

Development of Tool Kit for Schools to Respond to New Health Challenges of Young Generation Using the Healthy School Model

Part C Project Details

Goals and Objectives

Recently students in Hong Kong are facing the health challenges of substance abuse, obesity, influenza pandemic, emotional problems, and social behavioural problems. It has been shown that schools successfully employing the Health Promoting School (HPS) or otherwise known as Healthy School approach improve the development of student's resilience, building important protective factors for students' health and well being and create an overall social environment in the school which is supportive in achieving these outcomes (Stewart et al, 2004; Patton et al, 2006; Stewart-Brown, 2006). Locally, a study has shown that students in schools that had adopted the HPS framework had a more positive health behaviour profile than those in non-HPS schools (Lee et al, 2008). HPS schools were also reported to have better school health policies, higher degrees of community participation, and a better hygienic environment. The HPS model has the potential to become a generic model to manage emerging health challenges in school. The main goal of this project is to develop HPS tool kit based on decade of experience and research so the schools would learn how to apply in school setting. The specific objectives are:

- Tool kit describes how the different components of HPS would be applied to manage various health issues in school setting.
- Tool kit consists of HPS model of care for recent health crises of young generation, i.e., substance abuse, obesity, outbreaks of infectious disease, and impulsive social behaviours.
- Tool kit will guide the school to evolve a model of care based on HPS framework for impending health challenges in near future so one does not need to re-invent the wheel from time to time.

Needs Assessment and Applicant's Capability.

Background and Significance

The Centre for Health Education and Health Promotion of the Chinese University of Hong Kong (CHEP) first initiated the HPS programme in 1998 in Hong Kong (Lee et al, 2003) and then launched the Hong Kong Healthy Schools Award Scheme (HKHSAS) which was built on the concept of HPS in 2001 (Lee, 2002). Healthy Schools Award Schemes had been shown to be very popular producing changes in children's health behaviours and also facilitated health promotion policies (Moon et al, 1999; Rogers et al, 1998). The HKHSAS was modelled on the WHO Western Pacific Regional Office HPS framework covering six key areas (health policy, physical and social environments, community relationships, personal health skills and health services) (WHO, 1996). CHEP had designed the rating system and evaluation framework (Lee et al, 2004; Lee et al, 2005) to enable schools to fulfil the criteria for accreditation to different levels of the award. For each key area, there are a number of components and respective sets of indicators based on extensive literature and documentary reviews that were relevant, adaptable and achievable with a contextualisation specific to Asia Pacific countries. The tools had been validated by a group of HPS experts from different parts of the world during their field visits to schools in Hong Kong (Moon, 1999; St Leger, 2000; Tones and Tilford, 2001).

Adoption of HPS framework using a long-term whole school approach programme rather than ad hoc projects in building self esteem of students and improvement of school social environment would build protective factors as well as minimisation of risk factors (Well et al, 2003; Brown et al., 2004). Evidence from a number of studies have shown the effectiveness of schools in addressing mental health issues and identification of policies and priorities and committing them in an ongoing way (Patton et al, 2006; Stewart-Brown, 2006; Wear, 2000). The use of the HPS framework addressing the issue of physical activity has been shown to be more effective than the curriculum-based approach (Bell and Swinburn, 2004). Model of HPS would also help schools to face the challenge of public health crises such as SARS (Lee et al, 2003). The HPS model would become a generic model for schools to tackle emerging new health challenges in school rather than creating many ad hoc projects from time to time. CHEP in collaboration of International Union for Health Promotion and Education (Pearl River Region Liaison Office) have developed the self evaluation system to enable schools to create their own school health profile. CHEP has also conducted studies to identify common factors leading to success of HPS, and has created good exemplars of HPS in Hong Kong. Time is now ready to prepare user-friendly tool kit so all schools would know how to adopt the HPS model in dealing with different health issues in school context.

Intervention: Development of a user-friendly Health Promoting Schools Tool Kit for schools to respond to new health challenges of students

A rating system and indicators had been developed by CHEP for the assessment of status of HPS under the leadership of Prof. Albert Lee this project's leader. The school health profile was assessed based on the six key areas namely Healthy School Policies, Action Competency on Health, School Physical Environment, School Social

Environment, Community Link and Services for Health Promotion. Evidence has shown that students of those schools performing well in those key areas had better social behaviours and emotional health, and also better self-reported health status and academic performance (Lee et al, 2006). The important components of the six key areas can be integrated in a matrix system to become an integrated framework of HPS (Figure 1) so each component will have synergistic effect on other components. CHEP has already developed a structured system to assess how schools perform of the different components under each key area so improvement can be achieved (Lee et al, 2007). With the development of a self-evaluation system by CHEP, schools would then assess their status of HPS so they would develop action plans under different key areas for further improvement. With that infra-structure in place, schools would translate the action plans to tackle different health challenges. Figure 2 illustrates how the HPS model would improve physical activities amongst school children and figure 3 illustrates how HPS model would improve health literacy on infectious diseases.

