

HEALTHY SCHOOL COMMUNITIES CONCEPT PAPER

AUGUST 2012

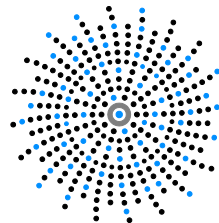
Prepared by:
Propel Centre for Population Health Impact

For:
Physical & Health Education Canada

PHE Canada
Physical & Health Education Canada



EPS Canada
Éducation physique et santé Canada



PROPEL
CENTRE FOR
POPULATION
HEALTH IMPACT

Suggestions for engaging the document

Please read this document as an active learner. Its contents lack value and impact if you do not engage with it. The variety of people who contributed ideas contained herein started the dialogue on how to most effectively promote the creation of healthier school communities. Please be part of the ongoing dialogue. Ask others who need to be a part of the conversation. Engage people you think can contribute. There is value in making this a living document that reflects the thoughts and experiences of its users. It won't be "The Answer". However, if it stimulates a deeper understanding of what makes healthier school communities in your school, school district, community or province / territory, it will have succeeded.

ACKNOWLEDGEMENTS

Physical & Health Education Canada acknowledges the financial support of The Lawson Foundation.

The Propel Centre for Population Health Impact would like to acknowledge and express appreciation to the following groups for their contributions to the development of this concept paper:

- Physical & Health Education Canada, for recognizing the importance of this work and providing the support to make it possible.
- Steering Committee Members, who helped guide the direction of this work, providing input and advice at every stage of development (see Appendix A for members).
- The Expert Advisory Panel, for their thoughtful review and feedback on drafts and sharing their expertise, insights and experiences at a full day in-person meeting (see appendix A).

Suggested citation

Bassett-Gunter, R, Yessis, J, & Manske, S, Stockton, L. (2012). *Healthy School Communities Concept Paper*. Ottawa, Ontario: Physical and Health Education Canada. Available at: <http://www.phecanada.ca/programs/health-promoting-schools/concept-paper>

For further information regarding this report, please contact: Dr. Steve Manske

Propel Centre for Population Health Impact
Lyle S. Hallman Institute
University of Waterloo
200 University Avenue West
Waterloo ON Canada
N2L 3G1
Telephone: 519-888-4518
Fax: 519-886-6424
Email: manske@uwaterloo.ca

TABLE OF CONTENTS

1.0	PURPOSE AND OVERVIEW.....	1
	Section 1.1 Background and Overview.....	1
	Section 1.2 Process.....	3
2.0	HISTORY AND TERMINOLOGY	4
	Section 2.1 Who and What?	4
	Section 2.2 Why?	5
3.0	COMPONENTS OF A HEALTHY SCHOOL COMMUNITY.....	6
	Section 3.1 The Frameworks	6
	Section 3.2 Effectiveness of Frameworks for Healthy School Communities	8
	Section 3.3 Core Components of a Healthy School Community	8
4.0	PROCESSES AND STRATEGIES FOR HEALTHY SCHOOL COMMUNITY IMPLEMENTATION	11
	Section 4.1 Strategies for Success	11
	Section 4.2 Fundamental Principles.....	16
	Section 4.3 Effectively Addressing Implementation Challenges	18
5.0	SUMMARY AND RECOMMENDATIONS	21
	Section 5.1 Summary and Recommended Next Steps.....	21
	Section 5.2 Overall Recommendations	23
	Section 5.3 Research and Evaluation Recommendations	24
	Section 5.4 Practice Recommendations.....	24
	Section 5.5 Policy Recommendations.....	25
	REFERENCES.....	26

APPENDICES

Appendix A: Contributors.....	31
-------------------------------	----

TABLES

Table 1. Core Components of Nationally Endorsed Healthy School Community Frameworks	10
Table 2. Guiding Resources for Implementation of Key Framework Componentets.....	20

FIGURES

Figure 1. The Social Ecological Model	1
Figure 2. Healthy School Community Frameworks and Implementation Processes	22

1.0 Purpose and Overview

Section 1.1 Background and Overview

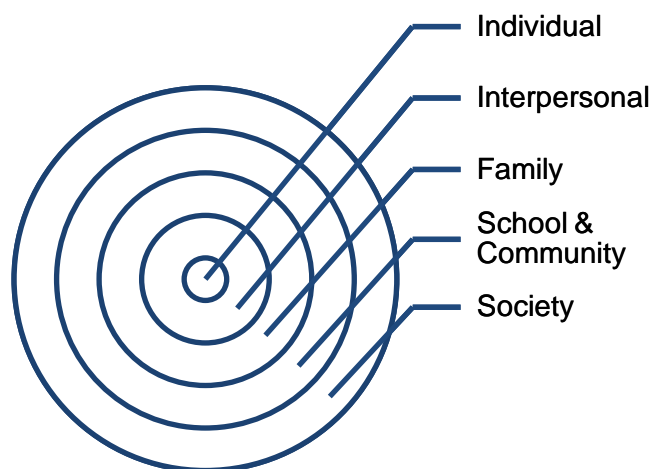
Optimal health and learning for all Canadian children lead to a strong future for our country. Compared to unhealthy children, healthy kids have increased capacity to learn and develop the values, attitudes and skills necessary to be competent, effective and resilient adults. The focus of the current work is to understand how creating healthy school communities can support the growth, development and overall health of children and youth by focusing on individuals that make up school communities, the broader community and their environments (1, 2).

A healthy school community is one that acknowledges the joint responsibility on the school and broader community for the health of students, staff and families who are part of a school. Similar to any community, schools are complex systems. The socio-ecological model has been used to understand such complex systems(3)and underpins the Ottawa Charter for Health Promotion(4). The socio-ecological model suggests that individuals (e.g. students, educators) are affected by multiple, interacting levels of influence.

Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

World Health Organization

Figure 1. The Social Ecological Model



Schools have diverse student populations with an array of developmental capacities and values, located in settings that vary dramatically with regards to physical and social environments, policies, teaching, and connections to communities. The complexity of school communities means that solutions to create healthy school communities require consideration of the individual school community context.

In Canada, our efforts will be improved through gaining consensus on a common understanding about what defines a healthy school community. Developing a common understanding about healthy school communities will improve coherence of efforts among partners engaged in

healthy school community initiatives. For example, if educators, health practitioners and policy makers can agree on terminology and essential conditions for healthy school communities, they will be better able to align their efforts. Likewise, researchers will have a greater opportunity to evaluate outcomes and processes to achieve a healthy school community, and to determine appropriate measurement tools. Together, partners across health and education sectors can gain from improved communication and move forward toward achieving healthy school communities for all Canadian children. A national Comprehensive School Health Roundtable held in Toronto in May 2010(6), noted that:

- progress on healthy school communities may be enhanced by the development of a common understanding of healthy school communities and improved communication;
- defining processes and strategies to advance healthy school communities would be advantageous; and
- different sectors and jurisdictions often use different words/language to discuss the same ideas, which may be one factor that challenges effective communication and progress on healthy school communities.

The intent of this paper is to build a common understanding and initiate a dialogue related to these three points across all sectors that can contribute to healthy school communities in Canada.

Attendees of the national Roundtable on Comprehensive School Health recognized that different sectors and jurisdictions often use different terminology to discuss the same ideas. As we pursue efforts to engage more policy, practice and research leaders in opportunities for creating healthy school communities, common understanding and effective communication are vital. Building on the work of the first national Roundtable(6), this paper attempts to bridge some of those discussions regarding healthy school communities. This paper calls for a shared understanding of healthy school communities. It summarizes what is known about healthy school communities including common components and principles of pan-Canadian frameworks, strategies for successful implementation, and recommendations for how to move forward.

**Words are a form of
action, capable of
influencing change**

Ingrid Bengis

While clearer understanding and communication is the goal, it is appreciated that many participants within a healthy school community face competing demands. Accordingly, various partners may need reason and justification to be involved in healthy school community initiatives. A key function of the paper is to establish the importance of healthy school communities. For instance, educators are interested in the academic health of students. Establishing the connection between health and academic success is critical in gaining full support from the education sector, which has a mandate focused on learning and academic achievement. Children's health status affects their ability to learn, and in turn, education affects lifelong health status(7). Indeed, "learning and health go hand in hand"(8, 9) and "healthy students learn better"(10). In order for education leaders from policy, practice and research

**Education, therefore, is
a process of living and
not a preparation for
future living.**

John Dewey

perspectives to see the value of working towards a healthy school community, the contribution of healthy school communities to academic outcomes must be demonstrated. Research has established a consistent, positive relationship between health and education across the lifespan(11). A higher level of overall child health status positively affects educational performance and attainment(12). Targeted school interventions that promote health within a school community have resulted in improved academic and social achievement. For example, healthy school meals and school breakfast programs positively impact academic performance(12, 13). Similarly, increased physical activity and physical education have been found to positively impact learning outcomes as well as self-esteem and social well-being(12, 13). Principal and teacher reports have also suggested that decreased discipline and behaviour problems and improved attendance rates may result from improved student health(14).

