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New Brunswick approach to Comprehensive School Health: Healthy Learners in Schools and the Community School

by

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THESIS

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List of Abbreviations

ACHSC - Alberta Coalition for Healthy School Communities
AHPSA – Australian Health Promoting School Association
AS! BC - Action Schools! British Columbia
AVHPS – Annapolis Valley Health Promoting School
CASH – Canadian Association for School Health
CDC – Center for Disease Control and Prevention
CPI – Coordinator of Planning and Implementation
CSH – Comprehensive School Health
CSHP –Coordinated School Health Promotion
ENHPS – European Network of Health Promotion School
GNB – Government of New Brunswick
HLS – Healthy Learners in Schools
HPEC - Health and Physical Education Council
HPS – Health Promoting School
OCHP – Ottawa Charter for Health Promotion
OME – Ontario Ministry of Education
PHN – Public Health nurse
SHC – School Health Committee
WHO – World Health Organization
Abstract

In this thesis, a multiple case study methodology and semi-structured interviews are used to identify and describe the barriers and facilitators to the implementation of a Comprehensive School Health (CSH) initiative, Healthy Learners in Schools (HLS), in two elementary schools within the same Francophone school district in New Brunswick, Canada. The first article in this thesis identifies five categories of factors that influence the implementation of HLS in the two schools. The second article provides evidence that another initiative, the Community School, is an effective way of implementing the CSH approach in schools. Overall, there was found to be large differences pertaining to school health promotion in the two schools involved in this study; many refinements of the implementation process are necessary if the provincial government’s goals are to be met.
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CHAPTER 1: INTRODUCTION
This research project fills a gap in the literature concerning CSH programs because it provides a better understanding of the ways in which HLS, a program using the CSH approach, is being implemented in New Brunswick. In addition, it demonstrates how the Community School approach can serve as a CSH initiative. By undertaking this project, additional literature pertaining to the implementation of CSH initiatives in Canada is made available for researchers and others involved in the implementation of similar programs. This thesis may be able to help the Province of New Brunswick to fine tune its implementation of the HLS and Community School programs and thus to achieve maximal effectiveness, which could have a subsequent impact on the health of thousands of young residents of New Brunswick in the years to come.

School Health Promotion Worldwide

Over the past few years, increasing attention has been given to the obesity “epidemic” in Canada. In 2004, Statistics Canada reported that nearly 60% of Canadians aged 18 years or older were overweight or obese (Tjepkema, 2006). Children between the ages of two and 17 are also showing alarming body weight trends; for example, in 2004 Statistics Canada reported that more than one in four children in this age group were either overweight or obese (Shields, 2006). Two proposed reasons for the increase (up 70% since 1978/1979) of overweight and obese children are physical inactivity and poor nutrition, problems that start in childhood and extend into adulthood (Shields). It has been found that childhood obesity plays an important role in adult obesity, and obese children are likely carrying their excess weight into adulthood (Freedman, Khan, Dietz, Srinivasan, & Berenson, 2001). Further, unhealthy lifestyle habits developed during youth tend to translate into adulthood (Kelder, Perry, Klepp, & Lytle, 1994); weight and unhealthy lifestyles that are acquired at a young age will affect adult health in the future, as these
children will likely grow up to strengthen current trends in obesity. It is important to note that the problem of childhood obesity extends beyond Canada. According to the World Health Organization (WHO) (2006), there were at least 20 million children under the age of 5 who were overweight worldwide in 2005.

In response to the problem of children practicing health compromising behaviours, many efforts have been made to improve health promotion in numerous parts of the world. This movement stems from the Ottawa Charter of Health Promotion (OCHP) (WHO, 1986), which outlined a campaign for improving health in an every day context. Within the OCHP, there is a section dedicated to the creation of supportive environments for health. An environment that has been targeted by the OCHP is the school, a place where health promotion can have an impact on diverse factors such as student learning and safety (WHO). Research has shown strong links between poor health and educational achievement, whereby poor childhood health is negatively correlated with academic achievement (Lavin, Shapiro, & Weill, 1992; Taras, 2005). As children spend a large portion of their days in schools, school settings seem to be promising environments for health promotion.

In order to strengthen the development of schools as settings for health promotion, many organizations have attempted to develop models to understand and facilitate school health promotion. Concepts of “health promoting schools” (HPS) have emerged from across the globe and have taken comprehensive approaches to bring these concepts to fruition, i.e., approaches that involve a number of settings and people working together. According to the WHO (1999), a HPS is a school that “is constantly strengthening its capacity to be a health setting for living, learning, and working” (p. 19). More specifically, through a comprehensive approach, HPSs “aim to build healthy public policies, create supportive environments, strengthen community
action, foster the development of personal skills, and reorient health services to embrace health promotion in addition to clinical and curative services” (WHO, p. 19). In order to better understand and situate a specific Canadian example of a HPS, one in the Province of New Brunswick, I will first outline examples of international approaches to HPS in Australia, the European Union, and the United States of America. Generally, these initiatives have been developed to improve and sustain comprehensive approaches to health promotion in elementary schools.

Australia

In Australia a HPS is defined as a school “that strives to nurture the social, emotional, physical, and spiritual well-being, and cognitive development of its students, staff, and community” (Australian Health Promoting School Association (AHPSA), 2006, p. 1). The Australian HPS framework encompasses three major interrelated components: curriculum, teaching and learning practices; school organization, ethos and environment; and partnerships and services (AHPSA, n.d.). The Australian HPS model addresses the environments in which children spend an abundance of their daily lives. The Australian HPS model (Figure 1) can be understood as a Venn diagram, with the three components overlapping, making school health promotion possible. The Australian approach clearly demonstrates a comprehensive approach, as all sectors must work together to follow the proposed framework. As the next few examples will demonstrate, such an approach is not only prevalent in Australia, but in other countries as well.
European Union

Similar to Australia, the European Network of Health Promoting Schools (ENHPS) has implemented an initiative called the “Health Promoting School.” In the European case, the HPS takes a settings approach, with a focus on mental, emotional, social, and physical health, as well as an emphasis on quality of life and “health as positive well-being” (ENHPS, 2006, p. 17). The ENHPS utilizes a long-term development approach that uses a progressive curriculum to educate students about age-appropriate health-related topics. Some of the specific components integrated in the ENHPS’ plan include health education across all areas of the curriculum, experiential
learning techniques that encourage students to take action with the knowledge they acquire, and the active use of families and community partners in decision-making. One of the interesting characteristics of the ENHPS model is the emphasis on teachers’ and administrators’ health. The model promotes teachers’ health by providing teacher education and support in the integration of the HPS approach in the schools, as well as opportunities for teachers to take care of their own health (e.g., activities related to stress management). The rationale behind this component is that “Teachers and other staff cannot be expected to be enthusiastic about health promotion if they do not feel their own health, both mental and physical, is being promoted” (ENHPS, p. 23). This approach also encourages teachers to lead by example while preserving their health in their workplaces.

United States of America

Similar to the Australian and European initiatives, the Centers for Disease Control and Prevention (CDC) in the United States of America has adopted its own approach related to health promotion in the school, called Coordinated School Health Promotion (CSHP). The CSHP is a multi-leveled approach that has been widely researched over the past two decades (Grunbaum, Gingiss, Orpinas, Batey, & Parcel, 1995; Johnson & Deshpande, 2000; Kolbe, Kann, & Brener, 2001; Lavin, 1993; Resnicow & Allensworth, 1996; Telljohann, Everett, Durgin, & Price, 1996). The CSHP program includes eight major components: health education; physical education; health services; nutrition services; counseling; psychological and social services; health school environment; health promotion for staff; and family and community involvement. The above eight components all interact in order to “maintain the well-being of young people” (CDC, 2007, online). In the United States, the CSHP acts as an overarching framework for specific health promoting initiatives within schools, which is very similar to the Canadian situation for HPS.
School Health Promotion in Canada

In Canada, education falls under each provincial and territorial government’s jurisdiction. Consequently, each province (and one territory) has its own concept of the health promoting school. Thus far all 10 provinces and the Yukon Territory have adopted different, yet very similar, approaches to improving school health. At the same time, there are several national associations advocating a CSH approach, which helps to account for many of the similarities in the provinces’ and the Yukon’s approaches. Notably, the Canadian Association for School Health (CASH), the Joint Consortium for School Health, the School Health Research Network, the Canadian School Physical Activity and Nutrition Network, the Canadian School Health Centre, and the Canadian Association for Health, Physical Education, Recreation, and Dance are all involved in promoting health in schools across the country.

The Canadian School Health Centre in partnership with CASH advocates the CSH approach from coast to coast to coast. Since the province that is the focus of this study uses CASH’s definition of CSH in its HLS implementation guidelines manual (Government of New Brunswick, 2005), that same interpretation will be used to define CSH in this paper. CASH’s CSH approach incorporates four components (CASH, 2007):

1. Health instruction that is comprehensive, promotes the adoption of a healthy lifestyle, and various learning strategies.

2. Support services that are available and accessible to both pupils and school staff.

3. A supportive social environment that encourages health promotion within the school as well as in the home and community.
4. A healthy school environment that is clean and safe, and helps prevent injuries and diseases.

These four components are guidelines that are used predominately in CSH-type frameworks in Canada: all ten provinces and the territory of Yukon in Canada have adopted initiatives that follow similar guidelines as the ones outlined by CSHC (Beaudoin & Bertrand, in preparation). Below, I outline a number of provinces’ CSH initiatives.

*Manitoba and Alberta: Healthy Kids, Schools, and Communities and Ever Active Schools*

The Government of Manitoba introduced in 2002 an initiative entitled “Healthy Kids, Healthy Schools, Healthy Communities” that attempts to improve “access to health and social supports, integrated teaching strategies, healthy physical and social environments, community partnerships, healthy lifestyle choices” (Government of Manitoba, 2007, online). Similarly, the Province of Alberta has introduced the “Ever Active Schools” program, the purpose of which “is to encourage, identify and recognize schools that value and promote positive healthy behaviors and practices, as well as physical activity opportunities, through initiatives that affect the entire school community” (Ever Active Schools, 2007, online). Although this initiative is available in Alberta schools, the province also has two non-governmental organizations that have mandates to promote health in schools: the Alberta Coalition for Healthy School Communities (ACHSC) and the Health and Physical Education Council (HPEC). The ACHSC is a coalition that promotes CSH by funding and promoting the approach across the province. The ACHSC’s vision is to ensure that all children and youth are part of a healthy school community in Alberta (ACHSC, 2006). The HPEC, on the other hand, is affiliated with the Alberta Teachers Association and is partially responsible for the development of Ever Active Schools.
Healthy School: Ontario

Similar to the Governments of Manitoba and Alberta, the Ontario Ministry of Education (OME) has launched the concept of the “Healthy School;” this approach follows the CSH framework, involving the school, family, and community in its efforts to improve the health and well-being of its students. According to the OME (2007), a Healthy School must include several important components: quality instruction and programs, a healthy physical environment, a supportive social environment, and community partnerships. In addition, the Healthy School emphasizes the inclusion of health education across all aspects of the curriculum, provides nutritious meals in the cafeteria, and makes gymnasium available for community non-profit organizations when the school is not using them. In 2005, the OME added yet another component to the Healthy School: 20 minutes of mandatory daily physical activity for all school children. To date, no research has been published in peer-reviewed journals pertaining to the Ontario Healthy School initiative.

British Columbia: Action Schools! British Columbia

Although there are school health initiatives in place in the majority of provinces and territories in Canada, the research and reports that have been compiled have not been typically published in peer-reviewed journals, which makes it very challenging to provide an assessment of the degree to which these programs are implemented or are successful (Beaudoin & Bertrand, in preparation). One of the few provinces to document its efforts in implementing CSH initiatives is British Columbia. The primary school health initiative that has been the subject of academic attention is “Action Schools! British Columbia” (AS!BC). The initiative’s mission is to “[provide] more opportunities for more children to make healthy choices more often” (Action Schools! British Columbia, 2006, online; emphasis in original). Researchers found that an
effective way of achieving AS! BC’s desired outcomes was by taking a “whole school” approach that incorporated physical activity as much as possible through six action zones: (1) School Environment; (2) Scheduled PE; (3) Classroom Action; (4) Family and Community; (5) Extracurricular; and (6) School Spirit (Naylor, MacDonald, Zebedee, Reed, & McKay, 2006). Thus far, AS! BC has been successful in its efforts, as the initiative has helped to increase students’ time of engagement in physical activity, produced positive changes in the children’s behaviour (e.g., enjoyment), improved the overall school climate, and met with teacher’s satisfaction for program training and support (Naylor et al.). In addition, researchers recently demonstrated that a program such as AS! BC can be successfully incorporated into a school’s curriculum, despite other competing demands (Naylor, Macdonald, Warburton, Reed, & McKay, 2008).

**Nova Scotia: Dartmouth Health Promoting School Study**

Like BC, Nova Scotia has also attempted to implement programs to improve children’s health. To date, there have been two large-scale studies pertaining to CSH in Nova Scotia. The first study, the Dartmouth Health Promoting School Study, was led by Belzer and McIntyre in the 1990s. It aimed to improve children’s mental and heart health with planned activities in a coordinated approach context. Self-administered surveys and aerobic fitness testing were used to test heart and mental health, while planned activities were conducted by a Coordinator of Planning and Implementation (CPI) in both school types – one category of schools using a coordinated approach and one using the conventional approach to health promotion. The CPIs had several main duties: assembling committees, generating ideas, planning activities and their implementations, then executing and evaluating these activities pertaining to health (McIntyre, Belzer, Manchester, Blanchard, Officer, & Simpson, 1996). Both quantitative and qualitative methods were used to evaluate the impact of this program. Major findings showed that the
coordinated program improved health awareness in the participants and was very well received by the teachers and administrators (McIntyre et al.). Instructional components of the program were also very well delivered due to the provision of lesson plans and classroom materials (McIntyre et al.). On the other hand, no conclusive findings were obtained from the quantitative data on children’s mental and heart health (McIntyre et al.). The authors did find, however, that the coordinated approach enhanced enthusiasm within the school and its community to promote health, which was deemed promising when rating its sustainability, and that the Coordinator of Planning and Implementation’s self-reported performed duties were congruent with the implementation procedure of the coordinated approach model (Belzer & McIntyre, 1994), which would suggest that it is an effective way of implementing the coordinated approach model.

Another study situated in Nova Scotia was led by Veugeler and Fitzgerald (2005); it aimed to measure the effectiveness of a “healthy school” initiative in the Annapolis Valley region. Through surveys and height and weight measurements, the research team compared two types of schools in the region: one type was implementing the healthy eating component of CDC’s CSHP (the CSH approach from the United States) and the other was using a self-reported healthy eating policy for the schools. Findings showed that children in a school having a health promotion program that was comprehensive (CSH) had lower rates of overweight and obesity, made healthier food choices, and exercised more often than children in schools that did not have the CSH program (Veugeler & Fitzgerald). Key components of the Annapolis Valley Health Promoting School’s (AVHPS) success included support from school staff and administrators, a school health promotion team, links with the community, and the identification and resolution of barriers pertaining to the delivery of the program as they arose (Health Promotion Clearing House, 2006). Similarly, other provinces in the Atlantic region have taken this approach and
many components of the AVHPS can be found in programs such as “Healthy Learners in School” (HLS) in the neighboring province of New Brunswick.

*Healthy Learners in School: New Brunswick*

Though it has received no attention in academic journals, in New Brunswick the provincial Department of Education in partnership with the Department of Health and Wellness developed the HLS program in 2000. The HLS framework is very similar the CSH guidelines provided by CSHC as it has three major components. The first component is instruction/awareness that “provides opportunities for students to acquire knowledge, attitudes and skills to live a healthy life” (Government of New Brunswick (GNB), 2005, p. 7). This first component is intended to be accomplished through quality curriculum and formal and informal instruction that is conducted both in and out of the classroom. Secondly, the physical, emotional and social environments are adapted to enhance and care for the health and wellness of students and staff. Some examples of ways in which this can be achieved are nutrition policies, tobacco free schools, and air quality initiatives. Lastly, services and support are made available to the schools or accessed through the broader community in order to reinforce the curriculum’s health promoting strategies.

