieve the objective, if applicable
Tool Kit describes how the different components of Health Promoting School (hereinafter refer as HPS) would be applied to manage various health issues in school setting.	1. Student and Teacher interviews in 23 local schools. 2. Re-analysis of school health profiles in schools adopting the HPS framework.	Fully achieved	Over 100 teachers and students interviewed. Re-analysis of school health profiles in schools adopting the HPS framework completed.	
Tool Kit consists of HPS model of care for recent health crises of young generation.	3. Data and literature review of potential health challenges faced by school-aged students and strategies adopted at local schools. 4. Translation of "Promoting health in schools: from evidence to action" for local educators and Chinese populations.	Fully achieved	Recent health crises of young generation and school staff were explored. Physical inactivity and pandemic of childhood obesity, infectious disease control, and occupational health at school were the three issues identified. "Promoting health in schools: from evidence to action" (Chinese version) to be included in the Tool Kit.	
Tool Kit will guide the school to evolve a model of care based on HPS framework for impeding health challenges in near future so one does not need to re-invent the wheel from time to time.	5. Dissemination of the resources and deliverable developed through teacher seminars and online platforms.	100% attained	Video shoots were taken at 23 schools, and interviews with school principals and experts in the field of school health promotion were completed. Videos demonstrating how to adopt HPS framework for impeding health challenges had been posted on the HPS Video Channel which is an online platform for local educators. Three seminars were organised in different districts for local schools to demonstrate effective use of Tool Kit. Tool Kits (booklet with resource DVD) were delivered to school representatives during seminars while Tool Kit via postal delivery is available for schools unable to send any representative to attend the seminars.	

2. Project Impact

The Tool Kit to be developed in the current project will guide local schools to evolve a model of care based on HPS framework for impeding health challenges in near future so one does not need to re-invent the wheel from time to time. The availability of the Tool Kit and resources on the on-line platforms would enable schools to respond better with emerging health issues encountered by schools from time to time. School leaders and teachers could take reference from a generic framework and evolve a comprehensive action plan. This will avoid developing ad hoc projects from time to time with different heath issues and enhance the efficiency of the schools in responding to health crisis and minimise excess workload of the school. Local and international experts were consulted on the structure and contents of the Tool Kit, and its appropriateness and usefulness had been recognised. Feedbacks from video viewers of the HPS Video Channel were positive and they found the videos useful and helpful in building a positive culture of healthy school. They also looked forward to more resources and new videos on other school health topics. Their feedbacks will be obtained regularly for assessing the rate of satisfaction and identifying room for improvement. After reviewing and compiling the information collected at interviews with teachers and data collected from Student Health Survey in 2011, Tool Kit was developed and they were disseminated to local schools via seminars and postal delivery. The seminars were well received by education sector and the feedbacks from participants were promising.

3. Cost-effectiveness

Table 2: Budget Checklist

Budget Items	Approved Budget (a)	Actual Expense (b)	Change [(b)-(a)]/(a) +/- %
Staff Cost	156,240.00	156,240.00	0.0%
General Expenses ($8,990 + $70 Round Up)	9,060.00	31,086.01	+243.1%
Service	48,000.00	47,762.50	-0.5%
Total	213,300.00	235,088.51	+10.2%

The actual expense of the project exceeded the approved budget by 10.2 per cent, mainly due to the additional cost for printing hard copies of the deliverable. The shortfall has been made up by private grants from the Centre for Health Education and Health Promotion of The Chinese University of Hong Kong.

With regards to utilisation of available resources, this project was built on three web-based platforms established and monitored by Centre for Health Education and Health Promotion of CUHK (hereinafter refer as CHEP) : (1) Health Promoting School Self-monitoring and Evaluation System, (2) HPS Video Channel, and (3) HPS Resource Bank. The first platform enables local educators to conduct self-evaluation for identifying strengths and weaknesses in school health promotion, and facilitate teacher

interviews involved in this project. The latter two platforms allow uploading of videos and resource materials developed in prior school health projects and the current project. The platforms not only enable wider dissemination of school health practices to people in the education sector in local and Chinese populations, but also allow updating and posting of new resource materials and ensure the project's sustainability. An IT company commissioned by CHEP had provided technical support to this project and assisted in video shooting and editing. The project team has also equipped with substantial hardware for video shooting and software for video editing and platform management.