The proposed Tool Kit will serve the following purposes:

- To demonstrate how to create a school health profile with the self-evaluation system with practical tips from schools and experience using it;
- To analyse the results based on some examples;
- To provide practical tips from exemplar schools in developing action plans based on the results;
- To illustrate how this system would help schools to develop action plans to respond to new health challenges such as drug abuse problems, social behaviours (more rational behaviour rather than acting on impulse), obesity, influenza pandemic etc.; and
- To provide guidance to schools how the integrated HPS model can respond to future health challenges.

The Tool Kit will include inputs from school principals, school teachers involved as co-ordinators of HPS so the kit is school-based and user-friendly.

An example of using the Health Promoting Schools model for schools to respond to the challenge of drug abuse in adolescents

Drug abuse (illicit and prescription) has become an epidemic adolescent health promotion issue. Usually, prescribed medications are taken for therapeutic reasons; however, reports show that schoolchildren, adolescents, and young adults are increasingly using drugs that cause dependence and toxicity. Reasons for drug abuse are many: curiosity; peer pressure; need to overcome feelings of insecurity and aloneness and to be a part of the group; etc. The drug subculture gradually replaces interest in family, school, hobbies and may lead to social problems and consequences of breaking the laws. Physiologically, illicit drugs depress the cerebral cortex and releases inhibitions in the limbic system. Primary and general signs and symptoms of drug abuse among adolescents include: signs of physical change or deterioration (including pale face red eyes, heightened sensitivity to touch, smell or taste, weight loss); signs of mental change or deterioration (including disordered thinking or illogical patterns, decreased ability to remember or to think in rapid thought processes and response, severe lack of motivation); change in activity, friends and appearance or dress; rebellious, resistant to authority, antisocial behaviours, less responsible behaviours in school (such as decrease in quality of schoolwork without a valid reason, school tardiness or absenteeism); etc. (Murray & Zentner, 1997)

School plays an important role in preventing students from attempting drug abuse. Table 1 outlines approaches and strategies derived from the six key areas of HPS that address how schools can respond to this emerging challenge among adolescents. It is essential for schools to state an explicit position concerning health promotion and drug abuse prevention in school and establish procedures/guidelines with respect to handling prescribed medications and dealing with cases of drug abuse within or outside the school property. It also illustrates how teachers can help equipping students with health skills and competency for taking smart and healthy choices/actions, as well as demonstrates the components of creating a supportive social environment in school. Teachers can help adolescents to clarify values, beliefs, and attitudes that are important and be more analytic in thinking. Besides the school context, the HPS model also emphasises the school's linkage with the community and referral of outside services for adolescence health. Since the identification, treatment, rehabilitation and counselling for drug abusers require the using of an interdisciplinary team approach involving professionals from the police and the field of psychology and social work. Therefore, school also plays a unique role in linking drug abusers to related professional services and providing continuous supports to the adolescents along the journey of rehabilitation. In addition, school can also serve a channel to disseminate messages of healthy living and combating drug abuse to families and the entire community.



Table 1: Using the Health Promoting Schools model for schools to respond to the challenge of drug abuse in adolescents