In addition to the components listed above, the mandate of HLS is “to support the long term outcome of student health, wellness and learning achievement” (GNB, 2005, p. 8). In order to achieve this goal, school health committees (SHC), which are established in order to make collaborative decisions and identify priorities related to the HLS initiative, are supposed to be established in each elementary school in the province and are comprised of school representatives, public health nurses (PHNs), community partners, and other members deemed necessary by the SHC. As mentioned above, despite the eight year existence of HLS in New
Brunswick schools, the program has not received academic attention. Thus, there is a gap in the available information pertaining to CSH in Canada.

Although HLS is a program that uses the CSH approach in New Brunswick, there is also another program in New Brunswick, the Community School, which advocates some of the same values as HLS. The roots of Community School come from a report entitled "When Kids Come First," which was released in June 2007 by the GNB's Department of Education. Through this report, the GNB announced a challenging goal for the years to come: to build the best education system in the country (GNB, 2007). As a means to reach this ambitious goal, eight commitments were set up as part of a large-scale plan: (1) to ensure school readiness; (2) to work urgently on literacy, numeracy, and science; (3) help children develop a passion for learning; (4) to give educator the tools to innovate and lead; (5) to live up to the promise of inclusion; (6) to engage communities and partners in improving schools; (7) to promote cultural identity and linguistic growth; and (8) to create healthy and safe schools. The commitment, in which the province aims to engage the community and partners in the improvement of schools, is where the concept of the Community School came to fruition.

According to the "When Kids Come First" publication,
The community school has a community based committee that works with principals and school teams to integrate community services with the teaching mission. The school uses community resources and assets to provide additional opportunities for classroom instruction and after-school programs. And teachers in a community school use those resources to provide more hands-on, interactive learning for children. Also, the building is often open for students and their families beyond traditional hours, offering community services. (GNB, 2007, p.
During the first phase of implementation of the Community School, the GNB plans to launch up to 30 community schools by June 2009. An additional 15 community schools will be introduced in the second phase of the initiative, which will run during years three to five of the program.

Although some researchers (Deschesnes, Martin, & Jomphe-Hill, 2003; St Leger et al., 2007) have not included Community Schools in their studies pertaining to the implementation of CSH, this thesis demonstrates how their similarities enable Community Schools to provide an opportunity for the use of the CSH approach. Since both of these approaches are settings approach that involve more than a single setting (i.e., the school and the community), an ecological model is a fitting framework to evaluate the implementation of these programs, as it takes a wide variety of factors into account (McLeroy, Bibeau, Steckler & Glanz, 1988; Stokols, 1996; Stokols, Allen, & Bellingham, 1996)

Ecological models have been used to describe health promotion programs for over two decades (McLeroy, Bibeau, Steckler, & Glanz, 1988). An ecological perspective addresses “multiple levels of behavior influence, leading to a more comprehensive approach to health promotion” (Miller, 2003, p. 15). Stokols has been a leader by publishing demonstrations of the social ecological model as a way of understanding the dynamic interactions between people and their environment when specific to health promoting initiatives (McLaren, & Hawe, 2005). Stokols (1996) found that “a major strength of social ecological approaches to health promotion is that they integrate strategies of behavioral change and environmental enhancement within a broad systems-theoretical framework” (p. 287). The systems that should be considered when describing a CSH approach or the Community School program are the school, students’ families, and the surrounding community. Within these systems, the social ecological model proposes an
interaction between three different dimensions: Interpersonal, intrapersonal and organizational relationships. Following Dwyer, Needham, Simpson, and Heeney (2008) and Geller, Zwirn, Rutsch, Gorham, Viswanath, and Emmons (2008), this thesis will examine these three relationships. For the purposes of my thesis, intrapersonal factors will refer to an individual’s characteristics such as attitude, skills, knowledge, and beliefs. Interpersonal processes that occur in the specified setting will refer to the relationships and the communication between the individuals in the particular setting. Organizational structures will be understood as factors that refer to the physical and organizational infrastructures of the different settings.

Implementation Process

It is important to examine HLS’ implementation process because such an examination can identify conditions and processes that ultimately lead to the initiative’s desired outcomes being obtained (Champagne & Denis, 1992). In addition, the description of the process of implementation can lead to the discovery of practical strategies that may be beneficial to others. As Scheirer and Rezmovic (1983) stated,

To correctly attribute the observed outcomes of a social program to the intervention, the researcher should have empirical evidence on the extent to which program components were implemented. Without such evidence, researchers may erroneously conclude that an intervention was ineffective when, in fact, treatment implementation was inadequate to afford a valid test of the program. (p. 599)

The implementation process of an initiative refers to “sequences of organizational changes and support mechanisms that account for the degree of implementation found at a given time” (Scheirer & Rezmovic, 1983, p. 601).
After reviewing a number of publications related to the implementation of health promotion initiatives in different settings including schools (Linnan & Steckler, 2002; Riley, Taylor, & Elliott, 2003; Saunders, Evans, & Joshi, 2005; Shedia-Rizkallah & Bone, 1998), it is clear that my research must focus on the evaluation of specific factors that affect the process of implementation. Each of the authors listed above has identified key categories of factors that influence the implementation of health promoting initiatives. After analyzing the different factors identified in these articles, five categories of factors were identified as being of special importance, as they reoccurred in the literature and provide a thorough representation of the potential factors that can affect the degree of implementation of varied health initiatives:

1. Program factors: the specifics of the initiative itself and the desired outcome or targeted behaviors (Saunders, Evans, & Joshi, 2005; Shedia-Rizkallah & Bone, 1998)

2. Individual factors: unique and specific factors pertaining to the different agents involved in the implementation of the initiative (Saunders, Evans, & Joshi, 2005)

3. Organizational factors: school’s characteristics, logistics, and structures used to sustain the implementation of the initiative (Saunders, Evans, & Joshi; Shedia-Rizkallah & Bone; Riley, Taylor, & Elliott, 2003)

4. Inter-organizational factors: characteristics and structures of partnerships (Shedia-Rizkallah & Bone)

5. External Factors: any external factors that may impact the implementation of the initiative (Shedia-Rizkallah & Bone; Riley, Taylor & Elliott)
I - Program Factors

One of the reasons why AVHPS was successful was that the teachers and administrators were involved in the planning of the initiative (Health Promoting Clearing House, 2006). Others have argued that this is a necessary part of the healthy school implementation process (Bermejo & Bekui, 1993; St Leger, Kolbe, Lee, McCall, & Young, 2007). More specifically, Bermejo and Bekui found that programs that are developed in collaboration with individuals from the community and those who are providing the service (in this case, teachers) are more likely to be implemented. Furthermore, change in the school is embraced when teachers are involved in the decision-making process (Inchley, Muldoon, & Currie, 2007). Often, school programs and reforms fail due to the lack of teacher involvement in their planning (Smaller, 2005); involving teachers in policy formulation may prevent failure (Cargo, Salsberg, Delormier, Desrosiers, & Macaulay, 2006). The findings from AS!BC project support this last statement, as the teachers and administrators were involved in the development of the project and the project was successful (Naylor et al., 2006).

It is important to involve teachers and administrators in the development of programs as some guidelines and frameworks pertaining to CSH suggested to schools by governments or CSH associations may be too demanding and require a degree of preparedness to which schools cannot adhere (St Leger, 1998). Moreover, school staffs need to understand that CSH is not an add-on to the already existing school curriculum; if they fail to understand this, they may be unenthusiastic in its implementation (Inchley et al, 2007). Allegrante (1998) also found that a school-site health promotion component for the school’s staff was an effective way to encourage health promotion, as it made teachers more likely to be interested in their students’ health.
In the program guidelines for the Province of New Brunswick’s HLS, there is no mention of whether or not teachers were involved in the development of the initiative. Nonetheless, teachers are involved in the SHC that help to implement the initiative in schools. By being part of the SHC, teachers lend a helping hand into the development of the specific projects that are implemented in the schools. The successful implementation of the initiative not only relies on the program factors, it also relies on the different individuals who take part in its implementation.

II - Individual Factors

The individuals who are implementing initiatives such as HLS all have different attributes that affect the implementation process. Specific factors pertaining to the individuals who are implementing CSH initiatives have been identified throughout the literature. These factors may help or hinder the implementation process and are outlined here.

Many researchers have confirmed that teachers do not feel adequately prepared to teach health topics to their students (Butler, 1993; Hausman & Ruzek, 1995; St Leger, 1998; Symons, Cincelli, James, & Groff, 1997; Telljohann, Everett, Durgin, & Price, 1996). Teacher training and ongoing reinforcement, however, have been found to improve significantly teacher preparedness (Hausman & Ruzek, 1995) and self-efficacy (Telljohann, Everett, Durgin, & Price, 1996) in teaching health topics. It has also been shown that teachers who develop a more holistic approach to school health have a greater appreciation for school health than those who viewed it as only classroom-based (St Leger, 1998). In addition to taking an holistic approach to CSH implementation, successful implementation of this approach has also been attributed to a sense of ownership by the individuals in the school – i.e., if the project is “rooted in the school” (Inchley, Muldoon, & Currie, 2007, p. 67). Other individual factors that have been shown to influence the implementation of such initiatives include values and beliefs. Teachers who view health
education as a high priority are more likely to be involved in the implementation of initiatives such as HLS (Salm, 2001). In order for these teachers to acquire the knowledge required to feel adequately prepared to undertake the implementation of CSH initiatives, certain organizational factors must be put in place.

III - Organizational Factors

For the purpose of this project, organizational factors refer to the different characteristics, structures, and logistics put in place by the school in order to sustain the implementation of specific initiatives. In the AVHPS, teachers mentioned that they needed more training in order to implement parts of the program more effectively (Health Promotion Clearing House, 2006). Others have agreed that professional development is strongly needed in order to fully implement school health programs (Butler, 1993; Lavin, 1993; Smaller, 2005; Smith, Potts-Datema, & Nolte, 2005; St Leger, 1998). Unless teacher training is part of the implementation guidelines provided by the government in its program implementation guide and that the government is committed to providing teacher training, educating teachers about CSH will be the school’s responsibility – which is why it is an organizational factor.

The success of CSH initiative implementation is partly dependent on the professional development programs that are associated with them and increased connectedness between curriculum education and the CSH framework (St Leger, 1999). According to the HLS program guidelines, there is no supplementary training provided for teachers (GNB, 2005); however, if the implementation process in New Brunswick is anything like that of Ontario schools, teacher training is not provided by the provincial government, but is the responsibility of each school. Whether or not teacher training is provided by the schools is an organizational factor that will be investigated during this study.
Resources available to teachers were also found to be crucial components in the success of AS! BC (Naylor et al., 2006). Resources coming from the school, government, and community can have an impact on the degree of implementation of an initiative. For instance, Salm (2001) identified a lack of resources as a barrier in the implementation of a CSH initiative in Saskatchewan. Furthermore, having health promotion specialists in the involvement of CSH implementation has been found to be especially useful in facilitating implementation (Inchley et al., 2007), which is in line with the DHPS as the Coordinator of Planning and Implementation was given the bulk of the implementation duties (Belzer & McIntyre, 1994).

Continuing with organizational factors, a lack of administrative commitment has been deemed a key organizational factor in the implementation of CSH initiatives (Butler, 1993) and school health effectiveness (St Leger et al., 2007). This lack of commitment is typically due to a lack of knowledge (Butler) and the CSH approach being perceived as a waste of valuable academic time (Symons, Cinelli, James, & Groff, 1997). Moreover, the way that the administration integrates the program components into the school’s organization may or may not affect the teachers’ workload. As a result, teachers may feel as if they do not have enough time in their school day/year to implement such initiatives (Butler; Salm, 2001). This is an organizational factor since it is each school’s responsibility to plan for the proper implementation of this type of initiative, including allowing time for it to be possible. Another important barrier to implementation mentioned by Butler is a lack of community and parental support, especially when initiating school health policies (St Leger, 1998). Furthermore, when schools have policies pertaining to health education, teachers’ perceptions are more favourable toward health education versus non-policy holding schools (Adamson, McAleavy, Doneagan, & Shevlin,
2006). As parents and the community are part of external school environment, they are also part of the factors in the inter-organizational category.

IV - Inter-Organizational Factors

As the CSH framework demonstrates, there are many parties involved in the implementation of health promoting initiatives in schools. Inter-organizational factors represent the different parties that take part in the implementation of CSH initiatives. Although the factors are deemed inter-organizational, they do not refer to organizations per se, simply to the different partners involved in the implementation of the initiative. In the CSH approach, the partners that are potentially included in the implementation of initiatives are teachers, administrators, parents, members of the broader community, and others involved in the development and implementation of these programs. St Leger (1998) found that teachers are more willing to enforce policies in schools when the community supports them. Additionally, new policies are more likely to be introduced into the school if they are “externally mandated” or have “widespread community support” (p. 230). Leurs, Schaalma, Jansen, Mur-Veeman, St Leger, and De Vries (2005) have also affirmed that community and health sector partnerships enhance HPSs. Allensworth (1994) found that outreach activities helped to increase collaboration and partnerships between the schools and the surrounding community. In general, health promotion initiatives are more effective when they bring about widespread changes in “norms and acceptable behavior” (Shediac-Rizkallah & Bone, 1998, p. 95) in the community as a whole.

V - External Factors

Another barrier to CSH implementation is a lack of governmental support (Symons et al., 1997). Deschesnes, Martin, and Jomphe-Hill (2003) have affirmed that a lack of political support and communication problems are important when it comes to broader CSH implementation. For
the HLS program, the joint partnership between the GNB's Department of Health and Wellness and the Department of Education may play a part in factors affecting its implementation due to a number of external organizational issues.

The above factors are all critical to understanding CSH implementation in New Brunswick schools. Nevertheless, there remains a gap in understanding which of the above factors have influenced HLS implementation in the Province of New Brunswick and whether or not Community Schools can be considered as meeting the requirements of a CSH approach.

Epistemology

A constructivist stance enables every individual to create his/her own meaning from the same phenomenon (Crotty, 2003); it is for this reason that I chose to engage with a constructivist epistemology for this thesis. A constructivist epistemology "suggests that each one's way of making sense of the world is as valid and worthy of respect as any other" (Crotty, p. 58). In constructivism, reality is constructed from the interaction between the subject and object. The subject's reality is constructed based upon his/her experiences and no one truth is universal (Crotty). Given that this study looked at factors that can facilitate or hinder the implementation of a CSH approach through the Community School and HLS initiatives, the interviewees constructed meaning based on the interactions between CSH and their own ways of making sense of the world. Depending on various social and cultural background factors, participants will construct different meanings of same object (i.e., HLS). According to the constructivist view, no one construction is better or worse than the next.

Methodology

In order to obtain a comprehensive description of the implementation of a CSH approach in New Brunswick, a multiple case study methodological approach was taken, an approach that
complements the chosen epistemology due to the way in which it is able to account for disparate experiences with the same phenomenon. Case study methodology is ideal for obtaining holistic and realistic understandings of particular phenomena (Yin, 2003). In fact, Hitchcock and Hughes (1995) have argued that case studies are "the most appropriate format and orientation for school-based research" (p. 316). The reason why a case study approach is used so often in the school setting is due to this approach's efficacy in contributing to the understanding of individual or group phenomena (Yin, 2003).

In the case of this research, the particular phenomenon studied through multiple case studies was the implementation of CSH through both HLS and the CS in two elementary schools in New Brunswick. In comparison to single case studies, multiple case studies are often considered more thorough and robust (Herriott & Firestone, 1983). A multiple case study approach is the most appropriate methodology for the research proposed herein because multiple case studies involve an in-depth study of a number of similar situations or events (Hitchcock & Hughes, 1995). In addition, multiple case studies have been used to study educational contexts for over three decades (Herriott & Firestone). In this instance, the cases studied were two elementary schools, which, according to GNB's HLS guidelines, should be using the CSH approach endorsed by the Province of New Brunswick. Multiple case studies can be used to identify the factors, including social behaviours that influence certain situations. The factors that were examined during the course of this research were identified as they emerged through the results from the data analysis process. Because more than one case was studied, it was possible to compare and contrast the diverse factors that affect the implementation of CSH.