In terms of human resources, the project team was able to link people from the health sector and education sector to work together for student health. Consultations were sought from not only local school principals and frontline teachers, but also international academics and leaders in WHO Western Pacific Regional Office (See ***Section 5C***). Participating schools responded to the proactively and they rendered tangible supports such as computing and video shooting facilities, venue, interviewee invitation among teachers and students that enabled the achievement of the visits and data collection.

Regarding unit cost for the direct beneficiaries and sustainability of the Tool Kit, the current project resulted in a Tool Kit demonstrating how to manage various health issues in school applying the components of HPS model. As the Tool Kit has been printed and available for every local school, the project is going to therefore benefit the education sector as a whole. Dissemination seminars at the final stage of the project received positive responses, and the project team stays open to the deployment of uploading videos and resource materials on school health to on-line platforms as described after completion of the project for free access by local school teachers or registered users. This would also allow possible updating of the contents, and provide a learning platform for user-applicant communications such as posting new videos and Frequently Asked Questions regarding school health promotion.

4. Deliverables and Modes of Dissemination

Two thousand copies of the Toolkit for School Health (校園健康錦囊) have been printed and are available for each local schools, including primary, secondary, special schools and kindergartens. It includes a booklet appending with a CD of short videos, two local and international practical guidelines of HPS (in PDF format). The booklet consists of three sections to illustrate how to adopt the HPS framework to address physical inactivity and pandemic of childhood obesity, infectious disease control, and occupational health at school respectively.

The two documents (Chinese version) are included in the deliverable and the whole set of Tool Kit is of good quality and is believed to have good dissemination value.

Three seminars named 'Overview on Healthy School Policies' for schools were held to illustrate the HPS framework and use of the deliverable. The seminars were conducted in Yuen Long, Wan Chai, and Sha Tin in Hong Kong. Two hundred and eighty-two attendees including school principals, teachers and other education workers (e.g. social worker, nurse, etc.) from around 190 local schools participated. Tool Kits were to school representatives attending the seminars. For schools unable attending the seminars, Tool Kits by postal delivery are available via application. Among 218 evaluation forms collected in three seminars, over 95% of participants agreed (or strongly agreed) that the seminar improved their knowledge in school health promotion. The percentage of participants agreed (or strongly agreed) that the seminar enhanced their understanding on effective strategies in healthy school promotion was around 90% and around 80% of responses agreed (or strongly agreed) the seminar promoted their confidence in implementing healthy school policies in school.

To summarise the key elements that contribute to the success of the project, the current project has demonstrated a model of partnership towards the common goal to create a learning community and sharing culture for student and staff health in school. The project team played the driving role to set up specific performance indicators for HPS and interview guidelines that allow teachers and students to understand and respond easily. The team also played the analytical role to interpret the data and information collected from schools, and identified needs and challenges of school health promotion among young people and school teachers. On the other hand, teachers participated in the interviews considered the tasks involved in this project in line with their works, and supported the idea of exploring the needs and challenges of school health promotion through video interview and dissemination at credible on-line platforms among the education sector. Benefits of the project were well understood and received, and some teachers responded that the interviews allowed them to reflect on their existing work for health promotion and enabled students to think about their health behaviours and roles in school health promotion. In addition, the project received full support from CHEP and international experts and organisations in the field of public health and health promotion. This resulted in sufficient resources (including professional advices, contribution of guidelines and technical supports of utilising the on-line platforms) rendered to the project and all these strengths and successful factors helped paving the pathway for the project to be continued in the future. During final stage, conducting seminars to illustrate the use of Tool Kit in different districts in Hong Kong was an effective approach for dissemination. On-going dissemination of Tool Kits via postal mail to schools without attending the disseminating seminar ensures the deliverables will benefits the education section as a whole.

5. Project Activity

A. Re-analysis of school health profiles in schools adopting the Health Promoting Schools framework

Project team conducted field visits at 23 local schools (including 16 Primary School and 7 Secondary Schools) from May to June 2011 for teacher interviews and video shooting among students. Table 3 shows the schedule of visits.

During the visits, the project team discussed with school teachers who are responsible for school health promotion or familiar with each of the key areas of the HPS framework. Teachers were asked to respond to questions such as: "What are some of the healthy school policies adopted in your school?", "What are the rationales behind of adopting the HPS framework?", "Is there are task force responsible for health promotion in your school?", "What are the areas of students and staff health to be improved?", "What are the potential health challenges faced by students at your school?", and "What strategies did you apply at school to deal with those health challenges?" Teachers responded positively and shared a lot of their views on the current situations and strategies adopted to help facing the challenges.