While longitudinal studies have established the positive effect of targeted interventions, less well understood is how broader, comprehensive approaches to healthy school communities impact academic outcomes. Few studies have examined the effects of a school health program that incorporates *all* components of the healthy school community frameworks(15). However, a recent systematic review supports the notion that healthy school communities (or components of healthy school community frameworks) indeed have a positive effect on academic and education outcomes(16). For example, Living Schools (17) (as an example of a healthy school community approach) have demonstrated that improvements in academic achievement accompany a healthier school community(18). Murray and colleagues (16) reviewed a broad set of evidence that points to the benefit of initiatives that included both health education and parental involvement. Overall, the authors conclude that the existing research provides strong evidence for the positive effect of a healthy school community approach on academic outcomes. A more recent review(19) supports the original conclusion, and states that comprehensive healthy school community approaches can enhance academic achievement and reduce both education and health disparities. There seems to be stronger and accumulating evidence that healthy school communities contribute to, rather than detract from, students' academic performance.

Section 1.2 Process

This section outlines the steps we have taken to develop this concept paper. Impetus for the paper came from the national Roundtable on Comprehensive School Health(6) referred to above. Out of this Roundtable's priorities for action came the suggestion of the benefit of a concept paper on healthy school communities. This has grown into a collaboration of partners from practice, policy and science (e.g., Physical & Health Education Canada, Pan-Canadian Joint Consortium for School Health, and Propel Centre for Population Health Impact at University of Waterloo). PHE Canada had received funding from The Lawson Foundation as part of a broader initiative to address healthy school community initiatives. The funding from The Lawson Foundation became the vehicle to drive forward the work on this paper. Subsequently, Propel devised the following process for developing and refining the paper.

- **Formation of Steering Committee and Expert Panelⁱ:** A nationally-representative group of individuals from health and education sectors of policy, practice, and science were invited to participate as members of a steering committee to guide and provide direction on the development of the paper. Additional individuals with experience and expertise in the area of healthy school communities were invited to participate on an expert panel to further refine and build the concept paper.
- **Creating a list of key sourcesⁱⁱ:** A list of key sources was developed after an initial scan of scientific literature and Canadian and international websites related to concepts of Health Promoting Schools, Comprehensive School Health, and Coordinated School Health. Steering committee members added to the initial list of key resources, and subsequently culled the list to include the most relevant documentation. Criteria for inclusion of documents were relevancy to healthy school communities in the current Canadian context and a reflection of a framework used for healthy school communities (i.e., Health Promoting Schools, Comprehensive School Health, Coordinated School Health).
- **Interviews about the historical context of healthy school communities in Canada:** Interviews were conducted with four members of the expert panel to ensure that authors had the appropriate context surrounding decisions made about the two main healthy school community frameworks currently operating in Canada (i.e., Comprehensive School Health, Health Promoting Schools).
- **Meeting of Experts:** Fifteen experts from nine Canadian provinces, representing education and health sectors and policy, practice and science perspectives, reviewed and provided feedback on an initial draft of the document during a 1-day face to face meeting. Their ideas and feedback contributed to subsequent drafts of the paper, which were then reviewed by both the Steering Committee and Expert Panel.

2.0 HISTORY AND TERMINOLOGY

Section 2.1 Who and What?

Policy, practice and science perspectives have helped shape the Canadian landscape around creating healthy school communities. Canada's constitution assigned responsibility for education to provincial/territorial governments, while responsibility for health is shared between federal and provincial/territorial governments. Consequently, pan-Canadian attempts to collaborate need to be purposeful with a common goal. Since both education and health have key roles and responsibilities in promoting healthy school communities, collaborative action is necessary to bridge these sectors. As might be expected then, organizations that have spanned these natural silos have played key roles in shaping how we think about, and work at, creating healthy school communities. On the other hand, the more individual perspectives (i.e., that of individual provinces / territories, of education or health) have also remained powerful forces.

The Pan-Canadian Joint Consortium for School Health (JCSH; www.jcsh-cces.ca) was established in 2005 by the federal, provincial, and territorial Deputy Ministers and Ministers of

i See Appendix 1.

ii See reference list.

Health and the provincial and territorial Deputy Ministers and Ministers of Education. The purpose of the JCSH is to provide leadership and facilitate a comprehensive and coordinated approach to school health by building the capacity of the school and health systems to work together. JCSH helped move toward some unity of understanding when they conceptualized healthy school communities using the Comprehensive School Health Framework (20). Physical and Health Education Canada (PHE Canada; www.phecanada.ca/) also has a pan-Canadian mandate earned over its 75 year history. PHE Canada strives toward their vision to see “all children and youth in Canada living healthy, physically active lives” through their conceptualization of healthy school communities using the Health Promoting School framework for advocating and advancing quality physical education and health education programs offered in Canadian schools.

As will be described in more detail below, both the Comprehensive School Health (CSH) framework and Health Promoting Schools (HPS) framework share their origins in international science and practice organizations. The challenge remains that many potential partners (in both education and health) do not have a clear sense of what either approach entails. It may be confusing when initiatives are framed using one approach but the partner is familiar with the other. Confusion is multiplied when slightly different conceptualizations of the frameworks are created within a given jurisdiction (province/ territory/ nation) and implemented by various organizations (e.g., school boards, NGOs, public health departments). Policy and practice leaders have indicated that there is confusion in understanding how CSH and HPS frameworks relate(1). Research studies have also indicated that there is confusion in differentiating HPS from other frameworks, interventions, and initiatives(22). For example, research conducted in Australia more than 10 years after the HPS concept had been implemented indicated that educators and school staff did not have a common understanding of the term of HPS or its key elements(23). So while frameworks exist, this study emphasizes the importance of both educating educators and school staff, and using clear communication in describing healthy school communities. By developing a shared understanding of healthy school communities, we can improve regular communication with key education and health stakeholders on how to accelerate movement toward healthy school communities.

Section 2.2 Why?

Most organizations and their partners have invested in a particular framework, using it to guide funding, programmatic and policy decisions. They have incorporated framework-specific language into their documentation. And within their own constituents, they have built understanding using a specific framework. Movement toward a shared understanding or consensus on how we communicate will aid our progress toward the common goal of improving the health and education of young people in Canada through the implementation of healthy school communities. Achieving change will require investment by all. The process of developing this concept paper is intended to help discern optimal strategies to moving in those directions. The content of the paper is the result of a multi-pronged approach as described in Section 1.2. The evidence considered was gathered from scientific literature sources and supplemented by web-based sources from organizations concerned with healthy school communities.

3.0 COMPONENTS OF A HEALTHY SCHOOL COMMUNITY

Section 3.1 The Frameworksⁱⁱⁱ

Healthy school communities have been addressed internationally by the International Union for Health Promotion and Education(10) and the World Health Organization(24). These organizations recommend a multifaceted, whole school approach to healthy school communities including focus on instruction in and out of the classroom, the social and physical environment of the school, and the wider community(18). The main purposes of this approach to healthy school communities include: building health knowledge, skills and behaviours in the cognitive, emotional, social and behavioural domains, and enhancing educational outcomes(10).

According to the IUHPE (2009), the rationale for healthy school communities include:

- promoting the health and well-being of students,
- upholding justice and equity,
- involving student participation and empowerment,
- providing a safe and supportive environment,
- linking health and education issues and systems,
- addressing the health and well-being issues of staff,
- collaborating with the local community,
- integrating into the school's ongoing activities,
- setting realistic goals,
- engaging parents and families in health promotion.

In Canada, the terms Health Promoting Schools (HPS) and Comprehensive School Health (CSH) reflect healthy school community frameworks that follow the WHO guidelines(24, 25), and the IUHPE framework(10), and have been used to address school health and well-being. Many provinces/territories use these or other similar but tailored frameworks to conceptualize HPS and CSH. For the purpose of the current paper, we will discuss HPS and CSH using the two frameworks as conceptualized by the Pan-Canadian organizations PHE Canada and JCSH. These frameworks describe the same basic concepts and processes, using slightly different language, and are often used interchangeably in research reports (26-28). Each framework parallels the rationale of the IUHPE (10) and WHO (24), and indicates that promoting health and well-being in school communities requires more than classroom-based learning.

ⁱⁱⁱCoordinated school health is another healthy school community framework most often used in the United States and was developed as a way of integrating policies and programs from different government agencies and departments into a model to enable schools to improve students' health and learning(21). The eight components of coordinated school health are similar to the components of the Canadian-used frameworks. In recent years, the Association for Supervision and Curriculum Development (ASCD; www.ascd.org) has adopted the HPS framework.

Comprehensive School Health

The comprehensive school health (CSH) framework addresses school health in a planned, integrated and holistic way(25). CSH, as conceptualized by the JCSH, is built on actions in four distinct but related pillars. When actions in all four pillars are harmonized, students are supported to realize their full potential as learners and as healthy, productive members of society.

The four pillars of CSH include^{iv}:

- **Teaching and learning** - Curricular and non-curricular education of students and training of teachers in resources, activities and provincial/territorial curriculum where students gain age-appropriate knowledge and experiences, helping to build the skills to improve their health, well-being, and academic outcomes.
- **Social and physical environment** – The quality of relationships, and emotional well-being of students and staff, in addition to the buildings, grounds, spaces around the school, and essential requirements such as air and water quality.
- **Healthy school policy** – Management practices, decision-making processes, rules, procedures and policies at all levels that promote health and well-being, and shape a respectful, welcoming and caring school environment.
- **Partnerships and services** – Supportive working relationships within schools (staff and students), between schools, and between schools and other community organizations and representative groups. Health, education and other sectors work together to advance school health. Community and school based services that support and promote student and staff health and well-being(20).