As with any methodology, a multiple case study approach has both strengths and weaknesses. According to Nisbet and Watt (1984), there are a number of strengths associated
with the use of case studies: they provide results that are widely understood by a large audience because they can be presented in everyday language; they allow detailed data to emerge through the data collection process; they provide insight into other cases and allow for interpretation with other similar cases; they can be undertaken by a single researcher; and they can incorporate unanticipated events. On the other hand, the authors also identified three weaknesses that are worth examining. The first is that results may not be generalizable. Nevertheless, since my study proposes to use multiple case studies, it may be possible to generalize a bit more than with only a single case study. Secondly, case studies are not typically open to cross-checking, which may lead them to be criticized as being personal, biased, selective and subjective. Finally, case studies are susceptible to problems of observer bias. As I will not be using participant observation as a method of data collection in my study, this will not be an issue to overcome.

Despite the drawbacks outlined above, a multiple case study approach remains a rich and viable approach. As noted by Yin (2003), case studies have diverse applications in evaluative research. One application, in particular, is pertinent to this study: description. This study describes the real situations and contexts in which interventions occur. By using multiple case studies as the methodology for this research project, I was able to gain information that enabled comparisons between schools to be made in order to identify similarities and differences in factors that affected the process of implementation of HLS.

The multiple case study approach that I used was one that was instrumental and embedded. According to Stake (2006), an instrumental case study is an examination of a particular case, “mainly to provide insight into an issue or to redraw generalization” (p. 445). As the study provides insight into what is happening in two elementary schools in New Brunswick pertaining to CSH, I gained a greater understanding of what HLS and Community School
implementation in schools across New Brunswick looks like; thus, it is instrumental in nature. That is, "understanding [the situation] will lead to better understanding, and perhaps better theorizing, about a still larger collection of cases" (Stake, p. 446).

**Sampling Justification**

In order to gain an understanding of the implementation of CSH initiatives, the participating schools were recruited from within the same school district. In New Brunswick, there are 14 school districts (5 francophone and 9 Anglophone), with approximately a dozen schools in each district (Government of New Brunswick, 2008). The HLS program implementation is directed by government-funded PHN; each school district is appointed one PHN who works in collaboration with each elementary school’s SHC. As it is likely that each PHN utilizes his or her own style of implementation, it was important to limit the scope of this research to one school district to control for differences in PHNs and their levels of interest or expertise. By limiting the potential variability, I was better able to focus on differences between schools, rather than between PHNs.

In order to develop a detailed description of the CSH programs and their implementation since their introduction in 2000, the districts with the most experienced PHNs were contacted in hopes of including one of them in the data collection process. Three school districts were targeted for this study as their PHNs had been working with HLS for the longest period of time (C. Couturier, personal communication, 25 January 2008). The decision to interview only experienced PHNs was made based on the assumption that the PHNs that have been working with the program for the longest will have the richest relationships with HLS as well as with the SHCs in their respective districts. This study was limited to Francophone schools, as there are no long-term PHNs currently working in the Anglophone districts.
In order to develop an understanding of what is currently occurring in terms of CSH implementation in elementary schools, two schools in the district that was recruited took part in the study. Within each school, the principal along with three teachers were interviewed. The interviews with the principals provided me with an administrative perspective to the implementation of the CSH approach. The data collected from the teachers provided insight into what form of implementation, if any, was happening within the classroom. By incorporating two schools in the data collection process, it was possible to compare and contrast different ways of using the CSH approach. As a result, I was able to identify factors that inhibit and enable HLS programs in both schools, as they may not be identical. Parents and members of the external community were not recruited as participants as their input would have led to information too broad for the scope of this study.

*Sampling*

The sampling process for the proposed research did not occur in one phase – it was conducted over three distinct phases. The first two phases were used to identify the cases (schools) for the study. Before beginning the sampling procedure, a list of names of PHNs for each school district in the province was obtained by browsing the school districts’ websites. Through personal communication, three PHNs were identified as experienced with the HLS program, as they have been working as PHNs since at least 2002. In the first phase, purposeful sampling was used to identify a PHN who expresses an interest in participating in the study. To achieve this, emails were sent out to the three PHNs previously identified by the researcher through access to the school districts’ websites in an effort to engage them in the present study. The first PHN to respond was chosen to participate in the study by telephone communication.
In the second phase, a list of the schools that are part of the district in which the PHN operates was used to invite schools to participate in this study. In order to contact the schools' administration, emails were sent to the schools' principals. One school principal replied to the email requesting additional information about the study, and a meeting was arranged to discuss the study's implications. Once this meeting was completed, the principal agreed to participate in the study. A second round of emails was sent to the schools in hopes of another reply; however, no responses were obtained. In order to have one other school participate in the research, telephone calls were made to the principals of the remaining elementary schools in the district in order to meet with them in order to explain the research project and what it entails. Three meetings were scheduled and completed. Once the meetings were carried out, one other school agreed to take part in the study.

Finally, in the third phase, the participants were selected. Once the schools were selected, purposeful sampling was utilized, as the principals of each of the two participating schools were interviewed. In addition, purposeful sampling conducted by the schools' principals was used to recruit several members of the school's staff. Seeing that teachers are often hard to access (Cohen, Manion, & Morisson, 2007), this was an effective way of recruiting subjects to take part in the study. The two principals, three teachers from each school, and the school district's PHN participated in individual interviews. In total, 9 interviews were conducted.

The principals were integral parts of the research since they are the participants who can answer questions pertaining to the organizational factors affecting the implementation of the HLS initiative. Principals are faced with the task of implementing HLS on a daily basis in their own schools, which makes them very well acquainted with the happening within their own school. One of the PHN's responsibilities is to assist the principal with health-related
administrative duties. The PHN also assists several other elementary schools in the implementation of the initiative, which gives him/her a broader range of experience with the initiative. Furthermore, studies have argued that the lack of administrative support is a major barrier in the successful implementation of CSH-type initiatives (St Leger, 1999; Symons et al., 1997). Also, the best-suited candidate to provide information pertaining to inter-organizational factors (i.e., community and parent partnerships) is typically the school principal. With a good understanding of the administration of the school from the answers pertaining to the school’s logistics obtained from the principals, the organizational factors pertaining to implementation were elucidated.

Methods

Semi-structured interviews have long been used by those conducting qualitative research. The major distinction between structured and semi-structured interviews is that semi-structured interviews leave the researcher room for exploration (Patton, 2002); however, it is important for the researcher to stay within the same guidelines for each interview in order to collect data that can be similar in subject. Interviews can serve various purposes. Cohen, Manion, and Morisson (2007) identified three main purposes for interviews as research methods. First, interviews may be used in order to gather “information having direct bearing on the research objectives” (p. 351). Notably, interviews can provide access to people’s knowledge, values and preferences, as well as attitudes and beliefs (Tuckman, 1999). Secondly, they can be used to test hypotheses or to put forward newly emerging hypotheses. Lastly, interviews may be used in concurrence with other research methods in order to follow up on certain issues that may have emerged previously (Cohen et al., 2007).
Generally, semi-structured interviews are used to generate a picture of a situation or experience lived by the participants (Smith, 1995). In this case, semi-structured interviews gave the participants the opportunity to elaborate on their experiences with the HLS program. In a structured interview, the data collected would only be a reflection of the questions asked, since the interviewer decides in advance what the respondent will be talking about (Smith, 1995). In addition, structured interviews “leave little room for unanticipated discoveries” (Breakwell, 2000, p. 240). With semi-structured interviews, the researcher has the chance to further question the participants regarding specific activities related to CSH that have occurred in their school.

An interview guide was created “to ensure that the same basic lines of inquiry are pursued with each person interviewed” (Patton, 2002, p. 343). Having homogenous interview guidelines enabled me to compare and contrast the different answers to the same questions obtained from the participants during the data analysis process. As the interviews were semi-structured, I had the opportunity to probe the participants’ responses (Patton). These probes were used in order to get a “deeper response” (Patton, p. 372) from the participants. During the interview, the majority of the questions were open-ended questions, which was done in order to eliminate the restrictions pertaining to content and manner of participants’ replies (Cohen & Manion, 1994). The questions that made up the interview guide aimed to identify factors that facilitate and hinder the implementation of CSH in the school. The questions were asked in order to understand components that facilitate implementation of HLS and CSH.

Due to their strengths for collecting qualitative data, I used semi-structured interviews for data collection. I conducted nine interviews that lasted from 20 to 90 minutes. The interviews were digitally-recorded and transcribed verbatim. In order to ensure validity, participants were asked to read over their transcripts and to confirm their contents
Analysis

As the purpose of this study was to describe the implementation of the CSH approach in selected New Brunswick schools, the analysis procedures ensured that this purpose was met. The transcribed interviews were entered into NVivo, a computer program for qualitative data management. Following this step, there were two phases to the coding of the data. First, open coding was used to identify any factors that could affect the implementation of the CSH approach. This phase included any statements pertaining to, among others, the diverse individual, environmental, inter-organizational factors that have previously been identified in the literature. Within this phase, statements that identify situations or factors that the participants have faced that are contingent with the implementation of a CSH approach were identified. Second, the factors identified were grouped into themes and categories. Once the factors are identified and clustered, a general profile was created for each school and the profile was compared with the other school for potential commonalities and contrasts.

Results: The Community School and HLS

HLS: New Brunswick's CSH Approach

In the first article found in this thesis, I describe the factors that facilitate and hinder the implementation of HLS in two elementary schools in New Brunswick. A multiple case study methodological approach and semi-structured interviews were used to gather data. The article presents five main factors that have an impact on the implementation of the HLS program in the two schools: knowledge (or lack thereof) of the initiative, environmental factors, support, individual attributes, and organizational factors. The article finishes with recommendations for actions that need to be undertaken in order to improve the implementation of HLS in some schools in New Brunswick, particularly in the school district studied.
The Community School: A Feasible Approach to CSH?

In the second article, dimensions of the social ecological model are used to illustrate how the Community School approach can be used in a way that satisfies the requirements of a CSH approach. This article used a case study approach to examine the implementation of the Community School approach in one elementary school in New Brunswick. Through three categories of factors—interpersonal, intrapersonal, and organizational, I demonstrate how the Community School approach in one elementary school is a strong example of CSH. The major themes identified in the second article related to CSH are the diverse health promoting activities led by the school with the help of the community such as an organic garden, a walkathon, and after-school activities. With the use of the health promoting activities previously mentioned, the Community School approach has proven to be an alternative to CSH in schools, even without the use of HLS (a CSH initiative); therefore, the Community School is a feasible way of implementing the CSH approach in New Brunswick schools.
References


Dwyer, J., Needham, L., Simpson, J. R., & Heeney, E. S. (2008) Parents and report intrapersonal, interpersonal, and environmental barriers to supporting healthy eating and


CHAPTER 2

Article #1:

Healthy Learners in Schools: New Brunswick's Comprehensive School Health Approach
Research pertaining to Comprehensive School Health (CSH) approaches has taken on a number of different forms in the past decade. For example, a number of researchers have attempted to develop models or frameworks for the evaluation of the outcomes of CSH initiatives (Lee, Cheng, & St Leger, 2005; Inchley, Muldoon, & Currie, 2006); reviews of literature have been conducted to build a large-scale understanding of the status of health promoting school implementation and effectiveness (Lister-Sharp, Chapman, Stewart-Brown, & Sowden, 1999; Miller, 2003; Murray, Low, Hollis, Cross, & Davis, 2007; Wanjiru & Flisher, 2004; Young, 2005); and case studies and larger scale multiple case studies have been conducted to illustrate what is happening in individual schools or areas in which CSH approaches have been implemented (Lee, St Leger, & Cheng, 2007; Xin-Wei et al., 2008). Although the goals of each of these studies have been diverse, the intentions behind all of them have been to inform teachers and administrators, researchers and policy makers about how to improve the implementation of CSH initiatives, how to build a strong case for the need of CSH approaches, and how to demonstrate their importance in a school setting. Furthermore, these studies have aimed to evaluate if CSH is an effective approach to health promotion in a school setting. In addition, with the hope of developing a framework that can explain the various elements that are essential to the successful implementation of CSH, a number of studies from various part of the world have identified factors that help and hinder its implementation in schools (Butler, 1993; Lavin, 1993; Hausman & Ruzek, 1995; St Leger, 1998; 2000; Symons, Cincelli, James, & Groff, 1997). As the research pertaining to CSH in Canada is quite limited, there is very little evidence concerning factors that influence the implementation of CSH in this country. Furthermore, one province in particular, New Brunswick, has not been represented in any published research pertaining to CSH to date. Building on the research conducted previously across the globe, this paper will
identify the different factors that have influenced the implementation of a CSH approach, Healthy Learners in Schools (HLS), in two elementary schools in the Province of New Brunswick, Canada.

Review of Literature

Introduced in the 1980s, the CSH approach is a multifaceted approach that incorporates the school’s environment, along with the family and the community, to promote health (Young, 2005). It is a settings approach, which refers to an approach where the “social context in which people engage in daily activities in which environmental, organizational and personal factors interact to affect health and well-being” (Nutbeam, 1998, p. 362). Several countries have adopted a CSH approach, namely, amongst the most studied, Australia, members of the European Union, and the United States. Each of these countries has its original, yet very similar, approach to the promotion of health in schools, and will be further explored in the following sections.

Health Promoting Schools

The Health Promoting School (HPS) movement stems from the World Health Organization’s (WHO) response to the Ottawa Charter of Health Promotion. The Ottawa Charter is a broad document that proposes guidelines to improve health promotion in a daily context through diverse approaches, including a settings approach (WHO, 1986). Although the WHO developed a model for HPSs, a number of different countries have created their own versions. For example, the Australian HPS framework encompasses three major interrelated components: curriculum, teaching and learning practices; school organization, ethos and environment; and partnerships and services (Australian Health Promoting School Association, n.d.). In Europe, the HPS has a focus on mental, emotional, social, and physical health, as well as an emphasis on quality of life and “health as positive well-being” (European Network of Health
Promoting Schools, 2006, p. 17). Similar to the Australian and European initiatives, the Centers for Disease Control and Prevention in the United States of America have adopted a school health promotion model, Coordinated School Health Promotion (CSHP), which encompasses several different components. The CSHP is a multi-leveled approach that has been widely researched over the past two decades (Grunbaum, Gingiss, Orpinas, Batey, & Parcel, 1995; Johnson & Deshpande, 2000; Kann, Brener, & Wechsler, 2007; Kolbe, Kann, & Brener, 2001; Lavin, 1993; Resnicow & Allensworth, 1996; Telljohann, Everett, Durgin, & Price, 1996). The CSHP program includes eight major components: (1) health education, (2) physical education, (3) health services, (4) nutrition services, (5) counseling, psychological and social services, (6) health school environment, (7) health promotion for staff, and (8) family and community involvement. Recently, a large scale evaluation of school health programs in the United States was completed (Kann, Brener, & Wechsler, 2007). This research project evaluated the eight components comprising the CSHP approach in schools. The major findings that emerged from this study included expansions (between 2000 and 2006) in a number of areas: number of policies pertaining to school time spent on health education, physical education and activity, provision of health services, improvements in nutrition services, and the number of active school health committees.

Canadian CSH Approaches

Similar to the above three examples, using the CSH approach, Canada has also introduced its own versions of the health promoting school. In Canada, education is part of provincial and territorial jurisdiction. As a result, each of the 10 provinces along with the Yukon Territory has developed its own version of a "healthy school." In addition, there are also a number of national associations that advocate the CSH approach, which explains the many
similarities between each of the provinces’ approaches. The Joint Consortium for School Health is an organization whose main focus is to encourage the communication and sharing of information between each province’s health and education sectors in order to facilitate comprehensive school health implementation (Joint Consortium for School Health, 2008). Another organization, the Canadian Association for School Health (CASH), is also partly responsible for the similarities between the several different CSH initiatives across the country, as it helps organize activities in schools and provides researchers with resources pertaining to CSH in Canada.