The teachers also helped invite interested students for video shooting during the school visit. At each time of video shooting, 4 to 8 students from different grades showed up and shared their views on topics such as "What do you think a Healthy School like?", "Do you like your school and what learning activities you like most?", "Are there any school activities that nurture you to learn how to put health knowledge into practice?", "Is there anyone who is internet addicted or gaming addicted around you?", "To establish friendship, do you prefer face-to-face communications or ways not requiring actual seeing each other such as texting, using Facebook? And why?", "What health behaviours among your peers and young people need improvement?" Students participated in the interview responded positively and shared a lot of their views on students' health. The project team had interviewed over 100 teachers and students and all of them treasured the opportunity to be involved in the project.

Table 3: Schedule of School Visit

Date	School
4 May, 2011	Lok Sin Tong Leung Kau Kui Primary School (Branch)
6 May, 2011	Lutheran Tsang Shing Siu Leun School
9 May, 2011	S.K.H. Kam Tin St. Joseph Primary School
13 May, 2011	QES Old Students' Association Secondary Schools
16 May, 2011	Precious Blood Primary School (Wah Fu Estate)
18 May, 2011	S.K.H. Yautong Kei Hin Primary School
19 May, 2011	S.K.H. Kei Lok Primary School

20 May, 2011	China Holiness Church Living Spirit College
23 May, 2011	S.K.H. Fung Kei Primary School
25 May, 2011	Kowloon Tong School (Secondary Section)
26 May, 2011	TWGHs Wong Yee Jar Jat Memorial Primary School
27 May, 2011	Po Leung Kuk Chee Jing Yin Primary School
30 May, 2011	Cho Yiu Catholic Primary School
1 June, 2011	The Hong Kong Institute of Education Jockey Club Primary School
3 June, 2011	Kau Yan College
7 June, 2011	Cotton Spinners Association Secondary School
8 June, 2011	TWGHs Li Chi Ho Primary School
10 June, 2011	QualiEd College
13 June, 2011	Taoist Ching Chung Primary School
15 June, 2011	St. Patrick's Catholic Primary School (Po Kong Village Road)
16 June, 2011	Lions College
20 June, 2011	Po Kok Branch School
22 June, 2011	HKTA YYI Shek Wai Kok Primary School

B. Data and literature review of potential health challenges faced by school-aged students and strategies adopted at local schools

A vigorous review on local students' health behaviours had been conducted from May to July 2011 aimed at comparing information collected from the interviews at schools (described in ***Section 5A***) and data collected through a student-administered Student Health Survey on health behaviours carried out by CHEP during January to April, 2011. It was a survey conducted among 49 local schools (30 primary and 19 secondary schools) participating in the Quality Education Fund Thematic Network on Healthy Schools. Educators in these schools have the idea or an implementation plan to strengthen the work of health promotion at school by adopting the HPS framework. All students studying in P4 or S3 were invited to complete a questionnaire which includes questions on oral health, dietary habits, physical activity, sleeping and screen time, times of consulting a doctor because of feeling ill during the three months before the survey, mental wellbeing and distress, school bullying and cyber bullying, sex behaviours, abuse of substances such as tobacco, alcohol and drugs. In total, 5248 valid questionnaires had been completed (by 2311 P4 and 2937 S3 students), and the data retrieved had been used for further investigation.

In reviewing all the information collected from schools, the following three health issues have been identified to be explored in the Tool Kit: Physical inactivity and pandemic of childhood obesity, infectious disease control, and occupational health at school.

Physical inactivity and pandemic of childhood obesity

Physical inactivity has been identified as the fourth leading risk factor for global mortality causing an estimated 3.2 million deaths globally. Results of CHEP's recent survey also showed that only 7% S3 and 7% P4 students had physical activity reaching the World Health Organisation's (WHO) recommendation of 60 minutes of physical activity per day, and 20% S.3 and 20% P4 students spent over two hours in watching television on an average school day. Nearly 20% S3 and 20% P4 students spent over two hours in electronic games on an average school day. These evidences further proved the importance of physical activity promotion at young stages especially through the school setting. Regular moderate intensity physical activity such as walking, cycling or participating in sports has significant benefits for health such as reducing the risk of cardiovascular diseases, diabetes, colon and breast cancer, depression, and help maintain healthy weight. All the schools visited in the current project provided opportunities for students to learn sports skills and participate in wide range of sports training and competitions. Comprehensive school-based policies to promote physical activity and prevent overweight and sedentary behaviours were however seldom found. A model of promoting physical activity in school that adopts the HPS framework has been established in the Tool Kit with an emphasis on a strong position of physical activities in school and screening for students necessary for weight control.

