



School Health Education Curricula in Canada: A Critical Analysis

Programmes-cadres d'éducation à la santé au Canada: Analyse critique

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Little is known about school health education curricula across Canada, and minimal literature has critically analyzed these curricula for further enhancement. In this study the authors examined health education curricula in Canada in all jurisdictions nationwide. As a result, the study delineates the profiles of health education curricula across Canada, discusses the core content and frameworks in these curricula, and reveals common trends against the scholarship in the field of school health education. The findings presented here will provide scholars and professionals with a comprehensive overview of school-based health education content, and will inform future curriculum revisions and improvements of overall school health education in Canada and across the globe.

Les programmes-cadres d'éducation à la santé offerts dans les écoles canadiennes sont peu connus et peu d'études les ont analysés pour éventuellement contribuer à les améliorer. La recherche qui suit présente une analyse de ces programmes-cadres d'éducation à la santé enseignés dans toutes les régions du Canada. La recherche trace le profil des programmes d'éducation à la santé offerts, discute de leurs grandes composantes et de leur cadre de référence et fait ressortir des tendances communes au niveau des contenus. En plus de donner aux universitaires et aux professionnels un aperçu détaillé et complet des cours d'éducation à la santé offerts dans les écoles, les résultats de l'étude pourraient apporter une contribution à la révision et à l'amélioration de ces programmes dans le futur, au Canada et ailleurs dans le monde.

Introduction

As scholars, teachers, administrators, and general citizens begin to understand the importance and breadth of health education, it is imperative that people become aware of the current states of school health education curricula (SHEC) across Canada and throughout the world. Critically examining and understanding SHEC in different jurisdictions helps identify the similarities, differences, strengths, weaknesses, and trends of SHEC development and in turn,

helps scholars, teachers, and other related agencies share and develop quality SHEC among provinces/territories and countries.

There are crucial issues and trends that must be illuminated and examined in relation to SHEC development in Canada and beyond, such as: the reconceptualization of health and health education from global perspectives; differences between school and public health education; emphasis of health literacy; and the role of mindfulness, spiritual health, and wholistic health (Lu, 2006; 2008; Singleton & Varpalotai, 2006; Telljohann, Symons, & Pateman, 2009). Obviously, health education is a broadly defined concept that extends far beyond physical parameters. Lu (2008) has defined school-based *health education* as a complex process of helping school students to develop necessary knowledge, skills, and attitudes in order to achieve and maintain good health. To further understand the significance of health education, individuals must understand such terminology such as — health and wellness which coincide with the meaning of health education. *Health* can be defined as a state of well-being affected by physical, psychological, spiritual, social, cultural, and environmental aspects in a complex way (Lu, 2008; World Health Organization, 2010a). *Wellness*, on the other hand, combines a wholistic approach as it represents the overall state of wellbeing or total health (Hilborn, Merki, & Merki, 2004; Saskatchewan Ministry of Education, 2004). Health education and the concepts that typically comprise SHEC make it one of the most important methods by which students can be guided toward living a high quality and healthy life.

Health literacy has recently become a new trend and core component in SHEC as the status and description of health literacy directly affects the quality of SHEC development (Saskatchewan Ministry of Education, 2010a, 2010b, 2010c, 2010d, 2010e; Thomas & Lu, 2010). It should be noted that there are dozens of definitions of health literacy, but usually they come from perspectives of those within medicine or public health. From a school health education perspective, *health literacy* can be defined as the developmentally appropriate comprehensive ability (e.g., physical, cognitive, and social) that enables an individual to gain access to, understand, evaluate, use, and advocate health information in order to develop and promote healthy lifestyles and maintain good health (Thomas & Lu, 2010). Thus, understanding health literacy consists of more than simply reading pamphlets and making medical appointments; it is the ability to comprehend and apply knowledge in practice (World Health Organization, 1998). Educators are in an ideal position to help and empower children and youth to use and improve access to health information, and to develop healthy lifestyles (Thomas & Lu, 2010; World Health Organization, 1998). SHEC scholars such as Meeks, Heit, and Page (2009) further suggest people are health literate when they possess skills that protect them from six behaviours such as: (a) unintentional and intentional injuries; (b) tobacco use; (c) alcohol and other drug use; (d) sexual behaviours leading to pregnancy, human immunodeficiency virus (HIV) and other sexual transmitted diseases; (e) dietary patterns that contribute to disease; and (f) insufficient physical inactivity.

Health promoting schools, also known as the *comprehensive school health* or *coordinated school health* approach, is another concept that has been advocated by the World Health Organization (WHO) since the 1990s. This Global School Health Initiative directly contributes to health literacy and

wellness along with the development of SHEC. The *health promoting schools* approach focuses on caring for oneself and others; making healthy decisions; creating conditions that are conducive to health (through policies, services, physical and social conditions); preventing leading causes of death, disease, and disability; and influencing health related behaviours (e.g., knowledge, beliefs, skills, attitudes, values, support). Establishing a health promoting learning environment requires the attention and engagement of school staff, students, parents, health providers, and community leaders. The interaction from these individuals constructs a school environment resembling a healthy, productive environment (World Health Organization, 2010b).