Key area of HPS	Approach and strategy
Healthy School Policy	<ul style="list-style-type: none"> • Stating the strong position of health promotion and substance abuse prevention in school, and putting it high on school agenda with substantial resource allocation. • Developing procedures of reporting and handling cases of substance abuse, drug intoxication, drug possession or trafficking in school, as well as guidelines for storage and administration of prescribed medicines in school. • Developing a harmonious school policy which promotes friendliness and a caring culture in school, as well as procedures for handling anti-social behaviours in school. • Establishing a system of consultation, implementation, monitoring and evaluation of the policies and guidelines.
Physical Environment	<ul style="list-style-type: none"> • Allocating staff for sentry and patrol within and around school property for security and inspection for suspicious circumstances related to substance abuse. • Providing good lighting in school and avoiding hidden corners or areas difficult for inspection.
Action Competency	<ul style="list-style-type: none"> • Clarifying self-concepts among students by identifying their own attitudes, values and expectations concerning drugs. • Developing decision-making and resistance skills in students concerning the drug abuse by identifying and evaluating peer pressure, family and social messages, beliefs, customs etc. which support or encourage risk choices; risk estimation or cost-and-benefit analysis. • Providing experiencing learning activities for students which foster a positive self image and goal-setting skills which help to develop the personal skills necessary for maintaining no risk choices. • Learning about relationships and acquiring related social skills and problem-solving skills; discussing the effect of peer influence on health risk issues including drug abuse. • Guiding students to access for information and services concerning drug use, misuse and abuse, discussing the safety issues and the adverse effects/ consequences of drug abuse. • Professional training for teachers on drug education and prevention of drug abuse. • Empowering teachers and other school staff with knowledge on the primary and general signs and symptoms of drug abuse among adolescents that enable them to identify and care for students in needed or involved in drug abuse.
Social Environment	<ul style="list-style-type: none"> • Promoting a friendly and positive school environment for all students: including those who are not succeeding academically. • School ethos cultivating healthful habits (such as a variety of sports and community services) for recreation. • Promoting warm, accepting, supportive, non-judgemental feelings and honest feedback as adolescents struggle with decisions or face drug abuse problems. • Helping students in needed make effective choices by fostering a sense of self-importance and strengthening a sense of what is significant in life and a resolve to live.
Community Linkage	<ul style="list-style-type: none"> • Involving parents in school activities and outreaching families in needed. • Proactive linkage with community for additional resources for combating drug abuse in terms of manpower and facilities. • Empowering the community for the message of combating drug abuse and fostering a positive culture for maintaining a healthy lifestyle.
Service for health promotion	<ul style="list-style-type: none"> • Comprehensive recording of health records for students and school personnel particularly absenteeism and sick leave record. • Establishing a system of surveillance for health and medical illnesses respecting individual's privacy. • Providing social and counselling services in school and introducing services available in the community. • Referring cases for further drug testing and aid/rehabilitation services for drug abusers when necessary.

Delivery of Services

- Tool Kit for all schools in an electronic version. Limited hard copies will be available to schools that have participated in Hong Kong Healthy School Award Scheme. Nominal charge will be applied to other schools or additional copies.
- Three seminars will be conducted to demonstrate effective use of the Tool Kit.

Expected deliverables, targets and number of beneficiaries

It is estimated that all schools in Hong Kong will receive the Tool Kit (in CD format) and be benefited from this project, including 540 Primary, 458 Secondary, 60 Special Schools, and 959 Kindergartens (according to 2009/10 school figure from EDB).

Implementation Plan with Time-line

It is a one-year project and the project will proceed in three phases (Table 2).

Table 2: Implementation plan of the proposed Health Promoting Schools Tool Kit project

Stage of Implementation and Time Schedule	Project Milestones and Major Tasks
Phase I: Preparation <i>Jul – Nov 2010</i>	<ul style="list-style-type: none"> • Recruitment and training of project staff. • Re-analysis of school health profiles in schools adopting the Health Promoting Schools framework and having used the Health Promoting Schools Self-evaluation system. • Investigation and identification of potential health challenges faced by school-aged students through literatures review, and school interview. • Exploration of strategies applied in distinguishing schools to deal with those health challenges using the framework and/or system.
Phase II: Development and Consultation of the Tool Kit <i>December 2010 – April 2011</i>	<ul style="list-style-type: none"> • Identification of effective exemplars using the Health Promoting Schools framework to address corresponding health challenges in school setting. • Drafting visual models and develop a user-friendly manual in a kind of Tool Kit with practical tips from schools. • Consultations on the Tool Kit in selected schools. • Refinement of the Tool Kit based on feedbacks from consultations. • Production of both electronic version and hard copies of the Tool Kit.
Phase III: Dissemination and Reporting <i>May -June 2011</i>	<ul style="list-style-type: none"> • Organising three seminars for school principals and teachers for launching the Tool Kit. • Sending the Tool Kit (in CD format) to all local schools. • Report writing.