In general, the Canadian CSH approach uses activities and services in both schools and communities to help students to “enhance their health, to develop to their fullest potential and to establish productive and satisfying relationships in their present and future lives” (CASH, 2006, online). In order to attain these objectives, in general, Canadian CSH approaches are made-up of four components: instruction, services, social support and physical environment (CASH, 2007). The pressure to start implementing CSH approaches in schools is partly due to recent health statistics that have been published by Health Canada and Statistics Canada. Some of the most eye-opening statistics were those pertaining to childhood obesity. For example, in 2004 Statistics Canada announced that over 25% of children between the ages of two and 17 was either overweight or obese (Shields, 2006). Two viable culprits for this increase (up 70% since 1978/1979) of overweight and obese children are physical inactivity and poor nutrition (Shields). In terms of regional differences, childhood obesity is a significant issue in the Atlantic provinces. The Province of New Brunswick, a mainland province that bathes in the Atlantic Ocean at the east end of the country, has the second highest childhood obesity rate in the country at 34% (Shields & Tjepkema, 2006).
In 2000 the province launched a CSH initiative called Healthy Learners in Schools (HLS). Similar to CSH approaches in other provinces, HLS has documented guidelines to its implementation. Found in the guidelines are its mandate and goals. Notably, the HLS mandate is to “support the long term outcome of student health, wellness and learning achievement” (Government of New Brunswick (GNB), 2005a, p. 3). In order to do so, HLS has three distinct goals, which are in line with a CSH approach: “1. School community acquires knowledge, attitude and skills to achieve wellness. 2. School community provides healthy and safe learning environments. 3. School-community has access to services and support.” (GNB, 2005a, p. 3).

![Diagram of HLS program]

*Figure 1: Organization of HLS program (GNB, online, n.d.)*

In order to implement HLS, the province has outlined a number of different groups and individuals that are responsible for executing specific functions. The first step in implementing HLS is the creation of School Health Committees (SHC) in either individual schools or at the school district level in order to identify priorities and to plan and monitor actions for the
implementation of HLS (GNB, 2005a). There are a number of recommended individuals who can serve on this Committee: school community representatives (e.g., Superintendent, Supervisors, School Principal, District Education Council, students, parents, teachers), a Public Health Nurse, partners (e.g. community organizations, local business, community leaders, municipal representatives, service providers, Regional Health Authority representatives, etc.), and other members as determined by the health committee’s action plan (e.g., Public Health Nutritionist) (GNB). The GNB provides templates for SHCs’ use in order to help them to plan their actions to create goals to achieve improvements related to CSH in the schools. There is also an appointed Public Health Nurse (PHN) who works with each school in the district (one per district). One of the PHNs’ many duties includes supporting the SHCs in the implementation of HLS in the schools for which they are responsible. Generally, the PHN is responsible for the overall implementation of SHCs in schools and the advancement of the HLS program in schools.

Other provinces in Canada have also attempted the implementation of CSH initiatives. Publications, however, are still scarce, which make it hard to evaluate the degree of implementation and effectiveness of CSH initiatives in Canada. Nevertheless, the Canadian publications that are available, as well as publications from other countries, have identified diverse factors that have been associated with the successful implementation of CSH.

*Factors Influencing CSH Implementation*

Several studies conducted in Canada have already identified factors that have an impact on the implementation of CSH initiatives. A study of Action Schools! BC (AS! BC) in British Columbia, conducted by Naylor and her team of researchers (Naylor, Macdonald, Reed, & McKay, 2006; Naylor, Macdonald, Zebedee, Reed, & McKay, 2006; Naylor, Macdonald, Warburton, Reed, & McKay, 2008; Reed, Warburton, Macdonald, Naylor, & McKay, 2008)
resulted in a considerable number of peer-reviewed articles pertaining to a single CSH project in Canada. The project uses the “active schools” model, which shares a number of similarities to CSH, as it uses a settings approach for the promotion of physical activity and the modification of risky health behaviours in the school environment. The model is designed to work through six action zones: school environment, physical education, family and community, classroom action, school spirit, and extra-curricular. Tools are provided to teachers to create “individualized action plans” (Naylor, Macdonald, Zebedee, Reed, & McKay 2006, p. 414) to help to facilitate increased opportunities for physical activity. Some of the major findings from the studies concerning this program include that with proper training, generalist teachers were able to significantly increase the time that students were engaged in physical activity, despite competing curriculum requirements (Naylor et al., 2008). In addition, through interviews and focus groups with teachers and administrators, Naylor et al. (2006) identified a number of barriers and facilitators to the implementation of AS! BC. Notably, teachers identified access to resources, leniency to practice physical activity during class time, positive reinforcement from students, and flexibility of the model and support as primary facilitators.

On the other hand, teachers also noted that constraints such as time, curriculum, report cards, need of a supportive environment, and physical barriers were key barriers to the implementation of AS! BC (Naylor et al., 2006). Administrators also identified key factors to the implementation of AS! BC. According to school administrators, the main facilitators included resources, parent support, communication, and starting on a small scale (Naylor et al., 2006). On the other hand, the researchers found scheduling and coordination, time constraints, teacher attitudes, space limitations, language and culture, and government support to be barriers (Naylor et al., 2006). This program of research also demonstrated that the help of external support, such
as the AS! BC support team, can be very beneficial to the implementation of this type of
initiative in schools (Naylor, Macdonald, Reed, & McKay, 2006).

The use of external support was also found to be an essential component in another CSH-
type study in Canada. The large-scale study led by Belzer and McIntyre (McIntyre, Belzer,
Manchester, Blanchard, Officer, & Simpson, 1996) in the early 1990s illuminated some
interesting findings pertaining to factors influencing the implementation of CSH programs in
Atlantic Canada, specifically in Dartmouth, Nova Scotia. The study, called the Dartmouth Health
Promotion Study (DHPS), aimed to identify whether a coordinated approach to school health
promotion would be more effective than the traditional approach, which had a lack of formal
coordination between its components. In order to do so, the study followed the work of an
individual with the title of Coordinator of Planning and Implementation, whose main tasks were
to assemble committees, generate ideas, plan activities and their implementation, then execute
and evaluate these activities as they pertained to health (McIntyre, Belzer, Manchester,
Blanchard, Officer, & Simpson, 1996). Although the full report on the findings of the DHPS
cannot be accessed, factors that influenced implementation are mentioned in a summary article
(McIntyre et al., 1996). The report identified major factors that could act as barriers or
facilitators, depending on the situation. For example, one of the factors identified included
understanding of the coordinated approach by teachers and administrators. If teachers and
administrators understood the coordinated approach, this factor became a facilitator to the
implementation of the initiative, whereas if they did not understand it, this factor became a
barrier to its implementation. Several factors were identified: interdisciplinary teaching; in-
service training and support; and support coming from the school board administrators. The
DHPS was found to be enjoyable, and "engendered positive feelings" (p. 135) from the participants on all components of the study.

Although both of the above studies examined approaches to school health promotion that have shown encouraging results, neither of them are CSH initiatives by definition as they use their own frameworks (active school model and coordinated model). These models resembled CSH greatly and are developed with the CSH approach as a foundation for their model. The reason why these studies are pertinent to the present study is that they demonstrate the type of articles that have been published in Canada thus far. This study will fill a gap in the literature as thus far no research has been conducted related to CSH programs in the Province of New Brunswick. Furthermore, the study will identify factors that facilitate or pose barriers to the implementation of such a program in two elementary schools in New Brunswick.

Methodology

Yin (2003) stated that a case study methodology is ideal when the research questions seek to answer "how" or "why" about a "contemporary set of events over which the investigator has little or no control" (p. 9). As this study focuses on the facilitating and hindering factors in the implementation of a CSH initiative, a case study methodology is the ideal approach to examine the contemporary status of the CSH approach in the two schools in New Brunswick. As the case study views the schools separately, as individual "whole unit[s] as [they] exists in real-life context" (Johnson & Christensen, 2008, p. 49), a multiple case study approach was deemed appropriate. Although case studies are criticized for their lack of generalizability (Stake, 1995; Yin, 2003), generalization is not the purpose of this study, as I do not strive to generalize the findings from two schools that are part of the same school district to all of the province's elementary schools. Instead I hope to generate a picture of the current situation pertaining to one
CSH initiative, HLS, in two elementary schools in New Brunswick in order to understand how schools in this region undertake the implementation of such an initiative.

Methods

Sampling

In order to obtain a more detailed understanding of HLS implementation in the Province of New Brunswick, one francophone school district was selected to take part in the study. As qualitative studies require participants that have a “unique ability to explain, understand, and yield information” about a specific event or situation (Vockell & Asher, 1995, p. 200), a Public Health Nurse (PHN) with a number of years of experience was required for the study in order to ensure the selection of cases that are rich in depth for the study (Patton, 2002). In order to identify experienced PHNs, purposeful sampling through internet searches and telephone inquiries were used. Once the PHNs with the most experience were identified, they were contacted through email and the first PHN to respond with an interest to participate in the study was chosen. Since the PHN had a number of years of experience with the HLS program, purposeful sampling was an effective way of assuring the selection of “information-rich cases for study in depth” (Patton, 2002, p. 230). Consequently, the school district in which the PHN worked was also chosen for the study. There is only one Public Health Nurse per school district, and she agreed to participate in an interview before the schools were chosen. Once the school district was selected and ethics approval was obtained from both the school district and the University of Ottawa, emails were sent to the elementary school principals (n = 7) in the selected district, inquiring if they would be interested in participating in the study. From this initial contact, one reply to the email was obtained, and consequently a meeting was scheduled to discuss the study’s details at a later date. All remaining principals were contacted via telephone
and three other principals agreed to meet with the researcher in order to further discuss the possibility of participating in the study. Once the principals were presented with more information pertaining to the terms of participation to the study, one other principal (this principal was the first to agree to participate) allowed his school to participate. The principals were then assigned the task of finding three teachers who would be willing to participate in individual semi-structured interviews with the researcher.

The two schools participating in the study are located in approximately the same vicinity, as they are within the same school district. The first, School A, is located in a village roughly 50km outside of a city. The school has 350 students from kindergarten to grade 8. The school has access to a multitude of facilities, including an ice rink, tennis courts, a golf course, a full track, and more. The second school, School B, is located just outside the same city. There are 150 students from kindergarten to grade 5. The school’s facilities are a bit more dated, as the school was built over half a century ago. The school has a small gymnasium, an outdoor playground, and a large field in its surroundings.

Once the nine participants were selected by both the researcher and the principals, they participated in semi-structured interviews lasting between 20 and 90 minutes in length Table 1 identifies the participants’ genders and years of experience. The interviews were digitally recorded, as this “produce[d] the most complete record of what was said” (Hitchcock & Hughes, 1995, p. 170). As an alternative to questionnaires, semi-structured interviews were selected to elicit data, as they leave the respondents the chance to “clarify or expand their responses, making the data from an interview potentially richer and more complete” (Slavin, 1992, p. 87). In order to obtain different perspectives or opinions on the same topics, the same questions were asked to
different individuals (Tuckman, 1999). Further information pertaining to the questions asked
during the interview can be found in the appendix.

Table 1

Participant’s gender and years of experience

<table>
<thead>
<tr>
<th>Public Health Nurse</th>
<th>Gender</th>
<th>Experience (years)</th>
<th>Same school (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>26 as Nurse</td>
<td>4 as PHN in schools</td>
</tr>
<tr>
<td><strong>School A</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>F</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Teacher A</td>
<td>M</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Teacher B</td>
<td>M</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Teacher C</td>
<td>F</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td><strong>School B</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>M</td>
<td>2 1/3 admin</td>
<td>1</td>
</tr>
<tr>
<td>Teacher A</td>
<td>F</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Teacher B</td>
<td>F</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Teacher C</td>
<td>F</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

In addition to semi-structured interviews, documents describing the background of HLS,
such as program guidelines and published government reports, were obtained to gain a better
understanding of the initiative. These documents were used in order to gain further clarification
pertaining to the program (HLS) in question for this study. As stated by Tuckman (1999),
document research “is the best and most objective way to orient yourself to the situation that you
are about to research” (p. 414); this preparation was helpful in the development of questions for
the interview guide used during the data collection phase.

Analysis

Once the data collected from the interviews were transcribed, the transcripts were then
verified and approved by each participant, and they were then entered into NVivo, a qualitative
software analysis program, for analysis. When I became familiarized with data at hand, it was
coded to identify examples of factors that affected the implementation of HLS in schools.

Inductive analysis (or open coding) was used in this portion of the coding, as no framework or
text was guiding the themes identified (Patton, 2002). Once specific factors were identified,
they were clustered into larger sub-groups or themes.

Following the data analysis process, five major factors emerged as influences to HLS and
general health implementation in the two schools: lack of knowledge of HLS; environmental,
support, individual attributes, and organizational factors.

Results and Discussion

Once the analysis process was completed, five main factors emerged pertaining to the
implementation of HLS through a CSH approach: a lack of knowledge pertaining to HLS;
environmental factors such as the physical surroundings; support from the administration,
community and families; teachers’ and administrators’ individual attributes; and organizational
factors such as the school’s daily operations and government/school policies pertaining to school
health. Below, I discuss the implications of these findings and then make suggestions to
strengthen the HLS initiative.

Lack of Knowledge

The most important factor and finding that this study identified is that HLS is unknown to
some staff in schools in the Province of New Brunswick. Even though the teachers at two
schools that took part in this study believe that health is integral to learning and that health
education is important in schools, the government funded CSH approach to health promotion
was not used in the schools involved in this study. The most striking finding that emerged from
the interviews was that none of the nine participants in the study had a strong understanding of
what HLS did or did not comprise. The principal from School A and the PHN had heard of the
HLS initiative, but only knew its name and not its contents. Furthermore, the PHN—whose main task is to help schools implement HLS—admitted to not understanding her role in implementing HLS: “I know it [HLS], but what are my duties? It’s unclear.” Consequently, a comprehensive approach to health promotion in these two schools was not implemented through the HLS program guidelines. As this article will demonstrate, however, there are other ways in which health is being promoted in the schools, even without the use of the HLS program.

*Environmental Factors*

Recently, ecological approaches have been used to demonstrate health promotion initiatives that use a settings approach (Evans, Roy, Geiger, Werner, & Burnett, 2008; Naylor et al., 2006). In general, the underlying message that accompanies these studies is that the surrounding environment in which the participants are situated will influence their health promoting behaviours; this was also found to be true for the study at hand. There were several factors in the physical environment that encouraged or discouraged the promotion of health in the schools that were examined for this study. In School A, the sport facilities were “probably some of the best in Canada” (Teacher B). By having the use of a multitude of well-kept sporting facilities at no cost, the teachers, in particular Teacher B, who is a physical education teacher, admitted that it was not a challenge to incorporate diverse sports and exercises for the students to practice during their physical education class and other special recreational activities. Without these facilities in such close proximity and with such accessibility, the staff may have found the task of incorporating supplementary physical activity in the school’s curriculum a challenge, which was the case in School B.

The facilities in School B were not as elaborate as those in School A: the facilities seemed outdated and in need of upkeep. The school’s gymnasium, which was not a separately
enclosed space, served a dual purpose as it was also a hallway to another part of the school, making it hard for it to be used as a gymnasium.

Not only are School A’s sporting facilities superior to the average school, but it also has other environmental advantages that helps the school’s staff promote health in its school. An innovation that School A has is an organic garden that is jointly grown in collaboration between the school and the community. By having this organic garden on school property, students and teachers alike practice composting and learn about the importance of organic farming and eating. Clearly, the addition of a garden was a large change in the school’s environment, but there were other changes in the schools that helped encourage healthy eating practices; for example, the school’s meal plans in the cafeterias have managed to emphasize healthy eating practices as the only foods served are nutritious. In both Schools A and B, the cafeterias have adopted a new menu that follows a new healthy eating policy (GNB, 2005b), which ensures that the foods served in New Brunswick schools are nutritious and promote healthy eating practices for both students and school personnel. Having healthy foods served as the only lunch and snack options for students and teachers ensures that all those eating from the cafeteria are having a healthy lunch and snacks while at school. Along the same lines, both schools take part in an annual initiative dedicated to teaching children about healthy eating practices, where students track the number of fruits and vegetables that they eat over a certain period of time. By doing this, the schools incorporate activities that make eating healthy foods “an exciting activity with rewards” and that “it lightens up the school’s atmosphere and creates a better ambiance in the school” (Teacher A, School B). Although this initiative is encouraging in theory, Teacher B from School B noted that, “it would be better if we did something during the whole school year.” In both schools, the principals agreed that school health is something that
“should be inculcated to the students on a daily basis” (Principal, School A). The idea that health should be a part of everyday education is consistent with the idea that CSH is a settings approach that should instil the values of health and the promotion of a healthy lifestyle into the school as a habitual, daily routine therefore making it a part of the school’s ethos.