The CSH framework has been widely promoted in North America(20, 29) and its use has grown over time. While only 3% of Canadian educators and health leaders were familiar with the term CSH in 1990, the concept had become increasingly familiar by 1998; 10 of 12 provincial education ministries, 5 of 12 health ministries, 40% of school boards and 53% of public health units explicitly supported CSH(30,16). As of 2012, the CSH framework as conceptualized by JCSH has been endorsed by all provincial and territorial governments of health and education (with the exception of Quebec), as well as the Public Health Agency of Canada(20).

Health Promoting Schools

PHE Canada conceptualizes the Health Promoting Schools (HPS) framework as the 4Es – Everyone, Education, Environment and Evidence. Science and practice leaders have indicated that these components are critical aspects in implementing a HPS approach.

The four components of HPS include:

- **Education:** Supporting a culture of learning for all school community members including wellness related programs for students and health promotion learning opportunities for teachers, staff and parents.

^{iv} CSH has also been conceptualized into four slightly different pillars by the Canadian Association for School Health: Teaching & learning, supportive social environment, healthy physical environment and health and other support services(62).

- **Environment:** Fostering a safe social and physical environment in the school, home and community, implementing policies that enable healthy active lifestyles and cultivating a place where everyone knows they belong.
- **Everyone:** Collaborating in a meaningful way with the people involved in the everyday life of the school and equal and inclusive opportunities for everyone to make healthy choices.
- **Evidence:** Collaboratively identifying goals, planning for action and gathering information to indicate the effectiveness of actions to support healthy active lifestyles throughout the school community”(31).

Section 3.2 Effectiveness of Frameworks for Healthy School Communities

Implementing a healthy school community approach is complex with the need to include multiple components and stakeholders. Evaluating the effectiveness of a particular framework can also be a challenging endeavour. A review of the evidence regarding the effectiveness of a healthy school community approach found that no studies have examined initiatives that incorporate all pillars/components(18, 32, 33). That being said, when schools reported using some aspects of a healthy school community approach there was a positive impact on the social and physical environment of the school, staff development, as well as opportunities for healthy food at lunch and physical activity programmes.. Changes to behaviour were found in some (but not all) of the studies reported in the reviews. For example, schools that have used healthy school community interventions to focus on the health issue of physical inactivity have found a positive impact on students’ physical activity levels(17). There was evidence that using a healthy school community approach resulted in greater self-esteem in students and reduced bullying in the schools involved(18).

An evaluation of 33 Living Schools (an intervention that uses a comprehensive healthy school community approach to school improvement), showed evidence of significant improvements in standardized test scores in grade 3 students after one and two years of exposure(17) suggesting academic benefits to the comprehensive approach. A comprehensive healthy school community approach was also used in the development of the Alberta Project Promoting active Living and Healthy Eating (APPLE) Schools. Students attending APPLE schools were more physically active, had a lower likelihood of obesity, consumed more fruits and vegetables, and consumed fewer overall calories in 2010 compared to 2008 (i.e., after two years of program implementation(34)). These examples illustrate the effectiveness of a comprehensive healthy school community approach.

Section 3.3 Core Components of a Healthy School Community

A review of the healthy school community frameworks indicates that each framework is essentially describing the same components using slightly different language and emphasis (Table 1). Both HPS and CSH emphasize the importance of healthy and supportive environments and policies along with education and partnerships. CSH as conceptualized by the JCSH draws attention to the importance of Healthy School Policy by pulling it out as a separate pillar, in addition to the social and physical environment pillar. The HPS framework as conceptualized by PHE Canada highlights a unique component called evidence, which for the purpose of this paper refers to gathering information systematically through planning and evaluation. Although

evidence (or continuous learning, planning and evaluation) is not identified as a separate pillar in the CSH framework, it is a foundational principle underlying CSH to determine if the strategies implemented are successful and to help guide improvements over time(20).

The following illustrates a healthy school community approach through the application of the frameworks' components in the development of a "healthy snack shack" within a school.

Creating a "healthy snack shack" using a healthy school community approach would involve participation of different members of a school community and use a comprehensive approach addressing all components of the healthy school community frameworks. For example, after learning that many students are bringing no snacks or unhealthy snacks to school, the school board may enlist a policy mandating that unhealthy snacks cannot be consumed within the school setting. School council, staff, students, parents and a public health representative may be part of a School Wellness Team that bring focus to creating a healthy snack shack to

Components of Healthy School Community Frameworks

- Policy
- Environment: Social & Physical
- Teaching & Learning/Education
- Community: Partnerships & Services
- Evidence

provide students with healthy snacks during the school hours. As part of this initiative, all teachers may agree to include a focus on healthy snacks in their classes regardless of the subject area. The team finds support in the school community for students and parent volunteers to fund, select, prepare, and distribute the snacks. The team could gather evidence to demonstrate nutritional improvements resulting from the snack shack's introduction. This approach is in contrast to the development of a healthy snack shack that doesn't involve a healthy school community framework, and may be coordinated by one individual at the school (such as the principal) without buy-in or agreement from others at the school. We expect the impact of this latter approach would lag behind the impact of the healthy school community approach since there would not be integration across important areas such as education, and environments. Table 1 further illustrates the application of each component of the healthy school community frameworks and demonstrates the similarities in the CSH and HPS approaches.

Table 1. Core Components of Nationally Endorsed Healthy School Community Frameworks

Health Promoting Schools(31)	Comprehensive School Health(20)	Application of the frameworks using the development of a healthy snack program
Environment	Social and Physical Environment	Creation of a welcoming home for the Healthy Snack Shack as part of a central social hub that attracts students and ensures that no one feels self-conscious getting the snacks
Education	Teaching and Learning	Staff agree to focus on healthy eating in an aspect of their teaching regardless of the subject area. For example in Art class children may make posters about healthy snacks; in Health class they may learn about Canada’s food guide and what healthy snacks are, in Math class word problems may focus on healthy snacks, and in English or Media class children may create the promotional pieces to advertise a healthy snack.
Everyone	Partnerships and Services	A Wellness Committee involving staff, administration, students, parents and public health decide to focus on developing a “healthy snack shack”.
		Healthy snack choices made by a group of students who have formed a special “Healthy snack shack” group with supervision from staff members ensure snacks appeal to students, yet meet guidelines.
		A local business funds purchase of healthy snacks for a 3-month trial period.
		Volunteer parents agree to prepare the healthy snacks (e.g., cut up fruit and vegetables) and distribute them to classes during nutrition breaks.
	Healthy School Policy	Healthy snack shack builds on a provincial, district or school level nutrition policy that supports increased access to healthy foods at school
Evidence		Assessment of snacks consumed by students and staff prior to the creation of the “healthy snack shack” and following the development of the “healthy snack shack” to determine the impact of the initiative.

4.0 PROCESSES AND STRATEGIES FOR HEALTHY SCHOOL COMMUNITY IMPLEMENTATION

Section 4.1 Strategies for Success

The practical usability of any healthy school community framework will be enhanced through guidance regarding the implementation of the components of the framework. A standard protocol or blueprint for implementation is unlikely to meet the unique needs of each school community (28). The individual variability across schools' needs, contexts, and cultures demands flexibility in the actions taken to implement a healthy school community framework at the level of both the school and jurisdiction. The following section reviews strategies and suggestions for implementing those components of a healthy school community which are consistent across the frameworks presented in Table 1.

Although we have presented the strategies in relation to individual components of the frameworks, it is imperative that elements for working effectively in complex systems (whole school approach, education and health synergy, assessment, planning and evaluation, leadership team/champion, sustainability) remain as integral orientations to implementing any specific component of a healthy school community approach. For example, the notion of health and education synergy will be instrumental in developing effective healthy school community policies. Similarly, the principles of leadership and sustainability will be critical for gaining community involvement, while the whole school approach suggests all components of a healthy school community must be considered. We caution that any one strategy to strengthen healthy school communities without consideration of all components will be less effective or sustainable. A key challenge is consideration of how the five common components apply to specific instances. Further, as we discuss the individual components of a healthy school community approach, the inherent interactions and complexity will become visible. For example, efforts to strengthen healthy school community policies invariably employ one or more other components, including the environment, teaching, and community. Similarly, changing the physical and social environment of a school community requires interaction with the community. It may seem overwhelming to consider implementing all components of the healthy school community frameworks simultaneously. While working toward the goal of using a comprehensive healthy school community approach, schools and their community partners are encouraged to start by addressing a minimum of two components of a healthy school community framework(35). As a school community builds its healthy school community platform, the complexity and interactions between the framework components will become clear. Examples of specific strategies are provided below for implementing each common component of a healthy school community approach. Table 2 provides guiding references for further information regarding implementation strategies.

Component 1: POLICY

Healthy school policy is a key component of each healthy school community framework(20, 28). Specific goals and plans must be embedded into school and jurisdictional policy(36) and reinforced(20) in order to achieve a healthy school community(14). Although the concept of policy is rather straightforward, the act of policy implementation can become complicated within

the complex school setting. Gleddie(36) has identified four key strategies for effective policy implementation.

First, policy development and execution demands clear communication and engagement of all stakeholders. Second, the integration of both “grass-roots” and “top-down” approaches to policy implementation are beneficial. Readiness for change and passion at the grass-roots level (i.e., among teachers, students) will facilitate the successful implementation of a healthy school community policy (20, 36-38). Third, healthy school community policy implementation demands a balance between flexibility and rigidity(36, 37). Certain aspects of healthy school community policy implementation require absolute rigidity. For example, a policy that establishes a minimum daily physical activity (DPA) requirement of 30 minutes leaves little flexibility regarding the amount of DPA each school must implement. However, within the same policy, there is room for individual school flexibility with regard to *how* DPA (or other policy mandates) are executed. Fourth, the successful implementation of healthy school community policy requires that health be embedded in the school culture and overall school improvement plan. Health should be a way of life, or the way business is done, within the school community(36).