In Canada, there are ten provinces (Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Prince Edward Island, Quebec, and Saskatchewan) and three territories (Northwest Territories, Nunavut, and Yukon). As has been the case with other aspects of their government structure, the three territories essentially follow the school health education curricula of two provinces: Yukon follows the British Columbia curriculum, and the Northwest Territories and Nunavut follow that of Alberta. In Canada, education is administrated by the provinces/territories through provincial ministries of education; in other words, there are no federal government jurisdictions responsible for developing a unified system of education. Furthermore, there does not appear to be sufficient communication between the provincial/territorial jurisdictions regarding their curricular development. The website of the Canadian Association for School Health does not provide any SHEC information. Further to this, the website of the Joint Consortium for School Health of Canada offers the links to provincial/territorial SHEC but needs to be updated and has no discussion on SHEC development. Despite insufficient collaboration or shared knowledge between the provincial/territorial systems, all curricular developers (usually teachers) aim to design the best curriculum possible based on cutting-edge research and current practice, and each jurisdiction revises its health education curriculum approximately every 7-10 years in a planned revision procedure—usually beginning with research on what the current trend of school health education is in Canada and around the world. Fostering a comprehensive understanding of health education curricula across Canada, however, will allow all jurisdictions to learn from each other, enhance the quality of health education curricula, provide sound health education programs for all Canadian children and youth in schools, and benefit health education curricula development on an international level.

Little is known about the school health education curricula in different jurisdictions across Canada and minimal literature has been found to critically analyze these curricula for further enhancement. The purpose of this paper is to examine SHEC in respective jurisdictions across Canada. The specific research questions proposed include: What are the frameworks and components of SHEC in Canada? What are the similarities and differences of the SHEC among jurisdictions? Finally, what are the common trends in the field of school health education? The answers to these questions will help educators, scholars, policy-makers, health services providers, and other concerned individuals understand current development and issues with respect to SHEC in Canada.

The research methodology involves two sources of data: (a) SHEC curricula in Canada; and (b) published literature on SHEC. SHEC curricula were collected

primarily from the websites or hard copies requested from each jurisdiction responsible for education in Canada. Existent literature was retrieved via multiple databases (e.g., ERIC, Physical Education & Kinesiology, Dissertation Abstracts International). As a result, only a handful of relevant published literature was discovered including a few articles and textbooks (see Anderson, 2007; Anderson & Piran, 1999; Hilborn, Merki, & Merki, 2004; Lu, 2008; Meeks, Heit, & Page, 2009; Singleton & Varpalotai, 2006; Telljohann, Symons, & Pateman, 2009; West, Sweeting, & Leyland, 2004) as referenced in the introduction or discussion in the present article. Then, a purposive review of these SHEC curricula and a comparable analysis was conducted in a framework of SHEC curriculum aim/goal/vision, dimension/aspects, framework/approach, and content/topic guided by the research questions (See Table 1 for a summary of profiles of SHEC in Canada). Lastly, the findings were discussed against the relevant literature in terms of similarities and differences, major issues, and common trends of SHEC among jurisdictions in Canada.

It is our hope that this paper will provide scholars and professionals with comprehensive information regarding school health education content, and will also profoundly inform future curriculum revisions and help to improve the overall school health education in Canada and across the globe.

School Health Education Curricula in Canada

In addition to specific information outlined in Table 1, the following findings highlight the nature, aim, frameworks, and characteristics of SHEC in each jurisdiction in Canada.

Alberta

In Alberta, the current SHEC is called *Health and Life Skills* mandated for Kindergarten -Grade 9 (K-G9). The aim of the curriculum is to enable students to make well-informed, healthy choices, and to develop behaviours that contribute to the wellbeing of self and others (Alberta Education, 2002). The interrelated dimensions of wellness are addressed by targeting physical, emotional/social, mental/cognitive, and spiritual elements (Alberta Education, 2002). As well, the curriculum provides the opportunity for students to extend and refine their learning in real life situations. Recently, a review has been completed for wellness-related curricula (i.e., K-G12 Physical Education, K-G9 Health and Life Skills, and Grades 10-12 Career and Life Management). As a result, the *framework for kindergarten to Grade 12 wellness education* has been developed. This framework is significant because it (a) indicates the direction of the future integration of health and physical education; (b) employs a sustained comprehensive school health approach; (c) emphasizes a wholistic vision of nurturing the whole child to reach his/her full potential in all dimensions (e.g., intellectual, physical, social, spiritual, and emotional); and (d) outlines the fundamental concepts and inherent values of wellness education and provides guidance for future mandated K-G12 wellness education programs (Alberta Education, 2009). The province expects to implement the new K-G12 wellness education at the secondary school level in 2014-2015 (Alberta Education, 2010).

British Columbia

In British Columbia, the current SHEC is *Health and Career Education*, most recently revised in 2006 for Grades 1-7 and in 2005 for Grades 8-9. The SHEC was developed to assist students with acquiring the knowledge, skills, and attitudes (KSAs) to be informed decision makers in regards to personal health and safety (British Columbia Ministry of Education, 2005, 2006). The curriculum covers a variety of content in health education, targeting the development of the KSAs necessary to enhance students' personal wellbeing throughout their lives and to prepare them to deal with a world of complex, ongoing change. The SHEC recognizes the importance of developing educated citizens for society by focusing on dimensions of wellbeing such as intellectual development, human and social development, and career development (British Columbia Ministry of Education, 2005, 2006).

Manitoba

Manitoba's current SHEC is *Health and Physical Education* for K-10, and *Active Healthy Lifestyles* for Grades 11-12 (Manitoba Education, 2010). There has been a shift in integrated health education and physical education in Manitoba with the intention of emphasizing health promotion and addressing risk factors facing children and youth. The integrated curriculum is designed to provide a connected approach to learning about the mind and the body; consequently students' learning outcomes have been designed to support an integrated and wholistic approach to using highly active and interactive learning experiences that promote lifelong physical activity and wellbeing. A framework has been developed to unite the two subjects of health education and physical education in K-12. The aim of the integrated curriculum is to help students develop the KSAs for physically active and healthy lifestyles. The dimensions of health covered in the integrated curriculum are physical, mental, emotional, and social. Educators are encouraged to make curricular connections with other subjects to achieve an integrated approach (e.g., body system and nutrition in science). Many changes made in this integrated curriculum are based on current research; in particular, a skill-based (as opposed to a cognitive-based) approach is adopted because merely knowing about being active and health is not sufficient in and of itself to guarantee the performance of certain health behaviours. Also, the curriculum recognizes that the school must work with families and community in the development of students' physically active and healthy lifestyles (Manitoba Education & Training, 2000).