Budget

Item	Description	Total Amount (HK\$)
1	Staff Cost	
	a.1 Project co-ordinator \$12,400 x 1.05 x 12 months	156,240
	Subtotal	156,240
2	Services	
	a. Consultancy services for the development of Tool Kit \$300/hr x 160	48,000
	Subtotal	48,000
3	General Expenses	
	a. Printing, postage and miscellaneous	4,000
	b. Cost for running seminars	1,000
	c. Administration and management charges (university overhead supported by QEF)	3,990
	Subtotal	8,990
	Grand Total	213,300[#]

[#]To the nearest hundred.



Justification**1. Staff Cost****a. Project co-ordinator*****Duties and Responsibilities***

One project co-ordinator is needed to:

- assist in development and production of the Tool Kit, as well as project management throughout the project period;
- assist in necessary data collection (interviews and surveys) and data analysis;
- provide logistic support to meetings, seminars and other activities of the project;
- assist in preparing instructional materials design for using the Tool Kit;
- provide necessary support to the evaluation of the Tool Kit; and
- assist in production of progress and final report of the project.

Entry Requirement

The applicants should have:

- Hong Kong degree, or equivalent;
- proficiency in written and spoken Chinese and English; and
- experience in health promotion/behavioural sciences/social sciences/health sciences related project(s).

Payment

Monthly salary will be HK\$12,400 with 5% MPF.

2. Services:**a. Consultancy services for the development of Tool Kit**

Consultancy services will be sought from local and overseas experts with expertise in pre-primary education, school health, health education and health promotion. They will work with the project team to develop and refine the Tool Kit. Other types of consultancy services essential to the evolvement and compiling process of the Tool Kit include:

- interviewing, writing, transcribing and editing materials
- multimedia and information technology
- webpage/ CD production

Estimated rate of consultancy services sought

HK\$300 per hour for estimated 160 hours.

3. General expenses

The applicant will provide office space, daily consumable products, basic computing facilities and related software for the project co-ordinator, as well as space for secure storage for necessary confidential files. The following further expenses will be needed for enabling smooth operation of the project:

a. Printing and postage

The cost on printing and postage of all school correspondence, manuals and deliverables has been included in general expenses of the project.

b. Cost for running seminars

Three seminars will be held targeted at school principals and teachers from all schools in Hong Kong to disseminate the use of Tool Kit.

c. Administration and management charges

The running cost on financial services, general administrative services, personnel services, central IT services, and contract administrative services, etc.

Asset Usage Plan

Category (in alphabetical order)	Item / Description	No. of Units	Total Cost	Proposed Plan for Deployment (Note)
Not applicable for the time being				

Note: for use by school / organisation / in other projects (please provide details of the department / centre to which the asset will be deployed and the planned usage of the asset in activities upon project completion).

Report Submission Schedule

My organisation commit(s) to submit proper reports in strict accordance with the following schedule:

Project Management		Financial Management	
Type of Report and covering period	Report due day	Type of Report and covering period	Report due day
Final Report 1/7/2010 - 30/6/2011	30/9/2011	Final Financial Report 1/7/2010 - 30/6/2011	30/9/2011

Evaluation parameters and method***a. Assessment of school health profiles in schools***

Data collection through curriculum and policy review, and semi-structured interview with school principals and teachers will be carried out in Phase I of the project in order to understand current school health profiles. Process of change before and after the implementation of Health Promoting School framework and the use of the Health Promoting Schools Self-evaluation System will be studied. This information will provide answers to which parts of Health Promoting Schools framework actually work for empowering students to face health challenges and how. Multi-method approaches will be employed to address the complex nature of Health Promoting Schools and school health promotion programmes.

b. Investigation of potential health challenges faced by school-aged students

Vigorous literature review and study on local available data will be carried out in Phase I of the project in order to identify potential health challenges faced by school-aged students. Scope of data being explored will include the health behaviours and health status among school-aged population in Hong Kong, such as drug abuse problems, social behaviours, obesity, influenza and hygiene practices, etc.

c. Evaluation on the appropriateness and usefulness of the Tool Kit

Experts in the field of education and school health promotion will work with the project team and be consulted to give advices on the structure and content of the proposed Tool Kit, in order to assess its appropriateness and usefulness. Both written advices and verbal feedbacks will be documented and considered when refining the Tool Kit in Phase II of the project.

d. Evaluation of project progress and satisfaction of the deliverable

Feedbacks and evaluation from participants of seminar(s) and users of the Tool Kit will be obtained to assess for the satisfaction of using the Tool Kit in Phase III. In addition, detailed progress/ final reports would be submitted to QEF on a half-yearly basis as required.