Support

There exists a strong body of evidence that support coming from the administration (Butler, 1993; St Leger, Kolbe, Lee, McCall, & Young, 2007; Symons, Cincelli, James, & Groff, 1998; Telljohann, Everett, Durgin, & Price, 1996) and the community (Butler) have a positive influence on CSH implementation. The present study also supports these findings, as administrative support was found to have a significant impact on the implementation of health promotion in both schools. In School A, the principal was very supportive of health promotion in the school. She went as far as saying, “it’s a lesson in itself to tell the students, look, it’s important to eat well and to move. That’s why [school health promotion is] not wasted time, but it has to be well invested” (Principal, School A). In contrast, in School B, the principal admitted that the school “has become too secondary” and that in terms of health, “it’s not a priority right now. We can’t add on another thing, there’s too many things going on already...when you have to spend a certain number of minutes a day on math skills and reading skills, we don’t really have the leisure of putting an emphasis on health like we should to make a difference.”

Support coming from the administration was deemed by teachers to be an important predictor of health promotion in their schools. Teacher B in School B stated, “the principal has a lot to do with whether or not we do things.” Indeed, the principals’ differing levels of engagement with health promotion were clearly demonstrated by the different activities that were occurring in their respective schools to promote the adoption of a healthy lifestyle. In School A,
there were several initiatives taking place on a regular, daily, basis (e.g., the organic garden, supplementary physical activity), whereas in School B the main initiatives that were promoted included short-term activities in which students could choose whether or not they wanted to participate such as the fruit and vegetable intake contest and a fundraiser promoting heart health through jumping rope. The other discernable difference in terms of support came from the community.

Although both of the schools did not apply the HLS initiative, School A is involved in an approach called the Community School. This approach, like CSH, is a settings approach and is similar to HLS as it promotes the students' development in a number of different areas, including health. Three of the four interviewees from School A talked about the positive reinforcement they received from members of the community, as well as from parents and students, since the implementation of the Community School. As School A's principal said, "I'm sure if you ask any member of the community they would tell you the same thing – our school should never close its doors" and that "our school is a place of choice in the community." In addition, Teacher B from School A said that, "now they [members of the external community] don't see us all as delinquents, they see that we're doing something that's positive." This comment indicates that the school and its teachers are seen in a better light now that they are implementing more activities that involve the community and families. These activities include after school activities facilitated by community members and also by participating in health-research charity events like walkathons. By obtaining positive support from the community (e.g., upkeep of School A's garden over the summer months), parents (e.g. thank you notes for the vegetables grown in the garden that were sent to their homes (Teacher C)), students (e.g. feedback of enjoyment of activities (Teacher, C)), the teachers and principal seem to have
renewed energy for the continuation of the Community School initiative, and thus health promotion. On the other hand, School B is not a Community School and its staff struggled to commit to the obligation of supplementary activities involved in the implementation of HLS and placed the blame on a lack of time and resources. These resources can come in a number of different forms, such as financial, educational, and human.

In School A, because of the implementation of the Community School initiative, one member of the school’s personnel (the assistant principal) was hired as a full-time “Community Development Agent.” Her job is to find partners and sponsors in the community, as well as to implement different activities and events (such as the walkathon) in the school. She also serves as a link between the teachers, the administration, the community, and their families. By having someone whose only job is to work on implementing the Community School approach in the school, the initiative received great emphasis and thus strong implementation in the school, as issues such as human and financial resources were dealt with on a daily basis. As School A’s principal stated, “I used to go to all the city council meetings to make sure that our school had a voice there, and I wanted to know what was going on there too. But now, it’s her job to do that!” The approach where one designated person is in charge of the implementation and function of the initiative resembles the approach taken by the Dartmouth Health Promotion Study with the use of the Coordinator of Planning and Implementation, which was showed to be an appropriate approach to the coordinated approach implementation (Belzer & McIntyre, 1994).

Continuing with the idea of support from supplementary resources, the PHN from the district admitted, “you need everyone to make this work” and that “parents are busy, they have their own schedules, and I don’t want to make excuses, but they don’t have time to be part of a SHC.” She went on to explain that in a number of areas in the district, committees were put in
place and meetings would occur on a regular basis for a short period of time, but the committee
members' engagement to the SHC would decline over time and finally the committee would fall
apart. This example demonstrates that it is possible for SHC to be formed, but unless they are
prioritized, they fall through. The schools that were mentioned by the PHN that had, at one point,
successfully formed and maintained SHC were not the schools that participated in this study, but
were part of the same school district.

The lack of SHCs that meet CSH criteria is not a situation that is unique to New
Brunswick. A large-scale study pertaining to the implementation of school health programs in
the United States found that only half of the schools studied had families involved in SHCs
(Micheal, Dittus, & Epstein, 2007). Although they are a large part of the implementation of HLS,
SHCs are not the only resource needed to put this program in place in schools. Teacher B in
School B said, "we need to get together, like at a personnel meeting, and discuss that we want to
put an emphasis on it and that the whole school gets involved," implying that the teachers need
to support themselves in promoting health in the school even if students' parents and the broader
community are not involved in a committee. Differing levels of support from teachers, parents,
and principals indicate that individual attributes may affect the implementation of CSH
initiatives in schools.

*Individual Attributes*

When asked to identify the most important predictor of health promotion in schools, the
majority of the teachers who were interviewed indicated that it is of the utmost importance to
"practice what you preach." For example, Teacher C in School B said, "if I'm going to tell the
students that they can't bring candy and desserts for a snack, I can't have one as a snack either."
By leading by example, the teachers demonstrate that good health is important, and "if [students]
see that the teacher is doing it [making healthy food choices], maybe it'll incite them to do it too” (Teacher A, School A). Although modeling healthy behaviors is a relatively simple task, not all health education is this straightforward. Many of the teachers interviewed made reference to additional training that they felt was necessary for them to receive in order to further implementation of CSH in schools.

One of the reasons for a lack of health education and CSH implementation is due to a need for teacher training (Hausman & Ruzek, 1995; St Leger, 1998, 2000; Symons, Cincelli, James, & Groff, 1997; Telljohann, Everett, Durgin, & Price, 1996) which has been correlated to reduced confidence (Hausman & Ruzek) and self-efficacy (Telljohann, Everett, Durgin, & Price) when faced with the task of instructing health topics. Jourdan et al. (2002) found that teacher training pertaining to health education is an essential predictor of whether or not teachers incorporate health education in their teachings. School B’s principal identified a need for further training in health education and the overall CSH approach, which could in part explain why HLS was not implemented in that school. In fact, almost all of the participants involved in the study discussed a need for either supplementary training or information on how to implement CSH programs.

Another important individual factor that was mentioned by the teachers who were interviewed was that collaboration between teachers and school staff and openness to new ideas are key factors to the success of new initiatives being implemented in schools. Teacher B from School A said, “without the collaborative atmosphere that we have here, it would not be possible [to have a Community School].” The collaborative atmosphere demonstrated in School A is an individual factor as it demonstrates that the teachers have a sense of collegiality and are open to work with others in order to produce change within the school. In addition, an openness to new
ideas and change was also mentioned as being an essential element to the implementation of new initiatives in the schools. The reverse is also true, as the principal in School A noted, “it’s hard when you have certain teachers who resist change…some teachers just have a hard time making the link” that the Community School approach is not an addition to the curriculum, but teaching the same subject manner in a way that involves the community and emphasizes health.

Organizational Factors

The HLS program is not being implemented in Schools A and B in New Brunswick; this fact is indicative of the organization and promotion of the program. As stressed by the principal of School B, “the idea is there, but there is no pressure by the government on schools and those who make important decisions to make the decision to make 30 minutes of daily physical activity mandatory in all schools.” He continued by saying,

We shouldn’t have elected officials who are trying to get votes from the population making education promises. We know that we have to eat well; we know that we need to be active - we talk about it as a vision in our society, but we’re not able to influence those who make the decisions at the educational system.

This comment contends that high level policy makers, such as those working for the Ministry of Education or the Ministry of Health, understand the concept of CSH in schools, but have yet to instill policies within schools to make it mandatory, which means that there are no administrative repercussions if changes are not made in schools. Without any pressure coming to from higher-levels, and a lack of dissemination of evidence why health is important to educational outcomes (St Leger et al., 2007), the CSH and HLS is not prioritized and thus schools and curricula are not organized with it in mind.
Along with a lack of policies, according to the school district's PHN, HLS' implementation was also stunted when each of the higher level representatives (those working above the PHNs and guiding HLS program implementation) were "given their pink slips" on one given day during the first few years of the program's development. Since then, there has been a great deal of confusion and many inconsistencies in the ways in which PHNs see their jobs. In addition, the PHN interviewed for this study struggled with the security of her job before her position was made permanent in 2004. She noted, "when you don't know if you'll have a position the next year...do you want to really start something?" The PHN further noted the lack of managers to guide the PHNs in HLS' implementation. This lack of organizational direction caused the way in which HLS was implemented across the different school districts to vary. As a result, "it's not consistent" (PHN). Since the schools in different districts do have some contact through meetings and conferences, they compare what is happening in their respective schools and for some PHNs who do not have the permission to do certain activities, "it's like I'm either doing something I'm not allowed to do, or I'm seen as the one who's not doing her job!"

Without a clear implementation plan and permission to implement such a plan, it is difficult for the PHN to truly understand how and what s/he supposed to be doing for HLS in the schools, at least in this specific school district. Whether this is the case for each of the districts in New Brunswick is unclear at this point and should be the focus of future research.

Seeing as though even the PHN is unsure of her duties, another seemingly viable option instead of supplementary training for teachers that was suggested was "to have someone, like a nurse, that would be at school all the time to organize activities for the students... because we [teachers] already have too many things, so it might help" (Teacher A, School B). This idea was mentioned by several teachers, especially in School B, as the school does not have a specific
person working full-time to help with the implementation of the HLS initiative. Although there is a PHN appointed for the implementation of HLS in the schools, there are at least a dozen schools per school district, which makes her job difficult. As the PHN explained, “[HLS] has to be done one school at a time, and it has to be done well. But they give us so much extra work, we don’t have time to do our job!” The extra work that the PHN has to do includes immunizations and workshops pertaining to diverse health subjects such as epi-pen delivery and nutrition. The PHN agreed with Teacher A in School B when she said, “we need more qualified help.” The reason supplementary qualified help is needed is simply to help the PHN accomplish her duties in a more efficient matter, as the number of schools and duties to complete were identified as too demanding for one person.

Recommendations

In order to implement HLS, School B’s culture and overall approach to education needs to incorporate an emphasis on health. Before this may begin to happen, there needs to be some policies, or perhaps repercussions, that will force the schools to take action to promote health in the school environment. As noted by the principal at School B, without anything pushing the school staff to change, there will be no change. If policies are implemented and enforced, perhaps this will promote – or even force - a change in the status of health promotion in this school. As of yet, there are no repercussions for principals of schools whose staff members are not implementing HLS (or a related, approved CSH approach). There also seems to be no repercussions to the PHN if HLS in not implemented. In order to increase the likelihood of the HLS program being implemented, those in charge of implementation need to be identified and then given suitable freedom and resources to enable successful implementation. Principals and teachers also need in-depth training in order to better understand the concept of CSH and the
ways in which HLS implementation can become a part of their classes each and every day. Each of these recommendations are organizational issues that need to be addressed in order to increase the probability of the progression of the implementation of HLS in schools.

Continuing with organizational factors, there are a few crucial changes that need to be made in order for HLS to be successfully implemented. School A is not implementing HLS; it is, however, implementing the Community School approach, which has many similarities to a CSH approach. Due to the fact that School A is using the Community School approach, the HLS program is not prioritized, yet the main aspects of HLS are still achieved. As a result, it is questionable if HLS should actually be implemented in the school, as the GNB’s goals are still being achieved. School B, on the other hand, was not at the time of the interviews implementing anything resembling the HLS approach. As a result, changes should be made in order to meet the GNB’s lofty goals.

I also suggest that it would be helpful if the PHN, principals, teachers, students, and the community were presented with examples of successful HLS approaches in other schools in order to see what the approach can look like and what it can do for students. Presentations such as these may help address the issue of a lack of knowledge pertaining to the HLS initiative. By presenting the CSH approach, the HLS program and their potential, the PHN, teachers and administrators may experience a renewed sense of commitment to change in the school.

Conclusion

This study investigated the factors that hinder and facilitate the implementation of a CSH approach (HLS) in two elementary schools in the province of New Brunswick. The results showed that there are five main categories of factors that affect the implementation of CSH in New Brunswick: a lack of knowledge, environmental factors, support, individual factors, and
organizational factors. Clearly, a lack of knowledge of the HLS program is the largest barrier to the implementation of CSH, and inevitably HLS, in schools. Within the environmental factors, well-kept and accessible school sporting facilities, healthy foods served in the schools cafeteria, and a school garden were all key facilitators to the implementation of health promotion in one school. In the support component, administrative, community and family's support were all key facilitators to the implementation of health promotion approaches. Furthermore, the use of a supplementary resource person within the school whose full-time task is to implement activities, including those pertaining to health promotion, was found to be helpful. Some of the key individual factors that were mentioned as facilitators included collaboration between teachers and openness to new ideas and change as being necessary to the implementation of new initiatives. The major organizational barriers to the implementation of HLS in the two participating schools were a lack of policy accountability from the government, lack of training for teachers and administrators, time constraints due to a demanding curriculum, and work overload on the PHN.

Although this study has some limitations, e.g., students, parents and community members were not participants, the message that came through from the participants was clear: when health is not made a priority in a school, the implementation of a health promoting program is made very difficult, if not impossible. The lack of school health promotion is not a situation that will be solved overnight, especially in schools where the idea that certain subject matter should be prioritized before health, even when the option of interdisciplinary teaching may be a viable option, is pervasive. Further research is needed to examine the culture of school health promotion New Brunswick in order to understand ways to integrate health into the school's curriculum in a way that will be both meaningful and successful.
References


Lee, A., Cheng, F. F. K., & St Leger, L. (2005). Evaluating health-promoting schools in Hong-

Lee, A., St Leger, L., & Cheng, F. (2007). The status of health-promoting schools in Hong Kong
and implications for further development. *Health Promotion International*, 22(4), 316-
326.

schools and health promotion in schools: two systematic reviews. *Health Technology
Assessment*, 3(22), 3-137.

McIntyre, L., Belzer, E., Manchester, L., Blanchard, W., Officer, S., & Simpson, C. (1996). The
Dartmouth Health Promotion Study: A failed quest for synergy in school health

Results form the school health policies and programs study 2006. *Journal of School
Health*, 77(8), 567-587.

Miller, G. (2003) *Ecological approach to school health promotion review of literature, for
CIHR-sponsored project “The Multifaceted Potential of the School as an Environment
for Health Promotion.”* Retrieved October 1, 2006 from
www.schoolhealthresearch.org/pdf.

health programs and academic achievement: A systematic review of the literature.
*Journal of School Health*, 77(9), 589-600.


CHAPTER 3:

Article #2:

A Community School in New Brunswick: A Means to Implementing Comprehensive School Health?
Over the last three decades, much attention has been paid to the use of settings approaches for health promotion, including the use of the school setting (Young, 2005). Health Promoting Schools (HPS) (WHO, 1998), a settings approach to health promotion, is an emerging trend in several countries, including Canada and the United States. In Canada, the approach typically follows the Comprehensive School Health (CSH) framework advocated by the Canadian Association of School Health (CASH) and several other associations. In the Province of New Brunswick, a new concept called the Community School is currently being implemented in over 40 schools. Through a case study of one elementary school in New Brunswick, in this paper I argue that, under certain conditions, the Community School can be considered a CSH approach.