New Brunswick

In New Brunswick, the current SHEC is *Health Education* in K-8 and *Physical Education and Health* in Grades 9-10. The aim of these curricula emphasizes an understanding and practice of wellness, while making wise lifestyle choices that contribute to both a healthy, caring individual – a benefit that will be carried into the community when students graduate from the public education system (New Brunswick Department of Education, 2001, 2005a, 2005b, 2005c, 2005d, 2005e, 2007). The curriculum focuses on the wholistic aspect of student health by targeting the physical, social, psychological, emotional, and spiritual dimensions of wellbeing. Further, they promote a comprehensive school health model that incorporates instruction, services and

support, and the school environment. Similar to the approach in other provinces, New Brunswick's health education is regarded as a shared responsibility among individuals, families, schools, and communities (New Brunswick Department of Education, 2001, 2005a, 2005b, 2005c, 2005d, 2005e, 2007).

Newfoundland and Labrador

Currently, the SHEC in Newfoundland and Labrador include these grade-appropriate documents: (a) *Towards a comprehensive school health program: A primary health curriculum guide*; (b) *Towards a comprehensive school health program: An elementary health curriculum guide*; and (c) *Adolescence: Healthy lifestyles (Health and personal development curriculum)*. The curricula were constructed to focus on wholistic aspects of wellbeing by targeting every child's physical, intellectual, emotional, social, spiritual and moral development and to empower students to improve their health, enhance their wellbeing, promote positive health practices, and alter the environments that affect them. The philosophy of the curricula reflects an awareness of the interrelationships between home, school, and community, with a focus on the development of KSAs which culminate in healthy behaviours (Newfoundland and Labrador Department of Education, 2007a, 2007b, 2007c).

Nova Scotia

Nova Scotia's present SHEC is *Health Education* for use in Grades 1-10. The curriculum was established to provide learning opportunities in which students acquire the KSAs to enhance the quality of student life through active, healthy living practices (Nova Scotia Department of Education, 1998, 2003). The revised Grades 4-6 curriculum emphasizes the importance of students' active participation and engagement in all aspects of their learning in relationship with the school and community (Nova Scotia Department of Education, 2003). The province targets the physical, emotional, social, and intellectual dimensions of wellbeing as these aspects are important in the development of active, healthy citizens (Nova Scotia Department of Education, 2003). The curriculum is also designed to offer the opportunity for students to be caring individuals, make informed decisions, and be responsible citizens in regards to personal wellbeing and development (Nova Scotia Department of Education, 2003).

Ontario

Health and Physical Education is the present SHEC for Grades 1-12 in the province of Ontario (Ontario Ministry of Education, 1999, 2000, 2010). The revised *Health and Physical Education* (HPE) curriculum for Grades 1-8 was implemented in the Fall of 2010, and due to recently required changes in the sexual health information included in the HPE for Grades 9-12, this document is currently scheduled for implementation in the Fall of 2011. HPE in Ontario focuses on the wholistic aspect of every individual by targeting five aspects of wellbeing: physical, mental, emotional, spiritual, and social. Compared to its previous version, the revised HPE curriculum has changed substantially.

Some of these changes are evident in new elements to the vision of the curriculum, such as prioritized health education, an emphasis on physical and health literacy, and suggested healthy active living promotion for others. Another difference is that all grades have the same three-strand framework or organizing

structure for Grades 1-12: healthy living, active living, and movement competence. Specifically, the healthy living strand (mainly representing components of health education) focuses on helping students develop the skills they need to grow and develop healthily, to take ownership of their own health, and to make connections beyond themselves by promoting healthy living in their family, the community, and the world (Ontario Ministry of Education, 2010). A key change in this strand relates to mental health concepts which are emphasized throughout the framework and integrated where appropriate in all grades; the focus on mental health now centres on the development of skills for supporting positive mental health and emotional wellbeing (versus mental illness and disease). Similar to the healthy living strand is the active living strand, which is concerned with developing the necessary skills to take ownership of, and make a commitment to, healthy active living. Movement competence, the third strand, highlights learning the transferable skills necessary for making connections between movement skills, movement concepts, and physical activity strategies and tactics. A living skill aspect is integrated in these three strands, which signifies yet another change: a shift from content-focused curricula to those concerned with skill building (Ontario Ministry of Education, 2010).

Prince Edward Island

In Prince Edward Island (PEI), the most recent SHEC is *Health Curriculum* in Grades 1-9. Each grade has its own separate curricula and mandate, which have recently all been revised: kindergarten in 2008, Grades 1-3 in 2006, Grades 4-6 in 2009, and Grades 7-9 in 2007. The aim of the SHEC is to enable students to make well-informed, healthy choices and to develop behaviours that contribute to the wellbeing of self and others (Prince Edward Island Department of Education, 2006a, 2006b, 2006c, 2007a, 2007b, 2007c, 2008, 2009a, 2009b, 2009c). The wholistic view of every individual is emphasized by targeting the physical, emotional/social, mental/cognitive, and spiritual aspects of wellbeing. In addition, the need for students to extend and refine learning in real-life situations is also recognized. The *health education* curricula for Grades 1-9 consist of four strands: (a) life learning choices; (b) relationship choices; (c) wellness choices; and (d) sexual health (starting in Grade 6). These components involve students learning about the habits, behaviours, interactions, and decisions related to healthy daily living and planning for the future of their health and wellness (Prince Edward Island Department of Education, 2006a, 2006b, 2006c, 2007a, 2007b, 2007c, 2008, 2009a, 2009b, 2009c).