Project impact

The availability of the Tool Kit would enable schools to respond better with emerging health issues encountered by schools from time to time. The schools would take reference from a generic model/ framework and evolve a comprehensive action plan. This will avoid developing ad hoc projects from time to time with different health issues and evidence has shown ad hoc project is less effective than using HPS model. This will enhance the efficiency of the schools in responding to health crisis and minimise excess workload of the school.



Sustainability of the Outcomes of the Project

The proposed project will result in a Tool Kit demonstrating how to manage various health issues in school applying the components of Health Promoting School model. This will help empower school teachers to face varied health challenges possibly happened around affecting students' health. It is a fact that healthy students learn better. Implementation of the strategies described in the Tool Kit will therefore have a positive impact to the building of students' action competencies for healthy living through health education, and enable their learning through creating a healthy school environment. As the Tool Kit will be available for every local school, the project will therefore benefit the education sector as a whole.

To maintain the outcome of the project, the applicant will stay open to the deployment of uploading selected contents of the Tool Kit to the applicant's existing website and/or e-resource bank after the completion of the project for free access by local school teachers or e-resource bank users. This would also allow possible updating of the contents, and provide a learning platform for user-applicant communications such as posting FAQ regarding the use of the Tool Kit.

Dissemination / Promotion

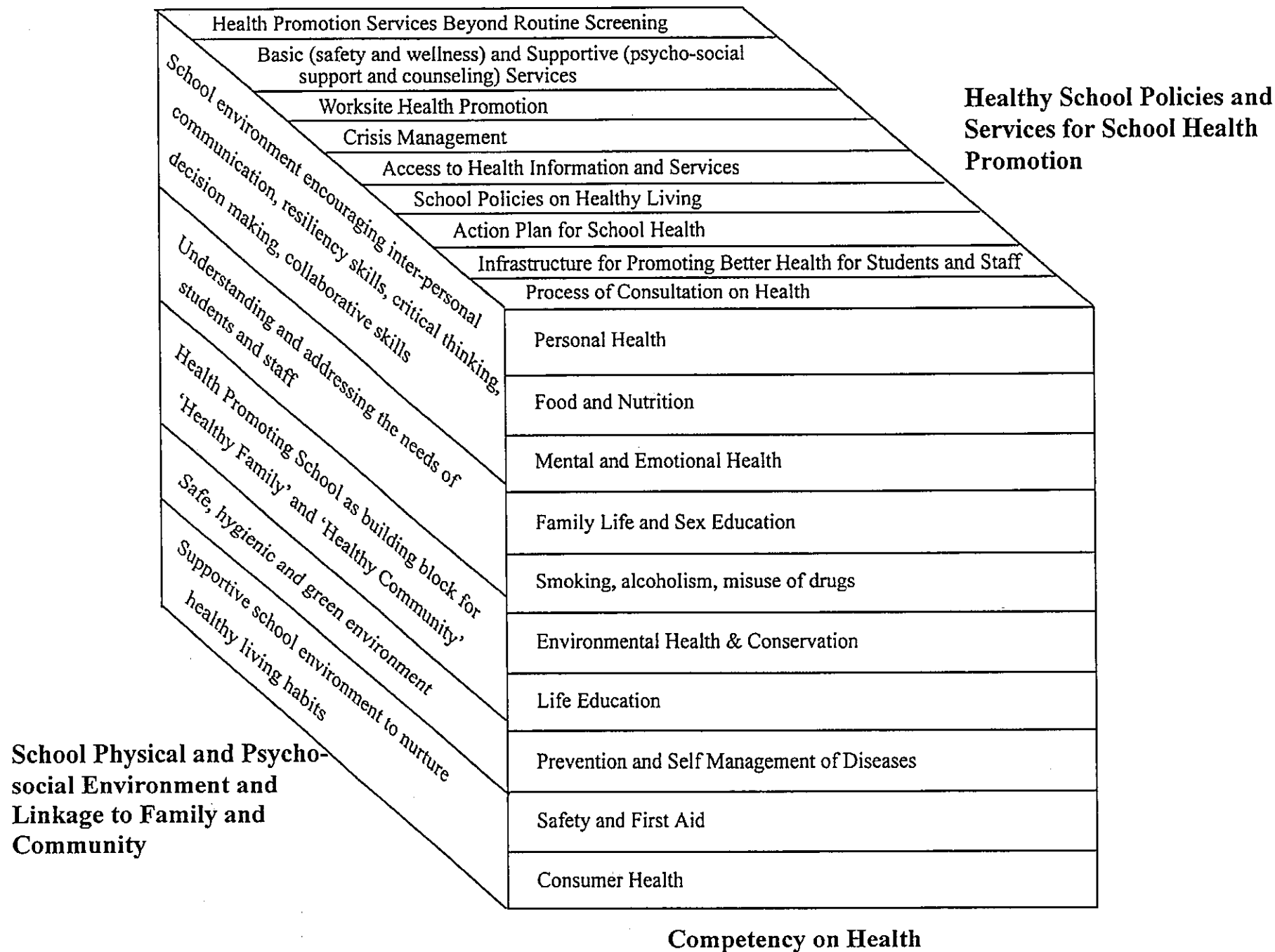
Three seminars will be conducted in final stage of the project to demonstrate effective use of the Tool Kit. All local schools will be informed about the seminars by receiving WinFax and e-mail invitations. During the seminars, to be held at the University, the Tool Kit (in CD format) will be signed for when delivered to school representatives. Schools unable to send any representative to attend in the seminars will receive the CD within three weeks after the last seminar via postal delivery by Hong Kong Post.