The HPS is not a new concept; it was first introduced by the World Health Organization (WHO) in the mid-1980s in response to the Ottawa Charter for Public Health (WHO, 1986), which outlined a movement for health promotion, such as creating supportive environments and strengthening community action. According to the WHO (1999), a HPS is a school that “is constantly strengthening its capacity to be a health setting for living, learning, and working” (p. 19). More specifically, through a comprehensive approach, HPSs “aim to [help] build healthy public policies [through the demonstration of its successes], create supportive environments, strengthen community action, foster the development of personal skills, and reorient health services to embrace health promotion in addition to clinical and curative services” (WHO, p. 19). The HPS approach is being implemented in schools as way to promote health as “a state of emotional, mental, physical, social and spiritual well-being that enables students to reach and maintain their personal potential in their communities” (WHO, p. 1948).
In Canada, the HPS approach is known as CSH. There are several national associations that advocate the CSH approach, which helps to explain the similarities between the province’s and territory’s approaches. Notably, the CASH, the Joint Consortium for School Health, School Health Research Network, Canadian School Physical Activity and Nutrition Network, Canadian School Health Centre, and the Canadian Association for Health, Physical Education, Recreation, and Dance all help promote health in school across Canada.

The Canadian School Health Centre in partnership with CASH, for example, advocates the CSH approach from coast to coast to coast. CASH is a “national association composed of provincial/territorial coalitions whose member promote the health of children and youth through school-related health promotion” (CASH, 2006, online). Its approach to school health promotion incorporates four components: comprehensive health instruction that promotes the adoption of a healthy lifestyle and various learning strategies; support services for both school staff and pupils; availability of psychological and social services for the school and community; and a safe school environment (CASH, 2007). For the most part, the provinces that are using the CSH approach, or an approach very similar to CSH, use the description of CSH as advocated by CASH. Since education in Canada falls under each provincial and territorial government’s jurisdiction, each province and the Yukon has its own concept of the HPS (the Northwest Territories and Nunavut do not have HPS). Thus far, as of 2008, all 10 provinces and Yukon Territory have had very similar approaches to improving school health.

Undeniably, the concept of health can be understood in a number of different ways and through diverse lenses. Over the last decade, much of the emphasis on poor health has been placed on the rise of obesity rates that are affecting both adults and children alike in Canada. In 2004, Statistics Canada reported that nearly 60% of Canadians aged 18 years or older were
overweight or obese (Tjepkema, 2006). It is not surprising that this problem is also having an impact on youngsters; indeed, in 2004 Statistics Canada reported that more than one in four children between the ages of 2 and 17 were either overweight or obese (Shields, 2006). The situation is not identical throughout the country, however. The Province of New Brunswick, for example, has the second highest childhood obesity rate in the country – Canada’s childhood obesity rate is 26%, and New Brunswick’s is significantly higher at 34% (Shields). Clearly, there are numerous factors influencing the health of children in New Brunswick (Government of New Brunswick (GNB), 2007); programs being implemented in schools do not solely focus on diminishing the occurrence of childhood obesity, but are also seeking to promote the adoption of health-encouraging behaviours in children. As children spend a great deal of their days in schools, the school has been found an ideal setting in promoting an active and healthy lifestyle (GNB, 2007).

**New Brunswick’s Education Initiative**

In the Province of New Brunswick, there is a government-funded CSH initiative that is supposed to be part of each school’s curriculum. This initiative, entitled “Healthy Learners in Schools” (HLS), was introduced to the province’s schools in 2000. While the HLS initiative has been used as a CSH initiative, in this paper I argue that another concept that has recently emerged in the province’s schools, the Community School, can also be considered to be an initiative that uses the CSH approach.

In June 2007, through a report entitled “When Kids Come First,” the Province of New Brunswick’s Department of Education announced an ambitious goal: to build the best education system in the country (GNB, 2007). In order to achieve this goal, the GNB set out eight commitments to help make this goal become a reality. One of these commitments is relevant to
this paper: to engage communities and partners in improving schools (GNB). This commitment, in which the province aims to engage the community in the improvement of schools, is where the concept of the Community School emerged.

*Engaging Communities and Partners in Improving Schools*

In order to help schools form linkages with their surrounding communities, and thus to achieve one of the When Kids Come First (GNB, 2007) goals, the GNB introduced the concept of a “Community School.” According to the When Kids Come First publication,

> The community school has a community based committee that works with principals and school teams to integrate community services with the teaching mission. The school uses community resources and assets to provide additional opportunities for classroom instruction and after-school programs. And teachers in a community school use those resources to provide more hands-on, interactive learning for children. Also, the building is often open for students and their families beyond traditional hours, offering community services. (p. 23)

In order to achieve the overarching mission of the Community School, which is to integrate the community with teaching, the Community School initiative focuses on 6 different axes of development: language and culture, pedagogy, scholarly inclusion, global health, recognition, and partnerships. Evidently, the component of the Community School that is especially important to mention as it is specific to school health promotion is that of “global health,” as it ensures that students develop healthy lifestyle habits including daily physical activity, which is included in the school’s schedule (GNB, n.d.). Once the vision for the Community School was built, GNB proposed an implementation plan for the Community School initiative. During the first phase of implementation of the Community School, the GNB had planned to launch up to
30 community schools by June 2009; this goal has already been surpassed as, to date, there are over 40 schools using the Community School approach (GNB, 2008). An additional 15 community schools will be introduced in the second phase of the initiative, which will run during years three to five of the program.

The idea of the Community School comes from an initiative that was introduced in Quebec’s elementary schools. Quebec’s “community and entrepreneurial school,” an approach that has shown very positive and encouraging results in elementary schools in Quebec, has a mission of making learning a pleasurable experience for all students (Levesque, 2005). At the time of this study, Levesque was a school director and wrote a memoir describing the community school’s implications on his school. The Community School initiative encourages partnerships with the community in order to build various types of entrepreneurial projects in schools. Examples of projects that have been created in schools in Quebec include a papery, community gardens, and school restaurants (Ecole-Des-Coeurs-Vaillants, 2006). According to Levesque, one Quebec school that adopted this approach had improvements in areas such as parental satisfaction, students’ lifestyle and violence patterns, school and community collaboration, and improvements in reading and mathematical test scores. After implementing this approach in numerous schools in Quebec, Levesque was offered a position working with the Government of New Brunswick as the Executive Director of Transformation and Strategic Innovation in Education and accepted. To date, 49 schools from both the Anglophone and Francophone districts have been designated as Community Schools within New Brunswick. Over the current school year (2008-09) the Department of Education of the GNB plans to invest another $3.3 million in the Community Schools initiative (GNB, 2008).
Although the CSH and Community School are both settings approaches that are used to achieve their overarching goals, they have different stated purposes. The idea behind CSH is the promotion of health in a comprehensive manner through various activities and approaches. In order to do so, CSH has four components to its implementation: teaching and learning of health, health and other support services, a supportive social environment, and finally, a healthy physical environment. On the other hand, the main goal of the Community School is to incorporate the community that surrounds the school in the school’s activities and educational outcomes. The Community School also has several components to its implementation, notably the six developmental axes that include: language and culture, pedagogy, scholarly inclusion, global health, recognition, and partnerships. As these approaches incorporate a number of different settings (i.e., the school and the community), an ecological model is an appropriate model through which to describe their implications (McLeroy, Bibeau, Steckler & Glanz, 1988; Stokols, 1996; Stokols, Allen, & Bellingham, 1996), as this model demonstrates how an environment and behaviours in that environment are interconnected in numerous ways. Since settings approaches create environments to encourage change, this paper uses an ecological approach to demonstrate how the Community School can serve as an effective approach to health promotion in New Brunswick schools. Furthermore, it will show how the Community School approach can be identified as a CSH initiative.

*From Settings Approach to Ecological Approach to School Health Promotion*

CSH and Community School approaches are settings-based approaches that acknowledge an interaction between several subsystems, such as the school, community, and the family, that all influence individuals’ health. When applied from a health promotion point of view, a settings approach refers to “a place of social context in which people engage in daily activities in which
environmental, organizational and personal factors interact to affect health and well-being’ (Nutbeam, 1998, p. 362). Similarly, Nutbeam also noted that settings can be used to promote health through those who work in them (e.g., teachers) and by creating partnerships with those surrounding the school community (e.g., with nurses or sporting facilities). Indeed, health promotion through a settings-based approach does not signify a simple intervention with an aim to change a specific aspect of an individual’s health, but rather a global approach that incorporates numerous elements within the setting. Moreover, by creating links with the external, surrounding community, there are a number of settings and factors of influence that can be related to these initiatives, making an ecological model a viable way to describe its implications.

McLeroy and colleagues (1988) proposed that an ecological framework “serves to direct attention to both behavior and its individual and environmental determinants” (p. 354). From a health promotion standpoint, an ecological model not only looks at individuals’ specific health behaviours, but also at the interplay between individuals and groups with their environment (Stokols, 1992). Several scholars (Fisher, 2000; Novilla, Barnes, De La Cruz, Williams, & Rogers, 2006; Soubhi & Potvin, 2000) have also argued that ecological perspectives should be the basis for designing health promotion initiatives because they account for various different levels of interaction. For these reasons, the overarching framework used for this study to understand if the Community School can be considered a CSH will be Stokols’ (1994, 1996, 2004) social ecological model. This model can be used to understand the interrelations between numerous personal and environmental factors related to health (Stokols, 1996).

According to Stokols (1992, 1996, 2003), the social ecological model has four main assumptions. The first assumption is that environmental settings have “multiple physical, social, and cultural dimensions” (Stokols, 1996, p. 285) that will have an impact on the occupants’ well-
being and overall health. Furthermore, it is the cumulative impact of these conditions, not single conditions such as "air quality or social climate" (p. 285), which will have an impact on the occupant over a certain period of time. The second assumption described by Stokols (1996) is that health and well being are not only affected by environmental attributes, but also by an interplay between the environmental conditions and personal attributes. Stokols affirmed that a certain level of congruence between situation and personal attributes is an important predictor of well-being. Thirdly, the social ecological model borrows concepts derived from systems theory, which, in brief, explores the relationships between the interactions among the several physical and social settings with which an individual is regularly in contact. Some of the concepts that are used to explore these relationships include interdependence, homeostasis, negative feedback loops, and deviation amplification (Stokols, 2003). Concisely, these concepts influence each other in different ways; for example, in a negative feedback loop, a teacher would discontinue the use of a specific activity following unresponsiveness from the students. Finally, the fourth assumption described by Stokols (1996) is that there is an important link between the occupant’s different “settings and life domains” (p.286) and that various physical and social facets of various settings will exert “independent as well as joint effects” (p. 286) on occupant’s well-being.

Ecological models are appropriate for exploring the school as a health setting as they study the “total system of influences surrounding people” in the school (Vockell & Asher, 1995, p. 195). Furthermore, all the agents involved with the school (e.g., teachers, administrators, students) each play different roles and have their own “contexts, cultures, patterns, and methods of relating” (p. 195) to one another, which will create a distinct climate in the school. Moreover, qualitative and human ecological research methods “are valuable in developing the basic
understanding of students, teachers, administrators, parents and the social contexts, scenes, and events in which these people live, study, and work” (p. 211). Furthermore, since children spend so much of their time in schools, it is appropriate to use a school setting as an environment to target for health promotion, as it can have a profound impact on students’ behaviours.

Several scholars have used ecological models to describe the numerous dimensions of children’s and teenagers’ health (e.g., Dwyer, Needham, Simpson, & Heeney, 2008; Klein, Lytle, & Chen, 2008; Robertson-Wilson, Leatherdale, & Wong, 2008). As stated by Novilla Barnes, De La Cruz, and Williams (2006), “an ecological perspective can serve as the uniting framework for ....building partnerships with the larger community, and addressing health issues” (p. 29). In addition, ecological models have been used by several scholars (Dwyer, Needham, Simpson, & Heeney; Klein, Lytle, & Chen; Robertson-Wilson, Leatherdale, & Wong) to study ecological relationships in and around schools.

For the purpose of this study, a simplified version of the social ecological model will be utilized to describe how a Community School approach was implemented in one school and how can be considered a CSH approach. In order to do so, three dimensions of analysis will be utilized to exemplify, through a social ecological model, if and/or how the Community School can be seen as a CSH approach: intrapersonal, interpersonal, and environmental dimensions. The three dimensions represent a simplified version of the different interrelationships between people and their physical and social environment expressed by the social ecological model. Recently, these three dimensions were used in social ecological studies; Dwyer and colleagues (2008) used them to explain several barriers to the implementation of healthy eating and physical activity practices in preschoolers in Hamilton, Ontario. These three dimensions were also used to guide the development of a survey to identify potential levels of influence relevant to the
implementation a sun-smart policy in an elementary school (Geller, Zwirn, Rutsch, Gorham, Viswanath, et al., 2008). Following Dwyer et al. and Geller et al., for the study at hand intrapersonal dimension will refer to individuals’ attributes such as attitude, skills, knowledge, and beliefs. Secondly, the interpersonal processes that occur in the specified setting will be studied; these refer to the relationships and the communication between the individuals in the particular setting. Thirdly, the organizational structures, which include the school’s physical environment, school logistics, amongst others, that promote health will be taken into consideration. Individually, the three dimensions of analysis (intrapersonal, interpersonal, and environmental) incorporate a number of different aspects of health promotion.

*Dimension I: Intrapersonal:* Research on factors within the intrapersonal dimension that affect the implementation of health promotion programs has focused on numerous psychological aspects of health promoting individuals (McLeroy, Bibeau, Steckler, & Glanz, 1988). Since the Community School is being implemented by teachers, there is likely to be a number of individual and psychological attributes affecting their behaviours as they pertain to health promotion. Specific to schools and health promotion, several researchers have found that teachers often do not feel adequately prepared to teach health topics to their students due to a lack of training (Hausman & Ruzek, 1995; St Leger, 1998, 2000; Symons, Cincelli, James, & Groff, 1997; Telljohann, Everett, Durgin, & Price, 1996), which has been correlated to reduced sense of confidence (Hausman & Ruzek) and self-efficacy (Telljohann, et al.) when faced with the task of instructing health topics. Furthermore, teachers who set a good example and reinforce healthy lifestyle habits through role modeling have also been seen as facilitators to school health promotion initiatives (Cargo, Salsberg, Delormier, Desrories, & Macauley, 2006). When specifically related to CSH, it has also been shown when teachers develop a more holistic
approach to school health, they have a greater appreciation for school health versus those who view it as only classroom-based (St Leger, 1998). Individual attributes such as values and beliefs also influence the implementation of such initiatives. Not surprisingly, teachers who view health education as a high priority are more likely to be involved in the implementation of health promoting initiatives (Geller et al., 2008; Salm, 2001).

**Dimension II: Interpersonal:** In addition to teachers holding health as a high priority, St Leger (1998) found that when the community supports the school’s policies, teachers are more willing to enforce health policies in schools. Along with teachers and administrators, there are many parties who are included in the implementation of Community School initiatives: parents, public health nurses, members of the external community, health policy makers, and other parties involved in the development and implementation of these programs. Factors identified in this section have been deemed interpersonal because they rely on the interaction and communication between various parties involved in the school health initiatives.

There are a number of ways in which relationships between individuals involved in school health promotion can be affected. Several researchers have identified administrative commitment as being a key factor in the implementation of school health promotion initiatives (Butler, 1993; St Leger, 1998; Symons, Cinelli, James, & Groff, 1997; Telljohann, Everett, Durgin, & Price, 1996). Administrative commitment is part of the interpersonal dimension because school administrators can provide resources and help promote the concept of school health to the rest of the school’s staff, and may have an impact on the overall climate of the school. As the school’s administration may have a large impact on the rest of the teachers in the school, their lack of enthusiastic commitment may play a role in whether school health initiatives are implemented. St Leger (2000) found that when the administration is supportive of health
promoting initiatives, collaboration between teachers is also key to the success of school health. Community (Butler, 1993; Leurs et al., 2005) and parental support (Butler) are also important for the success of school health initiatives. In order to help build partnerships between families and the community and the school, Allensworth (1994) found that outreach programs were an effective way to involve the family and community. In order to create these partnerships, however, programs and structures need to be put in place.