Quebec

In the province of Quebec, the current SHEC is *Physical Education and Health* in Grades 1-9. This curriculum focuses on increasing motor efficiency through regular physical activity along with helping students to develop psychosocial skills and acquire the knowledge, strategies, attitudes, and safe and ethical behaviours required to properly manage their health and wellbeing. It is also intended to enable individuals to develop their full potential, to reflect and work on themselves, to understand themselves, to recognize their true value, and to take action in order to make improvements in these various dimensions of their lives. Students' physical, cognitive, affective, social, moral, and spiritual dimensions of wellbeing are all taken into account in the curricula. Students will

develop tools they will use throughout their lives to feel physically and mentally healthy, to feel good about themselves, to live in harmony with others, and to work towards self-fulfillment as individuals (Quebec Ministry of Education, 2001, 2004, 2007).

Saskatchewan

In Saskatchewan, the present SHEC are titled *Health Education* for Grades 1-9 and *Wellness 10* in Grades 10-12. As one of the important curricula, health education is a required area of study. *Health Education's* aim is to develop confident and competent students who understand, appreciate, and apply health knowledge, skills, and strategies throughout their lifetime. The SHEC in *Saskatchewan* encompasses five dimensions of wellbeing: physical, mental, emotional, social, and spiritual, which are based on the principles of interconnectedness between the body, mind, heart, and spirit (Saskatchewan Ministry of Education, 2009a, 2009b, 2009c, 2009d, 2010a, 2010b, 2010c, 2010d, 2010e). A comprehensive school health approach has been employed to enhance the health education curricula, and to nurture the whole child through wholistic learning, achieving health literacy, building inquiring habits of the mind, and addressing community perceptions and norms. *Wellness10*, revised in 2004 for Grades 10-12, is in fact implemented through integrated health and physical education, and focuses on the physical, psychological, social, and spiritual dimensions of wellness. The curriculum was developed to increase health-enhancing behaviours and decrease health risk behaviours (Saskatchewan Ministry of Education, 2004).

Discussion

Consistent with existing literature, the SHEC in Canada can be seen to focus primarily on the development of the necessary knowledge, skills, and attitudes to live a healthy, active lifestyle. This general aim is intended to guide and empower students to maintain a wholistic quality of life and to play a contributing role in a healthy society. The jurisdictional SHEC, however, present many similarities and differences from coast to coast.

The *health promoting schools* (i.e., *comprehensive school health* or *coordinated school health*) framework advocated by WHO is an important component in persistently strengthening school capacity as a healthy setting for living, learning, and working (Public Health Agency of Canada, 2010; World Health Organization, 2010b). Based on the analysis of Canadian SHEC presented here, it appears that Alberta, New Brunswick, Newfoundland and Labrador, Nova Scotia, and Saskatchewan employ the World Health Organization's framework in their current SHEC. This model is highly developed and praised internationally for its numerous strengths and should therefore be a key SHEC building block. As such, more jurisdictions in Canada are being encouraged to consider this approach as a framework in their future SHEC revisions (Anderson & Piran, 1999; West, Sweeting, & Leyland, 2004).

The nature of wellness is an emerging topic across Canada and the globe, and its presence has expanded with its integration into the SHEC curricula. This signifies that a more wholistic view of health and of SHEC development is underway. To illustrate, the jurisdictions of Alberta, New Brunswick, PEI, and Saskatchewan have included wellness components in their curricula; in

particular, Saskatchewan has implemented a course entitled *Wellness* for Grade 10 while Alberta has been developing a new K-12 wellness education framework scheduled to be implemented in 2014-2015. In addition to these specific initiatives, the SHEC in most jurisdictions in Canada have addressed multiple dimensions of health such as physical, mental, social, emotional, and spiritual. British Columbia, for example, distinctly addresses intellectual development, human and social development, and career development; moreover, all jurisdictions except for British Columbia, Manitoba, and Nova Scotia now include a spiritual dimension—a dimension that has been receiving increased recognition in Canada and across the globe (Anderson, 2007; World Health Organization, 1998). Nonetheless, further research is needed to properly examine the relationships between wellness, wellbeing, and health with respect to a wholistic view. Ideally, to facilitate and regulate this and other related research, a framework could be developed to clarify and homogenize the terms and definitions referring to the dimensions of health.

Health literacy is another area of study that has recently been regarded as a priority in SHEC (Hilborn, et al., 2004; Thomas & Lu, 2010; Meeks, et al., 2009). At present, only a few jurisdictions (e.g., Alberta, Ontario, and Saskatchewan) in Canada address health literacy in their respective SHECs. As health crises arise across Canada and the globe, all jurisdictions should address health literacy to update and enrich their SHEC; in fact, as health-literate citizenship begins in school, this should be a global mandate of all school education (Thomas & Lu, 2010).

In a few jurisdictions, such as Manitoba, Ontario, and Quebec, health education and physical education are integrated, while other jurisdictions approach the two subjects separately. Due to the intertwined concepts and complementary characteristics of health and physical education, treating them as a combined entity is pedagogically an efficient strategy. Further, with the interest of the students in mind, harmonizing HPE may also lead them to ascertain meaningful connections in health awareness—connections which may ultimately increase their knowledge, ability, and appreciation for living a healthy active life. One weakness in this approach appears to be a possible decrease in instructional time for health education when compared to jurisdictions that have separate HPE. However, a new approach to curriculum development in Alberta deserves attention. The new Albertan K-12 wellness education will be developed resulting from the integration of a number of subjects such as health education, physical education, and career and life management. This may forecast a new trend in the development of comprehensive school health education, and a powerful response to health crises among the new generation of children and youth.