References

- Bell A. and Swinburn B (2004). What are the key food groups to target for preventing obesity and improving nutrition in schools? *European Journal of Clinical Nutrition*, 58:258 – 263
- Browne, G., Gafni A., Roberts J, Byrne C. & Majumdar B (2004). Effective/efficient mental health programs for school age children: a synthesis of reviews. *Social Science and Medicine*, 58, 1367-1384.
- Lee A (2002). Helping schools to promote healthy educational environments as new initiatives for school based management: the Hong Kong healthy schools award scheme. *Promotion and Education*, Special issue for the symposium on Health Education Dec 2001, suppl 1:29-32.
- Lee A, Lee SH, Tsang KK, To CY (2003). A comprehensive "Healthy Schools Programme" to promote school health: The Hong Kong experience in joining the efforts of Health and Education Sectors. *Journal of Epidemiology and Community Health*, 573:174-177.
- Lee A, Ho M, Leung TCY, Cheng FFK, Tsang KK, Suen YP, Yuen SK, Hong Kong Healthy Schools Project Team (2004). Development of indicators and guidelines for the Hong Kong Healthy Schools Award Scheme. *Journal of Primary Care and Health Promotion*. 2004; 1(1), 4-9.
- Lee A, Cheng F, St Leger L (2005). Evaluating Health Promoting Schools in Hong Kong: The Development of a Framework. *Health Promotion International*, 20(2): 177-186.
- Lee A, St Leger L, Moon A (2005). Evaluating Health Promotion in Schools meeting the needs for education and health professionals: A case study of developing appropriate indicators and data collection methods in Hong Kong. *Promotion and Education*, XII (3-4): 123-130. Special issue reporting successful school health programme globally.
- Lee A, Cheng F, Fung Y, St Leger L (2006). Can Health Promoting Schools contribute to the better health and well being of young people: Hong Kong experience? *Journal of Epidemiology and Community Health*, 60:530-536.
- Lee A., Cheng ., Yuen H., Ho M., Lo., Fung Y., Leung T (2007). Achieving good standard of Health Promoting Schools: Preliminary analysis after one year implementation of Hong Kong Healthy Schools Award Scheme. *Public Health*; 121: 752-760.
- Murray RB, Zentner JP (1997). *Health assessment promotion strategies through the life span* (6th ed). Stamford: Appleton & Lange, p.531-546.
- Moon A (1999). *Does a healthy school award scheme make a difference? The evaluation of the Wessex Healthy Schools Award*, unpublished PhD Thesis, Department of Public Health Medicine, University of Southampton.
- Moon AM, Mullee MA, Rogers L, et al (1999). Helping schools to become health-promoting environments – an evaluation of the Wessex Healthy Schools Award. *Health Promotion International*, 14:111-22.