In addition to the above four strategies, policy support is necessary so that implementation and sustainability are feasible. Administrative support and regulations should be built into healthy school community policies in order to facilitate the policy implementation(39). Institutional anchoring of the policy is vital(38). Specifically, the policy should embed (and be embedded in) all aspects of the school community.

Component 2: ENVIRONMENT: SOCIAL AND PHYSICAL

Healthy school community frameworks delineate both physical and social aspects of the school community environment. Some general strategies for changing the physical environment to support healthy school communities have been recommended. For example, schools can explore and make use of existent physical structures that will promote healthy school community implementation(38). Small changes to the physical and organizational context of a school environment can provide opportunities to increase physical activity and healthy food choices, for example, at recess and lunch(39). Implementation of a healthy school community requires awareness of environmental factors that support the development of physical and health literacy such as appropriate class sizes(39). Other physical changes within a school can support a healthy school environment including visual supports (e.g., bulletin boards, posters), healthy living messages on the announcements, and inclusion of healthy school community agenda items for parent council and staff meetings. In situations where changes to the physical environment of the school are limited, schools may look to the community^v for opportunities to support the implementation of healthy school communities. For example, an inner-city school may have limited access to fields or green-space for sports and games, and may partner with community recreation facilities to enhance opportunities for physical activity. The implementation of

^v Note that this consideration introduces a second pillar – community partnerships and services - into creation of healthy physical environments. This example provides a good demonstration of the complex relationships and interactions between the healthy school community framework components.

physical environmental changes is an area that requires particular flexibility and consideration of the individual school context.

The value of promoting a “culture of health and wellness” within the school community has been recognized repeatedly. However, there remains a gap in understanding how to support changes within the social environment, or culture, of a school community. Changing the social and emotional culture of a school requires engagement of, and open communication with, all stakeholders. Again, both “grass-roots” and “top-down” approaches will facilitate change to the social environment of a school community. It has been suggested that one key to implementing a social environment consistent with a healthy school community is the perspective of looking past the classroom and embedding health as a way of life within the school and beyond(36, 37). Changes to the social environment can also start with policy and mandated regulation approaches, although these ‘top down’ approaches should be used sparingly in changing the school community culture. For example, non-tolerance of bullying policies and policies around the availability of food choices within the school cafeteria, are important aspects of a culture that is working toward a healthy school community. Teacher support and modelling within a healthy school community is critical to implementing a health promoting social environment. The school must support staff wellness, as a healthy workplace is an important component of the social environment(10, 14, 27). Administrative regulations and policy mandates can support teacher and staff wellness through actions such as modified timetabling, attention to time required in meetings(35), time-release for professional development related to health promotion, and building health into teacher training. Creating a healthy workplace environment where teachers can model healthy living for students, is one step toward implementing a social environment to support a healthy school community.

Student involvement and positive student engagement are also vital for changing the social environment of the school. Students play a tremendous role in determining the culture of a school community and can be a source of enthusiasm and passion for the healthy school community approach(14, 20, 38). Some students may be resistant to a “top-down” approach to changing the culture of their school community. The resistance, in turn, may be a challenge to adults attempting to shape or control the school culture. Alternatively, by authentically engaging students in the planning, decision making, and execution of healthy school community initiatives, students can begin to feel a sense of belonging, empowerment and intrinsic motivation, which will contribute to the successful implementation of the healthy school community approach(38). It has been reported that often less than seven percent of students within a given school are actually engaged in healthy school community initiatives(35). In order to engage students in the process, it is recommended that all healthy school community activities - from planning to execution - be student centred. Students must be engaged and supported through the use of age-appropriate models, such that students develop a sense of connectedness and meaning(38). Specific strategies to enhance student involvement and positive engagement include the development of new clubs and committees in which students can participate, and providing students with leadership roles. For example, some schools have found success in designating students to become physical activity leaders and peer tutors to support healthy school community activities(14). Further, student engagement can contribute to the social environment through the development of positive lunchroom environments, mental health capacity building projects, and programs to reduce bullying(40, 41), for example. Students’ inherent enthusiasm

and creativity can play an influential role in the implementation of a healthy school community approach.

Component 3: TEACHING AND LEARNING/EDUCATION

Given that the curriculum is a driving force within the operations of any school, all healthy school community approaches and policies should aim to complement and enrich the school curriculum(42). However, curriculum alone is not enough to satisfy the teaching and learning component of a healthy school community. A well-developed curriculum must be fully implemented and taught to its fullest potential in order to strengthen a healthy school community. Strategies that embrace a whole school approach rather than relying primarily on a classroom learning approach facilitate health promotion within schools(7, 43) and offer supports for students to be healthier(44). Using a variety of teaching and learning strategies and ensuring adequate time for class-based activities, organisation and coordination, and out of class activities are also effective strategies(43). Physical and health education curricula by their nature may support healthy school communities. Schools also need to look beyond physical and health education curriculum for opportunities to incorporate health concepts across all teaching areas(39). The development of cross-curricular plans to integrate healthy school communities is one recommended strategy to implement health promotion within a school setting(38). Others have suggested involving students in curriculum development and including DPA within the curriculum (7, 28, 39). Further, strategies should be employed to include the education of members of the broader school community, especially parents.

Great teachers need great training. Ensuring appropriate staff have access to capacity building programmes and opportunities to put their skills into practice can facilitate building a healthy school community(43) since it leads to greater confidence among teachers to integrate health into their practices and the broad school community(44). Currently, in most Canadian jurisdictions, the majority of people teaching elementary school health and physical education are not specialists(31). Further, health is not a focus of pre-service training for teachers. Indeed, there may be opportunities for healthy school community concepts and frameworks to be embedded in teacher training(14). Not only will training advance teachers' abilities to integrate healthy school promotion into their formal teachings, but it will also facilitate teachers' abilities to model positive health behaviours(14). Healthy school community implementation will only occur when teachers have a strong sense of awareness of the benefits of health promotion within the school context(35, 38) and "buy-in" to the culture. In addition, teachers' self-efficacy(45), beliefs and attitudes towards the notion of a healthy school community are key components of implementation(38). Potential strategies to implement healthy school community teaching actions may include increasing availability of professional development and learning opportunities(7, 27, 35, 38, 46), and release time for teachers to engage in training and planning(27). Cross-discipline (i.e., beyond physical education) teacher commitment has been identified as a principle component of successful healthy school community implementation. Accordingly, efforts to support teachers in developing the knowledge, attitudes, skills, and tools to facilitate healthy school community initiatives are essential. In addition to the above, recent research in Ontario schools indicates teachers (and principals) often rely on a key teacher for health and physical education curricular advice(47). Ensuring that these key teachers are familiar with appropriate content and processes for advancing a health promoting school community may aid the effort.

Component 4: COMMUNITY: PARTNERSHIPS AND SERVICES

Healthy school communities seek resources beyond the classroom and the school walls via strong collaborations with the broader community(44). It has been suggested that the key to community engagement is meaningful and transparent dialogue, which leads to strong networking, alliances, and partnerships(27, 28, 35). In addition to strong communication, strategic planning, decision making, and the development of collective agreements(28) involving all parties(38) are strategies for the implementation of community involvement. Partnerships formed with parents and student peers may be particularly beneficial(28, 35, 37) in implementing healthy school community initiatives. Indeed, most reports on healthy school community implementation indicate that parent involvement is vital to securing additional ideas and expertise, providing emotional support, extending the health promoting ideas to the home, and adding positive models of behaviour. A lack of parent involvement can seriously hinder the execution of initiatives. Schools can also seek outside agency support(35) from local or regional health organizations(28), as well as government authorities(10). Ideally, schools should establish connections with individual organizations committed to healthy school communities (e.g., Ever Active Schools [Alberta; www.everactive.org], Ophea [Ontario; www.ophea.net]), local public health, or coalitions (e.g., Ontario Healthy Schools Coalition [http://www.opha.on.ca/our_voice/collaborations/ohsc.shtml])(27). Partnerships with public health, local recreation facilities, farming associations, parks and recreation departments may open healthy school communities to resources not otherwise available. Finally, in some cases linkages with commercial companies can advance healthy school communities.

Establishing various community alliances can also contribute to the changing of the *culture* of a healthy school community. Further, community partnerships can provide opportunities for healthy behaviours through providing access to facilities during and outside school hours(28), or access to nutritious food options, for example. By developing strong community relations, efforts to implement healthy school communities can be made easier. Schools and other invested organizations can combine and share the resources, efforts, and risks associated with implementing healthy school communities(20). These partnerships can decrease the “silos” across numerous organizations and individuals(20) who share a common goal, and can reduce the duplication of efforts during a time of limited resources.

Component 5: EVIDENCE

Evidence can build commitment and buy-in of critical stakeholders. For example, it has been suggested that by providing evidence of the academic benefits of a healthy school community approach, the buy-in and support of individuals in the education sector can be increased(10). Further, providing evidence may influence stakeholders who may determine the fiscal value of the healthy school community approach. Within a climate of limited resources across various sectors, the application of strong evidence to support a healthy school community approach is critical.