Evidently the SHEC in different jurisdictions across Canada, although very different in some respects, do cover similar content. Existing research recommends that the SHEC content frameworks should address key concepts such as: wellbeing; safe and positive learning environments; growth and development; relationships; prevention of unintentional or intentional injury; prevention of alcohol and other drug use; prevention of tobacco use; nutrition education; physical activity; sexuality education; death counselling; grief counselling; and preventing and managing communicable and chronic diseases (Telljohann et al., 2009; Meeks, et al., 2009). Across all Canadian jurisdictions, much of the health education content recommended by leading scholars is

covered in the SHEC. However, SHEC developers should revisit their content and consider adopting these recommended SHEC content frameworks during their future curricular development processes. Environmental health, for one example, is an important element that contributes to individual wellness (Meeks et al., 2009), and information regarding environmental issues such as safe water, clean air, safe noise levels, natural resources, energy conservation, and the proper recycling and disposal of waste should have a strong presence in SHEC. Nevertheless, despite its prevalence in politics, social culture, and the media, the impact of the environment on personal health has not yet been reflected in jurisdictional SHEC in Canada.

A further issue concerning consistency is that the jurisdictions have unique differences regarding mandated curricula for specific grade levels, and also have differing opinions concerning the time allocations to meet course requirements (see Table 1 for details). Also, provinces such as PEI, Ontario, and Saskatchewan require only one HPE credit while other provinces require more to meet graduation requirements in secondary school. Finally, all jurisdictions specify time allocated for the SHEC instruction, except Manitoba; this province has revised *Active Healthy Lifestyles* in 2008 for Grades 11-12 to be flexible and to encompass course components completed in-class and out-of-class. The intent of this flexibility is to provide students with the option to choose the combination of in-class and out-of-class percentages that best meets their individual needs (Manitoba Education, 2010).

Conclusion

SHECs are essential to help students develop the knowledge, skills, and attitudes necessary to live a high quality and healthy life. They have been given additional attention by educators in response to new societal demands and complications that have arisen for children and youth in today's ever-changing world, and it is critical for jurisdictions across Canada to be up-to-date with current research in the revision of respective curricula. The study presented here delineates the profiles of health education curricula across Canada, discusses the core content and frameworks in these curricula, and reveals common trends against the scholarship in the field of school health education. These findings provide scholars and professionals with comprehensive information regarding school-based health education content and will also profoundly inform future curriculum revisions and improvements of overall school health education in Canada and internationally.

This is among the first studies of SHEC across different jurisdictions, and more research is needed on issues and questions emerging from the information presented here. For example, how should the frameworks of the *health promoting school* or *comprehensive school health* be employed in SHEC? More empirical studies are required to investigate the outcomes resulting from these WHO frameworks. Another question that arises is whether wellness education should be an alternative to or replace health education; in addition, there are numerous issues regarding the components (and analysis) of the various aspects of health under discussion. It should be determined, for example, what the relationships are between wellness, wellbeing, and health with respect to a wholistic view. The conceptual framework of health dimensions - physical, mental, social, emotional, cognitive, intellectual and spiritual - currently used in SHEC should be more

concisely defined, as should the content framework of SHEC in relation to what is recommended by leading scholars. How to strengthen or balance health education in the jurisdictions that combined health and physical education is also a challenging question deserving of its own research. Of immediate concern is how positioning health literacy in SHEC can be used to address the current health crisis in children and youth. Finally, empirical research should be conducted by studying curriculum developers and leading scholars in the field of school health education to gain further understanding of jurisdictional curriculum revisions and common trends of SHEC.

References

- Alberta Education.(2002). *Health and life skills kindergarten to Grade 9: Rationale and philosophy*. Edmonton, Alberta: Alberta Learning.
- Alberta Education. (2009). *Framework for kindergarten to Grade 12 wellness education*. Edmonton, Alberta: Alberta Education.
- Alberta Education. (2010). *Wellness education*. Retrieved May 14, 2010, from <http://education.alberta.ca/teachers/program/wellness-education.aspx>.
- Anderson, A. (2007). Spirituality as an integral part of education for health. *Physical and Health Education Journal*, 73(1), 14-17.
- Anderson, A., & Piran, N. (1999). Health promoting schools. *CAHPERD Journal*, 65(1), 10-15.
- British Columbia Ministry of Education. (2005). *Health and career education 8 and 9*. Victoria, British Columbia: British Columbia Ministry of Education.
- British Columbia Ministry of Education. (2006). *Health and career education k to 7*. Victoria, British Columbia: British Columbia Ministry of Education.
- Hilborn, M., Merki, M. B., & Merki, D. (2004). *Glencoe health*. Toronto, Ontario: McGraw-Hill Ryerson.
- Lu, C. (2006). Eastern and Western approaches to physical and health education. In E. Singleton & A. Varpalotai (Eds.), *Stones in the sneaker: Active theory for secondary school physical and health educators* (pp. 71-85). London, Ontario: The Althouse Press.
- Lu, C. (2008). Health education re-conceptualized and its implications for Ontario school health education curriculum. *Teaching & Learning*, 4(3), 1-7.
- Manitoba Education.(2010). *Physical education/health education curriculum document and resources*. Retrieved August 11, 2010, from <http://www.edu.gov.mb.ca/k12/cur/physlth/curriculum.html>.
- Manitoba Education and Training. (2000). *Kindergarten to Senior 4 physical education/health education: Manitoba curriculum framework of outcomes for active healthy lifestyles*. Retrieved August 11, 2010, from <http://www.edu.gov.mb.ca/k12/cur/physlth/framework/index.html>
- Meeks, L., Heit, P., & Page, R. (2009). *Comprehensive school health education: Totally awesome strategies for teaching health* (6th ed.). New York: McGraw-Hill.
- New Brunswick Department of Education. (2001). *Health education curriculum: Kindergarten-Grade 5*. Fredericton, New Brunswick: Education Programs and Service Branch.
- New Brunswick Department of Education. (2005a). *Health education curriculum: Grade 6*. Fredericton, New Brunswick: Education Programs and Service Branch.