- Patton G, Bond L, Carlin J, Thomas L, Butler H, Glover S, Catalano R. & Bowes G (2006).. Promoting social inclusion in schools: A group-randomized trial on student health risk behaviour and well-being. *American Journal of Public Health*, 96: 9.
- Rogers E, Moon AV, Mullee MA, et al (1998). Developing the "health-promoting school" – a national survey of healthy school awards. *Public Health*, 112:37-40.
- St Leger L (2000). Developing indicators to enhance school health. *Health Education Research*. 15(6):719-28.
- Stewart-Brown, S. (2006). *What is the evidence on school health promotion in improving school health or preventing disease and specifically what is the effectiveness of the health promoting schools approach?*. Copenhagen: World Health Organization.
- Tones K, Tilford S (2001). Health education; effectiveness, efficiency and equity. Chapman & Hall, London.
- WHO (1996). Development of health-promoting schools-A framework for action. Manila: WHO/WPRO (Health-Promoting Schools Series 5 Regional guidelines).
- Weare, K. C. (2000). *Promoting mental, emotional and social health: a whole school approach*. Routledge, London, 2000
- Wells J, Barlow, J. & Stewart- Brown, S (2003). A systematic review of universal approaches to mental health promotion in schools. *Health Education Journal* 103, 4, 197-220.