Evidence in advance of new healthy school community initiatives may guide choice regarding effective approaches, while evaluation of the intervention can add to our knowledge of what works for whom under what circumstances and how. There have been few recommendations regarding strategies for using evidence to implement a healthy school community approach. The

development of evidence specific to the efficacy and effectiveness of a healthy school community approach is in its infancy. Researchers and evaluators must examine the effectiveness of a healthy school community approach in relation to numerous outcomes such as academic achievement, health, behaviour, and knowledge. Concurrently, individuals from the education and policy sectors must evaluate not only the effectiveness of the approach, but also the feasibility of implementation within the complex school systems. Evidence that is meaningful with regard to the implementation of a healthy school community approach will draw from both evidence-based practice and practice-based evidence(42).

Section 4.2 Fundamental Principles

Given that school communities function as complex systems, healthy school community implementation must be looked at through a broad lens. One must consider the fundamental principles of a healthy school community approach and deem these principles as necessary conditions for successful implementation of any component of a healthy school community framework. Based on our review of the relevant literature, the following might be considered essential principles of a healthy school community approach(38).

WHOLE SCHOOL APPROACH

One striking consistency in the discussion surrounding implementation of any healthy school community framework is the need to employ a whole school approach. The whole school approach refers to the interdependence of the school, its teaching and learning, its physical and social environment, and partnerships with the community. This approach incorporates a healthy culture through structures, policies, and procedures, for staff, students and community to model and promote health and well-being(18). The whole school approach is one that is complex and involves numerous domains of the school community(7, 14, 37). Involvement and cohesion among school principals, teachers, students, parents, and other members of the school community are imperative(48, 49). Whole school approaches have been used in many countries in Europe(50), in the Asia-Pacific region(51), in South Africa(52), in Australia(53), and in Canada(54). Successful implementation demands integrated and holistic strategies (10, 20), which some classify as a settings(35) or an ecological approach (14). Regardless of the term used to describe the strategy, the notion is consistent that healthy school community initiatives must reach every part of the school community(44).

EDUCATION AND HEALTH SYNERGY

Education and health are integrated (42) within the Pan-Canadian frameworks examined. Both are integral in the implementation of policies and actions to support healthy school communities(36). Health supports education goals and education is integral to health(7, 10). Collaboration between health and education sectors, is imperative to facilitate forward movement in the implementation of healthy school communities(27). Accordingly, JCSH works to create synergy between the education and health

Essential Principles of a Healthy School Community Approach

- Whole school approach
- Education & health synergy
- Leadership/Champion
- Assessment, Planning & Evaluation
- Planning for Sustainability

sectors. However, incongruent priorities often exist between health and education, which inevitably contribute to tensions and a lack of cooperation(14). Health and education sectors must comply and respect each other's policies and procedures while working together to strive for both health and education outcomes within the school community(42). Joint planning and coordinating policies and resources (e.g., funding, time) across the health and education sectors can reduce duplication of efforts to enhance student well-being and decrease gaps in existing policies and practices(36). Healthy school community approaches are designed to increase both health and academic achievement. More emphasis must be placed on understanding the link between improved health and improved academic achievement(38) and the built-in foundational role of health in education(27). Healthy school community initiatives must be designed to enhance not only physical and mental health, but also to enhance student learning(42).

LEADERSHIP TEAM/COMMITTED CHAMPION

Leadership is an essential aspect of implementing a healthy school community framework. Various sources of evidence point to a few components of leadership, which are instrumental in the implementation and monitoring of healthy school community activities. For example, key to successful implementation is an individual leader or champion who strongly values a healthy school community approach and healthy living (14, 27, 35, 37, 45). While the positive effect of the school leader may be strongest when the Principal acts as the champion(14, 38), some provinces and jurisdictions employ dedicated staff within schools to act as the key champion for healthy school communities (e.g., School Health Facilitators, School Health Coordinators, School Health Promotion Liaison Consultants(55)). A dedicated position to help guide and develop capacity for healthy school community initiatives has been linked with successful implementation(18, 56-58). Nonetheless, even when a dedicated staff member acts as a school champion, principal/administrator support is still perceived as critical for changes in the school to occur(1). Regardless of who acts as the leader or champion for the healthy school community approach, one individual alone is not sufficient for successful implementation. A team of individuals with strong commitment, relationships(20), communication, and management practices (e.g., school improvement team) will aid in facilitating healthy school community actions(38). Team members might include teaching and non-teaching staff, students, parents, and community partners from stakeholder groups including at least one member from the health sector (14). All leadership team members should have a clear role and participate in shared responsibility. It has also been recommended that leadership team members are engaged over multiple years, where possible, to allow for continuity and facilitate implementation of healthy school community initiatives(38).

ASSESSMENT, PLANNING AND EVALUATION

Assuming appropriate leadership is in place, effective implementation of healthy school community approaches requires thoughtful planning of efforts, careful assessing of impacts, and meaningful learning from actions. Evidence should inform planning in order to create healthy school communities and accelerate progress. In turn, evidence should be gathered based on the actions of healthy school communities, and this evidence should feed back into the system to inform future efforts and decision making(59).

Consistent with planning literature, school communities should assess a) existing resources including their current healthy school community actions, policies, goals, structures,

resources(38), processes, and personnel(14, 27), and b) needs of the students and staff(10, 35, 44). A review and reflection stage follows to examine opportunities and gaps for accelerating health promoting school community efforts. This stage may include establishing a common vision and realistic goal that aligns with the overall vision and goals of the school community, as well as other ministry strategies(14). It also enables plans to build on each school's unique strengths and needs, which will help gain wide-spread buy-in across the school community(1, 10, 20, 38). Finally, the development of a specific and strategic(27) implementation strategy(20, 46) with the involvement of all stakeholders including teachers, staff,(35) students(14), and the broader community(46) will be critical for engagement of school community members. It is recommended that significant lead-in time be allocated before implementation(14).

PLANNING FOR SUSTAINABILITY

The process to establish healthy school communities requires strategies beyond limited-time "projects" or "interventions"(38). A healthy school communities approach requires implementation over a long period of time(18). Many studies have focused on how to achieve this sustainability. For example, there must be long-term anchoring of the healthy school community initiatives into policy at the school and district level(38). Sponsoring agencies can contribute to sustainability through long-term commitment to healthy school community initiatives. Healthy school communities must approach change in an incremental, gradual and sustained manner(14) as such change requires intense and long-duration programs, which inherently take time to implement(37, 38). It is important to allow for adequate time for changes to occur and for schools to see progress towards their specific healthy school community goals and targets(10, 27). Some strategies for sustainability include building on existing programs and resources(38, 46), avoiding fragmentation of efforts across stakeholders, highlighting the link between health and education(38), monitoring and evaluating changes(20), and celebrating milestones and successes(10, 27). Strong leadership and continuity of leadership are also factors that can help to promote sustainability of healthy school community initiatives. A succession plan for school leaders/champions and the addition of new leaders over time are other important strategies to ensure continuity in leadership and sustainability of efforts(43, 60).

Section 4.3 Effectively Addressing Implementation Challenges

There are a number of potential strategies that may enhance the development and sustainability of healthy school community initiatives(43). This discussion does not provide an exhaustive list of possible implementation considerations, but rather, it addressed the concerns identified in the literature reviewed. Although each school community will face individual contextual issues(45), limited time and financial resources are the most frequently reported barriers to healthy school community implementation(7, 14, 37, 38, 45). In addition, healthy school community initiatives may be funded over the short term, while outcomes occur in the medium to long term(43). The development of a realistic budget during the planning and preparation stages of implementation is beneficial (38). Healthy school community leaders and committee members may have to brainstorm creative means of securing multiple funding sources through donations and in-kind contributions from community partners and stakeholders, or fundraising efforts(14). However, the costs associated with implementing and maintaining healthy school communities in Canada are actually modest(2). In fact, when volunteer, fundraising, and donation supports are engaged, a comprehensive healthy school community approach is believed to be cost-effective(2).

Many schools face an inundation of requests (27) and administrators feel pressure to prioritize efforts to meet numeracy and literacy standards (14). Tension regarding the feasibility of healthy school community implementation (45) can be decreased by demonstrating the value of healthy school community initiatives in relation to priorities such as numeracy and literacy(14). Support from administrative staff, senior management, and human resources(10, 37, 38) may allow for more efficient use of time and further decreased tension regarding healthy school community implementation.

As referenced in section 4.2, growing evidence points to the beneficial effects of dedicated staffing in the schools to facilitate the development and implementation of healthy school community initiatives. In Canada, a model where dedicated staff and infrastructure promote and facilitate healthy school community approaches may be increasingly appealing to provincial and regional health authorities and school boards(55). There are numerous examples across the country (e.g. Healthy Students, Healthy Schools (NL), Healthy Learners in Schools (NB), Living Schools (ON), APPLE schools (AB)) using models that range from modest dedicated time for existing school staff through to use of part or full-time ‘facilitators’ placed in each school, and/or interdepartmental collaboration(55, 61). While these models may facilitate the capacity of schools to undertake health school community initiatives, it should be noted that the resources required to fund them can be substantial and may not be realistic or feasible for all jurisdictions. Among jurisdictions with existing mandated school health facilitators, support for facilitators may further enhance their effectiveness. As noted above, there are many different models with varying levels of required resourcing that may be adapted to different contexts. Research is currently underway through APPLE schools to learn what aspects of facilitation makes it successful regardless of the dose.