- New Brunswick Department of Education. (2005b). *Health education curriculum: Grade 7*. Fredericton, New Brunswick: Education Programs and Service Branch.
- New Brunswick Department of Education. (2005c). *Health education curriculum: Grade 8*. Fredericton, New Brunswick: Education Programs and Service Branch.
- New Brunswick Department of Education. (2005d). *Nutrition for healthy living 120*. Fredericton, New Brunswick: Education Programs and Service Branch.
- New Brunswick Department of Education. (2005e). *You and your world curriculum: Kindergarten-Grade 2*. Fredericton, NB: Education Programs and Service Branch.
- New Brunswick Department of Education. (2007). *Physical education and health: Grade 9/10*. Fredericton, New Brunswick: Education Programs and Service Branch.
- Newfoundland and Labrador Department of Education. (2007a). *Towards a comprehensive school health program: A primary curriculum guide*. St. John's, Newfoundland and Labrador: Newfoundland and Labrador Department of Education.
- Newfoundland and Labrador Department of Education. (2007b). *Towards a comprehensive school health program: An elementary curriculum guide*. St. John's, Newfoundland and Labrador: Newfoundland and Labrador Department of Education.
- Newfoundland and Labrador Department of Education. (2007c). *Adolescents: Healthy lifestyles (health and personal development curriculum)*. St. John's, Newfoundland and Labrador: Newfoundland and Labrador Department of Education.
- Nova Scotia Department of Education. (1998). *Foundations for active, healthy living: Physical and health education curriculum*. Halifax, Nova Scotia: Nova Scotia Department of Education.
- Nova Scotia Department of Education. (2003). *Health education curriculum: Grades 4-6*. Halifax, Nova Scotia: Nova Scotia Department of Education.
- Ontario Ministry of Education. (1999). *Health and physical education curriculum (Grades 9 & 10)*. Toronto, Ontario: Ontario Ministry of Education.
- Ontario Ministry of Education. (2000). *Health and physical education curriculum (Grades 11 & 12)*. Toronto, Ontario: Ontario Ministry of Education.
- Ontario Ministry of Education. (2010). *Health and physical education curriculum (Grades 1-8) (interim edition)*. Toronto, Ontario: Ontario Ministry of Education.
- Prince Edward Island Department of Education. (2006a). *Health curriculum (Grade 1)*. Charlottetown, PEI: Prince Edward Island Department of Education.
- Prince Edward Island Department of Education. (2006b). *Health curriculum (Grade 2)*. Charlottetown, PEI: Prince Edward Island Department of Education.
- Prince Edward Island Department of Education. (2006c). *Health curriculum (Grade 3)*. Charlottetown, PEI: Prince Edward Island Department of Education.

- Prince Edward Island Department of Education. (2007a). *Health curriculum (Grade 7)*. Charlottetown, Prince Edward Island: Prince Edward Island Department of Education.
- Prince Edward Island Department of Education. (2007b). *Health curriculum (Grade 8)*. Charlottetown, Prince Edward Island: Prince Edward Island Department of Education.
- Prince Edward Island Department of Education. (2007c). *Health curriculum (Grade 9)*. Charlottetown, Prince Edward Island: Prince Edward Island Department of Education.
- Prince Edward Island Department of Education. (2008). *Kindergarten Integrated Curriculum Document*. Charlottetown, Prince Edward Island: Prince Edward Island Department of Education.
- Prince Edward Island Department of Education. (2009a). *Health curriculum (Grade 4)*. Charlottetown, Prince Edward Island: Prince Edward Island Department of Education.
- Prince Edward Island Department of Education. (2009b). *Health curriculum (Grade 5)*. Charlottetown, Prince Edward Island: Prince Edward Island Department of Education.
- Prince Edward Island Department of Education. (2009c). *Health curriculum (Grade 6)*. Charlottetown, Prince Edward Island: Prince Edward Island Department of Education.
- Public Health Agency of Canada (2010). *Comprehensive school health*. Retrieved July 30, 2010, from <http://www.phac-aspc.gc.ca/dca-dea/7-18yrs-ans/comphealth-eng.php>
- Quebec Ministry of Education. (2001). *Quebec education program: Preschool education, elementary education*. Montreal, Quebec: Quebec Ministry of Education.
- Quebec Ministry of Education. (2004). *Quebec education program: Secondary school education, cycle one*. Montreal, Quebec: Quebec Ministry of Education.
- Quebec Ministry of Education. (2007). *Quebec education program: Secondary school education, cycle two*. Montreal, Quebec: Quebec Ministry of Education.
- Saskatchewan Ministry of Education. (2004). *Wellness 10: A curriculum guide for the secondary level*. Retrieved August 14, 2010, from <http://www.sasked.gov.sk.ca/docs/wellness/index.html>
- Saskatchewan Ministry of Education. (2009a). *Health education (Grade 6)*. Retrieved August 14, 2010, from <https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en>
- Saskatchewan Ministry of Education. (2009b). *Health education (Grade 7)*. Retrieved August 14, 2010, from <https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en>
- Saskatchewan Ministry of Education. (2009c). *Health education (Grade 8)*. Retrieved August 14, 2010, from <https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en>
- Saskatchewan Ministry of Education. (2009d). *Health education (Grade 9)*. Retrieved August 14, 2010, from <https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en>