Figure 1. Integrated Framework for Health Promoting School

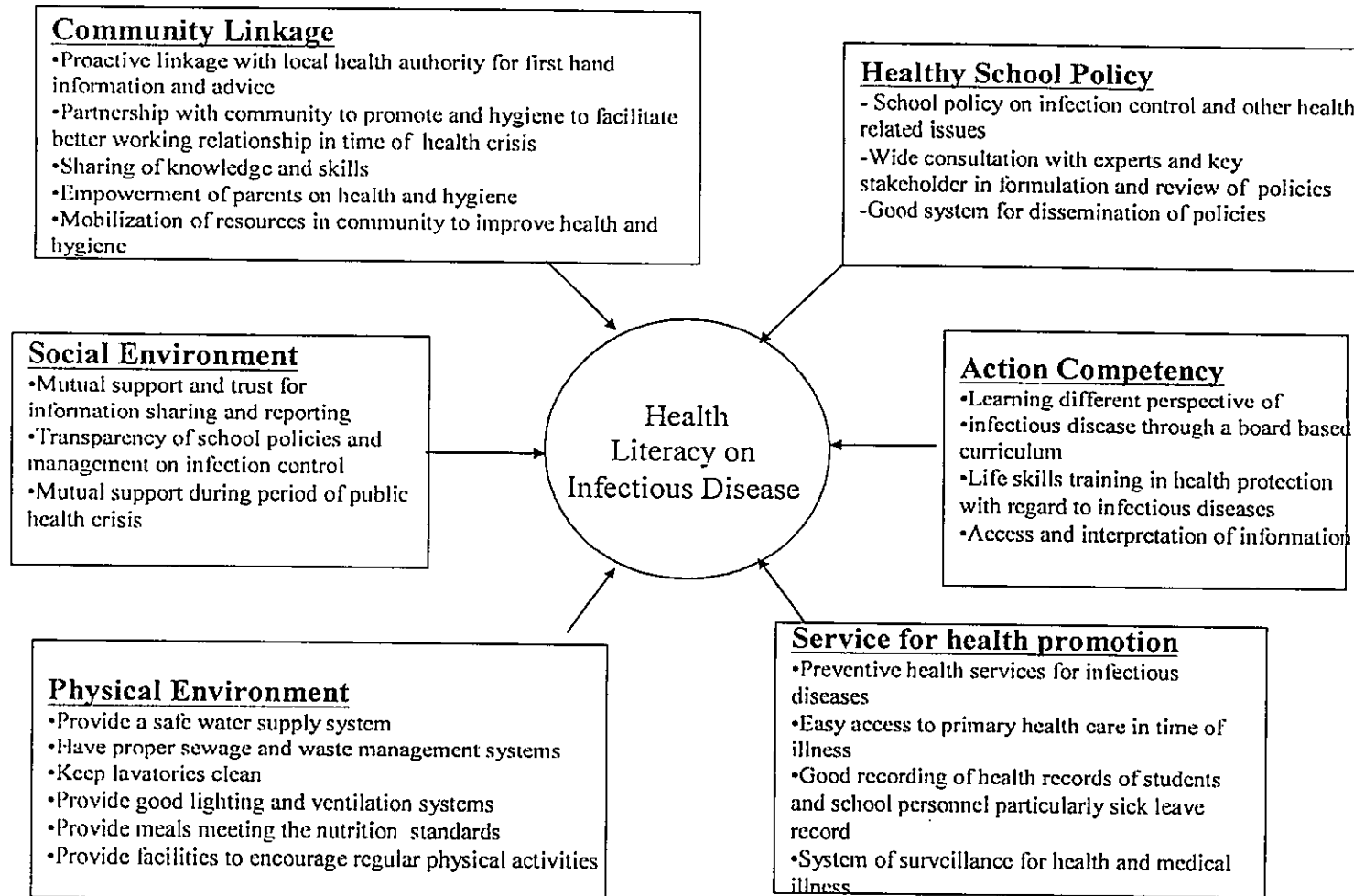


Figure 3. Using HPS framework to improve health literacy on infectious disease



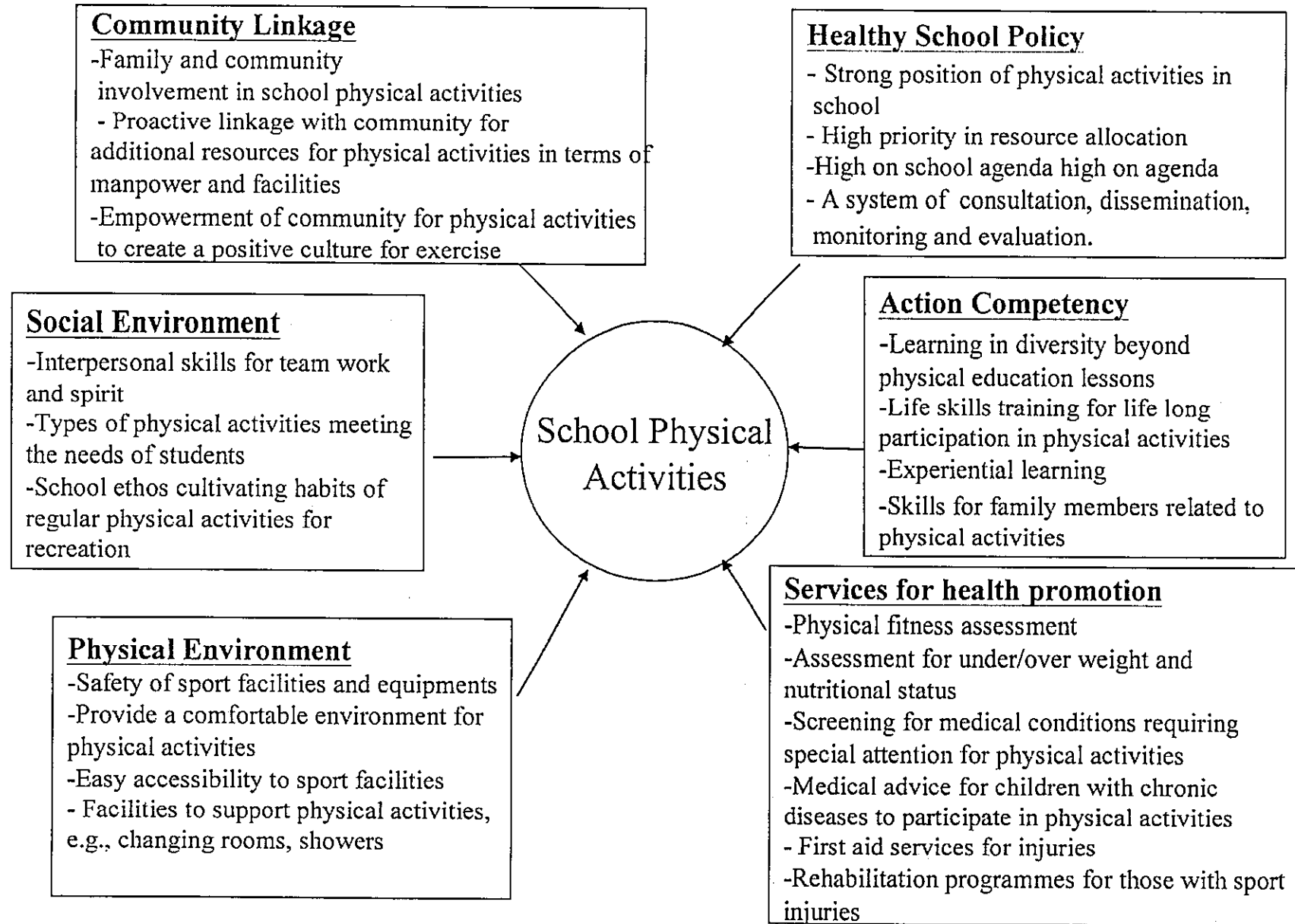


Figure 2. Using Health Promoting School framework to improve physical activities Albert Lee (2009)