Developing a shared or common understanding surrounding healthy school communities may facilitate healthy school community implementation (10). Furthermore, an encompassing framework for healthy school community implementation may be beneficial(14). Enhanced consistency surrounding frameworks and terminology may reduce challenges surrounding the measurement and evaluation of healthy school community initiatives, as well as the synthesis of knowledge regarding implementation and effectiveness. For example, improved measurement or demonstrated success of a healthy school community would be facilitated through the development of a common definition (14). Further, communication has been demonstrated as a critical component of implementation. Enhanced clarity surrounding healthy school community frameworks and terminology may facilitate understanding of health and education sectors through improved communication and potentially the improvement of available evidence supporting the effectiveness of various initiatives. National and Provincial/Territorial organizations which might be familiar with different healthy school community frameworks can better communicate and begin joint planning in collaborative efforts. By developing a shared or common understanding of healthy school community frameworks, we can move forward with establishing the most efficacious and effective practices for implementation within the operations of complex school systems.

Table 2. Guiding Resources for Implementation of Key Framework Components

Key Component of Frameworks	Guiding Resources on Implementation Strategies
Policy	Gleddie, 2012 JCSH, 2012 Baugh Littlejohns, 2006 Rowling & Samdal, 2010 Veugelers & Schwartz, 2010
Environment: Social and Physical	Eastern School District, 2010 Gleddie, 2012 IUHPE, 2008 JCSH, 2012 Baugh Littlejohns, 2006 Rowling & Samdal, 2010 Rowling & Jeffreys, 2006 Saab, 2009
Teaching and Learning/Education	Alberta Teachers' Association, 2009 Government of South Australia, 2012 Beaudoin, 2010 Scottish Health Promoting Schools Unit, 2009 Deschesnes, Trudeau, & Kebe, 2010 Eastern School District, 2010 Gleddie, 2010; 2012 Rowling & Samdal, 2010 Rowling & Jeffreys, 2006 Saab, 2009 Veugelers & Schwartz, 2010
Community: Partnerships & Services	Beaudoin, 2010 Gleddie, 2010 IUHPE, 2008 JCSH, 2012 Baugh Littlejohns, 2006 Rowling & Jeffreys, 2006 Veugelers & Schwartz, 2010
Evidence	Government of South Australia, 2012 IUHPE, 2008

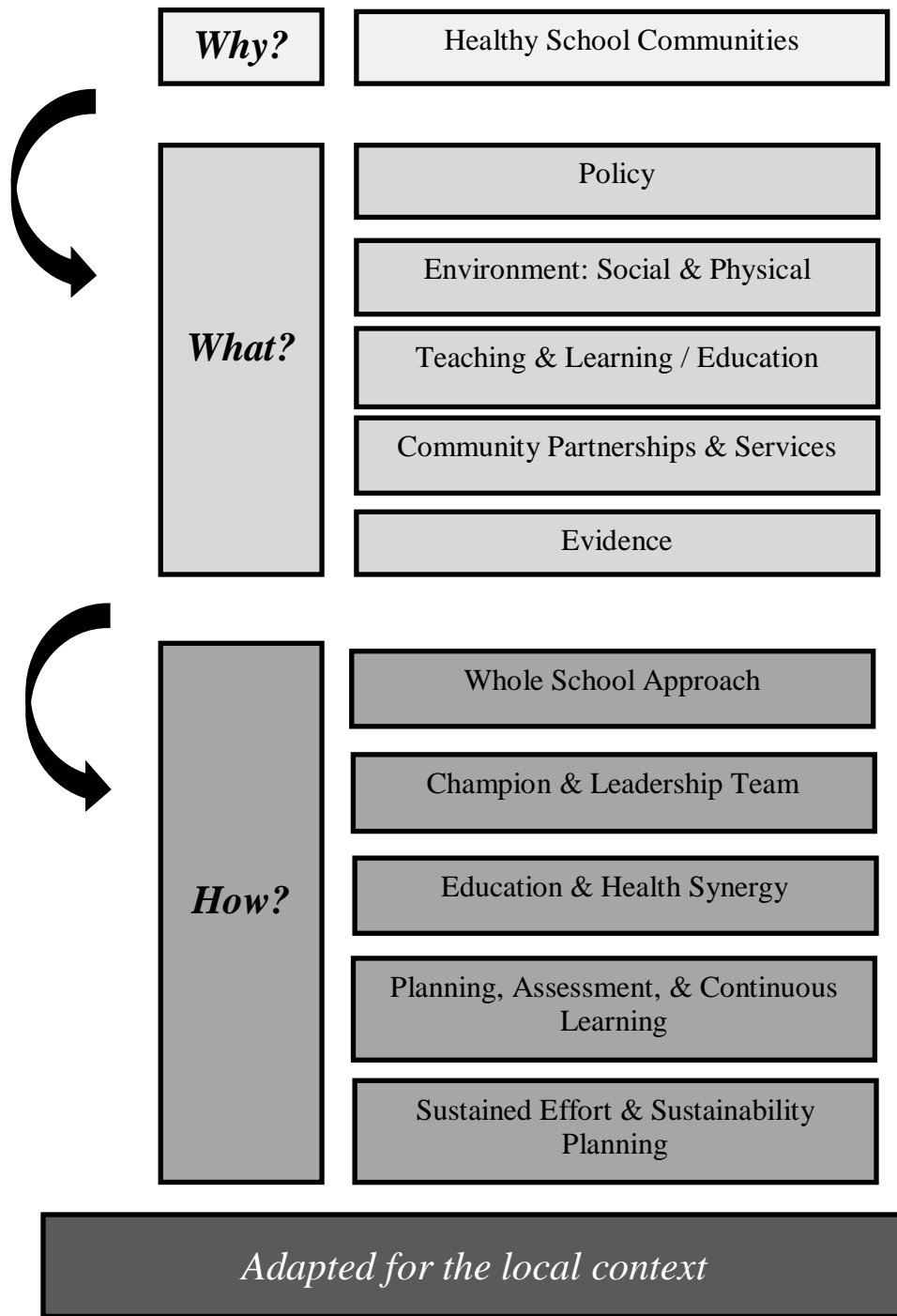
5.0 SUMMARY AND RECOMMENDATIONS

Section 5.1 Summary and Recommended Next Steps

This paper details the current state of approaches and evidence for healthy school communities in Canada. Its goal has been to move toward common understanding around healthy school communities and create a dialogue to help define processes that contribute to healthy school communities. Through the process of developing the paper, progress has been made in initiating plans for working towards a common understanding. The two nationally-endorsed frameworks considered, the Comprehensive School Health framework (JCSH) and the Health Promoting Schools framework (PHE Canada) differ in emphasis, not substance. They share their origins in international frameworks(10, 24) and have the same goal of promoting healthy school communities that improve both health and academic achievement. The synthesis of evidence related to the two frameworks points to consistent processes that lead to healthy school communities. These include employing a whole school approach led by a strong champion backed by a team representing various perspectives, using effective planning, assessment and continuous improvement strategies to achieve synergy of education and health outcomes, and incorporating sustained effort and sustainability planning. These components are described in Figure 2.

This document will serve as a platform for other more targeted documents to be produced and shared with particular audiences (e.g., practitioners, policy makers, scientists). In advance of producing these documents, key stakeholders within these groups will be consulted to see what aspects of this document resonate most, and what is valuable and needed from their perspectives. The PHE Canada conference in May 2012 served as an initial opportunity to do this, but other consultations will follow to ensure inclusion of diverse perspectives across sectors and jurisdictions.

Figure 2. Healthy School Community Frameworks and Implementation Processes



Section 5.2 Overall Recommendations

1. **Develop common language.** Canadian organizations with responsibility for and interest in healthy school communities should work towards adopting a common framework and language to describe their efforts. This synthesis paper demonstrated the comparability of two major frameworks and compatibility regarding how the various components can be effectively implemented. Communication with stakeholders will be enhanced if all are using the same terminology.
 - a. **Mechanisms to move forward.** To achieve this joint terminology, apply the principles underscored in this synthesis paper. That is for example, recognize that a) consideration of the “whole system” is required, and b) having a champion with support from a broad team is necessary to move the issue forward. There needs to be synergy across each organization’s mandate, with deliberate joint planning and established opportunities for learning and sustainability.
 - b. **Develop interim position.** The change to new language and frameworks requires long-term effort. We recommend that in the interim, advocates of each framework “recognize” the terminology of other frameworks in communications to other groups. This can be achieved by enhanced referencing of language and common goals of another framework.
 - c. **Deliberate joint planning.** Ongoing and future initiatives should focus on joint planning and collaboration between national and provincial/territorial organizations.
2. **Apply principles of healthy school communities to all activities resulting from this paper.** Both content and process must be considered in every approach to building foundations for stronger healthy school community movement. Using a “comprehensive” approach will point out that any refinement of direction needs to be backed by policy decisions, training and to incorporate means for learning from the decisions made.
3. **Develop flexible but coherent communication tools.** In order to advance awareness of and action for healthy school communities, we need “teaching and learning”. Using a common foundation for this endeavour will contribute to coherence for recipients of communications.
 - a. **Interim materials.** There is an immediate need to maintain the momentum of this paper. While the participating organizations may not be in a position to immediately endorse a common terminology or framework, there could be coherence around why it is important (e.g., advancement of academic performance and health), what are the key components, and how to implement using and the principles that undergird healthy school communities (see Figure 2).
 - b. **Develop packages that can be adapted for different settings and purposes.** With primary audiences in mind (e.g., school board personnel, school staff, parents, students, community partners), develop materials in multiple formats.
 - i. **Short versions of this document.** Employ both paper and electronic formats for brochures that summarize key ideas from the current document. Consider how these materials might emphasize certain material for particular audiences.
 - ii. **“Presentation in a box.”** Enhance awareness by providing easy to use materials in the form of presentations (e.g., pdf and power point formats). These presentation materials should cover both the content and strategies for

building understanding of how healthy school community approaches apply to the local setting.