- Saskatchewan Ministry of Education. (2010a). *Health education (Grade 1)*. Retrieved August 14, 2010, from <https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en>
- Saskatchewan Ministry of Education. (2010b). *Health education (Grade 2)*. Retrieved August 14, 2010, from <https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en>
- Saskatchewan Ministry of Education. (2010c). *Health education (Grade 3)*. Retrieved August 14, 2010, from <https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en>
- Saskatchewan Ministry of Education. (2010d). *Health education (Grade 4)*. Retrieved August 14, 2010, from <https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en>
- Saskatchewan Ministry of Education. (2010e). *Health education (Grade 5)*. Retrieved August 14, 2010, from <https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en>
- Singleton, E., & Varpalotai, A. (Eds.) (2006). *Stones in the sneaker: Active theory for secondary school physical and health educators*. London, Ontario: The Althouse Press.
- Telljohann, S. K., Symons, C. W., & Pateman, B. (2009). *Health education: Elementary and middle school applications* (6th ed.). New York: McGraw Hill.
- Thomas, L., & Lu, C. (2010, October). *Health literacy perspectives*. Paper presented at the meeting of Council for University of Professors and Researchers in Physical & Health Education, Toronto, Ontario, Canada.
- West, P., Sweeting, H., & Leyland, A. (2004). School effects on pupils' health behaviours: Evidence in support of the health promoting school. *Research Papers in Education*, 19(3), 251-291.
- World Health Organization (1998). *Health promotion glossary*. Retrieved June 5, 2010, from http://whqlibdoc.who.int/hq/1998/WHO_HPR_HEP_98.1.pdf.
- World Health Organization (2010a). *Health action in crises*. Retrieved June 5, 2010, from <http://www.who.int/hac/about/definitions/en/>.
- World Health Organization (2010b). *What is a health promoting school?* Retrieved May 12, 2010, from http://www.who.int/school_youth_health/gshi/hps/en/index.html.

Table 1: *Profiles of SHEC in Canada*

Alberta	Instructional Time	Major Components
Health & Life Skills K-G9 (2002) (Mandatory)	10% total school instructional time and combined with PE for K-G6. 50 hours per year for G7-9	1) Wellness choices (personal health, safety and responsibility); 2) Relationship choices (understanding and expressing feelings, interactions, group roles and process); 3) Life learning choices (learning strategies, life roles and career development, volunteerism).
Career & Life Management G10-12 (2002) (Mandatory)	75 hours instructional time	1) Personal choices (nutrition, physical activity, health and wellbeing, sex education); 2) Resource choices (financial literacy, decision making); 3) Career and life choices (manage personal and career development).

British Columbia	Instructional Time	Major Components/topics
Health & Careers Education G1-7 (2006) (Mandatory)	5% of total instructional time.	1) Goals and decisions; 2) Career development; 3) Healthy living (regular physical activity, emotional health strategies, healthy eating, disease prevention); 4) Healthy relationships; 5) Safety and injury prevention (home, school, community); 6) Substance (mis)use and prevention.
Health & Careers Education G8-9 (2005) (Mandatory)	5% of total instructional time.	1) Education and careers; 2) Healthy living (physical activity, nutrition, emotional health, sexual decision making, HIV/AIDS and STI's); 3) Healthy relationships; 4) Safety and injury prevention (home, school, community); 5) Substance misuse and prevention.

Manitoba	Instructional Time	Major Components/topics
Health/Physical Education K-G4 (2001) G5-8 (2002) G9-10 (2004) (Mandatory)	11% of total instructional time in K-6 and 9% in G7-8. 25% of time on health education. 50% of 110 hours on health education for G9-10.	1) Movement; 2) Fitness management; 3) Safety (physical activity, risk management, safety of self and others); 4) Personal/social management (personal development, social development, mental-emotional development); 5) Healthy lifestyle practices (personal health practices, active living, healthy food choices, substance use and abuse, human sexuality).
Active Healthy Lifestyles (2008) (Mandatory)	50% of 110 hours on health education for G11-12. Students need a completion of 4 credits from G9-12. This equals to 440 hours to meet graduation requirements.	1) Physical activity practicum; 2) Fitness management (disease prevention, personal health); 3) Mental-emotional health (stress, positive relationships, self-image, community services, problem solving strategies); 4) Social impact of sport (health enhancing-decisions, positive relationships, collaboration skills); 5) Substance use and abuse prevention; 6) Nutrition; 7) Personal and social development; 8) Healthy relationships.

New Brunswick	Instructional Time	Major Components/topics
You & Your World (2005) (The program contains four subjects: health, personal development and career planning,	130 minutes/week	1) Students as individuals (unique, family); 2) Healthy lifestyles (nutrition, hygiene, disease prevention, healthy lifestyle, safety); 3) Our senses; 4) Groups; 5) Community; 6) Safety; 7) Work; 8) Environment (seasonal cycle, recycle);

science, and social studies) K-G2 (Mandatory)		9) Growth and development.
Health Education K-G5 (2001) G6-8 (2005) (Mandatory)	Approximately 2.75 % of total instructional time. Equals about 45 minutes/week allocated toward health education.	1) Protecting yourself, your family, your community (hygiene, recycle, abuse, safety and injury prevention, diseases, pollution); 2) Personal wellness (nutrition, healthy lifestyle, self-image); 3) Physical growth and development; 4) Use, misuse, and abuse of materials with an emphasis on media literacy.
Health & Physical Education G9-10 (2007) (Mandatory)	45-135 hours of HPE combined. Half semester equals 45 hours. Maximum of 20% in class and 80% focused on active learning.	1) Doing (e.g., movement skills and concepts, activity specific motor skills, efficient and effective body mechanisms, cooperation); 2) Knowing (e.g., principals that support active living, maintain physical fitness, safety rules and procedures, concepts and principals related to movement categories); 3) Valuing (e.g., positive personal and social behaviours and interpersonal relationships, lifelong health and well-being).