**Dimension III: Organizational:** For the purpose of this project, the organizational dimension refers to the different characteristics such as resources, structures, and logistics put in place by a school in order to sustain the implementation of a specific initiative, such as the Community School approach. Resources coming from the school, government, and community can have an impact on the degree of implementation of an initiative. For instance, Salm (2001) found that a lack of resources acted as a barrier to the implementation of a school health promotion initiative in Saskatchewan. A lack of resources, whether they are physical, human, or financial, has been commonly found to be key barriers to the implementation of new programs (St Leger et al., 2007). But, as St Leger (2000) noted, it is up to school staff members to take their own individual approach to the integration of school health initiatives by developing a physical and social environment that supports it. Undeniably, the way in which the administration integrates the program’s components into the school’s curriculum (e.g., scheduling or addition of new tasks) affects the teachers’ workload. Consequently, teachers may feel as if time is a barrier to the implementation of such programs (Butler, 1993; Cargo et al., 2006; Salm, 2001; Symons et al., 1997). This is considered in the organizational dimension because it is each school’s responsibility to plan for the proper implementation of initiatives, including allowing time for them to take place. Finally, research by Adamson, McAleavy,
Donegan, and Shelvin (2006) identified that schools that had policies regarding school health significantly influenced favourably how teachers viewed health education.

As there is a reasonably large body of evidence pertaining to the various factors that affect the implementation of CSH initiatives in other countries, it is possible to demonstrate its similarities when it comes to the implementation of the Community School approach. Furthermore, research on CSH in Canada is scarce; this study fills a gap in the literature as no scholarly attention has been paid to either the Community School or CSH in the Province of New Brunswick. Research pertaining to the implementation of Community School and the factors that affect its success as a CSH approach are important to the improvement and continuation of the Community School initiative, as well as its further implementation in other schools.

Methodology

Qualitative research aims to “develop well-founded, deep, general interpretations of a situation” (Vockell & Asher, 1995, p.192) and, as such, it fits with the purpose of this study, which is to gain an understanding of the Community School’s implications as a CSH in one school in New Brunswick. Within qualitative research, researchers go to the setting in which they assume that human behaviours are significantly influenced (Slavin, 1992) and, in this case, the setting was the school. Qualitative research has been shown to be a valuable way of developing a foundation for the understanding of the work/daily activities of the people affiliated with schools and their various surroundings and daily events (Vockell & Asher, 1995). As this study focuses on the Community School approach in a single school, the methodology that was selected was a case study.

Case study methodology is ideal for obtaining holistic and realistic understandings of particular phenomena (Yin, 2003). Indeed, Hitchcock and Hughes (1995) have argued that case
studies are “the most appropriate format and orientation for school-based research” (p. 316). The reason why case studies are used so often in the school setting is due to this methodology’s efficacy in contributing to the understanding of individual or group phenomena (Yin). One of the main pitfalls of case studies is that they often “provide little basis for scientific generalization” (Yin, p.10). Nevertheless, case studies can be generalizeable to theoretical propositions, such as an ecological framework in this case, as they help to demonstrate how certain examples of health promotion can be congruent with a chosen theory. Case study methodologies have been recommended for studies where the contextual conditions may have an effect on the phenomenon being studied (Yin). The setting for the case chosen for this study was a Francophone elementary school of approximately 350 students in a village in the Province of New Brunswick.

Methods

Sampling

As the school taking part in this study was part of a larger population of schools within the same school district, the sampling process for this study was purposeful in nature. The purposeful sampling aspect of the sampling process aimed to identify schools within a district that had an appointed Public Health Nurse with multiple years of experience, as this criterion was necessary for another part of a related study. The participation of a Community School in this study occurred by chance, as the schools chosen for the larger study were not purposefully selected based on the Community School criteria. Emails were sent to all the school principals who were part of the chosen school district. The district was chosen due to the long length of time that the Public Health Nurse had worked there. One school principal within the district responded to the email with interest and, as a result, a meeting was arranged and her consent to
pursue research in the school was then obtained. Through a convenience sample (Vockell & Asher, 1995), the principal then put the researcher in touch with three teachers who consented to participate in the study. In line with the ethical procedures, the teachers were chosen by the school’s principal through volunteer sampling.

In order to collect data from the participants (i.e., the principal and teachers), semi-structured interviews were conducted. Interviews are important forms of data collection in the school setting, as “the richness of the responses in both breadth and depth can add markedly to the understanding of the classroom or school” (Vockell & Asher, 1995, p. 199). The major distinction between structured and semi-structured interviews is that semi-structured interviews leave the researcher room for exploration, as the researcher does not have to stay with a set plan (Patton, 2002). Generally, semi-structured interviews are used to generate an understanding of a situation or experience lived by the participants (Smith, 1995). All four participants (one principal, 3 teachers) who took part in the study gave informed consent. The interviews were digitally-recorded and transcribed verbatim. In order to ensure validity, once the transcription process was completed, participants were asked to read over their transcripts and to confirm their contents.

This case study pertains to a school with students in grades ranging from kindergarten to grade 8, which is located in a small town. The school is surrounded by a multitude of well kept sporting facilities, including (among others) an ice rink, basketball courts, golf course, walking paths, full track, and soccer field. Furthermore, the school has its own organic garden. The four participants taking part in this study had a number of years of experience. Teacher A (male) had been teaching for 11 years and had been a teacher in the school under study for the past nine years. Teacher B (male) had also been teaching at the school for a prolonged period of time (12
years) and teaches physical education. The third teacher, Teacher C (female), has been teaching at the school for 13 years and has 2 children, one of whom attends the school. Finally, the principal (female) interviewed for the study has been in the education system for 14 years, and a part of the school’s administration for 8 years.

Analysis

In order to obtain an ecological view of the Community School, data that were related to intrapersonal, interpersonal, and organization factors were identified and coded using NVivo, which is a qualitative data analysis software program. For this study, a deductive analysis approach (Patton, 2002) was used, as the data were analyzed according to an existing framework (social ecology). Once the initial coding was completed, the texts were re-read and coded using more specific themes and descriptions identifying specific examples of the CSH approach. In the last phase of the analysis, relationships between the different factors identified in the first phase of coding and the use of CSH were identified and analyzed. CSH is defined by its four main components, which were identified in a Consensus Statement prepared by a number of organizations promoting CSH in Canada: comprehensive health instruction that promotes the adoption of a healthy lifestyle and various learning strategies; support services for both school staff and pupils; availability of psychological and social support services for the school and community; and a healthy school environment (CASH, 2007)

Results

The results section is divided into three parts: intrapersonal factors, interpersonal processes and organizational factors. Each part represents one of the three dimensions used as a part of Stokol’s (1992, 1996) social ecological model for community health promotion programs and is applied to the Community School that was studied for this project. These three dimensions
were used to help to identify examples of how the Community School can be implemented in a way that is consistent with the CSH approach.

Intrapersonal Factors

Intrapersonal factors refer to the various individual attributes, in this case, of those involved with the Community School initiative, when specifically related to the health component of the program. Each of the individuals interviewed for this project had his/her own view of the definition of “health.” For example, the principal described health as “global health, which encompasses both physical and mental health.” Teacher C went as far as saying, “if you don’t have your health, you don’t have anything at all!” When asked what they did to maintain their health, each of the interviewees said that they were active on a daily basis outside of the school setting and were good role models to their students in terms of physical activity. Although each of the teachers mentioned an active lifestyle as part of good health, they also related good health to good nutrition. By having a positive attitude pertaining to good health, the teachers and the principal involved in this study demonstrated that they believe health to be important. In addition, since each of the participants knew what ”good health” meant to them and felt that they could identify a child that is healthy, they were confident in their abilities to educate children through a “practice what you preach” approach. As stated by Teacher A, “you’re not sending the message if you’re teaching phys. ed. and you’re overweight. You have to demonstrate to the kids that you move and that you practice physical activity too.” In addition to being active, Teacher B said that by being involved in local and regional sports teams has been important for him as, “children see me outside the school and they see me as being more human…the kids think we live in this school!”
When questioned about the Community School program, the interviewees all agreed that the Community School initiative was a positive addition to the school. Furthermore, the school’s principal repeatedly mentioned throughout her interview that the Community School approach was what was best for the school and that, “even before we decided to become a community school, we already started to initiate projects with the community.” Throughout her interview, the principal made repeated remarks about how the Community School had a special personal importance to her, and that she’d be “disappointed if the day that I left, the community school project would crumble.”

*Interpersonal Processes*

Because of the adoption of the Community School approach, Teacher C reported that she, “asked professionals in certain domains to come and show her how to show the students to do specific things [with agriculture]” in her classroom. By doing so, she embraced the partnerships with the community and the relationship that she had previously had with members of the community changed. Furthermore, once the community members started to notice some of the positive changes in the school, they began offering their expertise to the school. The enhanced relationships between teachers and members of the external community are considered interpersonal processes as they describe the implications on the communication between those in the studied setting. Parents and community members with specific knowledge pertaining to diverse subjects were all a part of special after-school initiatives, as they led workshops for the students. Furthermore, coaches and volunteers began offering their time to the school in order to help with the school’s extracurricular activities. Not only is there a significant amount of collaboration between the community and the school, but also between the teachers in the school. Teacher B said, “had we not had this collaborative atmosphere and to want new challenges, it
[the Community School] would never have been possible.” After hearing positive comments from students’ parents regarding after school activities that were presented as part of a special program involving professionals from the community, Teacher B started to feel as though the school was well received in the community and no longer felt as though it was seen in a negative light.

Since the school that took part in this study is situated in a small community, Teacher A felt “that it is easier to connect the school and the community because we are the only school in the region.” Teacher C, who is also a parent of a student who attends the school, said that “my daughter even wants us to start our own garden at home because she sees what can be done at school.” This demonstrates that the students are bringing their knowledge home and may be developing and implementing healthy habits with their families.

Organizational Factors

There are numerous ways in which the school’s organization has an impact on both students’ and teachers’ health. First of all, the food served in the cafeteria follows specific health guidelines set out by Policy 711 (GNB, 2009), which ensure that the foods served in the school’s cafeteria follow Canada’s Food Guide. Furthermore, the school has an organic garden from which the students pick vegetables and are served as healthy snacks. In addition, each classroom in the school has a compost box where any food waste is deposited in order to make compost soil for the school’s garden (Principal). The Community School also mandates that every member of the school (including staff) take part in at least 30 minutes of physical activity on a daily basis. The supplementary physical activity is practiced during school hours and all the students and the school’s staff participate. In order to make this 30 minutes of physical activity possible, the school’s administrative personnel had to make some changes to the school’s schedule.
(Principal). Also, after school hours there are certain activities that are organized to encourage parents and students to be physically active together on school grounds, including diverse cultural activities, a “walk for literacy,” and family walking nights on the school’s walking paths.

Discussion

As described above, CSH is made up of a number of components: teaching and learning of health topics; health and other support services; the creation of a supportive social environment pertaining to health; and a healthy physical environment. Further, CSH relies on an “integrated approach that incorporates health and health messaging into all aspects of school activities and engages the community at large” (CASH, 2007, p. 2). The Community School, on the other hand, is an approach that creates a strong partnership between the school and its broader community; it involves parents and other community members in school life on a regular basis (GNB, n.d.). While the Community School and CSH are clearly different initiatives, the findings suggest that the Community School initiative is a successful vehicle through which schools can effectively engage in health promotion in a manner that is consistent with CSH.

Teaching and Learning

According to the Canadian Consensus Statement (CCS) regarding CSH (CASH, 2007), the teaching and learning component in CSH refers to the diverse teaching and learning strategies that teachers incorporate in order to engage students in various health education opportunities. The Community School initiative, on the other hand, uses complementary educational activities that help the students develop competencies that they will use throughout their lifetimes; the manner in which the Community School does so, however, simultaneously satisfies the requirements of CSH. For example, at the Community School, the organic garden not only facilitates the growth of healthy vegetables, but also different teaching methods and the
promotion of health. The garden helps the teachers to use a hands-on approach to health education. For instance, one of the curriculum components that has been linked to the garden includes measuring the perimeter of the garden, which requires the students to move while applying their mathematical skills; this is a clear demonstration of the use of complementary activities that supports both the Community School and CSH initiatives. Levitt (2002) found that teachers believed that hands-on approaches to teaching are effective because students reap the benefits of the activity immediately and these activities make science more meaningful to them. Additionally, students perform significantly better when life science tasks are taught while using a hands-on method rather than a contemporary textbook method (Pine et al., 2006). Through the garden the students learn about healthy food production practices that include gardening without the use of pesticides and the importance of organic farming.

Based on the CCS, the teaching strategies that use the Community School’s garden meet the requirements of “approaches that support development of students’ knowledge, attitudes, skills and behaviours for healthy decisions making” (CASH, 2007, p. 2), as the students are learning about how to make healthy food choices to complement a healthy lifestyle. Furthermore, they are complementary activities to the school’s curriculum that engage the community (farmers help care for the garden), which is consistent with the Community School approach. In addition, health is also promoted by using an interdisciplinary approach to teaching about healthy eating, as certain curriculum objectives are entwined by incorporating the use of the garden as a teaching tool. According to the CCS, the use of diverse teaching methodologies is an important component for the implementation of the teaching and learning component of CSH.

Research has shown that people buy organic foods because of the perceived benefits for human health (Magnusson, Arvola, Hursti, Aberg, & Sjoden, 2003). If the students learn about
organic food practices at school and believe that eating organic products is beneficial to their health, they may try to influence their families to do the same. Indeed, the students are promoting health in a broader environment than simply their school. As a result, health promotion also may influence the students’ families, which helps build links between the school and the families through health promotion and is consistent with the idea of incorporating health through the engagement of the larger community. The creation of strong partnerships between the school and the parents and community is fundamental for the implementation of the Community School.

Research has shown that a strong relationship between a school and a student’s home will improve the effectiveness of any health promoting intervention (Ma, 2000). By bringing health into another setting (i.e., the home), a stronger link to health is created as health is being promoted in more than just one setting – making it more comprehensive for the children, and thus meeting the requirements of a CSH approach as an integrated approach to health promotion.

In sum, the various teaching and learning strategies used by the school help to promote health in a way that is consistent with both the Community School and CSH approaches.

Supportive Social Environment

A supportive social environment for health promotion is a critical component of a CSH approach; such an environment was evident at the school under study due largely to its Community School-related partnerships. According to the Canadian Consensus Statement pertaining to Comprehensive School Health, the support necessary for CSH may be informal (e.g., between teachers, peers), or formal (e.g., school policies) in nature (CASH, 2007). In the Community School, all of the teachers who were interviewed viewed health as being of paramount importance in life, and they therefore created support for environment where health is prioritized and seen in a positive light. Research has shown that teachers who show interest in
their own health are more likely to show interest in their students' health, and consequently become more "effective teachers of health" (Allegrante, 1998, p. 192). Furthermore, a teacher who is in a supportive social environment, has a positive attitude toward health instruction, and a good sense of control over health education, will develop stronger intentions to teach health related topics (Ajzen, 2002). As a result, these teachers may be more likely to incorporate health into their own classroom, thus creating a supportive social environment for health.

The teachers in the Community School also fostered a supportive social environment amongst themselves, as they reported a high level of collaboration with each other, which has been found to be an integral part of health promoting programs' success (Smith, Roberts, Nutbeam, & McDonald, 1992; Symons, Cincelli, James, & Groff, 1997). Not only is there an immense amount of collaboration between the teachers, but also with the local municipality, which offers support by hiring students to help with the organic garden's upkeep during the summer months. In addition, other community members collaborate with the school to enhance the school's sports teams. The collaboration with diverse members of the community is consistent with the Community School approach, as one of its main focuses is to recognize and embrace strong partnerships with the community, which in turn leads to a broad base of social support.