4. **Recognize, celebrate and share successes.** The review of literature found scant information about the successes of healthy school communities in Canada. Few central means of gathering, celebrating or sharing these stories currently exist. Efforts to date have had limited success in capturing the essence of efforts, have been shorter term, and have received limited dissemination. We recommend that collaboration occur to more adequately gather and use stories to offer school communities practical advice on their own efforts. Such collaborations could share a common database of “stories”, while presenting organization-specific interfaces to users. An example of such efforts includes the Promising Practices database where stakeholders have an opportunity to share healthy school community successes (<http://www.phecanada.ca/programs/health-promoting-schools/promising-practices-database>).
5. **Ensure that all efforts recognize that promoting academic success is the sine qua non for education stakeholders.** While this principle is also located in the “how” to achieve healthy school communities, it bears repetition for health stakeholders.

Section 5.3 Research and Evaluation Recommendations

1. **Develop research methods and programs of research** that effectively test healthy school community approaches for both outcome and learning assessments. Very few sources reviewed examined the full scope of healthy school community approaches. In part, this is due to the complexity of the task. The complexity implies that a single project is unlikely to succeed, but rather that through building a coherent body of work, stakeholders will learn how to move forward. In addition, future research and evaluation efforts need to address a) what works, b) for whom, c) in what contexts, and, d) how. Research that only addresses the question “Does it work?” will have limited utility to advancing the field. Development of appropriate methods to complete such assessments will also advance the field.
2. **Apply common outcomes/indicators.** One challenge in the review was to compare outcomes of extant literature. Canada has just undergone a process of identifying core school level indicators and measures for youth health in three content areas (physical activity, nutrition, tobacco control). These indicators are being incorporated into revisions of the JCSH Healthy School Planner (www.healthyschoolplanner.uwaterloo.ca), a free, on-line tool. The use of a common tool (e.g., the Healthy School Planner) across Canada would permit greater comparison of outcomes.
3. **Develop ongoing opportunities to identify research and evaluation priorities for healthy school community approaches.** Bring policy, practice and research perspectives together to share their knowledge on what answers might be most useful for advancing policy and practice. For example, is clarity needed about the frequency or type of training opportunities necessary for professional development?

Section 5.4 Practice Recommendations

1. **Link ‘pockets of expertise’.** Generate and share stories of schools that are doing it well. Include stories from a broad cross section of schools – those who have been involved for

varying amounts of time, different types of schools at different stages. Find effective ways to engage schools in peer learning/training opportunities.

2. Identify an organization within each provincial/ territorial jurisdiction to serve as a **central resource/connection** within the jurisdiction. Continue to build and strengthen current mechanisms to appropriately share resources across jurisdictions, including experiential evidence.
3. **Convene an annual gathering of stakeholders from policy, practice and research / evaluation.** Such a conference might be the venue at which the identification of ongoing opportunities and priorities (i.e., research recommendation 3) is achieved. Ensure that champions from school settings have opportunities to attend and become enthusiastic supporters of healthy school community approaches. Perhaps move the location of the meeting around so various jurisdictions have the opportunity to benefit.

Section 5.5 Policy Recommendations

1. Use **this document as a stepping stone to strengthen relationships:**
 - a. **Between primary players in healthy school communities.** JCSH and PHE Canada can identify each other's strengths and complementary expertise. Collaboration could evolve to sitting on each other's committees and/or Boards. Such ties could identify at multiple levels how to integrate actions to advance healthy school communities.
 - b. **Across other (less traditional) groups with a stake in healthy school communities.** (e.g., Canadian Association of Principals, CASA, teachers federations, parent groups, Heart & Stroke Foundation of Canada, Canadian Association of Municipalities) The intent will be to raise awareness of inter-relationships of healthy school communities with the mandates of these organizations.
 - c. **With Canadian university professors and researchers.** PHE Canada includes a branch in its organization that includes some of these individuals. The intent of building relationships is to expand membership and interest in research/evaluation of healthy school communities.

REFERENCES

1. Storey KE, Spitters H, Cunningham C, Schwartz M, Veugelers P. Implementing comprehensive school health: Teachers' perceptions of the Alberta project promoting active living and healthy eating in schools - APPLE schools. *PHENex Journal*. 2011;3(2):1-18.
2. Ohinmaa A, Langille J-, Jamieson S, Whitby C, Veugelers PJ. Costs of implementing and maintaining comprehensive school health: The case of the Annapolis Valley health promoting schools program. *Canadian Journal of Public Health*. 2011;102(6):451-454.
3. Colucci-Gray L, Camino E, Barbiero G, Gray D. From the scientific literacy to sustainability literacy: An ecological framework for education. *Science Education*. 2006;90(2):227-252.
4. Kickbush I. Approaches to an ecological base for public health. *Health Promotion International*. 1989;4(4):265-268.
5. National roundtable on comprehensive school health. 2010. Available from: <http://www.propel.uwaterloo.ca/youthexcel/index.cfm?section=19&page=306>.
6. Strachan-Tomlinson, Manske S, Russell E, Wong K. Comprehensive school health roundtable report, May 13-14, 2010. Waterloo, Ontario: Propel Centre for Population Health Impact, University of Waterloo; 2010.
7. Achieving health promoting schools: Guidelines for promoting health in schools. 2009. Available from: http://www.everactive.org/uploads/files/Documents/Research/CSH%20Wellness_HPEC_09.pdf.
8. Cutler DM, Lleras-Muney A. Education and health: Evaluating theories and evidence. Cambridge, MA: National Bureau of Economic Research; 2006.
9. Ross CE, Wu C. The links between education and health. *American Sociological Review*. 1995;60(5):719-745.
10. International Union Health Promotion and Education. Achieving health promoting schools: Guidelines for promoting health in schools. Saint-Denis Cedex, France: International Union Health Promotion and Education; 2009.
11. Furnée CA, Groot W, Maassen van den Brink, H. The health effects of education: A meta-analysis. *European Journal of Public Health*. 2008;18(4):417-421.
12. Suhrcke M, de Paz Nieves C. The impact of health and health behaviours on educational outcomes in high-income countries: A review of the evidence. Copenhagen: WHO Regional Office for Europe; 2011.
13. Berlot M, James J. Healthy school meals and educational outcomes. *Journal of Health Economics*. 2011;30(3):489-504.

14. Saab H, Klinger D, Shulha L. The health promoting school: Developing indicators and an evaluation framework. Canadian Council on Learning; 2009.
15. Stewart-Brown S. What is the evidence on school health promotion in improving health or preventing disease and, specifically, what is the effectiveness of the health promoting schools approach? Copenhagen: Health Evidence Network Report; WHO Regional office for Europe; 2006. Health Evidence Network Report.
16. Murray NG, Low BJ, Hollis C, Cross AW, Davis SM. Coordinated health school programs and academic achievement: A systematic review of the literature. *Journal of School Health*. 2007;77(9):589-600.
17. Ontario Physical and Health Education Association. Healthy schools and communities. 2012. Available from: <http://www.ophea.net/healthy-schools-communities>.
18. Guertin M. An examination of the effect of a comprehensive school health model on academic achievement: The effect of living school on EQAO test scores. Toronto, Ontario: Ontario Institute for Studies in Education; 2007.
19. Basch CE. Healthier students are better learners: High-Quality, strategically planned, and effectively coordinated school health programs must be a fundamental mission of schools to help close the achievement gap. *Journal of School Health*. 2011;81(10):650-62.
20. What is comprehensive school health. 2008. Available from: <http://www.jcsh-cces.ca/upload/JCSH%20CSH%20Framework%20FINAL%20Nov%2008.pdf>.
21. Coordinated school health. 2012. Available from: <http://www.cdc.gov/healthyyouth/cshp/>.
22. Stewart DE, Parker E, Gillespie A. An audit of health promoting schools policy documentation. *Journal of School Health*. 2000;70(6):253-254.
23. Mohammadi NK, Rowling L, Nutbeam D. Acknowledging educational perspectives on health promoting schools. *Health education*. 2010;110(4):240-251.
24. World Health Organization. School policy framework: Implementation of the WHO global strategy on diet, physical activity and health. Geneva, Switzerland: World Health Organization; 2008.
25. WHO Regional Office for the Western Pacific. Regional guidelines development of health promoting schools: A framework for action. Manila, Philippines: WHO Regional Office for the Western Pacific; 1996. Health Promoting Schools Series 5.
26. McKenna ML. Policy options to support health eating in schools. *Canadian Journal of Public Health*. 2010;101(8):S14-S17.