Newfoundland	Instructional Time	Major Components/topics
Towards a Comprehensive School Health (CSH) Program: A Primary Health Curriculum Guide K-G3 (2007) Towards a CSH Program: An	There are no definitive time allocations in K-3. 6% of instruction time allocated in G4-6.	1) Mental health (self-esteem, well-being, decision making); 2) Relationships (family, abuse, respect, stereotyping); 3) Nutrition (portions of food, types of food for health); 4) Physical growth and development; 5) Self-care (disease prevention); 6) Dental health; 7) Active living (physical fitness, social development, stress management); 8) Injury prevention and safety (environment, first aid); 9) Drug education; 10) Consumer health (media literacy and awareness);

Elementary Health Curriculum Guide G4-6 (2007) (Mandatory)		11) Environmental health (pollution, responsibilities).
Adolescence: Healthy Lifestyles (Health and Personal Development Curriculum) G7-9 (2007) (Mandatory)	5% of total instructional time.	1) Emotional and social well-being (self-esteem, self-concept, stress management, decision making); 2) Human sexuality; 3) Relationships (family, friendships, peers); 4) Drugs: smoking and alcohol; 5) Active living; 6) Safety and environmental health (safety practices); 7) Nutrition (healthy eating, benefits, portion control).

Nova Scotia	Instructional Time	Major Components/topics
Health Education K-G3 (1998) G7-9 (1998) (Mandatory)	50 minutes/week or 4.4% of total instructional time.	1) The body, growth, and development; 2) Strategies for healthy living (nutrition, safety, safe and unsafe substances, diseases, hygiene, health-related fitness); 3) Values and practices for health (family, community, home, healthy environment); 4) Strategies for positive personal development and healthy relationships.
Health Education (2003) G4-6 (Mandatory)	60 minutes/week or 4.2% of total instructional time.	1) The body, growth, and development; 2) Strategies for healthy living (nutrition, healthy diet, mental well-being, harmful substances, safety, causes and prevention of diseases, sharing and expressing feelings, hygiene, health-related fitness); 3) Values and practices for health (family, roles and responsibilities of community groups, changing society, environment, diverse cultures); 4) Strategies for positive personal development and healthy relationships.

Ontario	Instructional Time	Major Components/topics
Health & Physical Education G1-8 (2010) (Mandatory)	65 minutes/week of instructional time in G1-8. 30% of total instructional time on health education and 70% on physical education.	1) Active living; 2) Movement competence: skills concepts and strategies; 3) Healthy living (health eating; personal safety and injury prevention; substance use, addictions and related behaviours; human development and sexual health).
Health & Physical Education G9-10 (1999) (Mandatory)	110 hours of instructional time.	1) Physical activity; 2) Active living (active participation, physical fitness, safety); 3) Healthy living (growth and sexuality, nutrition, substance use and abuse, personal safety and injury prevention); 4) Living skills (decision making, conflict resolution, social skills).
Prince Edward Island	Instructional Time	Major Components/topics
Health Education (2008) Kindergarten (Mandatory)	60 minutes/week allocated for instructional time.	1) Physical development; 2) Health and well-being (nutrition, positive hygiene and health care habits, physical activity, safe and unsafe situations, safety rules); 3) Personal development (feelings and emotions, curiosity and interests in learning, engage and complete activities).
Health Education G1-3 (2006) G4-6 (2009) G7-9 (2007) (Mandatory)	60 minutes/week allocated for instructional time in K-G3. 75 minutes/week allocated for instructional time in G4-6. 60-90 minutes/week	1) Life learning choices (life goals and career development, volunteerism, time management, decision making strategies); 2) Relationship choices; 3) Wellness choices (personal health, safety and responsibility, nutrition, immune system, body image, alcohol, drugs, personal health/wellness); 4) Sexual health starting in grade 6.

	allocated for instructional time in G7-9.	
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Quebec	Instructional Time	Major Components/topics
Health & Physical Education G1-6 (2001) G7-9 (2004) (Mandatory)	60 minutes/week of instructional time in G1-6. No time allocation labelled in G7-9	<ol style="list-style-type: none"> 1) Performs movement skills in different physical activity settings; 2) Interacts with others in different physical activity settings; 3) Adopts a healthy active lifestyle (analyze the impact of certain personal lifestyle habits on own health and well-being, develop a plan designed to change some personal lifestyle habits, evaluate own process and lifestyle habits; carry out the plan).

Saskatchewan	Instructional Time	Major Components/topics
Health Education K-G5 (1998) (Mandatory)	80 minutes/ week in K-G6	<ol style="list-style-type: none"> 1) Healthy body (nutrition, disease, body systems, health promotion, sex education); 2) Social relationships (personal identity, friends, family, dating, community); 3) Safety (injury prevention, risk assessment); 4) Self-esteem (growth and development, assertiveness, appearance, self-knowledge).
Health Education G6-9 (2009) (Mandatory)	100 minutes/week in G7-9	<ol style="list-style-type: none"> 1) Develop the understanding, skills and confidence necessary to take action to improve health; 2) Make informed decisions based on health related knowledge; 3) Apply decisions that will improve personal health.
Wellness (2004) G10-12 (Mandatory)	100 hours required for completion.	<ol style="list-style-type: none"> 1) Wellness (physical activity and fitness, stress management, leisure, nutrition, and relationships); 2) Challenges of wellness (HIV and AIDS); 3) Supports for wellness (injury prevention and safety); 4) Supports for local and global wellness (volunteerism).