Infectious disease control

Infectious diseases control is the second content area to be covered in the Tool Kit. Schools should prevent the spread of infections by ensuring routine immunisation, high standards of personal hygiene and practice, particularly hand-washing, and maintaining a clean environment. School personnel should also contact Centre for Health Protection for reporting any outbreaks of infection and getting the latest guidance of recommended period for cases of infections and communicable diseases to be kept away from school. Hand-washing is one of the most important ways of controlling the spread of infections, especially those that cause diarrhoea and vomiting, and respiratory disease. Students should be reminded to wash hands after using the toilet, before eating or handling food. Cover all cuts and abrasions with waterproof dressings. Coughing and sneezing easily spread infections. Students should also be encouraged to cover their mouth and nose with a tissue. Cleaning of the school environment, including surfaces and equipment should be frequent, thorough and follow guidance. Besides, schools should monitor cleaning contracts and ensure cleaners are appropriately trained with access to personal protective equipment. All spillages of blood, faeces, saliva, vomit, nasal and eye discharges should be cleaned up immediately. If skin is broken, wash thoroughly using distilled water or normal saline, apply dressing properly and consult healthcare professional for advice if needed or unsure.

Some medical conditions make children vulnerable to infections that would rarely be serious in most children. Schools that had been visited normally have been made aware of such children (e.g. children

with chronic illnesses, allergies and deficiencies). Students' health record and immunisation status should always be checked at school entry and at the time of any vaccination (P1 & P6). Parents should be encouraged to have their child immunised (especially those newly immigrated students) and any immunisation missed or further catch-up doses organised through Department of Health and the child's family doctor. A model using the HPS framework to improve health literacy on infectious disease had been established in the Tool Kit, which will strengthen existing hygienic practices at school and prevent the spreading of infectious diseases such as influenza and increased number of case reported of scarlet fever in 2011.

Occupational health at school

Staff health promotion in school is the third content area identified in the current project. Among the schools that have been visited, more than half of the schools provide sufficient and appropriate equipment and facilities (such as microphones, trolley, mouse pad and wrist rest for using keyboard etc.) for teachers and workmen. Only one-fifth of the schools, however, have established a structuralised function group for occupational safety and health at school, and none of them have conducted comprehensive risk assessment for this area. Work-related health problems reported in teacher interviews include tiredness, varicose veins of lower limbs, eyestrain, contact dermatitis, sleep problems, shoulder pain, and voice disorder etc. Responding teachers also reported an increase perceived stress level due to heavy workload and time pressure, education reforms, pursuing further education. They also looked forward to a more robust system to promote staff health (such as health talks and training to staff) and handle cases in need (such as staff injury, stress management and mental distress among school staff). Short videos showing stretching exercise tailor-made to frontline teachers directed by registered physiotherapist of CHEP were produced and included in the Tool Kit.

C. Consultation on the structure and contents of the Tool Kit

From May to June 2011, three experienced school leaders

consulted to identify common factors leading to success of HPS and the approaches adopted to tackle health challenges faced by nowadays students and teachers. The interviews were video-taped for further studies and dissemination. Common successful factors addressed by these school leaders were the importance of leadership at both administrative level and among function groups within the school community, as well as setting-up of school-based healthy school policies and their implementation.

They further identified the impact of sedentary

lifestyle, internet/gaming addiction and social networking to be the epidemic challenges faced by school-aged children and young adults worldwide. Both of them and many other academics in the field of health promotion consider a whole-school approach adopting the HPS framework as one of the key strategies to strengthen the protective factors among next generation to face health challenges. All the professional opinions and inspirations were also video-taped for writing up the Tool Kit and dissemination in HPS video channel.

D. Translation of "Promoting health in schools: from evidence to action" for local educators and Chinese populations

The project team conducted vigorous literature and document review at Phase I and II of the current project. Besides recent health guidelines from countries worldwide, a major document "***Promoting health in schools: from evidence to action"*** published by International Union for Health Promotion and Education in 2010 was reviewed. As described earlier, it is an advocacy document for the health and education sectors to undertake school health promotion activities based on the evidence of effectiveness. It highlights major findings from the literature about what is possible to achieve in school health and the circumstances under which the gains will occur. Attention is focused both on the evidence from the education sector, e.g. effective schools, learning and teaching approaches, and from the health sector. It also identifies the outcomes from topic areas such as mental and emotional health, healthy eating and nutrition, physical activity, hygiene, sexual health and relationships, substance use and misuse. The project team had successfully sought the rights for Chinese translation of the document and reprinting in the Tool Kit for wider dissemination in local schools.