The provision of community services and resources, a Community School concept, is beneficial for health promotion, which is a CSH goal. Community involvement relieves much stress from the school's administration and personnel, as the hardship of finding community partners is alleviated, which creates a supportive social environment for the staff. Indeed, community members' cooperation and participation in the school is described as being an essential component for the creation of a supportive social environment (CASH, 2007).
Furthermore, since there are more individuals interested in helping at the school (e.g., coaching sports teams, teaching agriculture), the students are exposed to more health promoting activities. Through the creation of a supportive social relationship and hence environment, all members of the school community may help in the prevention of teacher burnout through the creation of an improved school climate (Grayson & Alvarez, 2008). Certainly, the Community School’s strong partnerships with students’ parents and its broad community create a supportive social environment that meets the criteria for CSH. Once the supportive environment is created, there are other support services that can be offered through the school to help to promote health throughout the school’s community.

*Health and other Support Services*

Since the Community School actively shares its sporting facilities with the community after school hours in order to allow for the organization of diverse sporting leagues, the school is participating in the promotion of a healthy, active lifestyle for those in the larger school community. The coordination and sharing of resources, such as facilities, is an essential facilitator in the implementation of CSH (Gottlieb et al., 1999). In addition, the sharing of the school’s facilities is consistent with the Community School approach, as it embraces its partnerships with the community in a way that is beneficial to both the school and its surrounding community.

The school under study also has after school programming, which includes diverse activities such as cultural and sporting activities. Research has shown that after school programming for students can serve as an ideal time and place for the encouragement of health promoting behaviours such as healthy eating and physical activity (Coleman, Geller, Rosenkranz, & Dzewaltowski, 2008). These supplementary school activities are part of the
health support services provided by the school, as they are all activities that help to promote health in the school’s community and are not offered during school hours. These activities are also required for the implementation of the Community School, as one of the components of the approach is the promotion of New Brunswick’s culture and the promotion of health in a way that encourages healthy lifestyle behaviours (GNB, n.d.). Furthermore, when the school has special activity nights, students’ families and other community members are encouraged to participate; such activities are considered health services as they are organized recreational activities offered to those in the community. An example of the type of activity that the school has hosted includes “walking nights,” where the school’s staff demonstrates through the use of their walking paths that exercise with one’s family can be enjoyable and that it can be practiced at no cost. This initiative promotes the adoption of a healthy lifestyle by the students and their parents, which is consistent with both the Community School approach from a partnership standpoint and the CSH approach from a health promotion standpoint. Without the interaction of the two settings (e.g., the school and the home), this type of health promotion throughout the community would not be possible unless organized in a similar fashion by another community organization. As a result, the school is made into an essential support service for health promotion in the community.

*Healthy Physical Environment*

The school’s physical environment is also a key factor in helping teacher and students alike to stay healthy. An element that is unique to the Community School under study that is consistent with the CSH requirement of the provision of a healthy physical environment is the organic garden on the school’s grounds. The garden, the maintenance of which relies heavily on community partnerships, is an important part of the school’s physical environment because it encourages healthy eating practices through the cultivation of fresh vegetables on the school’s
grounds. Having a school garden has been found an effective way of improving the school’s physical environment when implementing health promoting initiatives (St Leger, 2000).

The physical environment is also influenced by the sport facilities on the school’s property, which are “probably some of the best in Canada” (Teacher B). By having a number of easily accessible, well-kept sporting facilities at its disposal, the school’s environment is enhanced as it provides multiple opportunities for physical activity – making it an environment that fits with the CSH approach (CASH, 2007). Furthermore, to make good use of these facilities, changes were made to the school’s curriculum in order to accommodate an additional 30 minutes of physical activity for the students and staff of the school – therefore enhancing the opportunities for physical activity. The implementation of a supplementary 30 minutes of daily physical activity is an essential component of the Community School approach as its “global health” component requires schools to make changes in their daily routines in order to accommodate for this change. By doing so, the school is incorporating both the Community School approach and the CSH approach.

Conclusion

By using a social ecological model this study has demonstrated that the Community School can be used as a CSH approach. Through semi-structured interviews with the school’s principal and three teachers, this study has shown how the Community School approach can be integrated into a school through the inclusion of parents and the community in its school life, the promotion of culture and health, the addition of complementary activities to the curriculum, and embracing partnerships, all of which, as shown above, can be used to facilitate satisfying the requirements of a CSH approach.
Further research needs to be conducted in other Community Schools across the province to identify whether other Community Schools can be considered as facilitating CSH. As this case has demonstrated, the CSH approach is present in the Province of New Brunswick. The fact that the Community School can serve as a CSH approach is very encouraging because through education may come change, and through change the students, teachers, parents, administrators, and others involved with the Community School may be exposed to a lifestyle that promotes healthy living. Ultimately, the Community School approach can be a viable option for the promotion of health in elementary schools in New Brunswick, even though its primary goal is not health oriented.
References


Chapter 4

Conclusion
This thesis aimed to describe the state of implementation and the factors that influence the implementation of the Comprehensive School Health (CSH) approach in two schools in the Province of New Brunswick. I found that there was a large variance between schools when it came to the implementation of the government-funded CSH program, which is called Healthy Learners in Schools (HLS). Specifically, in the schools taking part in the study, the staff was generally not aware of the HLS initiative and, unless an alternative program was in place, such as the Community School, the prime issues upon which the CSH approach focuses were not addressed in a substantive fashion. My major findings have been described in two separate articles: one pertaining to the various factors affecting the implementation of HLS and the CSH approach in two schools in the same school district and another pertaining to the Community School as a means for the implementation of CSH.

Findings

*Healthy Learners in Schools: New Brunswick's CSH Approach*

The first article presents the numerous factors that were found to influence the implementation of HLS. Through semi-structured interviews with principals, teachers, and a PHN, this study identified five categories of factors (both facilitators and barriers) affecting the implementation of HLS. The five categories of factors identified as having an effect on the implementation of HLS included knowledge factors, environmental factors, support factors, individual factors, and organizational factors.

The five groups of factors all worked in different ways to either serve as barriers or facilitate HLS implementation. The first group of factors identified through data analysis, knowledge factors, was also found to be the main barrier to the implementation of HLS in these schools: there was lack of knowledge concerning the HLS initiative, as only one principal
(School A) knew of the program by name. The environmental factors that were identified as having an impact on the implementation of HLS were a school environment that fosters healthy eating practices and access to well-maintained sporting and recreational facilities. In terms of support factors, administrative support along with a collaborative atmosphere between the teachers and members of the external community were identified as facilitators to the implementation of health promoting programs. Furthermore, a lack of School Health Committees (SHCs) acted as a barrier to HLSs implementation as SHCs are the first step to that should be used to identify ways to improve health promotion in schools. Individual factors were also identified as being of importance to health promotion in schools; this group of factors included the role modeling health promoting behaviours by school personnel and the help of a full-time employee whose main function is to help implement health promotion initiatives. Additionally, teachers admitted that supplementary training pertaining to the implementation of a CSH approach would be beneficial to further its implementation. Finally, the general barriers to the implementation of HLS that were found to be organizational in nature included a lack of implementation structure from the government, which includes a lack of policies that create accountability for the implementation of HLS.

A Community School in New Brunswick: A Means to Implementing CSH?

In the second article, I used the social ecological model to demonstrate how the Community School approach can be a viable option to the implementation of CSH. First, I identified three different categories - interpersonal, intrapersonal, and organizational, to show that the Community School approach is social ecological nature. Through the identification of factors within these categories, I found a large number of instances that demonstrated how the Community School approach can be used to meet CSH requirements. Indeed, the results showed
that changes made by the staff (e.g. hands-on teaching that included the use of an organic
garden) resulted in a curriculum that was enhanced through diverse teaching methods in a way
that was consistent with CSH. In addition, the school's staff members reported believing that role
modeling along with changing the school's cafeteria menu and adding daily physical activity
were beneficial to creating a supportive social environment for health promotion in the school as
these changes created an atmosphere where healthy lifestyle behaviours by students were
encouraged. Furthermore, support from the administration and the surrounding community
helped to maintain a supportive social environment for health promotion, which is also congruent
with the CSH approach. The school's incorporation of after-school activities that include
physical activity with the family are a demonstration of support services that help to promote
healthy lifestyle behaviours throughout the community. Finally, the school's physical
environment has been modified through changes in the cafeteria menu, the addition of an organic
garden on the school grounds, and extraordinary sporting facilities that help to encourage healthy
habits for students and school staff while at school. With the strong partnerships created between
the school and its external community, it has been possible to use the Community School
approach as a viable means for the implementation of CSH in this school.

General Findings

Overall, I have found that CSH is occurring in at least one school district in New
Brunswick, even though it is not being implemented through the HLS program. Although the
majority of the staff in the schools whom I interviewed were not familiar with HLS, it is not
possible to assume that the majority of the schools in the province are not using the CSH
approach through HLS. In fact, the PHN even admitted that the only implementation of CSH that
she was aware of was through the Community School approach. As demonstrated by the social
ecological model in the second article, it is possible that other districts are using other initiatives, like the Community School, that incorporate the use of CSH. It is surprising, however, that even with all the studies pertaining to both childhood obesity in New Brunswick and the links between health and learning, the Government of New Brunswick has yet to implement any policies that can be used to monitor and enforce the implementation of HLS, or an initiative that is health promoting in nature. Although this study has shown hope that the Community School may be a feasible alternative to the implementation of CSH in New Brunswick, the Community School’s main focus is not health promotion, but instead the creation of partnerships with the school’s external community. Nevertheless, as demonstrated in the second article, the Community School can be implemented in such a way that it promotes health within the school and its community through strong links with students’ parents and other community members.

Limitations

One of the limitations of my thesis includes the small number of schools and individual participants in the study, which makes it impossible to generalize the results to the rest of the schools in the province. Nevertheless, my interview with the PHN added rich data pertaining to the overall situation in the remainder of the school district when the concern is the implementation of HLS. She also led me to believe that there were other activities and School Health Committee meetings happening in the other school districts, and she mentioned that other PHNs were using different means through which to implement HLS in their respective school districts. The limited scope of participants in the study (in that they were all affiliated with the schools) also acted as a limitation, as these individuals might have had a vested interest in appearing in a positive light.
Perhaps the biggest limitation to my thesis is that due to issues of time requirements and available funding, I was unable to interview students, parents (with the exception of the one teacher who was the parent of a student in one of the schools) and other community members. Some might argue that it is impossible to take a true social ecological approach without interviews without students, parents and other community members, I argue that through interviews with teachers and administrators, their daily communication with students, parents, and members of the community were sufficient to provide the necessary information pertaining to their (students, parents, and community members) implications with the Community School.

Future Research

Future research should be conducted in order to take a broader look at what is happening in terms of CSH in other parts of the province. Completing such research would allow for generalizations pertaining to the implementation of the HLS approach in New Brunswick to be more feasible. If the Government of New Brunswick (GNB) aims to build the best education system in the country (GNB, 2007), accountability measures and policies need to be put in place in order to build and maintain this system. Thus, research pertaining to CSH implementation policies that are present in other provinces is needed in order to identify whether such policies are effective ways of ensuring CSH implementation. Furthermore, since CSH is an approach that incorporates schools, families, and the external community in the promotion of health, it is necessary to explore other actors’ functions in the implementation of CSH.

It is also important to conduct future studies pertaining to the use of Community Schools as a means to CSH implementation in other parts of the province and/or country. If this concept is better understood and implemented in schools, perhaps it could be a viable alternative to HLS and other CSH initiatives. It is important to mention that a presentation demonstrating the
Community School approach was made to School A (the Community School) by an employee of the GNB; this presentation discussed the Community School approach and also discussed its implications and the approach how it could be of benefit the school (Principal, School A). According to the PHN, HLS was never presented in this way to the school district in which this research occurred, which may play a role in why the schools’ staffs had little understanding of CSH and the HLS program.

Recommendations

In order for the HLS program to be implemented in full, it is clear that the initiative, as well as the CSH approach, must be understood by all parties participating in its implementation. Furthermore, clear guidelines that outline how to implement and evaluate implementation of CSH in schools need to put in place and followed by those who employ this approach in schools. The main barrier to CSH implementation in the two schools participating in this study was found to be that the majority of the stakeholders were unaware of its existence. In order to disseminate knowledge pertaining to CSH and its potential opportunities for health promotion, researchers and policy makers working in the field of school health promotion should present information pertaining to the CSH approach to those who intend to implement the program, which would put research into practice. Furthermore, the GNB should implement policies pertaining to the integration of government-funded programs such as HLS into schools in order to create a sense of accountability amongst those implementing the program.

Most of the teachers that I interviewed stated that teacher training is necessary if health promoting initiatives are to be implemented in schools. The training should include both educational components (health instruction) and practical components such as how to conduct interdisciplinary teaching in order to integrate health education into other subjects (e.g., readings
pertaining to the importance of daily physical activity, math activities that compare calories in foods, etc). The training should also focus on having an impact on the ways in which teachers can influence the culture of the school as a whole, not only how they operate in their own classrooms, as CSH is a whole-school approach.

Through the completion of this research project, I have been able to demonstrate that although the HLS program is not being implemented in one part of the province, there is another viable option to the promotion of health in New Brunswick’s elementary schools: the Community School initiative. The most interesting piece of information that I learned through the completion of this thesis was that even though the health of children in the Province of New Brunswick is at risk (e.g., due to increasing rates of childhood obesity (Shields, 2006)), the implementation of supplementary health education in the place of or in conjunction with literacy and numeracy is not always seen obligatory. For example, in one school where educational scores are below what it expected from the Ministry of Education (principal, School B), time constraints and prioritization of other subject matter over that pertaining to health promotion were very apparent and resulted in few health promotion activities. Clearly, a teacher’s primary task is to teach – but when overall health and healthy lifestyle behaviours do not constitute any part a school’s academic evaluation, which is the basis upon which the GNB ranks schools in the province, it begs question, is it really surprising that school health promotion is not a priority?

I hope that my research will help to enlighten educators and policy makers in the Province of New Brunswick on the current status of implementation of HLS in two (anonymous) schools in the province. Furthermore, I hope this research project will help to create change by demonstrating that information pertaining to CSH has not been appropriately delivered to one specific school district, making its existence practically unknown, and that it is possible that this
is the case of other districts in the province. Without proper training of qualified personnel and further implementation of HLS, change and improvements due to HLS are unlikely.
References


Appendix

Interview Guide – General guidelines

1. Tell me a bit about yourself...
   a. How many years of experience?
   b. How many schools?
   c. All in NB?
   d. What have you taught?

2. What is health to you?
   a. How do you define health?
   b. What do you do to stay healthy?
   c. How do you know when a child is healthy?

3. Have you heard of the initiative Healthy Learners in Schools? How did you learn about it?
   a. What is your opinion about the initiative?
      i. Do you think it is a relevant initiative?
      ii. Does the initiative uphold the values of the school/community/families?
      iii. If you have adopted the initiative, why have you done so?
   b. Do you have a school health committee?
      i. Who takes part in the meetings?
      ii. How often do these meetings take place?
      iii. Where do they take place?
      iv. How was the committee formed?
   c. Since its introduction in 2000, has anything changed in your school?
      i. Program wise?
      ii. School structure wise?
   d. Have you (specifically) done anything to implement this initiative in your school?
      i. Have the teachers been involved in any supplementary training?
      ii. If so, how was it organized?
   e. Please describe some partnerships (if any) that you have with the community or families.
   f. What are some of the challenges in implementing HLS?

4. What are the personal characteristics that you possess that affect the implementation of HLS?

5. In terms of resources (monetary, physical, educational) is there anything you’d need to help you in the implementation process?

6. What are some of the factors that have helped the implementation of the initiative?
   a. The literature suggests that good support, teacher involvement, training, and time are all factors that influence the implementation of CSH initiatives. Do you agree with these factors? If yes, why, if not, why not? Would you add any other factors?
   b. What changes have you observed, if any?
   c. If you had to go back and implement the initiative again, would you change anything? What? Why