27. Gleddie DL. A journey into school health promotion: District implementation of the health promoting schools approach. *Health Promotion International*. 2010;27(1):82-89.
28. Veugelers PJ, Schwartz ME. Comprehensive school health in Canada. *Canadian Journal of Public Health*. 2010;101:S5-S8.
29. Allensworth DD, Wyche J, Lawson E, Nicholson L. Defining a comprehensive school health program: An interim statement. Washington, D.C.: 1995.
30. Ontario Public Health Association. Comprehensive school health: An integrated approach to promoting wellness in a healthy school. In press. Available from: www.opha.on.ca/resources/docs/csh_phn.ppt
31. Health promoting schools. 2012. Available from: <http://www.phecanada.ca/programs/health-promoting-schools>.
32. Mukoma W, Flisher A. Evaluations of health promoting schools: A review of nine studies. *Health Promotion International*. 2004;19(3):357-368.
33. St Leger L. The opportunities and effectiveness of the health promoting primary school in improving child health - a review of the claims and evidence. *Health Education Research*. 1999;14:51-69.
34. Fung C, Lu C, Kuhle S, Purcell M, Schwartz M, Storey K, et al. From "best practice" to "next practice": The effectiveness of school-based health promotion in improving healthy eating and physical activity and preventing childhood obesity. *International Journal of Behavioral Nutrition and Physical Activity*. 2012;9:27.
35. Rowling L, Jeffreys V. Capturing complexity: Integrating health and education research to inform health-promoting schools policy and practice. *Health Education Research*. 2006;21(5):705-718.
36. Gleddie DL. The devil is in the details: Development of policy and procedure in the Battle River project. *Health Education Journal*. 2012;71:30-38.
37. Baugh Littlejohns L. Passion and policy: A selected review of delivery systems for comprehensive school health. Edmonton, Alberta: Ever Active Schools Program; 2006.
38. Rowling L, Samdal O. Filling in the black box of implementation for health promoting schools. *Health Education*. 2011;111(5):347-362.
39. Active and healthy living policy. 2010. Available from: http://esdnl.ca/about/policies/esd/J_JJK.pdf.
40. Blum RW. A case for school connectedness. *Educational Leadership*. 2005;62(7):16-20.

41. Patton GC, Glover S, Bond L, Butler H, Godfrey C, Di Pietro G, et al. The gatehouse project: A systematic approach to mental health promotion in secondary schools. *Australian and New Zealand Journal of Psychiatry*. 2000;34:586-593.
42. Health promotion: Better health, better learning. guidelines for health promotion with schools and preschools. 2012. Available from: www.healthpromotion.cywhs.sa.gov.au.
43. St Leger L. Protocols and guidelines for health promoting schools. *Promot Educ*. 2005;12(3-4):145-7.
44. Beaudoin C. Twenty years of comprehensive school health: A review and analysis of Canadian research published in refereed journals. *PHENex Journal*. 2011;3(1):1-17.
45. Deschesnes M, Trudeau F, Kebe M. Factors influencing the adoption of a health promoting schools approach in the province of Quebec, Canada. *Health Education Research*. 2010;25(3):438-450.
46. Scottish Health Promoting Schools Unit. Being well - doing well. Scottish Health Promoting Schools Unit; 2004.
47. Manske S, Nowaczek AM. Baseline assessment of OPHEA supports for the implementation of Ontario's grades 1-8 health & physical education curriculum (interim edition, 2010 [revised]): Input to guide lessons learned. Waterloo, Ontario: Propel Centre for Population Health Impact, University of Waterloo; 2011.
48. Gottlieb NH, Keogh EF, Jonas JR, Grunbaum J, Walters SR, Fee RM, et al. Partnerships for comprehensive school health: Collaboration among Colleges/Universities, state-level organizations, and local school districts. *Journal of School Health*. 1999;69(8):307-313.
49. Mullen PD, Evans D, Forster J, Gottlieb NH, Kreuter M, Moon R, et al. Settings as an important dimension in health education/promotion policy, programs, and research. *Health Education Quarterly*. 1995;22:329-345.
50. Piette D, Rasmussen V, eds. Towards an evaluation of the European network of health promoting schools - the EVA project: A manual for national coordinators of the ENHPS and their collaborators. Copenhagen: WHO Regional Office for Europe; 1995.
51. Rowling L, Ritchie J. Health promoting schools: Issues and future directions for Australia and the Asia Pacific region. *Asia-Pacific Journal of Public Health*. 1997;9(1):33-37.
52. Swart D, Reddy P. Establishing networks for health promoting schools in South Africa. *Journal of School Health*. 1999;69(2):47-50.
53. Keshavarz N, Nutbeam D, Rowling L, Khavarpour F. Schools as social complex adaptive systems: A new way to understand the challenges of introducing the health promoting schools concept. *Social science & medicine*. 2010;70(10):1467-1474.

54. Reed KE, Warburton DER, Macdonald HM, Naylor PJ, McKay HA. Action schools! BC: A school-based physical activity intervention designed to decrease cardiovascular disease risk factors in children. *Preventive Medicine*. 2008;46(6):525-531.
55. Card A, Doyle E. School health coordinators as change agents. *Health and Learning*. 2008;7:3-11.
56. Ebbesen L, Heath S, Naylor P-, Anderson D. Issues in measuring health promotion capacity in Canada: A multi-province perspective. *Health promotion international*. 2004;19(1):85-94.
57. Winnail SD, Bartee T, Kaste S. Existence of the school health coordinator in a frontier state. *Journal of School Health*. 2005;75(9):329-333.
58. Austin SB, Fung T, Cohen-Bearak A, Wardle K, Cheung L. Facilitating change in school health: A qualitative study of schools' experiences using the school health index. *Preventing Chronic Disease*. 2006;3(2):1-8.
59. Riley BL, Manske S, Cameron R. Youth excel: Towards a pan-Canadian platform linking evidence and action for prevention. *Cancer*. 2011;117(10 Suppl):2281-2288.
60. Hutchinson K. Literature review of program sustainability assessment tools. Vancouver, British Columbia: Community Solutions Planning & Evaluation; 2010.
61. Schwartz M, Karunamuni ND, Veugelers PJ. Tailoring and implementing comprehensive school health: The Alberta project promoting active living and healthy eating in schools. *Physical and Health Education Academic Journal*. 2010;2(1):1-15.
62. Canadian Consensus Statement. Comprehensive school health. Surrey, B.C.: Canadian Association for School Health; 2007.

APPENDIX A: CONTRIBUTORS

Prepared by:

- **Rebecca Bassett-Gunter**, Propel Centre for Population Health Impact
- **Steve Manske**, Propel Centre for Population Health Impact
- **Lisa Stockton**, Propel Centre for Population Health Impact
- **Jennifer Yessis**, Propel Centre for Population Health Impact
- **Dana Zummach**, Propel Centre for Population Health Impact

Steering Committee members:

- **Sterling Carruthers**, PEI Department of Education and Early Childhood Development/ PEI School Health Coordinator (JCSH)
- **Doug Gleddie**, Grant MacEwan University
- **Caley Hartney**, Physical and Health Education Canada
- **Louise Humbert**, Physical and Health Education Canada/University of Saskatchewan
- **Katherine Kelly**, Pan-Canadian Joint Consortium for School Health
- **James Mandigo**, Brock University
- **Sharon May**, Physical and Health Education Canada
- **Marlien McKay**, New Brunswick Department of Culture, Tourism and Healthy Living/NB School Health Coordinator (JCSH)
- **Christine Preece**, Middlesex London Health Unit
- **Audrey Seehagen**, EverActive Schools
- **Bill Tucker**, Canadian Association of Principals

Key Informants:

- **Antony Card**, Memorial University
- **Gail Diachuk**, Joint Position Alberta Education and Alberta Health/AB School Health Coordinator (JCSH)
- **Doug Gleddie**, Grant MacEwan University
- **Paige MacFarlane**, British Columbia Ministry of Education

Expert Panel:

- **Antony Card**, Memorial University
- **Sterling Carruthers**, PEI Department of Education and Early Childhood Development/ PEI School Health Coordinator (JCSH)
- **Gail Diachuk**, Joint Position Alberta Education and Alberta Health/AB School Health Coordinator (JCSH)
- **Doug Gleddie**, Grant MacEwan University
- **Erin Hobin**, Propel Centre for Population Health Impact
- **Louise Humbert**, Physical and Health Education Canada/University of Saskatchewan
- **Katherine Kelly**, Pan-Canadian Joint Consortium for School Health

- **James Mandigo**, Brock University
- **Sharon May**, Physical and Health Education Canada
- **Marlien McKay**, New Brunswick NB Department of Culture, Tourism and Healthy Living/NB School Health Coordinator (JSCH)
- **Christine Preece**, Middlesex London Health Unit
- **Dwayne Provo**, Pan-Canadian Joint Consortium for School Health, Nova Scotia
- **Audrey Seehagen**, Ever Active Schools
- **Kate Storey**, University of Alberta
- **Marg Schwartz**, APPLE schools
- **Brian Torrance**, Ever Active Schools
- **Bill Tucker**, Canadian Association of Principals

Physical & Health Education Canada

301-2197 Riverside Drive

Ottawa, Ontario, Canada K1H 7X3

Telephone: (613) 523-1348 • Fax: (613) 523-1206

E-mail: info@phecanada.ca • www.phecanada.ca

Propel Centre for Population Health Impact

Lyle S. Hallman Institute, University of Waterloo

200 University Ave. W., Waterloo, Ontario, Canada N2L 3G1

Telephone: (519) 888-4520 • Fax: (519) 746-8171

E-mail: propel@uwaterloo.ca • www.propel.uwaterloo.ca