E. Dissemination of Took Kit via seminars, postal mail and online platform

During final stage of the project, project team organised three identical seminars named 'Overview on Healthy School Policies Seminar' for school principals and teachers have been held on 27 February, 28 February and 3 March 2012 to illustrate the HPS framework and disseminate the deliverables. The seminars were conducted in schools located in Yuen Long, Wan Chai, and Shatin to facilitate participation from territory wide. The seminars introduced participants about the framework of HPS and how to develop school health policies adopting HPS framework to tackle different health issues in school. In each seminar, experienced school principals and teachers were invited to share their experience and tips on school health promotion. There were over 300 school principals, teachers and other education workers (e.g. social worker, nurse, etc.) workers from 82 primary, 71 secondary, 17 special schools and 22 kindergartens attending the seminars. Tool Kits were given to school representatives attending the seminars. For schools unable attending the seminars, the hand-out of the seminar is available in Centre website and Tool Kits by postal delivery are available via fax application. The project team also will upload the electronic version of Tool Kit in Centre website and HPS Resource Bank for wider dissemination.

6. Difficulties Encountered and Solutions Adopted

A. Implementation Schedule Adjusted

This project aimed at exploring health challenges at schools and school-based strategies applied to deal with those challenges using the HPS framework. Overwhelming responses were received from teachers and students in Phase II of development and consultation of the Tool Kit during December 2010 to April 2011. The project team also explored possible formats of the project deliverable and ways of its dissemination. A booklet appending with a CD of resource materials was considered good enough for knowledge transfer and utilisation of resource materials among school teachers. Teachers advised the team to make good use of information technology to provide information and recommendations on how to put HPS framework into practice. The team then revised the work plan and decided to produce a series of short videos as described in ***Section 5A***, and had sought supports from CHEP's colleagues and IT contractor for utilising two online platforms — HPS Video Channel and HPS Resource Bank, for further dissemination and better sustainability of the deliverable. The adjustment also brought about the idea of video shooting at schools for understanding students' views on school health promotion. Very positive responses were received from 23 schools, and many new ideas and constructs about how health challenges and how to make good use of information technology in school lives for a healthy living had been brought up during the interviews. By the end of the project period, the team was able to complete analysis of part of the information collected, edit and post ten videos of selected topics onto the platforms, and complete writing of the deliverable booklet. More time is required for final proof-reading and printing of the booklet, and there is still room for uploading new videos on other school health topics onto the HPS Video Channel. Those materials would serve as valuable resources and reference for other teachers in health education and promotion.

After reviewing the calendars of local schools, end of February was most suitable time for organising seminars as teacher's working schedule was relatively less tight. School venues located near public transit for the seminars were preferred, but most of these venues were not available in that period of time. Eventually, the last seminar had been rescheduled in early March 2012 and the responses from participants were very satisfactory.

B. Content areas covered in the Tool Kit Identified and Adjusted

Beside the changes of actual implementation schedule, setting out specific content areas covered in the Tool Kit was also a challenge encountered. At the preparatory stage, drug abuse was the example used in the project proposal illustrating how to adopt the HPS framework to respond to the challenge and temptation of drug abuse among young people. Drug abuse can result in serious illnesses and injuries, and is one of the health risk behaviours identified to be addressed. Education Bureau also took active

responses to the need to promote a healthy school environment for the young generation, and had called for schools' action to formulate a school-based Healthy School Policy starting from 2010/2011 school year by reintegrating the school's existing resources to create a healthy school environment. The review of local Student Health Survey conducted by CHEP in January to April, 2011 showed that a minority proportion of responding students (ranging from 0.1% to 0.4% of P4 and S3 students) reported to have abused ketamine, ecstasy, or cough syrup during the 30 days prior the survey, while 0.7 to 1.6% responding students reported that they have ever had the experiencing of being invited to use some of these drugs but they refused. Literatures also support that the building up protective factors—positive bonds to family, school, and community—while reducing risk factors such as peer pressure and favourable attitudes toward drugs are important to prevent drug abuse in adolescents. In reviews of these data and literatures, the project team decided not to cover drug abuse in the Tool Kit at this stage, but put efforts on exploring strategies to promote physical activity that helps control the obesity pandemic and build a positive school environment to prevent health risk behaviours including drug abuse.